

FINAL REPORT TASK ES-8-22 COMPUTERIZED APPLICATION OF STANDARDS NEWPORT NEWS SHIPBUILDING January 9, 1985

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COMPUTERIZED APPLICATION OF STANDARDS

FINAL REPORT ON TASK ES-8-22

9 JANUARY, 1985



Prepared By

NEWPORT NEWS SHIPBUILDING AND DRY DOCK CO.

For The

NATIONAL SHIPBUILDING RESEARCH PROGRAM

In Conjunction With

Panel SP-8 on Industrial Engineering

of the

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Contract Manager:

Ship Producibility Research Program Bath Iron Works Corporation 700 Washington Street Bath, Maine 04530

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EXECUTIVE SUMMARY

The Computerized Application of Standards Project successfully proved that MOST developed standards could be applied by an existing computer-aided design system to eliminate manual application of standards. The Computer Center, Industrial Engineering, and Production Engineering worked together to develop a computer program *to* apply standards to the pipe detail work packages for the bending, fabricating, welding, and machining operations in the pipe shops.

The implementation of this program into the computer-aided pipe detail design systems has resulted in improved accuracy and consistency of standards applications. Other benefits resulting from computerized application of standards include: increased manhour productivity, standardization of pipe detail part terms, capability to apply detailed standards, and the capability for computerized transfer to the Production Scheduling and Control System.

The development of the program took approximately eight months and involved extensive communications between the computer programmer and the Production Engineering pipe shop planners. This level of effort was based on the existance of a computer-aided pipe design system Generating pipe detail work packages and a well-established manual standards application system. Although the transferability of the program software may be minimal, the approach and techniques used to develop the program should be highly transferable.

Introduction

Project Summary

Existing System

Data Development

Program Development

Bending Values Development

Fabrication Values Development

Welding Values Development

Machining Values Development

Pipe Details Without Fittings

Print Out

Testing

Benefits

Conclusions

Appendix

Flow Chart

Program

LIST OF FIGURES

1. (No Figure 1)

- 2. Pipe Detail Working Drawing
- 3. Standards Application Pick Sheet
- 4. Explanation of Types Codes
- 5. Flow Chart Bending
- 6. Standards Matrix Bending
- 7. Flow Chart Array Development
- 8. Flow Chart Array Development
- 9.Flow Chart Fabrication
- 10. Standards Matrix Fabrication
- 11. Flow Chart Welding
- 12. Flow Chart Welding
- 13. Standards Matrix Welding
- 14. Flow Chart Machining
- 15. Standards Matrix Machining
- 16. Flow Chart Pipe Details Without-Fittings
- 17. Flow Chart Print Out
- 18. Computerized Standards Application Values

INTRODUCTION

The Computerized Application of Standards Project provided for the elimination of manual application of standards by integrating standards that were previously developed using Manual MOST into existing Newport News Shipbuilding production computer systems. The pipe shop Work Management Manuals were developed between 1978 and 1979 using 10X Manual MOST. Since 1979, the Work Management Manuals, along with information obtained from existing production computer systems, have been utilized by Production Engineering personnel to manually apply standards to pipe shop work packages for bending, fabrication, welding and machining operations. The work packages are part of a production control system used to schedule and track the progress of pipe details through each shop work center.

The pipe shops at Newport News Shipbuilding are divided into three areas; Steel Pipe Shop, Copper Pipe Shop, and Nuclear Pipe Shop. This project provided for computerized application of standards to work packages for all three shops. Since the application-procedure is identical for all three shops, only the Steel Pipe Shop is explained in detail in this report. This will simplify the report by avoiding repetitious documentation.

The pipe shops were selected for this project because of the excellent computer information that was available; the costs to apply standards to the pipe details being generzted; and a well established manual application system was already in existance.

PROJECT SUMMARY

Existing System

The existing manual standards application program for the pipe shops involved interfaces between the Newport News Shipbuilding computer system, production engineering shop planners, and shop foremen. The standards were applied to pipe details by Production Engineering and then organized into work packages for use by the shop foremen.

The pipe details were created from piping design drawings by a computer-aided pipe detail manufacturing system. Two sheets were generated for each detail: a pipe detail manufacturing record and a working drawing of the pipe detail (Fig. 2).* The pipe detail manufacturing record provides the following data:

- how the pipe is bent: number of bends bend radius bend angle
- layout of pipe detail: distance between center distance been tangents X, Y, Z coordinates
- how the pipe is fabricated
- end preparation required for welding
- size and description of pipe and fittings
- material type and part number of pipe and fittings
- miscellaneous fabrication notes

The working drawing provides dimensioned views and an isometric sketch of the pipe detail.

* There is no Figure 1.

10 PIECE NO	LOCATION	ORIENT	JT Y JOINT NO.	NDT
1 F146-1 2 F2 3 P91-1 4 P91-2 5 F18 6 FL1 7 F5	HAIN PIECE BENDI WITH AF2 WITH CF2 BWITH P91-1 AWITH P91-2 BWITH AF18	90.0-2 15-2 90.0+X	8P 8P 8P 8P 8P 8P	VT VT VT VT VT VT





DATE-
SIGNATURE-
LOCATION-

P91-1	2000				
DETAIL	- PAGE	2	<u> </u>	_2	
ARR. DWG.	NO. 2282	2	2	<u>19X1</u>	
DET. DHG.	NO. J221	32 -		160	



After the pipe details were generated, they were sent from the The planners computer center to the production engineering shop planners. manually applied standards for bending, fabrication, welding and machining to These standards were developed using 10X MOST and were the pipe details. organized on a pick sheet for the planner's use (Fig. 3). The planners used the pick sheets, along with the information generated on the pipe detail manufacturing records, to set the standards for each pipe detail. Work package folders were then established for each pipe detail. Each work package folder included: the pipe detail manufacturing record, the working drawing of the pipe detail, the standard hours for bending, fabrication, welding and machining operations, the parts list, and the material schedule. The material and scheduling information from the pipe "detail manufacturing records and the, standard times for each work center in each pipe detail are transferred to the production scheduling and control system by the planners. The work package folders were sent from the planners to the shop foremen who assigned them to the mechanic as the work arrived at the shop.

This project eliminated. the manual application of standards to the pipe detail. The standards for each detail are now generated by a computer program that interacts with the computer-aided pipe detail manufacturing system. However, the basic flow of the work packages remained unchanged, since the planners are still required to develop the work package folders. Application of the work packages and the use of the standards by the Production Central System are not within the scope of this project and therefore are not addressed.

Normal Pipe Size	I <u>M</u> 	umbe 2	<u>r of</u> 3	Ber	<u>145</u>
Applies To All Bending Machines 1/2" Thru 3 1/2"		Í		İ.	İ ! .
4" Thru 6"	1	1		1	
8" Thru 12" +	1	1	11	11	

	MACHININS							
	PER	PIPE	END)					
1	Man	0per	ation					

Nos.	Straight	Combination
Pipe	Bevel	J Bevel &
Size	Operation	Counter Bore

1/2" ~ 1"	1	
1 1/2" - 4"	1	1
5" - 8"	1	1
10" - 14"	1	1
15" - 20"	1	1
DRILL HOLES:	1 MHRS/HOLE	

l Hoi

!	1	Sc	ocket	We	d		Fina	ange _i Butt Weld					Boss		
	Can Ste	rbon eel	CJ3 Cre	11, :\$	Chro Mo	be- Ly			Car Ste	rbon rel	<i>CUN</i> Cres	1. :\$	Chro Mol	y y	
Joint Dia. or Noa. Pipe Size	Pfrst Joint	Pach Add-on	Fitet Joint	Kach Add-on	Ptrst Joint	Each Add-on	first flange	Each Add-on	First Joint	Fach Add-on	First Joint	Each Add-on	ftrat Joint	Lach Add-on	frach Joint
1/2									1		1	1	1	1	1
1	i	1	1	1	1	T.	1	1	1	1	Ī	1	1	1	1
1 1 1/4								1	1		1	1	1	1	
2	1	1	1	1	1	1	1	1	1	1	Ī	1	1	1	1
2 1/2	11		1		<u> </u>		1	1	1	<u> </u>	+	1	1	1	
3 1/2	11	i	1	i	li	i	i i	1	1	i	i	1	1	1	i
4	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4 1/2	11	11	11	1	1	<u> </u>	1	1	1	<u> </u>	+	1	1	1	1
6	1			1	1		1	1			1	1	1	1	1
7	1	1	1	1	1	1	1	1	ī	1	1	1	1	1	1
8	11	1	1	1	1		11	1	1	1	1	1	1	1	1
9]] 1	1	1	1		1	1.	1	1
112	i	hî	h i	Î	Î	1 I	1	+	1	H-	÷	i	1	1	1
114	11	1	11	1	1	1	1	ī	ī	ī	1	1	ī	1	ĩ
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	11	1		1	1	1	1	1	1	1	1	1	1	1	1
20					1			1		1	1	1		1	1

FABRICATION

A	1	с	D		E					G	н	
Pipe or Firting	Set-Up The		Slip		Sp: Fi	ecial ttings	ial Brazing			Template Assem		
Dian.	Job	Pittings	Flange	Branch	Boss	Weld-o-let	Sleeve	Fitting	Flange	Set-Up	Flange	
1/2" Thru 3"	1	1	1	1	1	1	1	1	1	1		
3 1/2" Thru 5"	1	1	1	1	1	1	1	1	1	1	1	
5 1/2" Thru 8"	1	1	1	1	1	1	1	1		1		
8 1/2" Thru 12"	1	1	1	1	1	1	1	1	1	1	. 1	
12 1/2" Thru 16"	1	1	1	1	1	1	1	1	1	1	1	
16 1/2" Thru 20"	1	1	1	1	1	1	1	1	1	1	1	
20 1/2" Thru 24 1/2"	1	1	1		1	1	1	1	1	1	1	

WELDING

Data Development

Before a computerized system to apply the standards could be developed, the input data had to be standardized. The information on the pipe detail manufacturing record is referenced from a catalog of Pipe detail parts. This catalog originally contained the part numbers, material types, and descriptions of the pipe detail parts. For the computer program to apply the correct standards to a pipe detail, it had to be able to use this information However, the information contained in the parts to identify the parts. description was not standardized; different abbreviations were used for the same part, the placement of the part name varied in the description field, many parts names were similar (reducer, reducing flange, reducing elbow) therefore not easily identifiable, etc. Without standardization of the description, it was not possible for the computer to accurately identify the parts. To provide for standardization of the catalog's part descriptions, the size of the catalog record was iacreased to include a type code.

The type code consists of three letters used to identify the piece type, weld joint type, and additional description of the piece (Fig. 4). The type code allows the part to be easily identified regardless of how it is abbreviated within the description on the pipe detail manufacturing record. Type codes were identified for all parts already in the catalog and are assigned as-new parts are entered into the catalog.

EXPLANATION OF TYPE CU:

THERE ARE 3 LETTERS TO THE TYPE CODE. THE FIRST LETTER IDENTIFIES THE TYPE OF PIECE, AND IS LISTED ALPHABETICALLY. THE SECOND LETTER GIVES THE WELD TYPE. SINCE THE WELD TYPES DO NOT SPECIFICALLY MODIFY ANY ONE PIECE TYPE, THEY ARE LISTED AS A GROUP FIRST. THE THIRD LETTER IS USED TO DESCRIBE THE PIECE. SINCE REDUCING AND UNION ARE GENERAL PURPOSE MODIFIERS, THEY ARE LISTED FIRST. THE REMAINING MODIFIERS ARE LISTED ON THE LINE OF THE PIECE THEY MOST FREQUENTLY DESCRIBE.

	PIECE TYPE CODES	
1ST LETTER	2ND LETTER	3rd letter
PIECE TYPE	JOINT TYPE	MODIFIER
A [■] ADAPTOR B [■] BOSS C [■] COUPLING	B BUTT WELD F FLANGED S SOCKETT WELD T THREADED Z SIL-BRAZED M MIXED	R ⁻ REDUCING U ⁻ UNIOIN
E ⁼ ELBOW	N N/A	9 90 DEG RADIO
F [®] FLANGE		4 45 DEG RADIO D ⁼ RAISED FACE F ⁼ FLATFACE O ⁼ SLIP UN T ⁼ FOUNDATION
H [■] BUSHING N [■] NIPPLE P [■] PIPE R [■] REDUCER		I CUNCENTRIC
S [™] SLEEVE		E ECCENTRIC
T [™] TEE U [™] UNION		M [†] MALE W [†] FEMALE
V [®] VALUE		A [↑] ANGLE B [†] BALL C [↑] CHECK G [†] GATE i [†] ELCO.
[■] WELDOLET, SOCKLET, BRAZOLET,		
X CROSS		
I LAIERAL Z TRAPS		P [™] P TRAP S [™] S TRAP N [™] RIINNING TRA'
M [†] MISC		$1 = 1 \text{NODE} \\ Z = Z \text{NODE} \\ 3 = 3 \text{NODE} $

Program Development

The computer program that applies the standards to the pipe details is a part of the computer-aided pipe detail manufacturing system. The flowchart Mand program for the Steel Pipe Shop are included in the Appendix. Data in the program has been modified to exclude company propriatory information. The program is divided into four major sections (bending, fabrication, welding, machining), which are part of the following format:

- a pipe detail is selected from the computer-aided pipe detail manufacturing program. (A detail may be a single piece of pipe or may include a main pipe piece with up to 25 fittings.)
- all data needed to apply pipe standards is collected from the pipe detail manufacturing system
- the bending standard times are extracted from the standards table
- the fabrication standard times are extracted from the standards table
- the welding standard times are extracted from the standards table
- the machining standard times are extracted from the standards table
- the standard time values for the pipe detail are printed







Fig. 5

Data from the pipe detail manufacturing system is used to determine number of bends and the main pipe piece size. The standard times for Bending are established in a matrix (Fig. 6) which is identical to the matrix on the planner's pick sheet. The outside diameter of the main pipe piece determines which row is applicable and the number of bends required determines the applicable column. The program accesses the standard time and records the total bending value for the detail. Fabrication Values Development

Fitting information is collected and organized before the Fabrication, Welding, and Machining values are calculated. Fitting data, including the description, material type, and end preparation, is taken from the computer-aided pipe detail manufacturing system where it has already been used to develop the pipe detail manufacturing record. If the pipe detail is bent but has no fittings the program advances to the point immediately following the **determination of the welding values (**). If the pipe detail has fittings, the fabrication and welding values are determined.



Fig. 7

The input data is reviewed and the fittings are established in an array. Fittings that are designated as having no value (e.g. O-rings, backing rings, etc.) are flagged so they will be excluded from consideration in the

remainder of the program. These excluded fittings will be specific to each shipyard depending on the application of their work packages. The number of reaaining fittings is then determined by subtracting the number of excluded fittings from the total number of fittings.

After the fitting array is set up, another array containing the information pertaining to the joints (including end preparation) is established. A direct correspondence exists between these arrays. The array of joint sizes allows the program to correctly handle a number of special situations. These situations may exist for reducing fittings, which can be different sizes on each end, and for bosses, branches, or weld-o-lets which may differ in size from the piece to which they are attached. Joints that are screwed or threaded are designated as having no value and are flagged so they will be excluded from consideration in the program. A loop is made through the array to identify excluded joints, joints on the main pipe piece, and fitting joints.



Fig. 8

The next step is to loop through fitting array to check for type codes. Using the descriptions of the fittings in the array the type codes are extracted from the catalog of pipe detail parts. If the fitting type code is not in the catalog, the fitting description is scanned and the type code created.

Another loop is made through the array of fittings to determine how the standards for joints at special fittings will be applied. Each joint is divided into two sides, based on fitting descriptions and size information generated by computer-aided pipe detail manufacturing systems. Each side of the joint is analyzed to determine which side will be used to determine the standard.

In a separate routine, the notes from the pipe detail manufacturing record are scanned to determine if the detail has a "Template From Ship" note. This note requires that a template be taken from the ship in order to construct the pipe detail. This operation requires that an additional value based on the outside diameter of the main pipe piece be added to the fabrication total.





The fitting outside diameter, description, end preparation, and type code are used to determine the fabrication values from the matrix (Fig. 10). The outside diameter of the fitting determines which row of the matrix is applicable for an operation. Each column is checked until the correct fitting type is found. All the fittings for the detail are looped through and the standard time for each fabrication-activity is added to the overall detail fabrication total.

	1	C		1		L				G	1 6
Fipe or	Set-Up The		Slip on		Sp F1	ecial ttings		Jraz	ing	Template	Asse
Diam.	Job	Fittings	flange	Branch	Boss	Wald-o-let	Sleeve	Fitting	Flange	Set-Up	Flat
1/2" Thru 3"	1	1	<u>,</u> 1	1	1	1	1	1	1	1	
3 1/2" Taru 5"	1	1	1	1	1	1	1	1	1	· ·	1
5 1/2" Thru 8"	2	. 1	1	1	1	1	1	1	1		
8 1/2" Thru 12"	1	I	1	1	1	1	1	1	1	1	
12 1/2" Thru 16"	1	1	1	1	1	1	1	1	2	1	,
16 1/2" Thru 20"	1	1	1	- 1	- 1	1	1	1	I	1	
20 1/2"- Thru 24 1/2"	1	1	1	1	1		1	1	1	1	

FABRICATION

Fig. 10

The pipe shop especifications require that brazing be included in the fabrication step. The end preparation required for each fitting is checked to determine if brazin, is required. If the fitting is brazed, the joint flag is removed so the joint will not be considered in the welding section of the program. The brazing standard times are added to the fabrication total for each detail.

Welding Values Development

The welding values are determined joint by joint, they are not looped through an array like the fabrication values. The outside diameter of the piece at the joint determines which row of the matrix (Fig. 13) is applicable for an operation. Before the welding values are determined, flags are set to keep track of the first weld of each weld type. This is necessary because the first joint requires preparation and set-up time.



Fig. 11



Fig. 12

The end preparation requirements are checked to make sure that the fitting requires welding and to determine the joint type. The type of fitting is checked to determine the column section of the matrix (Fig. 13). If the fitting is a boss or flange the standard time from the matrix is selected according to size, regardless of the joint type. Other fittings are selected according to the joint type and material type. The standard time for each joint is determined and the welding value for the detail is incremented joint by joint.

Ī		Socket Weld							ze	Jutt Weld					BORS	ł	
		Car Sta	bon el	CJN Cre	1,	Chro Mol	y y			Car Ste	bon mel	CUI Cre	1,	Chro Hol	y y		
	Joint Dis. or Nos. Pipe Size	First Joint	Rach Add-on	First Joint	Each Add-on	Pirst Joint	Each Add-on	Pirst Flange	Each Add-on	Pirst Joint	tach Add-on	First Joint	Each Add-on	First Joint	Lach Add-on	Each Joint	
Ţ	1/2			1	1	1	1		1 1	1	1	1	1	1	1	1	
1	1	1	1	1	1	1	1		1	1	1		1			1	ł
ļ	1 1/4	1							1		1	1	1	1	1	î	i
+	2	1	12	i	1	1 <u> </u>	ī	1	1	1	1	1	1	1	1	1	Ī
j	2 1/2	1	1	1	1	1	1	<u> </u>			1	1		1	1		ļ
1	3						1		1	1		1	1	1	1	i	i
-	4	11	1	i	1	1	1	1	1	1	1	1	1	1	1	1	Ī
j	4 1/2	1	1	1	1	1	11_	1	1		1	1	1	1	1		ļ
7	5	1	1									1		1	1	1	1
	5	11					í î	li l	li	ii	i	īi	ī	ī	ī	1	i
-	8	fi	+i-	1	1	1-	1	1	1	1	1	1	1	1	1	1	Ī
ļ	9	1	11	11	1	1	11	11	11	11	1	1	1	1	1	1	ļ
	10	<u>j 1</u>	1	1	1	1	11	1	1	1		1	1	1	Ļ		ļ
1	12	1		11													ļ
	14						11						1	1	1	1	i
	10	+-	<u> </u>		ابْ	 ^ -	+	<u> </u>	+ i		1	1	1	1	1	1	t
1	120		1		li	ii	ii	11	iī	11	1	1	1	1	1	1	i
-	24	lī	lī	lī	īī	ī	j ī	11	1	1	1	1	1	1	1	1	Ĺ

Fig. 13



	1	PER OIOE END Man Operation	
Nos. Pipe Size		Straight Bevel Operation	Combination J Bevel & Counter Bore
1/2" - 1"		1	
$\frac{1/2" - 1"}{1 \ 1/2" - 1}$	4"	1	1
$\frac{1/2" - 1"}{\frac{1}{5" - 8"}}$	4 * *		1
$\frac{1/2" - 1"}{\frac{1}{1/2"} - \frac{1}{2}}$ $\frac{5" - 8"}{10" - 14"}$	ب ۳		
$\frac{1/2" - 1"}{1 \ 1/2" - 3}$ $\frac{1}{5" - 8"}$ $\frac{10" - 14"}{15" - 20"}$		1 1 1 1 1	1 1 1 1 1

Fig. 15

Fig. 14

The machining values are based on the type of welding involved and the end preparation required for a piece. Since machining is allowing is allowing is allowing is allowing it and welding it is included within the welding section of the program but is considered a spearate operation for standards application.

The machining required for each joint is based on the fitting type and the welding involved. If the fitting is a flange, it must be determined whether a butt weld or a socket weld is required. If a socket weld is required for a flange end prep, no machining value is applied. If a butt weld is required for a flange end prep, the machining value is applied. If the fitting is a boss, the drilling value is added to the machining value directly after the welding value for bosses is added to the welding total.

The machining values for the other joints are based on the type of welding required. If a socket weld is required, no machining values are applied. If a butt weld is required, the machining value is for the time spent to bevel the end of the pipe prior to welding. Therefore, a machining value is not applied if the joint is a fitting to fitting joint.

The outside diameter of the-piece determines which row of the matrix (Fig. 15) is applicable for an operation. The column is determined by the type of machining operation required for particualr weld types. According to Newport News Shipbuilding specifications, the Combination J Bevel & Counter Bore is used only on one particular weld type, all other operations use Straight Bevels. The machining values for each operation are determined and added to the machining total.



Fig. 16

Before the value totals are printed, the pipe details without fittings are checked for fabrication requirements. If a "Template From Ship" is required, the value for additional set-up time is designated as part of the fabrication value.

Next, the end preparation-requirements are checked to determine if a templated end is left on either end of the main pipe piece. This templated end consists of addditional length at the end of the piece of pipe that can be cut to fit the work already installed on the ship. If there is a templated end, then that end of the pipe is not prepared and a machining value is not applied. If there is not a templated end, then either one or both ends of the piece may require butt weld end preparation. If the end preparation is required, flags are set so that machining values will be applied.

If the pipe is bent, the end preparations are checked. If butt weld end preps were not required and a specified cut length on a non templated end was not specified then the program advances to print out the standard values. If butt weld end preps were required then the set-up value is added to the fabrication total and the machining total. If the pipe is not bent, the set-up value is added to the fabrication total and any required machining values are added to the machining total.

Print Out



Fig. 17

After the bending, fabrication, welding and machining values are determined, the total value for each operation on a detail is written to a file. This record also includes administrative data, drawing numbers, and the pipe detail identifier. A utility sort function is performed to sort the file by detail identifier. A print out of the details, with the standard time values, is provided to the planner when developing the work packages (Fig. 18).

	QT AN	IDARD TIME VALUES	PAGE 2		
DATE 11/12/8	BENDING	LAY-OUT & CUT-	MACHINING	FABRICATION-	WELDING
DETAILS/REVIS!	VALUE/SHOP	VALUE/SHOP	VALUE/ SHOL	1 3/COPPER	1.7/COPPER
A/C	, 3/COPPER			1. B/COPPER	9.1/CUPPER
C/C	. 3/COPPER			2 1/COPPER	2.0/COPPER
D/C	, 3/ COPPER			1.9/COPPER	2.8/COPPER
F/C	. 4/COPPER	` •		1/STFFL	2. 4/ STEEL
H/C			2,0/81666	2 8/STFFL	3.0/STEEL
J/C			2. 3/ STEEL		2. 2/COPPER
R/C	, 4/COPPER			1, 3/ COFFE	2. 8/STEEL.
			2.0/STEEL	S. OF STELL	3. 1/COPPER
V/C .	, 3/COPPER			1, 0/ COFT CI	1, 2/ STEEL
Y/C	٠		1.0/STEEL	1. ALCORPER	2. S/COPPER
AB/C	4/COPPER			2 8/STEFI	2. 0/ STEEL
AD/C			1.4/STEEL	2.0/01222	4.0/COPPER
AE/C				2, 37, 401 FEI	1.8/STEEL
` AF/C			1.4/31EEL	e/capper	. 4/COPPER
AH/C	, 3/COPPER				
AJ/C			. 5/ STEEL		2 8/STEFL
AK/ C			1.5/STEEL	3, 1/ SIEEL	2. 0/STEEL
AL/C			1.0/STEEL	2, 4/ SIEL	1. B/COPPER
<u>A\$/C</u>				1, 5/ COPPER	1 3/COPPER
AT/C				1. 57 COPPER	1. 3/COPPER
AU/C				1, 5/ COPPER	2.0/COPPER
AV/C				2, 1/COPPER	2, 0/ COFFER
AW/C				2, 1/COPPER	Z, U/ COPPER
AY/C				, 9/COPPER	1. 1/COPPER
AZ/C	. 9/COPPER			, 9/COPPER	1, 1/COPPER
BE/C				1.5/COPPER	1.8/COPPER
	HULL AP	PL. QR	OUP NO. - 4100-5407-	ARRO DWO. 2285	- 1059X1 - 1090

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Testing

After the development of the standards application programs was completed, the programs were tested for completeness and accuracy. Testing was accomplished by comparing the standard time results from the program with those applied manually by the planners. A cross section of drawings were tested in this manner until the results were consistently correct.

When the computer applied standards were compared to the manually applied standards, the computer application proved more accurate in many cases than manual application. The program also identifies input data errors and will not attempt to calculate the standards with incorrect data. A data error message is printed with the pipe detail so data corrections can be made.

After the testing was complete, the program was put into production use. The application of the program and the interfaces with other computer programs were closely monitored for any adverse effects. The planners have been told to notify the computer programmer if any unusual results are received.

BENEFITS

This project successfully proved that MOST developed standards could be applied by an existing computer-aided design system to eliminate the manual application of standards. Computerized application of standards has resulted in improved:

- accuracy
- consistency
- productivity

Preliminary results indicate that the costs for computerized application are approximately equal to the costs for manual application. There are several reasons why both application processes appear to result in equal costs.

- The standards application pick sheets were designed for ease of manual application." The detail of the standards were compromised so they could be categorized for easier application.
- The planners are organized into specialized groups according to the standards application pick sheets. Therefore, over a period of time, each planner becomes highly skilled and proficient in standards application within his areas.
- The computerized application costs are temporarily high since this program was ritten to be combatable with a new computer system and not most efficient under the existing system. A system changeover is occuring which will reduce costs.

Benefits resulting from the computerized application of standards include:

• Increased manhour productivity The manual application of standards has beta eliminated resulting in edditional time for the planners other work. Computer costs do not directly correspond to manhour costs.

Improved accuracy and consistency The computer is not prone to fatique and mistakes present in manual application.

- Standardization of pipe detail part terms
- The capabilities of the existing computer-aided pipe detail manufacturing system is expanded by being able to accurately identify parts.

• Capability to apply detailed standards

- The standards are currently used as targets by the pipe shops. If more detailed standards were required, the matrices on the application pick sheets would be expanded, making it difficult for manual application.
- •Capability for computerized transfer to the Production Scheduling and Control System

CONCLUSIONS

This project successfully proved that MOST developed standards could be applied by an existing computer-aided design system to eliminate manual application of standards. Computerized application of standards proved superior to manual application and particularly beneficial if concerned with accuracy, consistency, and application of detailed standards.

The development and implementation of the program was also beneficial for Newport News Shipbuilding since it forced the standardization and upgrading of input data and other programs within the computer-aided design system.

The transferability of this program depends on the computer-aided design systems and standards application processes in use. Due to the company-oriented nature of these systems and processes, the transferability of the actual program software is probably minimal. However, the approach and techniques used to develop this program should be highly transferable. This information should reduce the time and effort required to develop the program. APPENDIX




















TO LINE#	FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE#
176	151	169	162	163	155	152	140	152	121
152	120	147	154	143	131	105	138	143	135
98	83	98	79	98	75	98	71	98	67
98	63	98	59	98	55	98	49	98	34
<u>98</u> 76	<u>94</u> 73	<u>95</u> 72	<u>92</u> 69	<u> </u>	<u>40</u> 65	64	61	<u> </u>	<u>77</u> 57
56	53	50	43	41	37	38	38	35	31
RETURN	179								
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FSET	SYMBOLIC	GLOBAL	REFERE	NCES BY	ALTER	NUMBER										
5	ASCB.				•											
17	E.L.	ΠΑΤΑ														
6	. FCHM.										·					
10	. FCNVI															
11	.FDEC.															
7_	<u>.FRTN.</u>		•		·											
2	.FTAB.															
103	STELL	DATA	1.65	107	1.40	• • •										
14	CONCAT	. DATA.	10	20	140	141	26	07	00	114						
104	DECFLG	DATA.	15	108	$\frac{21}{127}$	136	20		93	114						
105	DECMAL	.DATA.	17	109	132	133										
24	DES	. DATA.	12	19	20	21	25	26	27	53	57	61	65	69	73	
100			77	81	92	114										
106	DESLET	. DATA.	12	114	116	117	118	121								
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467	FARN	FITING	7													
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2	GETOD		14													
4442	GKNO	FIING	.7													
265	MUEL	FITING	11													
47	1	DATA.	52	53	57	61	65	60	72	77	01	01	02	110	114	
36	IDES	FITING	7	19	20	21	25	26	27	~ ~ ~	01	91	92	112	114	
46	11	. DATA.	51	52	90	91	111	112			•					
353	IPEC	FITING	7	31	36	37	42	155								
4407	POINT	FITING	7		~~	~										
20	ĸ	. DATA.	148	19	20	21	25	26	27	31	36	37	42	99	147	
13	комрсн		31	36	37	42	53	57	61	65	60	73	77	0.1	02	
	<u> </u>		116	117	118	155	<u>~</u>				05			01	32	
31	MACHNO	STDHRS	11													
5	MAT	FITING	7													
<u>3</u> .	NB	FITING	<u> </u>			<u></u>					······································					
272	NEAR	FITING	7													
113	NO	DATA	121	124	171	179										
1	NP	FITING	7			176										
4440	NPPPTS	FITING	7						••••••	·	· · · · · · · · · · · · · · · · · · ·					
2	NX	FITING	7													
0	OD	FITING	7	<i>.</i> –												
32	0010	STDHRS		15	147	174			<u></u>	·····				· ··		
21	ODELES	AFTAD	160	15	22									•		
102	ODTOTI	DATA	14	106	120	122	1.41	152	150	165	170	171				
4441	REV	FITING	.,		120	100	1-41	100	100	100	170	171				
3	STOHRS		11			······										
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461	. \$1000		39	89												
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112	. \$5100	FORMAT	121	122												
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°1420 01	11-20-84	14.903	SUBROUTINE OD21PS(OD, IPS)STA25P1USE OD TO FIND IPS	LABEL OD21PS PAGE 1
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)00007	ż	•	SUBROUTINE OD2105(OD 105) STA25FIOSE OD TO FIND IFS	00013750
100007	3	<u>C</u>		
)00007	4	•	REAL IPS ABSVALTO OD (DIPS(2,25)	00013770
)00007	5	C	NEAL 11 0, AD3VAL, 0D, 0D1F3(2, 23)	00013780
200007	6	v		00013790
200007	7	0		00013800
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100007	17		a 1.900, 1.500,	00013900
100007	17		& 2.125, 2.000,	00013910
200007			<u>8</u> 2,375, 2,000,	00013920
100007	19		& 2.625, 2.500,	00013930
200007	20		& 2.875, 2.500,	00013940
100007	21		« 3.125, 3.000,	00013950
200007			<u> </u>	00013960
100007	23		& 3.625, 3.500,	00013970
200007	24		& 4.000, 3.500,	00013980
200007	25		& 4.500, 4.000,	00013990
100007	26		<u> </u>	00014000
200007	27		& 6.625, 6.000,	00014010
200007	28		& 7.625, 7.000,	00014020
200007	29		& 8,625, 8,000,	00014030
200007	30		<u>8 9,625, 9,000,</u>	00014040
200007	31		& 10.750, 10.000,	00014050
200007	32	•	« 12.750, 12.000/	00014060
200007	33	C		00014070
200007		<u> </u>		00014080
200007	35		D0 222 1=1,25	00014090
200011	36			00014100
200012	37		ABSVAL=ABS(dDIPS(1,11)-dD)	00014110
200022		<u> </u>		00014120
100022	39	C		00014130
100023	40		IF (ABSVAL .LT. 0.05) GO TO 444	00014140
100027	41	22	2 CONTINUE	00014150
100027	42	<u> </u>		00014160
J00027	43	C	THE OD IS NOT IN THE TABLE, USE THE OD AS THE IPS.	00014170
100033	44		IPS=0D	00014180
100035	45	_	RETURN	00014190
000035	46	C		00014200
JUUU40	47	44	4 CONTINUE	00014210
JUUU40	48		IPS=0DIPS(2,11)	00014220
00045	49		RETURN	00014230
100046	50		END	00014240

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FRAN	SFERS.	• • •							
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76 0		. DATA.	2 2 4	4	37	44 	•			 	 <u></u>
27 . 40 .	. S222 . S444		35 40	41 47						 	
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DIT D SED T ERE W IK W	DATE 06 TIME (SEC WERE NO WORDS WER	-29-83 < FT2) .27 DIAGNOSTIC E USED FOR T	L S IN ABO HIS COMP	INES/MI	NUTE 100	909				 <u></u>	
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P1420 01	11-20-84	14.902	SUB. GETCOD(K)STA25PIEXTRACT TYPE CODE FROM THE DESCRIPTION	LABEL GETCOD PAGE	3
000575	119	С		00013130	
000575	120	C	THIS CHARACTER MUST BE A NUMBER	00013140	
000576	121		DECODE(DESLET, 5100, ERR=7000) NO	00013150	
b00215	122	5100	FORMAT(11)	00013160	
p00612	123	C	MAKE A REAL NUMBER	00013170	
000612	124		X=N0	00013180	
000612	125	C	·	00013190	
000612	126	C	SPLIT HERE DEPENDING WHETHER BEFORE OR AFTER DECIMAL PT.	00013200	
000617	127		IF(DECFLG .EQ. 1) GO TO 5200	00013210	
000655	128	C		00013220	
000623	129		DTTTL=(DTTTL*10.0)+X	00013230	
000627	130	•	60 10 6000	00013240	
000627	131	C		00013250	
100630	132	5200		00013260	
000633	100			00013270	
000637	134	•	60 10 6000	00013280	
000637	100	5		00013290	
000640	130	5300		00013300	
000642	137	n	60 10 6000	00013310	
000642	130	5500	CONTINUE	00013320	
000643	140	5500		00013330	
000647	140	······		00013350	
000652	142	Ċ	IT (OBTOTE . OT. 0.007 BERTED-1	00013360	
000654	143	6000	CONTINUE	00013370	
000654	144	c		00013380	
000654	145	C C	THE SIZE OF THIS FITTING CANNOT BE EXTRACTED.	00013390	
000654	146	č	SO USE THE OD OF THE MAIN PIECE OF PIPE.	00013400	
000660	147	6200	$F_{1}TOD(K) = OD_{1}O$	00013410	
000663	148		FITSAM(K)=, TRUE.	00013420	
000665	149		GØ TØ 9500	00013430	
000665	150	С		00013440	
000665	151	С		00013450	
000666	152	7000	CONTINUE	00013460	
000666	153		IF (ODTOTL.LT.0.05 .OR. ODTOTL.GT.99.9) GO TO 6200	00013470	
poo674	154	C		00013480	
000675	155		IF (KOMPCH(IPEC(1,K),1,'P',1,1) .EQ. 0) GO TO 8000	00013490	
000712	156		X=ODTOTL	00013500	
000714	157	•	GO TO 9000	00013510	
000714	158	C		00013520	
000714	159	C	THIS IS A PIPE, SO, THE NOMINAL SIZE (IPS)	00013530	
000714	160	<u> </u>	MUST BE FOUND, SUB, OD2 IPS GOES	00013540	
000714	161	C	INTO THE TABLES USING THE TRUE O.D. TO	00013550	
000714	162	C	EXTRACT THE NOMINAL SIZE,	00013560	
000715	163	8000	CONTINUE	00013570	
	164	<u> </u>		00013580	
000715	165	•	CALL ODZIPS(ODIOIE, X)	00013590	
000715	100	U O		00013600	•
000715	107		CONVERT TO INTEGER,	00013670	
600773	100	<u> </u>	CONVERT TO INTEGER USE TEN TIMES THE NOTITIAL SIZE	00013620	
000722	120	9000		00013630	
000726	170			00013040	
000724	170			00013650	
000724		<u> </u>		00013600	
000737	174	0	FITSAM(K) = (FITOD(K) - FO - ODID)	00013680	
000737	175	C		00013690	
000746	176	9500	CONTINUE	00013700	
000746	177	2020		00013710	
1.01.70			• •	000.01.0	

DOUSSUD 60 400 CONTIN D00300 61 IFC D00312 62 D00322 64 450 CONTIN D00322 65 IFC D00334 66 IFC D00344 68 460 CONTIN D00344 68 460 CONTIN D00365 71 000365 D00366 72 470 CONTIN D00366 72 470 CONTIN D00366 73 IFC D00410 76 480 CONTIN D00410 76 480 CONTIN D00411 79 000432 D00432 80 500 CONTIN D00433 83 000454 000454 84 550 CONTIN D00460 86 GO D00461 89 1000 CONTIN D00462 93 1000 CONTIN D00463 91 1 000460 68 C 000461 <	UE KOMPCH(DES, I, 'WELD-O-LET', 1, 10) .NE. 0) GO TO 450 TC = 'W' GO TO 1800 UE KOMPCH(DES, I, 'SOCKOLET', 1, 8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES, I, 'BRAZOLET', 1, 8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES, I, 'LATROLET', 1, 8) .NE. 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES, I, 'SLEEVE', 1, 5) .NE. 0) GO TO 500 TC = 'S' GO TO 1800	00012540 00012550 00012560 00012570 00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012650 00012660 00012680 00012680
D00302 61 IF(000312 62 000321 63 000322 64 450 CONTIN 000334 66 1F(000343 67 000344 000356 70 1F(000365 71 000366 72 000366 72 470 CONTIN 1F(000366 73 1F(000400 74 000400 74 000410 76 480 CONTIN 1F(000410 77 1F(000410 77 000431 79 000432 80 500 CONTIN 000453 83 000454 84 550 CONTIN 000460 86 G0 TO 000460 86 00 TO 000461 89 1000 CONTIN 1 1 1 000463 91 1 1 1 1 1 000463 91 1 1 1 <td>KOMPCH(DES, 1, 'WELD-O-LET', 1, 10) .NE. 0) GO TO 450 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'SOCKOLET', 1, 8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'BRAZOLET', 1, 8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'LATROLET', 1, 8) .NE. 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'SLEEVE', 1, 5) .NE. 0) GO TO 500 TC = 'S' GO TO 1800</td> <td>00012550 00012560 00012570 00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012650 00012660 00012680 00012690</td>	KOMPCH(DES, 1, 'WELD-O-LET', 1, 10) .NE. 0) GO TO 450 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'SOCKOLET', 1, 8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'BRAZOLET', 1, 8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'LATROLET', 1, 8) .NE. 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES, 1, 'SLEEVE', 1, 5) .NE. 0) GO TO 500 TC = 'S' GO TO 1800	00012550 00012560 00012570 00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012650 00012660 00012680 00012690
DOUGRE DESCRIPTION 000321 63 000322 64 450 CONTIN 000334 66 IF(000343 67 000344 68 460 CONTIN 000344 69 IF(000365 71 000366 72 470 CONTIN 000366 72 470 CONTIN 000400 74 000400 74 000400 74 000410 76 480 CONTIN 000410 76 480 CONTIN 000431 79 000432 80 500 CONTIN 000444 62 000454 84 550 CONTIN 000454 64 550 CONTIN 000460 87 C 000150 00 16 00 00 150 000461 90 DO 150 CONTIN 16 17 000461 90 DO 150 CONTIN	TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SOCKOLET',1,8) .NE, 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'BRAZOLET',1,8) .NE, 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8) .NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012560 00012570 00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012650 00012660 00012680 00012680 00012690
000322 64 450 CONTIN 000322 65 IF(000334 66	GO TO 1800 UE KOMPCH(DES,1,'SOCKOLET',1,8) .NE, 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'BRAZOLET',1,8) .NE, 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8) .NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012570 00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012660 00012680 00012680 00012690
000322 64 450 CONTIN 000322 65 IFC 000343 66	UE KOMPCH(DES,1,'SOCKOLET',1,8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'BRAZOLET',1,8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8) .NE. 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) .NE. 0) GO TO 500 TC = 'S' GO TO 1800	00012580 00012590 00012600 00012610 00012620 00012630 00012650 00012650 00012660 00012680 00012680 00012690
DODAC BS IF (D00334 66 D00343 67 D00344 68 460 CONTIN D00365 71 000366 72 470 CONTIN D00366 72 470 CONTIN 1F (D00366 72 470 CONTIN 1F (D00366 73 1F (1F (D00400 74 1F (1F (D00410 76 480 CdNTIN 1F (D00410 76 480 CdNTIN 1F (D00431 79 300432 80 500 CoNTIN D00432 81 1F (1F (D00444 82 3000453 83 000454 84 550 CONTIN 1F (D00454 86 G0 TO 1F (D00460 87 C 000460 000461 90 DO 150 1F (D00462 93 1000 CONTIN 1 = 000506 <t< td=""><td>KOMPCH(DES,1,'SOCKOLET',1,8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'BRAZOLET',1,8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8) .NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800</td><td>00012590 00012600 00012610 00012620 00012630 00012630 00012650 00012650 00012660 00012670 00012680 00012690</td></t<>	KOMPCH(DES,1,'SOCKOLET',1,8) .NE. 0) GO TO 460 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'BRAZOLET',1,8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8) .NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012590 00012600 00012610 00012620 00012630 00012630 00012650 00012650 00012660 00012670 00012680 00012690
000343 67 000344 66 460 CONTIN 000356 70 000365 71 000366 72 470 CONTIN 000366 73 IF(000400 74 000410 76 480 CONTIN 000410 76 480 CONTIN 000410 76 480 CONTIN 000410 76 480 CONTIN 000431 79 300432 80 300432 80 500 CONTIN 000453 83 950 CONTIN 000454 84 850 CONTIN 000454 84 950 CONTIN 000460 86 G0 TO 000461 90 DO 150 000463 91 1 1 90 D0 150 000506 94 1000 CONTIN 000513 98 1600 CONTIN 000516 101 C 000516 103 C	TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'BRAZOLET',1,8) ,NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'LATROLET',1,8) ,NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'SLEEVE',1,5) ,NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012600 00012610 00012620 00012630 00012640 00012650 00012660 00012660 00012680 00012680 00012690
000343 67 000344 68 460 CONTIN 000356 70 000365 71 000366 72 470 CONTIN 000366 72 470 CONTIN 000366 73 1F(000400 74 000407 000410 76 480 CONTIN 000410 76 480 CONTIN 000431 79 000431 000432 81 1F(000444 82 000453 000454 84 550 CONTIN 000460 86 G0 TO 000461 89 1000 CONTIN 000461 89 1000 CONTIN 000463 91 1 000507 95 1500 CONTIN 000506 94 000507 000516 101 C 000516 102 C 000516 103 C 000516 103 C	GO TO 1800 UE KOMPCH(DES,I,'BRAZOLET',1,8) .NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'LATROLET',1,8) .NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012610 00012620 00012630 00012640 00012650 00012660 00012660 00012680 00012680 00012690
000344 68 460 CONTIN 000344 69 IF(000365 71 000366 72 470 CONTIN 000366 72 470 CONTIN 160 000366 73 IF(000400 74 000400 74 000407 75 000410 76 480 CONTIN 000410 76 480 CONTIN 160 000431 79 000431 79 300432 80 500 CONTIN 000432 81 IF(000444 62 000453 83 000454 84 550 CONTIN 000460 66 GO TO 000460 86 C 000461 90 DO 150 000461 90 DO 150 000506 94 1 1 000507 95 1500 CONTIN 1 1 1 000516 101 C C <td>UE KOMPCH(DES,I,'BRAZOLET',1,8),NE, 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800</td> <td>00012620 00012630 00012640 00012650 00012660 00012660 00012670 00012680 00012690</td>	UE KOMPCH(DES,I,'BRAZOLET',1,8),NE, 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,I,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012620 00012630 00012640 00012650 00012660 00012660 00012670 00012680 00012690
DOUGLINA DB IFC 000356 70 000365 71 000366 72 470 CONTIN 000366 73 IFC 000400 74 IFC 000410 76 480 CONTIN 000410 76 480 CONTIN 000410 77 IFC 000431 79 IFC 000432 80 500 CONTIN 000432 81 IFC 000453 83 000454 000454 85 950 CONTIN 000460 86 GO TO 000461 89 1000 CONTIN 000461 89 1000 CONTIN 000461 90 DO 150 000463 91 I 000506 94 IFC 000507 95 1500 CONTIN 000516 101 C 000516 102 C 0000516 103 C <	KOMPCH(DES,1,'BRAZOLET',1,8),NE. 0) GO TO 470 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012630 00012640 00012650 00012660 00012670 00012680 00012690
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D00366 72 470 CONTIN D00366 73 IF(000400 74 1F(000400 74 1F(000410 76 480 CONTIN 000410 76 480 CONTIN 000410 77 IF(000432 80 500 CONTIN 000432 81 IF(000453 83 1F(000454 84 550 CONTIN 000460 86 G0 TO 000460 87 C 000460 87 C 000460 87 C 000461 90 D0 150 000463 91 I 000464 92 IF(000507 95 1500 CONTIN 000506 94 0000507 000513 98 1800 CONTIN 000516 101 C 000516 102 C 000516 103	UE KOMPCH(DES,1,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012660 00012670 00012680 00012690
200000 73 IFC 000400 74 000407 75 000410 76 460 CONTIN 000410 76 460 CONTIN 000410 77 IFC 000410 77 IFC 000410 77 IFC 000412 78 IFC 000432 80 500 CONTIN 000432 81 IFC 000444 82 IFC 000453 83 CONTIN 000454 85 950 CONTIN 000460 86 GO TO 000460 87 C 000461 89 1000 CONTIN 000463 91 I 0000506 94 IFC 000507 95 1500 CONTIN 000513 98 1800 CONTIN 000516 101 C 000516 102 C 000516 103 C <t< td=""><td>KOMPCH(DES,1,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800</td><td>00012670 00012680 00012690</td></t<>	KOMPCH(DES,1,'LATROLET',1,8),NE, 0) GO TO 480 TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5),NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012670 00012680 00012690
000407 75 000410 76 480 CONTIN 000410 77 IF (000410 77 IF (000412 78 000431 79 000431 79 000432 80 500 CONTIN 000432 81 IF (000432 81 IF (000432 81 IF (000444 82 000453 63 000454 84 550 CONTIN 000454 85 950 CONTIN 000460 86 GO TO 000460 86 C 000460 86 C 000461 90 DO 150 000461 89 1000 CONTIN 1 1 000463 91 I 1 1 000464 92 IF (000506 94 000507 95 1500 CONTIN 000516 101 C 000516 101 C 000516 102 C 000051	TC = 'W' GO TO 1800 UE KOMPCH(DES,1,'SLEEVE',1,5) ,NE, 0) GO TO 500 TC = 'S' GO TO 1800	00012680 00012690
COURT 75 000410 76 480 CONTIN 000410 77 IF (0004122 78 116 (000431 79 300432 80 500 CONTIN 100432 81 IF (116 (116 (000453 83 3000454 84 550 CONTIN 000454 84 550 CONTIN 116 (000454 85 950 CONTIN 116 (000460 86 G0 TO 000460 88 C 000460 88 C 000461 90 D0 150 000461 90 D0 150 000464 92 IF (000461 90 D0 150 1500 CONTIN 1 000463 91 I I 1 000464 92 IF (000507 95 1500 CONTIN 000507 95 1500 CONTIN 1 1 1 0000516 100 1900 CON	GO TO 1800 UE K <u>ompch(des,t,'sleeve',1,5) ,ne, 0) go to 500</u> TC = 'S' GO TO 1800	00012690
000410 76 480 CONTIN 000410 77 IF(000422 76 IF(000431 79 000432 80 500 CONTIN 000432 81 IF(IF(000432 81 IF(000432 81 IF(000444 82 000453 83 000454 84 550 CONTIN 000460 86 GO TO 000460 86 C 000461 90 DO 150 000461 90 DO 150 000463 91 I 000464 92 IF(000463 91 I 000506 94 If(000507 95 1500 CONTIN 000513 98 1800 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 105 5000 C	UE KOMPCH(DES,1,'SLEEVE',1,5) .NE, 0) GO TO 500 TC = 'S' GO TO 1800	
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76 78 000431 79 000432 80 500 CONTIN 000432 81 IF (000432 81 IF (000432 81 IF (000453 83 160 000454 84 550 CONTIN 000454 85 950 CONTIN 000460 86 GO TO 000460 86 C 000460 89 1000 CONTIN 000461 90 DO 150 000463 91 1 000464 92 IF (000506 94 000507 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000513 98 1800 CONTIN 000513 98 1800 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 105 5000 CONTIN	IC = 'S' GO TO 1800	00012710
79 79 000432 60 500 CONTIN 000432 61 IF(000432 61 IF(000432 63 1F(000433 63 1F(000453 63 1F(000454 84 550 CONTIN 000454 85 950 CONTIN 000460 86 G0 TO 000460 87 C 000460 89 1000 CONTIN 000461 90 DO 150 000463 91 I 1 1 1 000463 91 I 1 1 1 000463 93 IF(000506 94 0000507 95 1500 CONTIN 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 102 C 000516 103 C 000516	GG 1 G 1800	00012720
000432 81 IF(000432 81 IF(000444 82 1000444 000453 83 1000453 000454 84 550 CONTIN 000454 85 950 CONTIN 000460 86 G0 TO 000460 87 C 000460 87 C 000460 89 1000 CONTIN 000460 89 1000 CONTIN 000461 90 D0 150 000463 91 I 000464 92 IF(000506 94 000507 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000507 97 C 0000513 98 1800 CONTIN 000516 102 C 000516 103 C 000516 105 5000 CONTIN 000516 105 5000 CONTIN 0000516	a A seat	00012730
Display Display <t< td=""><td></td><td>00012740</td></t<>		00012740
b2 b2 000453 63 000454 64 000454 65 000454 65 000460 66 000460 67 000460 68 000461 90 000461 90 000463 91 000464 92 000463 91 000464 92 000506 94 000507 95 000507 95 000507 97 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 102 000516 103 000516 104 000516 105 000516 106 000516 107 000516 106 000516 107 000516 106 000516 005	KOMPCH(DES, 1, 'BOSS', 1, 4) . NE. 0) 00 TO 550	00012750
000454 64 550 CONTIN 000454 84 550 CONTIN 000460 86 G0 TO 000460 87 C 000460 87 C 000460 88 C 000461 90 DO 150 000461 90 DO 150 000463 91 1 000464 92 IF(000463 91 I 000506 94 If(000507 95 1500 CONTIN 000507 96 C 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 102 C 000516 103 C 000516 105 5000 CONTIN 000516 105 5000 CONTIN 000516 106 0DTOTL 000516 106 0DTOTL 000516 106 0DTOTL 000520 107<	TC = 'B'	00012760
000454 64 550 CONTIN 000460 86 950 CONTIN 000460 87 C 000460 87 C 000460 87 C 000460 88 C 000461 90 D0 150 000463 91 I 000464 92 IF(000464 92 IF(000464 92 IF(000506 94 000507 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000507 97 C 000513 98 1600 CONTIN 000513 99 TYPCOD 000516 102 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 0DTGTL 000520 107<	GQ TO 1800 .	00012770
000460 03 930 CONTIN 000460 86 GO TO 000460 87 C 000460 87 C 000460 88 C 000460 88 C 000461 90 DO 150 000461 90 DO 150 000463 91 1 = 000463 91 1 1 = 000464 92 IF(000464 92 1500 CONTIN 000506 94 000506 94 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000513 98 1800 CONTIN 000513 98 1800 CONTIN 000516 101 C 000516 100 1900 CONTIN 000516 102 C 000516 102 C C T T 000516 102 C 000516 104 C <		00012780
000460 67 C 000460 68 C 000461 89 1000 CONTIN 000461 90 D0 150 000463 91 1 000464 92 IF(000463 91 1 000464 92 IF(000506 94 000506 000507 95 1500 CONTIN 000507 96 C 000507 97 C 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 0DTOTL 000516 106 0DTOTL 000516 108 DECFLG 000520 107 BLKFLG 000521		00012790
000460 68 C 000461 89 1000 CONTIN 000461 90 D0 150 000463 91 1 000463 91 1 000464 92 1F(000463 93 1500 CONTIN 000506 94 000507 000507 95 1500 CONTIN 000507 96 C 000507 97 C 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 0DTOTL 000516 107 BLKFLG 000520 107 BLKFLG 000521 108 DECFLG	1900	00012800
000461 89 1000 CONTIN 000461 90 D0 150 000463 91 1 = 000464 92 IF(000463 91 1 = 000464 92 IF(000506 94 000507 000507 95 1500 CONTIN 000507 96 C 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 103 C 000516 105 5000 CONTIN 000516 105 5000 CONTIN 000516 103 C 000516 105 5000 CONTIN 000516 106 0DTOTL 000520 107 BLKFLG 000521 108 DECFLG		00012810
000461 90 D00 L000 CONTIN 000463 91 I I = 000463 91 I I = 000464 92 IF(000464 92 IF(000506 94 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000507 96 C 000507 97 C C 000513 98 1800 CONTIN 000513 98 1800 CONTIN 000516 100 1900 CONTIN 000516 101 C C 000516 102 C 000516 103 C 000516 103 C 000516 104 C T 000516 105 5000 C0NTIN 000516 105 00070TL 000520 107 BLKFLG 000521 108 DECFLG 000 DECFLG 000 DECMAN 000522 109		00012820
30 50 50 50 50 50 50 50 50 50 50 50 15 50 60 15 60<		00012830
000464 92 IF 000464 92 IF 000506 94 000507 95 1500 CONTIN 000507 95 1500 CONTIN 000507 96 C 000507 97 C 000513 98 1800 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 102 C 000516 103 C 000516 104 C T T 000516 105 5000 CONTIN 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL 0D0516 000516 106 ODTOTL 0DC0520 000521 108 DECFLG 000522 109 DECMAN	J 11=3,18	00012840
000476 93 000506 94 000507 95 1500 CONTIN 000507 96 C 000507 97 C 000507 97 C 000513 98 1600 CONTIN 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 0DTOTL 000516 106 0DTOTL 000516 108 DECFLG 000520 107 BLKFLG 000521 108 DECFLG		00012850
000506 94 000506 94 000507 95 1500 CONTIN 000507 96 C 000507 97 C 000513 98 1600 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG	COMPCH(UES, I, SLTP-ON', 1, 7) .NE, 0) GO TO 1500	00012860
000507 95 1500 CONTIN 000507 96 C 000507 97 C 000513 98 1800 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C 000516 105 5000 CONTIN 000516 106 ODTOTL 000516 106 ODTOTL 000516 108 DECFLG 000520 107 BLKFLG 000521 108 DECFLG	CALL CONCAT(10, 3, '0', 1, 1)	00012870
000507 96 C 000507 97 C 000513 98 1800 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C C 000516 102 C C 000516 103 C C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL DOTOTL 000516 106 ODTOTL DECFLG 000520 107 BLKFLG DECFLG 000521 108 DECFLG DECFLG		00012880
000507 97 C 000513 98 1800 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C C 000516 102 C C 000516 103 C C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL DOUG520 107 BLKFLG DECFLG DECFLG 000521 108 DECFLG DECFLG		00012890
000513 98 1800 CONTIN 000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL 000516 106 ODTOTL 000516 108 DECFLG 000521 108 DECFLG		00012900
000513 99 TYPCOD 000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C 000516 105 5000 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG	16	00012910
000516 100 1900 CONTIN 000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL DOUGTL 000520 107 BLKFLG DECFLG 000521 108 DECFLG DECFLG		00012920
000516 101 C 000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 C0NTIN 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG	IF	00012930
000516 102 C 000516 103 C 000516 104 C T 000516 105 5000 C0NTIN 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG		00012940
000516 103 C 000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG 000522 109 DECFLG		00012950
000516 104 C T 000516 105 5000 CONTIN 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG 000522 109 DECFLG		00012960
200516 105 5000 CONTIN 000516 106 ODTOTL 000520 107 BLKFLG 000521 108 DECFLG 000522 109 DECFLG	E SECOND FUNCTION OF THIS SUPPORTING DECING LEDE	00012970
000516 106 0DT0TL 000520 107 BLKFL0 000521 108 DECFL0 000522 109 DECFL0	JE	00012980
000520 107 BLKFLG 000521 108 DECFLG 000522 109 DECFLG	:0.0	00012990
000521 108 DECFLG	= 0	00013000
000522 109 DECMAL	•0	
DECHAL DECHAL	:1.0	00013020
000522 110 C		00013030
000524 111 DØ 600		00013040
000527 112 1=11	0 11=1.10	00013050
200527 113 C	0 11=1,10	00013060
100530 114 CALL C	0 11=1,10	00013070
100530 115 C	D 11=1,10	00013080
000540 116 IF (Kr	D 11=1,10 DNCAT(DESLET,1,DES,1,1)	00013090
100552 117 IF (KO	D 11=1,10 DNCAT(DESLET,1,DES,1,1) MPCH(DESLET,1,',',1,1) FR 0) CC TC 5500	00010100
000564 118 IF (Ko	D 11=1,10 DNCAT(DESLET,1,DES,1,1) PCH(DESLET,1,'',1,1) .EQ. 0) GØ TØ 5500 PCH(DESLET,1,'',1,1) .EQ. 0) GØ TØ 5500	00013100
	D 11=1,10 DNCAT(DESLET,1,DES,1,1) PCH(DESLET,1,'',1,1).EQ. 0) GO TO 5500 (PCH(DESLET,1,'',1,1).EQ. 0) GO TO 5300 (PCH(DESLET,1,'',1,1).EQ. 0) GO TO 5300	

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P1420 01	11-20-84	14.902 SUB. GETCOD(K)STA23PIEXTRACT TYPE CODE FROM THE DESCRIPTION LA	BEL GETCOD PAGE I
000000	1	C SUB. GETCOD(K)STA25PIEXTRACT TYPE CODE FROM THE DESCRIPTION	00011950
600006			00011070
	3		00011970
000006	4	C THE SECOND PART OF THIS ROUTINE EXTRACTS A FITTING OD	00011980
000006	5	C FROM THE DESCRIPTION.	00011990
000006	<u> </u>		00012000
000006	/	COMMON/FILING/ OD, NP, NX, NB, MF, MAI(25), IDES(6, 25), DETAIL,	00012010
000006	8	4 HULL(5), NFAB(25), IPEC(4,25), FABN(125, 16), (POINT(25), NPPPTS,	00012020
000006	g	a, REV, GRNO(4), DWGNO(5)	00012030
000006	10		00012040
000006	11	COMMON/STDHRS/IPPCOD(25), MACHNO, ODIO, HRIEMP	00012050
000006	12	CHARACTER TYPCOD, DES*24, TC, DESLET*1	00012000
000006	13		00012070
000006	14	COMMONZGETODZODELAG, FITODZES, FITSAMZES	00012080
000006	15	INTEGER ODFLAG, FITOD, BLKFLG, DECFLG, ODTO	00012090
000006	16	LOGICAL FITSAM	00012100
000006	17	REAL X, ODTOTL, DECMAL	00012110
<u>200006</u>	18	<u>C</u>	00012120
000006	19	CALL CONCAT(DES, 1, IDES(1, K), 1, 4)	00012130
000021	20	CALL CONCAT(DES, 5, IDES(2, K), 1, 4)	00012140
00034	21	CALL CONCAT(DES,9, IDES(3,K),1,4)	00012150
000037	22	<u>C</u>	00012160
000047	23	1F (ODFLAG .EQ. 2) GO TO 5000	00012170
000052	24	с .	00012180
000053	25	CALL CONCAT(DES, 13, IDES(4, K), 1, 4)	00012190
000066	26	CALL CONCAT(DES, 17, IDES(5, K), 1, 4)	00012200
000101	27	CALL CONCAT(DES, 21, IDES(6, K), 1, 4)	00012210
000104	28	C	00012220
000104	29	C CERTAIN INFORMATION ABOUT THE FITTING TYPE CAN BE	00012230
000104	30	C GAINED BY EXAMINING THE PIECE NUMBER OF THE FITTING.	00012240
000114	31	IF (KOMPCH(IPEC(1,K),1,'P',1,1) .NE. 0) GO TO 150	00012250
000131	32	TC='P'	00012260
000140	33	GO TO 1800	00012270
000140	34	<u>C</u>	00012280
000141	35	150 CONTINUE	00012290
000141	36	1F (KOMPCH(1PEC(1,K),1,'FL',1,2) .EQ. 0) GO TO 200	00012300
000156	37	IF (KOMPCH(IPEC(1,K),1,'J',1,1) .NE. 0) GO TO 250	00012310
000173	38	200 TC*'F'	00012320
000202	39	BO TO 1000	00012330
000202	40	С	00012340
000203	41	250 CONTINUE	00012350
000203	42	IF (KOMPCH(IPEC(1,K),1,'F',1,1),EQ, 0) GO TO 300	00012360
000217	43	C SINCE NONE OF THE ABOVE, THIS MUST BE A VALVE	00012370
000220	44	TC= 'V'	00012380
000227	45	GO TO 1800	00012390
000227	46	C	00012400
000227	47	C	00012410
000227	48	Č.	00012420
000227	49	C C C C C C C C C C C C C C C C C C C	00012430
000220	50		00012440
100230	K1	DG 950 11=2.22	00012450
000233	52		00012460
100233	52	IF(KOMPCH(DES I 'TEE' 1 3) NE 0) GG TG 325	00012470
000234		$T_{0} = T_{1}$	00012480
200240	<u>74</u>		00012490
200200	00		00012500
000256	50		00012510
000256	57	$\frac{1}{10}$	00012520
100220	58		00012520
200277	59	01000	00012030

3752 .82365 .971 .980 .953 .954 .955 .957 .956 .970 4021 .52367 .972 .980 .923 .926 .931 .934 .939 .942 .975 .976 .983 .986 .991 4041 .52384 .093 .994 .997 .990 .009 .001 .003 .001 .001 .001 .003 .001 .001 .001 .003 .003 .001 .003 .003 .001 .003	1420 01	11-20-84	14.899	SUB.	STDT I M(T	EMP, AD1	, ADN)	·STA25PI	CALCU	ILATE ST	D. TIME	VALUES	LABE	STDTI	M PAGE	: 28	
4026 \$2380 \$972 \$68 4041 \$2380 \$986 \$91 \$22 \$26 \$91 \$93 \$942 \$975 \$978 \$963 \$966 \$991 4055 \$2282 1003 1004 1023 1004 1023 \$100 1000 1009 1010 1011 1012 1013 1014 1015 411 \$2286 \$16 \$104 \$105 \$106 \$1060 \$1009 1010 1011 1012 1013 1014 1015 411 \$2286 \$16 \$1040 \$105 \$106 \$1060 \$1010 1011 1012 1013 1014 1015 411 \$2395 \$16 \$1040 \$102 <td< td=""><td>3752 4013</td><td>. \$2362 . \$2365</td><td></td><td>947 971</td><td>948 980</td><td>953</td><td>954</td><td>955</td><td>956</td><td>957</td><td>958</td><td>970</td><td></td><td></td><td></td><td></td><td></td></td<>	3752 4013	. \$2362 . \$2365		947 971	948 980	953	954	955	956	957	958	970					
4041 52380 565 601 923 926 931 934 935 942 975 976 963 966 991 4065 52382 1003 1006 1023 1006 1023 1011 1011 1012 1013 1014 1015 4311 52384 1004 1023 1035 1016 1017 1035 1011 1012 1013 1014 1015 4316 52384 1006 1023 1035 1031 1035 1031 1031 1011 1012 1013 1014 1015 4316 53020 1054 1062 1031 1061 1111 1051 106 1111 1051 1065 1031 106 1111 1053 1032 1032 1031 1132 1130 1131 1136 1333 1330 1330 1330 1333 1330 1331 1335 1334 1343 1343 1343 1343 1343 1343 1343 1343 1343 1354 1344	1026	\$2367			088												
Adds Size Size <thsize< th=""> Size Size</thsize<>	4041	S2380		372	801	.023	926	931	934	939	942	975	978	083	986	991	
4065 32382 1004 1023 4231 52384 1004 1023 4311 52385 1016 1017 1035 4316 52395 116 1040 1023 4321 52395 116 1040 103 4321 52395 616 1040 103 4321 52395 616 1040 103 4321 52395 616 1040 103 4321 52395 1051 103 104 4326 53020 1055 1081 1051 4346 53020 1052 103 1051 5227 53040 1062 1098 1111 5333 53040 1042 1106 1111 5333 53040 1125 1134 1136 5407 54015 1138 1144 146 5407 54035 1165 1164 5447 54039 1165 1173 5447 54043 1165 1173 <td>4041</td> <td>. 52,000</td> <td></td> <td>000</td> <td>091</td> <td>923</td> <td>920</td> <td>501</td> <td>504</td> <td>909</td> <td>346</td> <td>970</td> <td>370</td> <td>900</td> <td>900</td> <td>331</td> <td></td>	4041	. 52,000		000	091	923	920	501	504	909	346	970	370	900	900	331	
4211 \$2284 1004 1023 4311 \$2385 86 827 901 967 1000 1009 1010 1011 1012 1013 1014 1015 4316 \$2395 616 1017 1035 1000 1009 1010 1011 1012 1013 1014 1015 4321 \$2395 616 1040 4327 \$3000 223 317 1051 4460 \$3020 1084 1062 1031 1065 1031 5267 \$3000 1082 1003 1109 1131 1136 5267 \$3030 1125 1130 1136 1144 5467 \$4015 1138 1144 5406 \$4019 1142 1146 5474 \$4035 1147 1153 5447 \$4035 1147 1153 154 154 154 154 154 154 154 154 154 154 154 154 154 154 154 154 154 154 <t< td=""><td>4065</td><td>\$2382</td><td></td><td>1002</td><td>1008</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	4065	\$2382		1002	1008												
4311. S2365 626 627 901 967 1000 1009 1011 1012 1013 1014 1015 4316. S2395 016 1040 1038 1040 1015 1014 1015 4321. S2395 016 1040 233 317 1051 4362 53020 1054 1062 4366. S3020 1065 1081 1010 1101 1062 1039 5217. S3040 1062 1039 1111 1105 1111 1105 5227. S3020 1100 1108 1111 1105 1105 1105 5227. S3020 1101 1108 1111 1105 1107 1103 1108 1111 5320. S3020 1101 1103 1108 1111 1105 1104 1109 1101 1103 1104 1105 1111 1105 1111 1105 1111 1105 1104 1105 1111 1111 1105 1111 1111 1111 1111 1111 1111 1111 1111 1111	4231	\$2384		1004	1023		·						·····				
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4316 \$2395 616 1030 4321 \$2395 016 1031 4321 \$3020 233 1051 4346 \$3020 1065 1081 5170 \$3040 1062 1096 5213 \$3040 1062 1096 5213 \$3040 1002 1096 5227 \$3050 1105 1106 5230 \$3072 1117 1111 5250 \$3072 1117 1136 5333 \$3080 1142 1166 5406 \$4015 1138 1144 5407 \$4019 1142 1146 5407 \$4019 1141 1165 5426 \$4035 1151 153 5446 \$4045 1156 162 5447 \$4049 1160 164 5437 \$4045 1177 177 5437 \$4045 1177 177 5437 \$4045 1188 1189 5543 \$3				1016	1017	1035	507	1000		1000	1010	1011	1016	1010	1014	1010	
1321 \$2235 1100 1327 \$23000 223 317 1327 \$2000 1051 1051 1327 \$2000 1055 1051 1570 \$2000 1055 1081 5171 \$2045 1065 106 5213 \$2002 117 106 1111 5230 \$2002 117 106 1101 5330 \$2000 1025 100 106 1111 5250 \$2072 117 106 1109 1131 1136 5420 \$3010 1042 1106 1109 1131 1136 5407 \$4015 1130 1142 1146 144 145 5407 \$4015 1150 1164 165 167 164	4316	. \$2390		, 1010 , 818	821	1038											
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6170 53040 1082 1098 5213 53045 1105 1108 1108 5250 53072 1117 1130 1131 1136 5333 53090 1125 1130 1131 1136 5333 53072 1117 1130 1131 1136 5333 53090 1024 1109 1131 1136 5406 54015 1139 1144 146 5407 54035 1147 1153 . 5426 54035 1147 1153 . . 5427 54035 1165 1162 . . 5446 54045 1156 . . . 5447 .54039 1161 1164 . . 5447 .54045 1165 1189 . . 5434 .54059 1171 1175 . . . 2342 .59900 1166 1189 . . . 5552 .59990	4660	. \$3030		1065	1081												
5213 53045 1105 1108 5225 33072 117 5333 53090 1125 1130 5333 53090 1125 1130 5433 53090 1125 1130 5434 53090 1142 1109 1131 1136 5405 54105 1138 1144	5170	. \$3040		1082	1098					e				 			
5227 53050 1100 1108 1111 5250 53072 1117 1100 1109 1131 1136 5333 53090 1125 1130 1131 1136 1108 1111 5430 5310 1042 1109 1131 1136 1108 1111 5430 5310 1042 1109 1131 1136 1108 1109 1131 1136 5440 54015 1138 1144 1146 1147 1145 1155 1155 1155 1165 1165 1164 1164 1164 1164 1164 1164 1165 1164 1165 1164 1165 1164 1165 1164 1165 1165 1165 1165 1165 1165 1166 1164 1165 1165 1165 1165 1165 1165 1165 1165 1165 1165 1165 1166 1165 1166 1165 1166 1165 1166 1165 1166 1166 1166 1165 1166	5213	. \$3045		1105	1108												
5250 .33072 1117 1130 5333 .53060 1125 1130 5377 .53100 1042 1109 1131 1136 5406 .4015 1138 1144	5227	. \$3050		1100	1103	1106	1111				•						
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5370 \$3100 1042 1109 1131 1136 5400 \$4015 1138 1144	5333	. \$3090		1125	1130						······				·····		
5406 .54015 1139 1144 5407 .54019 1142 1146 5427 .54039 1151 1153 5427 .54039 1151 1152 .5446 .54045 1156 1152 .5447 .54049 1164 . .5473 .54055 1165 1173 .5474 .54059 1171 1175 .2305 .59076 FORMAT 1163 .2305 .59076 FORMAT 1191 .5543 .59900 1188 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 1186 1193 .5552 .59990 .5404 .5404 .5552 .59990 .5404 .5404	5370	. \$3100		1042	1108	1109	1131	1136									
5407 \$4019 1142 1146 5426 \$4035 1147 1155 5427 \$4039 1151 1155 5446 \$4045 1156 1162 5447 \$4049 1165 1173 5447 \$4055 1165 1173 5447 \$4059 1171 1175 2342 \$4100 FORMAT 1177 2342 \$4100 FORMAT 1177 2342 \$4100 FORMAT 963 191 2025 \$39876 FORMAT 963 5543 \$9900 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > EDIT DATE 06-29-83 < FT2.1U1 > ILAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5406	. \$4015		1138	1144												
\$426 \$4035 1147 1153 \$5427 \$4039 1151 1155 \$5446 \$3045 1156 1162 \$5447 \$4049 1160 1164 \$5473 \$3055 1165 1173 \$5474 \$4059 1171 1175 \$2342 \$4100 FORMAT 1963 \$2305 \$3076 FORMAT 963 1191 \$5543 \$39900 1188 1189 5552 \$39900 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > * * * * * * LAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 *	5407	. \$4019		1142	1146												
5427 \$4039 1151 1155 5446 \$4045 1156 1152 5447 \$4049 1165 1173 5473 \$4055 1165 1173 5474 \$4055 1165 1173 5474 \$4059 1171 1175 2342 \$4100 FORMAT 1177 1179 _2305 \$3976 FORMAT 963 1191 _5543 \$3990 1186 1189 5552 \$3990 1186 1193	5426	. \$4035		1147	1153				·····								
5446 .54045 1150 1162 5447 .54049 1160 1164 5473 .54055 1165 1173 5474 .54059 1171 1175 2305 .99276 FORMAT 1177 2305 .99276 FORMAT 1191 5543 .59900 1186 1189 5552 .59990 1186 1193	5427	. \$4039		1151	1155												
5447. \$4049 1160. 1164 5473. \$4055 1166 1173 5474. \$4059 1171 1175 2305. \$30276 FORMAT 963. 1191 1191 2543. \$3990 1180 1189 5552. \$3990 1186 1193	5446	. \$4045		1150	1162		-					•					
6473 S4055 1165 1173 5474 S4059 1171 1175 2342 S4100 FORMAT 1177 1179 2305 S9876 FORMAT 963 1191 5543 S9900 1188 1189 5552 S9990 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > ELIT DATE 06-29-83 < FT2.1U1 > ELIT DATE 06-29-83 < FT2.1U1 > TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5447	. \$4049		1160.	1164		•										
5474 .54059 1171 1175 2305 .59876 FORMAT 1171 1179 2305 .59876 FORMAT 163 1181 5543 .59900 1188 1189 5552 .59990 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > EDIT DATE 06-29-83 < FT2.1U1 > INES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5473	. \$4055		1165	1173												
2342 . S4100 FORMAT 1177 1179 2305 . S9076 FORMAT 963 1191 5543 . S9900 1188 1189 5552 . S9990 1186 1193 EDIT DATE 06-29-63 < FT2. 1U1 > EDIT DATE 06-29-63 < FT2. 1U1 > ILAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5474	. \$4059		1171	1175												
2305 S9876 FORMAT 963 1191 5543 S9900 1188 1189 5552 S9990 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > EDIT DATE 06-29-83 < FT2.1U1 > EDIT DATE (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	2342	. \$4100	FORMAT	1177	1179												
5543 .59900 1188 1189 5552 .59990 1186 1193 EDIT DATE 06-29-83 < FT2.1U1 > CLAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	2305	. S9876	FORMAT	963	1191												
5552 . S9990 1186 1193 EDIT DATE 06-29-83 < FT2.101 > EDATE 06-29-83 < FT2.101 > ELAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5543	. \$9900		1188	1189												
EDIT DATE 06-29-83 < FT2.1U1 > LAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	5552	. \$9990		1186	1193												
EDIT DATE 06-29-83 < FT2.101 > LAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION						·····											
LAPSED TIME (SEC) 3.40 LINES/MINUTE 21018 THERE WERE 2 DIAGNOSTICS IN ABUVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	EDIT	DATE 06-2	9-83 < FT2	101 >			•										
THERE WERE 2 DIAGNOSTICS IN ABUVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION	LAPSED	TIME (SEC)	3.40		LINES/M	INUTE 2	1018										
THERE WERE 2 DIAGNOSTICS IN ABOVE COMPILATION 32K WORDS WERE USED FOR THIS COMPILATION																	
	THERE <u>32K</u>	WERE 2 WORDS WERE	DIAGNOSTIC	S IN AE	OVE COM	PILATIO	N										
										. <u></u>							

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21420 01	11-20-84	14.899	SUB. S	TOTIMCT	EMP, AD1	, ADN)	STA25P1	CALCU	LATE ST	D. IIME	VALUES	LABEL	. SIDIIM	PAGE	27	
371	. 5930		307	308	312	204	205	206	207	202	206	211	212			
456	s1000		337	348		294	290	290	297			_3[]	313	~~~~		
571	. \$1001		360	362	. 363	370										
700	. \$1002		371	372	373	374	375	376	377	380						
711	. 31003		352	353	365	378	384									
716	. \$1004		386	202												
722	S1005		349	392	387	397										
733	. \$1008		326	399	007	037										
1040	. \$1012		426	430	435											
1070	. 51014		435	444												
1102	. \$1015		442	448			450	•								
1130	<u>. \$1016</u>		439	440	445	446	456									
1171	S1019		420	403												
1252	. \$1022		478	482	487					-						
1301	. 81025		487	491	492	495										
1331	. \$1029		466	505												
1365	. \$1034		509	510	513											
1406	. \$1038		433	506	511	520								-		
1573	<u>. 51041</u> 51043		535	561	562	564	565	567								
1611.	. \$1044		559	572		004	000	007								
1616	. \$1045	•	529	530	536	543	555	576			•					
1623	. \$1060		412	415	454 '	461	485	495	498	499	502	518	580			
1626	. \$1065		410	581												
1746	. \$1072		605	616		~ ~ ~										
1753	. 51074		602 504	603, 607	606 500	624	614	620								
1763	<u>\$1078</u>		592	626		044			· · · · · · · · · · · · · · · · · · ·				· · · · · ·			
1772	. \$1300		640													
2153	. \$1305		669	680												
2222	<u>. 51310</u>		690	693	698											
2257	. \$1315		696	698	709											
2302	. \$1320		684	715	700											
2336	S1330		719	720	123											
2371	. \$1350		729	734				· · · · · · · · ·								
2414	. \$1360		735	740												
2437	. \$1370		710	721	741	746										
2446	. \$1380		712	731	737	743	750		· · · · · · · · · · · · · · · · · · ·							
2522	. 51388		761	768	787	765	770									
2001	51309		703	704 868	707	700	707	725	773							
2541	. \$1395		661	775	704	700	/0/	120	110							
2546	. \$2000		785													
3164	. 52320		832	859						•						
3247	. \$2331		873	875	879											
3253	<u>. \$2332</u>		870	871	683											
3301	, 52340		886	894				-								
3327	, 32342 \$2347		900	091												
3342	. \$2350		896	904												
3507	. \$2352	•	905	906	907	908	909	910	911	912	913	914	917			
3552	S2355		919	928	-											
3565	. 82357		920	936				•								
3600	<u>, s2360</u>		915	946												
2272	. S2361	FORMAT	960	961												

			1024	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079 1127	
			1133	1000		1000		1050	1091	1032		1034_	1050	1030		
31	MACHNO	STDHRS	62	66	•											
5	MAT	FITING	57	919	920	971	972									
<u>2174</u>	MAXIND	. DATA.	276	278	289	290	1188						·	· · · · · · · · · · · · · · · · · · ·		
23	MCHING	.DATA.	177	178	1032	1128	1134									
2164	MPSIZE	.DATA.	66	217	218	219	220	221	642	643	644	645	646	647	648	
~ . ~ ~			651	654	668	1056	1112	1113	1115							
2163	MAUSTO	<u>. UATA.</u>	63	214	<u> </u>	1032	1128	1134	1147	1149	1150					
2140	NAVEIG	.UAIA.	97	100	/4/	1100	1120									
3	NE	FITING	57	197	202	1100	1130	410	502	661	910	1100				
272	NEAR	FITING	57	223	250	202	320	251	392	415	528	580	507	601	624	
6/6			<u> </u>	752	773	821	825	1038	397	410				001		
1	NP	FITING	57	196	308	021	020	1000								
4440	NPPPTS	FITING	57	307						•						
2166	NTRUEF	DATA.	250	261	317											
2	NX	FITING	57		مسر حلمة متسمعهم											
0	0D	FITING	57													
32	0D10	STDHRS	62	66	200	201	218	219	220	221	457	459	573	617	643	
			044	645	646	847	648	789	790	791	792	793	794	795	796	
			797	798	799	800	601	802	803	804	805	806	807	808	809	
			810	1112	1113,	1120	1121	1122	1123							
0	ODFLAG	GETOD	71	72	334	341	387	393			•					
2260	OMSWI	<u>, DATA,</u>	939	940											·	
2317	OMVJTI	.DATA.	991	992												
9991	REV	FITING	57	1177		1070		•	•							
2144	SEIUP	. DATA.	97	100	651	1056	1115	000	202	200	200	210	050	125	428	
1744	SHUFJ		441	497	260	200	203	<u>200</u>	<u> </u>	500	510	520	<u> </u>	546	562	
			441	407	490	493	495	706	710	720	754	758	827	881	1120	
1547	SJTDUP	ΠΑΤΑ	66	76	285	300	301	309	362	363	365	367	439	440	441	
1041	001001		445	446	449	491	492	493	498	499	501	509	510	535	536	
			541	546	549	550	564	565	566	605	606	608	704	705	706	
			719	720	870	871	875	877	661							
2152	SLEEVE	.DATA.	97	100	742											
2146	SLPFLG	. DATA.	97	100	711											
3	STDHRS		62													
	STDTIM		3													
2236	SWFLAG	.DATA.	66	829	918	1,000										
<u></u> _	IEMP	DATA	3	1065	1082	1106	1109									·····
2155		. UATA.	9/	100	654	0.40	000	400	ACK	ACC	KOG	550	550	570	500	
U	TTPCOD	SIDHKS	52	03 710	337	349	302	420	400	400	000 80K	800 800	009	570	233	
2151		DATA	004	100	736	163	750	741	701	000	030	050				
50	WELDS	DATA	124	125	897	997										
2162	WTOTAL	. DATA.	69	213	897	965	997	1165	1167	1169	1170					
						200										
20	. \$300		199					•								
42	. \$700		196	197	209											
135	. \$810		256	257	260											
145	. \$830		262	263												
156	. 5840	··· • • • · · · · · · · · · · · · · · ·	258	269												
161	. \$850		270	271												
171	. \$890		264	273												
174	. \$895		252	274	_			•								
342	5920		290	291	292	303										

21420 01 11-20-8	14.899	SUB. S	STDTIM(T	EMP, ADl,	ADN) -	- STA25F	pl CA	LCULATE	STD. TIM	IE VALUES	5 LAB	EL STD	TIM PA	.GE 25	
2 GETOD		71													
44.12 GRNO	FTTTING	57	1177	,											
33 HRTEMP	STDHRS	62	63	654											
265 HULL	FITTING	57	1177												
2157 1	. DATA.	199	200	201	202	542	543	547	549	609	610	612			
67 I <u>ABN</u>	FITING	66	78	287	291										
2223 IARG	DATA,	66	449	450	451	452	453	541	542	548	550	608	609	6 1 3	· ·
		887	890	922	925	930	933	938	941	974	9.7.7	982	985	990	
ייסד 2000	עשעם	993	997 1171	1003	1004 1177	1023	1024	1032	1120	1127	1128	1132	1133	1134	
26 IDFC		<u> </u>	1141	1144											
2336 IFT	DATA	64	1159	1162	1177										
2335 IMT	.DATA.	64	1150	1153	1177										
2165 IND	.DATA,	230	2 5 3	260	262	270	273	276	321	351	352	397	405	424	
		425	428	429	470	471	480	481	509	510	514	515	516	517	
		528	529	560	500	587	601	602	624	638	689	692	719	720	
		7 <i>52</i>	753	773	785	825	826	1038							
22 <u>1 INDCEN</u>	DATA	66	<u>42</u> 5	429	471	475	4 <u>76</u>	481	495	498	499	5	5 01	6)89	
		690	692	693	698	703	704	705	706						
2170 INDEND	.DATA,	66	253	262	270	351	352	424	426	428	430	435	438	439	
		440	441	445	446	449	450	451	459	460	470	473	474	478	
		480	482	487	490	491	492	493	528	529	560	601	602	752	
303 TDEC	ᢑ᠇᠊ᡎᡎ᠇᠉ᢙ	/53	8⊿5 ว⊑7	8∠6 200	110	E O 1	662	010							
323 IPBC 4407 IDOINT	FILLING	57 57	308 72/	J∠O ,	412	594	200	010							
16 TORED	L T I I TING	1068	1069	1070 ·	1071	1072	1073	1074	1075	1076	1077	1078	1079	1085	
		1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1127	1133	
2175 IPTA	, DATA .	287	291	308	1007	T000	TODT			1071					
2235 IWSIZE	.DATA,	66	788	789	790	791	792	793	794	795	796	797	798	799	
		800	801	802	803	804		806		808	809	810	831		
2340 IWT	.DATA.	64	1170	1173	1177										
2173 J	.DATA,	262	263	270	271	290	291	292	294	295	299	300	301	307	
		308	352	353	356	362	363	365	367	529	530	535	536	538	
		539	541	545	546	547	840	549	550	561	573	51	602	603	
		605	60	6 608	753	754	757	758	826	827	832	1100	1100		
2202 77	D307	871	875	8.7.7	881	960	1024	1027	1028	1029	T030	1188	1189		
2202 JJ 352 דיידיי	.DATA.	333	342	394	560	561 541	562	503	564	565	556				
1155 JTTOD	DATA,	- 72-	<u>∠03</u> /⊑0	<u>2/1</u> 250	<u>449</u> 472	<u>54⊥</u> //7⊑	51 <i>1</i>	516	220	517	510	572	8 2	41027	
T100 CTTT	.DAIA.	1028	1029	1030	CIF	4/3	714	JT0	220	741	542	515	0 3	TIUG/	
760 JTSAME	DATA.	73	451	460	474	476	515	517	539	548	550	574	832		
237 JTSIZE	.DATA.	, 3	831	635	836	837	838	839	840	841	842	843	844	845	
		846	847	848	849	850	851	852	853	854	855	856	857	897	
		997	1026	1027	1028	1029	1030	1032	1119	1120	1121	1122	1123	1128	
		1134													
2167 к	. DAT A	252	253	256	<u>257</u>	271	273	278	280	283	285	286	287	289	
		290	296	297	298	300	301	309	310	326	328	331	333	337	
		349	351	382	397	410	412	415	420	452	453	457	458	465	
		466	473	474	475	476	506	514	515	516	517	523	538	539	
		543	553	559	570	580	592	594	597	599	601	<u>610</u>	612	613 725	
		617	618	624	661	663	666	669	671 005	684	710	716	729	735	
		741	752	761	773	816	818	821	825	886	895	896	919	920	
0 KONDOU		971	972	T038	000	0.07	200	2 2 5	240	200	265	271	270	272	
Z KOMPCH		257	294	<u>295</u>	296	410	328	337	349	300	305	5/L 170	3/2	5/3	
		374	3/3 E0/	3/0	5/1	41Z	42U	420 600	430	405 71 <i>6</i>	400	生 / ひ ワつ E	48∠ 7/1	300 757	
		559 761	010 010	צעכ כדס	003 075	004 006	090 205	805 806	00F /10	016 110	129 907	000	/4⊥ Q∩Q	/ 5 / 91 0	
		/01 911	010 010	0/5	0/5	000	0 2 C 0 2 C	0/7	903	010	954	900		9T0	057
		211	914 971	<u> </u>	9 <u>14</u> 1009	1000	1010	<u>9</u> 4 <u>/</u> 1011	1012	1012	1014	1015	1016	1017	JJ1
			211	214	TODO	TODA	TOTO	TOTT	TOTZ	TOTO	TOTI	TOTO	TOTO	TOT /	

PI420 01	1 11-20-8	4 14,899	SUB. S	STDT IM(TH	EMP, AD1	I, ADN)	STA25P	ICALCU	ILATE ST	D. TIME	VALUES		STDTIM	PAGE	24	
OFFEET	SVMD CI LO	OL OD AL	DECES			NUMBER										
		GLUDAL	REFERE	LINCES BY	ALIER	NUMBER				<u></u>						
5	ASCB															
ĩ	DATA.															
17	<u>.E.L</u>	_, DATA.				<u></u>										
7	. FCHM.															
12	. FCNVC															
14			•													
<u> </u>	.FCOM.						<u></u>	<u> </u>			<u> </u>		<u> </u>			
10	.FFIL.															
11	.FSRO.															
	FTAB.							····		·····						
15 2	. FWRU.															
2142	AD1	DATA.	3	1105						-						
2141	ADN	_, DATA,	3	1108							<u></u>					
722	BNDHRS	.DATA.	82	83	202											
2150	BRANCH	DATA.	97	100	730											
2153	BRZFIT	DATA.	97 07	100	724											
2154	BRZFLG	, DATA.	<u>97</u>	100	768											
2160	BTOTAL	DATA.	69	202	1140	. 1141										
20	CONCAT	D • T • •	382	553	570						•					
2257	CSV IT1	DATA	931	932				· · · · · · · · · · · · · · · · · · ·								
2256	CUSW1	DATA	903	904 924												
2315	CUVJTI	DATA.	975	976					÷							
264	DETAIL	FITING	57	1177			••••••••••••••••••••••••••••••••••••••	•								
4446	DWGNO	FITING	57	1177												
17 605		DATA	1056	105	6K 1	0=4			704	700	700	740	747	764	700	
000	- ADHKO	. UNTA	1115	100	160	004	023	711	124	730	730	142	/4/	104	100	
467	FABN	FITING	57	63	78	294	295	296	297	356	365	367	426	430	478	
		_	482	690	693	757	<u>' 866</u>	875	877	960	1024	-	_		-	
2206	FABNJT	.DATA.	63	356	360	367	371	372	373	374	375	376	377	866	873	
			877	905	906	907 are	908	909	910	911	912	913	<u>914</u> 1011	<u>947</u> 1012	948	
			1014	1015	1016	10175	1.1901	900	900	1000	1008	1010	1011	1016	1013	
2230	FFSIZE	.DATA.	72	668	672	673	674	675	676	677	678	699	711	724	730	
			736	742	747	764	. 768	·····	<u></u>							
4	FITING	OFTER	57													
1	FILOD	96100	71	72	450	452	457	473	475	514	516	538	542	543	609	
32	FITSAM	GETOD	71	73	451	453	458	474	476	515	517	539	548	550	613	
<u></u>			618	669			<u>~~~</u>		Y		<u>*_i i i .</u>	<u> </u>		<u> </u>	<u>~</u> .~	· · · · · · · · · · · · · · · · · · ·
2321	FLAGI	.DATA.	66	1062	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	*
		D.4.7.4	1079	1103	1125								1000			
2322	LAG2		66	11053	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	
2234	FLGI	DATA.	786	888	889											
2156	FLOFLO	DATA.	97	100	699											
2231	FODIO	DATA.	72	1 671	673	674	675	678	677	678	834	836	837	838	839	
			840	841	842	843	844	845	846	847	848	849	850	851	852	
a.	CTATA		853	854	855	856	857	*** *		700		740	7 4 7	701	700	
2161	CIUTAL	. DATA.	69 1056	212	001 1159	604 1150	1150	711,	724	730	736	142	141	164	768	
21	GETCOD		342	394		1.00								••		
			₩ ⁻ 1 Ray											ì		

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TRANSFERS....

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TO LINE# FROM LINE#	TO LINE# FROM LINE#	TO LINE# FROM LINE#	TO LINE# FROM LINE#	TO LINE# FROM LINE#
1193 1187 1155 1152	1175 1172 1153 1148	1173 1166 1146 1143	1164 1161 1144 1139	1162 1157 1136 1131
1136 1110	1136 1108	1136 1050	1130 1125	1111 1104
1111 1102	1111 1107	1108 1105	1098 1084	1081 1067
1062 1055	1051 320	1051 229	1038 824	1038 820
1035 1013	1035 1012	1035 1011	1035 1010	1035 1009
1035 1008	1035 1002	1035 969	1035 903	1035 828
1035 1022	1035 1016	1035 1015	1035 1014	1023 1007
1008 1003	997 945	997 939	997 935	997 931
997 927	997 923	997 991	997 893	997 000
997 987	997 983	99/ 9/9	997 975	957 950
900 973	900 971	970 952	970 954	970 953
970 957	970 908	928 919	917 906	917 905
917 914	917 913	917 912	917 911	917 910
917 909	917 908	917 907	904 896	897 895
694 686	883 870	883 872	879 874	879 876
859 833	773 705	773 704	773 667	773 665
773 727	773 708	770 756	770 767	770 757
768 763	750 714	. 750 739	750 733	750 745
746 741	746 710	746 722	740 735	734 729
728 718	723 720	723 719		<u> </u>
709 698	698 691		620 607	620 604
	624 090 616 605		520 007 580 498	580 497
520 015 580 488	580 462	580 455	580 419	580 414
580 519	580 504	576 556	576 544	576 537
576 534	572 559	567 564	567 562	567 561
567 565	557 535	520 512	520 434	520 508
513 509	513 510	505 469	495 492	495 491
495 489	487 484	467 479	470 465	463 423
456 440	456 439	456 447	456 445	448 443
444 437	435 427	435 432	397 330	
397 332	392 350	384 355		384 306
380 377	380 376		370 362	370 361
380 372		310 304	313 297	313 296
212 205	313 300	313 284	313 282	313 311
1 312 308	305 289	303 293	303 291	273 268
269 259	260 256	260 257	209 198	209 196
RETURN 1193				
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01 11-20-84 14.899 SUB. STDTIM(TEMP, AD1, ADN)--STA25PI--CALCULATE STD. TIME VALUES LABEL STDTIM PAGE 22

TRANSFERS....

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FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE#	TO LINE#	FROM LINE# T	O LINE#	
1193	RETURN	1167	1193	1172	1175	1166	1173	1161	1164	
1157	1162	1152	1155	1148	1153	1143	1146	1139	1144	
1131	1136	1125	1130	1110	1136	1108	1136	1107	1111	
1105	1108	1104	1111	1102	1111	1084	1098	1067	1081	
1055	1062	1050	1136	1022	1035	1016	1035	1015	1035	
1014	1035	1013	1035	1012	1035	1011	1035	1010	1035	
1009	1035	1008	1035	1007	1023	1003	1008	1002	1035	
996	997	991	997	987	997	983	997	979	997	
975	997	973	986	971	960	969	1035	959	970	
957	970	956	970	955	970	954	970	953	970	
952	970	947	970	945	997	939	997	935	997	
931	997	927	997	923	997	921	936	919	928	
916	946	914	917	913	917	912	917	911	917	
910	917	909	917	908	917	907	917	906	917	
905	917	903	1035	896	904	895	897	893	997	****
888	997	886	894	876	879	874	879	872	883	
870	683	833	859	828	1035	824	1038	820	1038	
767	770	763	768	757	770	756	770	745	750	
741	746	739	750	735	740	733	750	729	734	
727	773	722	748	, 720	723	719	723	718	728	
714	750	- 710	746	708	773	705	· 773	704	773	
698	709	<u> </u>	709	695	698	691	<u>698</u>	688	715	
670	680	667	773	665	773	615	620	611	620	
607	620	605	616	604	620	600	624	598	624	
596	624	565	567	564	567	562	567	561	567	
559	572	556	576	544	576	537	576	535	557	
534	576	519	580	512	520	510	513	509	513	
508	520	504	580	499	580	498	580	497	580	
492	495	491	495	489	495	486	580	484	487	
4/9	487	469	505	465	470	462	580	455	580	
447	406	445	456	443	448	440	456	439	456	
407	444	434	520	432	435	427	435	423	463	
419	080	414	580	391	397	379	384	377	380	
	360	3/5	380		380	373	380	372	380	
J/ 286	380	366	384	364	370	362	370	361	370	
300	304	350	392	340	348	332	397	330	397	
207	1001	311	313	308	312	306	313	302	313	
201		290	313	295	313	294	313	293	303	
250	260	. 209	305	284	313	282	313	268	273	
106	209	207	200	206	260	229	1051	198	209	
150	209									
						- <u> </u>				
		***** ********************************			<u></u>					

١.

P1420 01	11-20-8	4 14.899	SUB. STDTIM(TEMP, AD1, ADN) STA25PI CALCULATE STD. TIME VALUES	LABEL STDTIM	PAGE 21
005535	118	1	& 5A4, 18X, A2, `/', A1, 17X,	00011810	
005535	118	32	k = 4(14)	00011820 U	
005535	118	33 с	()/	00011830	
005535	118	84 с		00011840	
005535	118	85 с		00011850	
025535	118	36	IF (NF ,EQ. 0) GO TO 9990	00011860	
005537	118	37 с	ZERO OUT SHOPJT ARRAY FOR NEXT TIME THROUGH	00011870	
005540	118	38	DO 9900 J=1, MAXINO	00011880	
005543	118	9900	, SHUPJT(J) = O^{-}	00011890	
0053 <u>44</u>	119	0 с		00011900	
005552	119	1 9876	FORMAT(V)	00011910	
005552	119	2 c		00011920	
005552	119	9990	RETURN	00011930	
003 <u>556</u>	119	94	END	00011940)
(** * *W	1470 EQU	ALITY OR NON-	EQUALITY COMPARISON MAY NOT BE MEANINGFUL IN LOGICAL IF EXPRESSIO	NS	
(****W	7 MEM0	DRY EXPANDED.	USE SLIMITS OR CORE= OPTION FOR NEXT RUN		

D005264 1122 IF (DD10, GT, B1), JTS12E-2 D0011220 D00274 1123 G IF (LA01, GO, GT, A1), JTS12E-2 D001120 D00274 1124 G IF (LA01, GO, GT, A1), JTS12E-2 D001120 D00274 1125 G IF (LA01, GO, GT, A1), JTS12E-2 D001120 D00274 1126 IF (Component (IPREPTL), I, 'PP-2', I, 4), EO, 0) LARG-5 D001120 D003930 1127 IF (Komponent (IRR, JTS12E) D001120 D001120 D003930 1128 MTORL-MEDIAL-REPTL3), I, 'PH-2', I, 4), EO, 0) LARG-5 D001120 D001120 D003930 1131 IF (KA0PCH (IRREPTL3), I, 'PH-2', I, 4), EO, 0) LARG-5 D001130 D001120 D003930 1132 IF (KA0PCH (IRREPTL3), I, 'PH-2', I, 4), EO, 0) LARG-5 D001130 D001120 D003930 1136 G100 CONTINUE D001130 D001130 D001130 D003930 1136 G100 CONTINUE D001130 D001130 D001140 D003930 1136 G100 CONTINUE D001140 D001140 D001140 D003930<	P1420 01	11-20-84	14.899	SUB. STDTIM(TEMP, AD1, ADN)STA25PICALCULATE STD. TIME VALU	ES LABEL STDTIM PAGE 20
0068271 1120	005264	1122		IF (OD10 .GT. 81) JTSIZE=4	00011220
03224 124 C F (LAS) 0011260 03221 125 F (KONPCHL (PREPL(1), 1, "PH-2", 1, 4), EQ. Q) LARG=5 00011220 03333 126 MIOTAL-MIOTAL-MICHING(LARG, JTS12E) 0001120 0001120 03333 128 C 0001120 0001120 0001120 03333 131 -000 PETHINE 0001130 0001120 003334 133 F (KONPCHI (PREPC(1), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003340 133 F (KONPCHI (PREPC(3), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003340 133 F (KONPCHI (PREPC(3), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003340 134 F (KONPCHI (PREPC(3), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003340 134 F (KONPCHI (PREPC(1), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003340 134 F (KONPCHI (PREPC(1), 1, "PN-2", 1, 4), EQ. Q) LARG=5 0001130 003370 136 G F (KONPCHI (PREPC(1), 1, "PN-2", 1, 4), EQ. Q) LARG=5<	005271	1123		IF (UD10 .GT. 141) JTSIZE=5	00011230
0002576 1125 IF (FLAG) 1.6 (D) 0 (D) 0 (D) 1.78 (D) 000300 1.2 (D) IA (D) IA (D) IA (D) 0 (D) 1.2 (D) 000301 1.2 (D) IA (D) IA (D) IA (D) 0 (D) 1.2 (D) 000333 1.2 (D) IF (FLAG2, EG, O) 0 (D) 1.2 (D) 0 (D) 1.2 (D) 000333 1.3 (D) 0 000 (D) 0 (D) 0 (D) 1.2 (D) 0 (D) 1.2 (D) 000333 1.3 (D) IF (FLAG2, EG, O) 0 (D) 1.4 (D) 0 (D) 1.2 (D) 1.4 (D) 0 (D) 1.4 (D)	005274	1124	C		00011240
030301 1126 IAT MORE I 00011280 030301 126 IF (KONDON() PREP(1), 1, PN-21, 1, 4), E0., 0) IAR025 00011280 030303 126 IF (KONDON() PREP(1), 1, PN-21, 1, 4), E0., 0) IAR025 00011280 030303 1130 300 00011280 00011280 030303 1130 100 00011280 00011380 030303 1131 IF (FLAG2, E0, 0) E0 TO 300 00011380 00011380 030300 1134 MTGTAL-MICHING (ARG, JTS12E) 00011380 00011380 030300 1136 1100 CONTINUE 00011380 00011380 030300 1136 0100 CONTINUE (ARG, JTS12E) 00011380 00011380 030300 1136 010 CONTINUE (ARG, JTS12E) 00011380 00011380 030300 1136 010 CONTINUE (ARG, JTS12E) 00011380 00011380 030300 1147 010 CONTINUE (ARG, JTS12E) 00011380 00011380 030370 1140 DTG142 (BTG142+10.0) + 0.001 00011480 000011480	005276	1125		IF (FLAG1 .EQ. 0) GO TO 3090	00011250
02533 142 F (KMPECHI [PREPT (1), 1, 'PN-2', 1, 4), EQ, Q) LARG=5 00011270 000333 1130 C NTOTAL-HITOLA HIGH (100 (1ARG, 37512C) 00011280 000333 1130 C 00011280 00011280 000333 1131 1/F (FLAS2, EQ, Q) eQ TO 3100 00011320 000336 132 LARG=1 00011320 00011320 000336 132 LF (KOMPCH) [PREP(3), 1, 'PH-2', 1, 4), EQ, Q) LARG=5 00011320 0003370 136 G 00011320 00011320 0003370 136 G 00011320 00011320 0003370 136 G 00011320 00011420 0003371 140 DTOTAL-(BTOTAL+10, 0) + 0, 001 00011420 00011420 000377 141 IBTETOTAL 0.001 00011420 00011420 000373 140 DTOTAL-(BTOTAL+10, 0) + 0, 001 00011420 00011420 000377 141 IBTETOTAL 0.001 00011420 0004040 C<	205301	1126		I ARG= 1	00011260
005323 1126 MTGTAL=MTGTAL HORING (LARG, JTSIZE) 00011200 005323 1129 0000 00011200 005333 1131 IARD=1 00011200 005334 1132 IARD=1 00011200 005334 1133 IF (FLAGZ_EQ.Q).00.70.3100 00011320 005340 1134 IARD=1 00011200 005340 1134 IARD=1 00011320 005370 1136 0 to CONT HUE 00011320 005370 1136 0 to CONT HUE 00011400 005370 1136 IF (ND.EC.D) GD TO 4015 00011400 005370 114 BTGTAL=1DTAL_LID.0) + 0.001 00011400 005370 142 0 TO 4015 00011400 005405 1442 0 TO 4015 00011400 005405 1442 0 TO 4015 00011400 0054140 4015 TET=0.0 00011400 00011400 005425 151 0.011400 00011400 005426 152 0 0	<u>205303</u>	1127		<u>IF (KOMPCH(IPREP(1),1,'PN-2',1,4),EQ, 0) IARG=5</u>	00011270
CODE C CODITION CODE CONTINUE CODITION CODE CODITION CODITION <	005323	1128		MTOTAL=MTOTAL+MCHING(IARG, JTSIZE)	00011280
000333 1130 0000 00011300 0001130 IF (FLAG2, E0. 0) e0 T0 3100 0001130 0001130 IF (FLAG2, E0. 0) e0 T0 3100 0001130 0001130 0001130 0001130 0001130 0001130 0001130 0001135 0001135 0001135 0001135 0001135 0001135 0001137 0001136 0001136 000370 1136 IF (NB .E0. 0) 60 T0 4015 0001136 000377 1136 IF (NB .E0. 0) 60 T0 4015 0001140 000377 114 IF BETOTAL * 16 TOTAL * 10. 0) + 0.001 0001140 000377 114 IF BETOTAL * 10.01 + 0.001 0001140 000407 1144 G OT 0 4019 0001140 000407 1144 G OT 0 4019 0001140 0004140 G OT 0 4019 0001140 0001140 0004140 G OT 0 4019 0001140 0001140 0004140 G OT 0 4019 0001140 0001140 0004140 G OT 0 4019 00011	005323	1129	C		00011290
000000000000000000000000000000000000	005333	1130	3090	CONTINUE	00011300
00336 132 1AR6+1 00011320 003360 133 IF (KMPCH(IPREP(3), 1, 'PN-2', 1, 4), EQ. 0) IAR6+5 00011340 003360 136 0 0011340 0 003370 137 C 00011360 0 003370 137 C 00011360 0 003370 136 0 DFOTAL=NTOTAL=10.0) + 0.001 00011360 003370 138 0 DFOTAL=(DTOTAL=10.0) + 0.001 00011360 003370 138 0 DFOTAL=(DTOTAL=10.0) + 0.001 00011420 003370 141 DEFOTAL=COTAL=0.0 00011420 00011420 003477 141 DEFOTAL=COTAL=0.0 00011420 00011420 003477 143 dD19 <cottinue< td=""> 00011420 00011420 004400 144 dD19<cottinue< td=""> 00011420 00011420 004407 144 dD19<cottinue< td=""> 00011400 00011420 004412 148 O 00011400 00011420 005427 14</cottinue<></cottinue<></cottinue<>	005333	1131		IF (FLAG2, EQ. 0) GO TO 3100	00011310
133 IF (KOMPCH(IPREP(3), I, PN-2', I, 4), EQ. 0) IARG-5 00011330 000340 134 OTTOL-MCILING(IARG, JS12E) 00011340 000370 138 0 0100 CONTINUE 00011370 000370 138 F (NB.EQ. 0) 00 T0 4015 00011370 000377 138 F (NB.EQ. 0) 00 T0 4015 00011400 000377 140 BTOTAL-(BTOTAL=10.0) + 0.001 00011400 000377 140 BTOTAL=(BTOTAL=10.0) + 0.001 00011400 000377 144 BTOTAL=(BTOTAL=10.0) + 0.001 00011400 000377 144 OT GOT 0.013 00011400 000377 144 0.01 1400 00011400 000377 144 0.01 1400 00011400 000400 1445 0 00011450 004400 144 0.01 1400 00011450 004417 1149 0 IT MOTAL=KINTOTAL=10.0, 0 + 0.001 00011450 005412 1152 0.01 4009 00011500 00011500 005425 1152 0.0011500 <td>005336</td> <td>1132</td> <td></td> <td>1 ARG= 1</td> <td>00011320</td>	005336	1132		1 ARG= 1	00011320
005360 1134 MT0TAL=H107IAL=H106(1AR6, JTS12E) 00011350 005370 1135 0100 CONTINUE 00011350 005371 1136 0100 CONTINUE 00011350 005372 1139 0 IF (NS .EO. 0) 00 TO 4015 00011350 005373 1140 BUTAL=(BT0TAL=(DT0TAL=	005340	1133		IF (KOMPCH(IPREP(3),1,'PN-2',1,4) .EQ. 0) IARG=5	00011330
135 C 00011350 003370 1136 3100 CONTINUE 00011360 003370 1137 C 00011370 003371 1136 01011370 00011370 003372 1130 0 Diff.L.(EBTOTAL: 10.0) + 0.001 00011360 003373 1140 Diff.L.(EBTOTAL: 10.0) + 0.001 00011400 003374 1140 Diff.L.(EBTOTAL: 10.0) + 0.001 00011400 003375 1141 IBTESTOTAL 00011400 003376 1142 00 TO 4019 00011400 003476 1144 4015 IBTE0.0 00011400 004400 1144 4019 CONTINUE 00011400 004412 144 4019 CONTINUE 0001 005413 1149 MTOTAL: (MTOTAL: 10.0) + 0.001 00011490 005417 1150 IMTOTAL: (MTOTAL: 10.0) + 0.001 00011500 005427 1152 03 TD 4039 0001150 005428 1153 4035 IMT=0.0 00011500 005429 1156	005360	1134		MTOTAL=MTOTAL+MCHING(IARG, JTSIZE)	00011340
000370 1136 0100 CMTINUE 00011360 000370 1137 C 00011360 00011360 000370 1130 IF (NB.EQ. 0) 60 TG 4015 00011360 000371 1141 IBT=8TGTAL=(BTGTAL=10.0) + 0.001 00011400 005377 1141 IBT=8TGTAL=(BTGTAL=10.0) + 0.001 00011400 005375 1142 GO TG 4019 00011400 005376 1142 GO TG 4019 00011400 005405 1142 GO TG 4019 00011400 005407 1146 GO TG 4019 00011400 005407 1146 GO TG 4019 00011400 005413 1144 GO TG 4025 00011400 005413 1144 GO TG 4029 00011400 005413 1149 MTGTAL=(HTGTAL=LT, 0.03) GO TG 4035 00011420 005413 1149 GO TG 4029 00011420 005413 149 MTGTAL=(HTGTAL=LT, 0.03) GO TG 4045 00011520 005425 150 GO TG 4049 00011520	005360	1135	<u> </u>		00011350
100370 1137 C 00011370 000370 1138 0 IF (NB.EQ.0) GO TO 4015 00011380 000370 1138 0 DTOTAL: (DTOTAL: 10.0) + 0.001 00011400 000377 1141 DTOTAL: (DTOTAL: 10.0) + 0.001 00011400 000377 1141 DTOTAL: (DTOTAL: 10.0) + 0.001 00011400 000377 1142 GO TO 4019 00011440 000400 1144 4015 [ET=0.0 00011440 000400 1144 4019 CONTINUE 00011440 000400 1144 4019 CONTINUE 00011400 000413 1149 MTOTAL: (MTOTAL: 10.0) + 0.001 00011400 000413 1149 MTOTAL: (MTOTAL: 10.0) + 0.001 00011500 000421 1153 4035 [MT=0.0 00011520 000422 1153 4039 [GTTAL: LT. 0.03] GD TO 4045 00011520 000423 1154 00011520 00011520 000424 1153 4039 [GTTAL: LT. 0.03] GD TO 4045 00011520 000425 1150	005370	1136	3100	CONTINUE	00011360
003370 1138 IF (NB.EG. D) GD TD 4015 00011360 003372 1140 BTGTAL=(BTGTAL=10.0) + 0.001 00011400 003373 1140 BTGTAL=(BTGTAL=10.0) + 0.001 00011400 003373 1140 BTGTAL=(BTGTAL=10.0) + 0.001 00011400 003405 1142 00 TD 4019 00011400 005405 1144 00 TD 4019 00011440 005405 1144 015407 00011440 005405 1144 015407 1144 015407 005405 1144 015407 1144 015407 005412 1144 0 00011440 005412 1144 0 00011460 005412 1144 0 00011460 005412 1145 0 00011460 005425 150 00 TD 4003 00011400 005426 1153 000 TD 4003 0001150 005427 1155 0 F TGTAL=(FTGTAL=10.0) + 0.001 0001150 005427 1155	005370	1137	C		00011370
1182 0 00011200 003372 1140 BTOTAL=(BTOTAL=10.0) + 0.001 00011400 003373 1141 IBT=BTOTAL 00011400 003373 1141 IBT=BTOTAL 00011400 003373 1141 IBT=BTOTAL 00011400 003375 1141 IBT=BTOTAL 00011400 003375 1142 00011400 00011400 003375 1143 013 00011400 00011400 005403 1144 019 CONTINUE 00011400 005413 1146 0 00011400 00011400 005414 146 0 00011400 00011400 005413 1149 MTOTAL=(MTOTAL=10.0) + 0.001 00011500 00011500 005425 152 C 030 0011400 00011520 005426 153 0030 0010 4045 00011520 005427 153 0030 0010 4045 00011520 005428 154 0	005370	1138		IF (NB .EQ. 0) GO TO 4015	00011380
1140 BT07AL=(BT07AL=10.0) + 0.001 00011400 005377 1141 BT=ST07AL 00011410 005405 1142 00 T0 4019 00011420 005405 1144 00 T0 4019 00011420 005405 1144 00 T0 4019 00011420 005405 1144 00 T0 4019 00011450 005407 1146 0 Continue 00011450 005411 1147 IF (MT07AL=10.0) + 0.001 00011450 005412 1148 0 00011450 005413 1149 MT07AL=(MT07AL=10.0) + 0.001 00011400 005414 149 00011400 00011400 005415 150 00 T0 4029 00011500 005426 153 000 T0 4029 00011500 005427 156 IF (FT07AL=LT, 0.03) GD T0 4045 00011560 005428 155 000 T0 4045 00011560 005427 156 IF (FT07AL=LT, 0.03) GD T0 4045 00011560 005428 157 0 00011560 00011560 005427 156 IF (FT07AL=LT, 0.03	005372	1139	C		00011390
U004// I 141 IBT®TOTAL 00011410 005405 1142 0 0 00011420 015405 1142 0 00011420 00011420 015405 1142 0 00011420 00011420 015405 1146 0 00011420 00011420 015407 1146 0 00011420 00011420 015402 1146 0 MTOTAL_LIT, L.T., 0.03) GO TO 4035 00011420 005413 1149 MTOTAL_LITOTAL_LID, 0) + 0,001 00011420 00011420 005412 1146 0 MTOTAL_TITOTAL_LID, 0) + 0,001 0001150 005423 1152 C 00011520 00011520 005424 1154 C 00011520 00011520 005425 1155 4039 CONTINUE 00011520 00011560 005426 1154 C 00011520 00011560 005427 155 167 COTAL_TOTAL_10.0 + 0.001 00011560 005433 1156 167 COTAL	005373	1140		BTOTAL=(BTOTAL*10.0) + 0.001	00011400
NU-403 1142 0.0 T d 019 00011420 NU-403 1144 4015 BT=0.0 00011420 NU-404 1144 4015 BT=0.0 00011420 NU-405 1144 4015 Continue 00011420 NU-405 1144 4015 Continue 00011420 NU-405 1147 4015 Continue 00011420 NU-405 1147 4015 Continue 00011420 NU-405 1147 0011440 00011420 NU-405 1147 0011440 00011420 NU-405 0011470 00011420 NU-405 00011400 00011500 NU-412 NT-410.0.0.1 00011500 NU-412 001000 00011500 NU-412 0010000 00011500 NU-412 001150 00011500 NU-412 001150 00011500 NU-412 001150 00011500 NU-412 0001150	005377	1141		IBT=BTOTAL	00011410
11/100 11/43 C C00011440 005-005 11/44 4015 IBT=0.0 00011440 005-005 11/45 C 00011440 005-005 11/45 C 00011440 005-005 11/47 LF (MT0TAL_LT, 0.03) 60 T0 4035 00011440 005-017 11/47 LF (MT0TAL_LT, 0.03) 60 T0 4035 00011440 005-017 11/47 C 00011400 00011400 005-017 11/47 LF (MT0TAL_LT, 0.03) 60 T0 4035 00011400 00011500 005-017 100-0 0001150 00011500 00011500 00011500 005-025 1151 0001150 00011500 00011500 00011500 005-027 1156 116 00011500 00011500 00011500 005-027 1155 116 00011500 00011500 00011500 005-027 1155 116 00011500 00011500 00011500 005437 1156 116 00011500 00011500 00011500 <td>005405</td> <td>1142</td> <td></td> <td>GO TO 4019</td> <td>00011420</td>	005405	1142		GO TO 4019	00011420
NGA00 1144 4015 161=0.0 00011400 NGA00 1145 C 00011460 NGA07 1146 4019 CONTINUE 00011460 NGA02 1147 LF (MTGTAL_LT, 0.03) 00 T0 4035 00011460 NGA12 1146 0 00011400 NGA12 1146 0 00011400 NGA13 1149 MTGTAL=(MTGTAL+10.0) + 0.001 00011400 NGA13 1150 INT=NTGTAL 00011500 NG425 1152 0001000 00011520 NG425 1152 00011520 00011520 NG425 1153 4039 CONTINUE 00011520 NG425 1156 IF (FTGTAL+10.0) + 0.001 00011520 NG426 1157 00011520 00011520 NG427 1156 IF (FTGTAL+10.0) + 0.001 00011520 NG446 160 60 T0 4049 00011520 NG446 162 6045 1FT=0.0 00011520 NG446 163 C 00011520 NG446 164 604040 00011620 NG446 <td>005405</td> <td>1143</td> <td><u>C</u></td> <td></td> <td></td>	005405	1143	<u>C</u>		
Normon 1145 C 019 CONTINUE 00011450 Normon 1147 LE (NTOTAL _LT_0.03) 60 TO 4035 00011460 Normon 00011410 00011400 00011400 Normon 00011410 00011400 00011400 Normon 00011410 00011400 00011400 Normon 00011410 00011400 00011400 Normon 00011500 00011500 00011500 Normon 00011500 00011500 00011500 Normon 1166 00011500 00011500 Normon 1167 00011500 00011500 Normon 1167 00011500 00011500 Normon 1166 1167 00011500 Normon 1168 FTOTAL = (FTOTAL = 10.0) + 0.001 00011500 Normon 00011600 00011600 00011600 Normon 00011600 00011600 00011600 Normon 00011600 00011600 00011600 Normon 00011600 00011600	005406	1144	4015	181=0.0	00011440
NALADZ 146 AUTS DON TADE ODD 1460 19407 147 147 0.0011400 00011400 105407 147 147 0.0011400 00011400 105412 140 0 00011400 00011400 105413 149 MTGTAL=(MTGTAL=10.0) + 0.001 00011400 00011400 105425 150 0010170 00011500 00011500 105425 152 0 00011500 000115300 105425 152 0005 CONTINUE 00011500 00011500 105425 153 4005 CONTINUE 00011500 00011500 105427 155 4005 CONTINUE 00011500 00011500 105427 156 1F1FTOTAL=10.0 + 0.001 00011500 105445 160 1F1=FTOTAL 0.001 00011500 105446 162 4049 00011600 00011600 105446 162 4049 00011600 00011600 105446 162 1F1	003406	1145	U (ala	*	00011450
11/202 11/2 1P 1P 1P 003 000 14/2 000 14/2 005412 144 C 000 000 1400 000 1400 005413 149 MTOTAL=(MTOTAL=10.0) + 0.001 000 1500 000 1500 005425 151 00 150 000 1520 000 1520 005426 153 4035 IMT=MTOTAL 000 1520 000 1520 005427 155 4039 CONTINUE 000 1560 000 1550 005427 156 1F<(FTOTAL, LT, 0.03)	003407	1146	4019	CONTINUE	00011460
No.312 11/3 C 00011400 005413 11/43 MT0TAL=(MT0TAL±10.0) + 0.001 00011400 005417 1150 IMT=MT0TAL 00011500 005416 1152 C 00011520 005425 1152 C 00011520 005426 1153 4035 IMT=0.0 00011530 005427 1156 0011550 00011550 005428 1154 C 00011550 005427 1156 1FT=FT0TAL= 00011550 005433 1158 FT0TAL=(FT0TAL=10.0) + 0.001 00011590 005437 1160 60011590 60011590 005435 1160 60011600 60001600 005445 1161 C 00011620 005445 1161 C 00011620 005445 1164 04049 00011620 005447 1164 4049 CONTINUE 00011620 005447 1164 00001620 00011620 005446 </td <td>06412</td> <td>1147</td> <td></td> <td>IF (MIDIAL . LI, 0.03) GO TO 4035</td> <td>00011470</td>	06412	1147		IF (MIDIAL . LI, 0.03) GO TO 4035	00011470
Obs. Obs. <th< td=""><td>005412</td><td>1140</td><td>G</td><td></td><td>00011480</td></th<>	005412	1140	G		00011480
Obs Obs <td>005415</td> <td>1149</td> <td></td> <td></td> <td>00011490</td>	005415	1149			00011490
Display Display Dot 10 10 10 10 10 10 10 10 10 10 10 10 10	005425	1150			00011500
ODS 426 1125 4035 IMT=0.0 00011520 005426 1154 C 00011530 00011530 005427 1155 4039 CONTINUE 00011550 005427 1155 4039 CONTINUE 00011550 005427 1155 00011550 00011550 005432 1157 0 00011570 005432 1153 IFT=FTOTAL 0.001 005433 1158 IFT=FTOTAL 00011500 005445 1160 60 T0 4049 00011600 005445 1161 C 00011620 005445 1161 C 00011630 005446 1162 4045 IFT=0.0 00011630 005447 1164 4049 CONTINUE 00011630 005447 1166 IF (WTOTAL.LT.O.0.0) GT 0 4055 00011630 005456 1166 O0011660 00011650 005464 170 IWTTAL=(WTOTAL=1999.9 00011670 005464 170	005425	1152	······	60 10 4039	00011510
05426 1153 0.0011530 005427 1155 4039 CONTINUE 0.0011550 005427 1155 4039 CONTINUE 0.0011550 005427 1156 IF (F0TAL, LT. 0.03) GO TO 4045 0.0011570 005423 1157 0 0.0011570 0.0011570 005433 1158 FTOTAL=(FTOTAL*10.0) + 0.001 0.0011580 0.0011580 005445 1160 60 TO 4049 0.0011610 0.0011610 005445 1161 C 0.0011620 0.0011620 005445 1161 C 0.0011620 0.0011620 005445 1164 4049 CONTINUE 0.0011630 0.0011630 005445 1166 IF (WTOTAL .LT. 0.03) GO TO 4055 0.0011630 0.0011640 005445 1166 C 0.0011630 0.0011660 0.0011660 005453 1167 IF (WTOTAL .GT. 1000.0) WTOTAL=999.9 0.0011660 0.0011660 0.0011660 005456 1168 C 0.0011660 0.0011660 0.0011660 0.0011660 0054572 1172 GO TO 4059 0.00	005426	1153	4035		00011520
105 4039 CONTINUE 0001 350 105427 1156 IF (FTOTAL.LT. 0.03) GO TO 4045 0001 550 105427 1156 IF (FTOTAL.T. 0.03) GO TO 4045 0001 550 105433 1158 FTOTAL=(FTOTAL.*10.0) + 0.001 0001 500 105435 1160 60 TO 4049 0001 600 0001 600 105445 1161 C 0001 600 0001 600 105445 1161 C 0001 600 0001 600 105445 1161 C 0001 600 0001 600 105446 1162 4049 CONTINUE 0001 660 0001 660 105447 1164 4049 CONTINUE 0001 660 0001 660 105456 1166 C 0001 660 0001 660 105456 1168 WTOTAL=(WTOTAL *10.0) <	005426	1154	c 000F	111-0.0	00011530
05427 156 IF (FTOTAL, .LT, 0.03) GO TO 4045 00011550 005422 1157 0 00011550 00011550 005433 1156 FTOTAL=(FTOTAL*10.0) + 0.001 00011550 00011550 005445 1160 GO TO 4049 00011600 00011600 005445 1161 C 00011600 00011620 005445 1161 C 00011620 00011620 005445 1162 4045 IFT=0.0 00011620 00011620 005446 1162 4045 ONTINUE 00011630 00011660 005447 1164 4049 CONTINUE 000100, 0) WTOTAL=999,9 00011660 005447 1165 IF (WTOTAL.GT.L.GT.LOO.O) WTOTAL=999,9 00011660 00011660 005452 1166 C 00011650 00011660 005456 1166 C 00011660 00011660 005466 1168 C 00011660 00011600 005472 1170 WTOTAL=(WTOTAL*10.0) + 0.001 000011700 00011700 </td <td>005427</td> <td>1155</td> <td>. 4039</td> <td>CONTINUE</td> <td>00011550</td>	005427	1155	. 4039	CONTINUE	00011550
005432 1167 0 01 01000 00001	005427	1156			00011560
156 FT0TAL=(FTOTAL=10.0) + 0.001 00011500 159 IFT=FTOTAL 00011500 159 IFT=FTOTAL 00011600 005445 1160 G0 T0 4049 00011610 005445 1161 C 00011620 005446 1162 4045 IFT=0.0 00011630 005447 1164 4049 CONTINUE 00011630 005447 1165 IF (WTOTAL_LT.0.03) GD T0 4055 00011660 005447 1165 IF (WTOTAL_LT.0.03) GD T0 4055 00011660 005452 1166 C 00011660 00011660 005456 1168 C 00011660 00011660 005456 1168 C 00011660 00011660 005456 1168 C 00011600 00011600 005472 1172 G0 T0 4059 0001170 0001170 005473 1173 4055 IWT=0.0 0001170 0001170 005473 1174 G 0001170 0001170 00011740	005432	1157	C		00011570
1159 IFT=FTOTAL 00011590 005445 1160 60 T0 4049 00011600 005445 1161 C 00011610 005445 1161 C 00011620 005445 1163 C 00011620 005446 1163 C 00011630 005447 1164 4049 CONTINUE 00011650 005452 1166 C 00011650 005453 1167 IF (WTOTAL . UT. 0.03) GG TG 4055 00011650 005455 1166 C 00011650 005456 1168 C 00011650 005464 1170 IWTEWTOTAL=(WTOTAL=10.0) + 0.001 00011650 005464 1170 IWTEWTOTAL 001 00011600 005472 1172 C 00011700 00011700 005473 1173 4055 IWTE<0.0	005433	1158		FT0TAL=(FT0TAL*10.0) + 0.001	00011580
005445 1160 60 T0 4049 00011600 005445 1161 C 00011610 005446 1162 4045 IFT=0.0 00011620 005446 1163 C 00011630 005447 1164 4049 CONTINUE 00011660 005447 1165 IF (WTOTAL.LT. 0.03) GC TC 4055 00011660 005452 1166 C 00011670 005466 1168 C 00011670 005467 1167 IF (WTOTAL.GT.1000.0) WTOTAL=999.9 00011670 005456 1168 C 00011670 005464 1170 WTOTAL=(WTOTAL*10.0) + 0.001 00011690 005472 1171 GO TO 4059 0001170 005473 1173 4055 IWT=0.0 00011720 005473 1174 C 00011720 005473 1174 C 00011740 0051747 1175 4059 CONTINUE 00011760 005473 1174 C 00011720 <td< td=""><td>005437</td><td>1159</td><td></td><td>IFT=FTOTAL</td><td>00011590</td></td<>	005437	1159		IFT=FTOTAL	00011590
1161 C 00011610 005445 1162 4045 IFT=0.0 00011620 005446 1163 C 00011620 005447 1164 4049 CONTINUE 00011640 005447 1165 IF (WTOTAL .LT. 0.03) G0 T0 4055 00011650 005452 1166 C 00011650 005453 1167 IF (WTOTAL .GT. 1000,0) WTOTAL=999,9 00011670 005456 1168 C 00011690 005464 1170 IWT=WTOTAL=(WTOTAL=10.0) + 0.001 00011680 005472 1171 G0 T0 4059 00011700 005472 1172 C 00011720 005473 1173 4055 IWT=0.0 00011720 005473 1174 C 00011720 005473 1174 C 00011740 005474 1175 4059 CONTINUE 00011720 005473 1174 C 00011720 005473 1174 C 00011760 005474 1175 4059 CONTINUE 00011760 005473 1176	005445	1160		GO TO 4049	00011600
005446 1162 4045 IFT=0.0 00011620 005447 1163 0 00011630 005447 1165 IF (WTOTAL .LT. 0.03) G0 T0 4055 00011650 005452 1166 0 00011660 005453 1167 IF (WTOTAL .GT. 1000.0) WT0TAL=999.9 00011660 005456 1168 C 00011660 005464 1170 WT0TAL=(WT0TAL*10.0) + 0.001 00011690 005464 1170 IWT=WT0TAL 00011690 005472 1171 90 T0 4059 00011700 005472 1172 C 00011720 005473 1174 C 00011730 005473 1174 C 00011730 005473 1174 C 00011730 005473 1174 C 00011740 005474 1175 4059 CONTINUE 00011740 005473 1174 C 00011760 005473 1174 C 00011760 005474 1175 4059 CONTINUE 00011760 005473	005445	1161	C		00011610
163 C 00011630 005447 1164 4049 CONTINUE 00011630 005447 1165 IF (WTOTAL,LT,0.03) G0 T0 4055 00011650 005452 1166 C 00011650 005453 1167 IF (WTOTAL,GT,100,0) WTOTAL=999,9 00011670 005456 1168 C 00011680 005464 1170 WTOTAL=(WTOTAL=WTOTAL=10,0) + 0.001 00011680 005464 1170 WTWTOTAL 00011 005472 1171 G0 T0 4059 00011710 005472 1172 C 00011720 005473 1173 4055 IWT=0.0 00011730 005473 1174 C 00011740 005474 1175 4059 CONTINUE 00011750 005473 1174 C 00011760 005474 1175 4059 CONTINUE 00011750 005473 1176 C 00011760 005474 1175 4059 CONTINUE 00011750 005473	005446	1162	4045	IFT=0.0	00011620
005447 1164 4049 CONTINUE 00011640 005447 1165 IF (WTOTAL.LT. 0.03) GO TO 4055 00011650 005452 1166 C 00011660 005453 1167 IF (WTOTAL.GT. 1000.0) WTOTAL=999.9 00011670 005466 1168 C 00011680 005464 1169 WTOTAL=(WTOTAL*10.0) + 0.001 00011680 005464 1170 IWT=WTOTAL 00011690 005472 1171 GO TO 4059 00011720 005473 1173 4055 IWT=0.0 00011720 005473 1174 C 00011720 005474 1175 4059 CONTINUE 00011740 005473 1174 C 00011740 005474 1175 4059 CONTINUE 00011750 005473 1174 C 00011750 005474 1175 4059 CONTINUE 00011750 005473 1174 C 00011750 005474 1175 4059 CONTINUE 00011750 005475 1176 & BT, 1MT, IFT, 1WT 00011780	005446	1163	C		D0011630
005447 1165 IF (WT0TAL, LT. 0.03) G0 T0 4055 00011650 005452 1166 C 00011660 005453 1167 IF (WT0TAL, GT, 1000,0) WT0TAL=999,9 00011670 005456 1168 C 00011680 005464 1170 IWT=WT0TAL=(WT0TAL=*10.0) + 0.001 00011690 005472 1171 G0 T0 4059 00011700 005472 1172 C 00011720 005473 1173 4055 IWT=0.0 00011720 005473 1174 C 00011730 005474 1176 C 00011760 005473 1176 & IBT, IMT, IFT, IWT 00011760 005473 1176 & IBT, IMT, IFT, IWT 00011760 005473 1176 & IBT, IMT, IFT, IWT 00011770 005535 1176 & IBT, IMT, IFT, IWT 00011780 005535 1179 4050 FORMAT (15, 16, 14, A3,	005447	1164	4049	CONTINUE	00011640
005452 1166 C 00011660 005453 1167 IF (WTOTAL.GT.1000.0) WTOTAL=999.9 00011670 005456 1168 C 00011680 005456 1169 WTOTAL=(WTOTAL*10.0) + 0.001 00011690 005456 1169 WTOTAL=(WTOTAL*10.0) + 0.001 00011690 005464 1170 IWT=WTOTAL 00011700 005472 1171 GO TO 4059 00011720 005473 1173 4055 IWT=0.0 00011730 005473 1174 C 00011740 005473 1175 4059 CONTINUE 00011760 005473 1176 C 00011760 005474 1176 C 00011760 005473 1176 & IBT, IMT, IFT, IWT 00011760 005473 1176 & IBT, IMT, IFT, IWT 00011770 005474 1176 & IBT, IMT, IFT, IWT 00011780 005535 1176 & IBT, IMT, IFT, IWT 00011780 005535 1179 4100 FORMAT(15, 16, 14, A3,	005447	1165		IF (WTOTAL .LT. 0.03) GO TO 4055	00011650
JU2933 1167 IF (WT0TAL, GT, 1000, 0) WT0TAL=999, 9 00011670 D05456 1168 C 00011680 D05460 1169 WT0TAL=(WT0TAL*10.0) + 0.001 00011680 D05464 1170 IWT=WT0TAL 00011670 D05472 1171 G0 T0 4059 00011700 D05473 1173 4055 IWT=0.0 00011730 D05473 1174 C 00011740 D05473 1175 4059 C0NTINUE 00011750 I05174 1176 C 00011760 I05174 1176 C 00011760 I05175 1176 G 00011760 I05175 1176 G 00011760 I05175 1179 IBT, IMT, IFT, IWT 00011770 I05535 1178 G IBT, IMT, IFT, IWT 00011780 I05555 1179 4100 FORMAT (15, 16, 14, A3,	005452	1166	С		00011660
000400 1166 C 00011680 005460 1169 WT0TAL=(WT0TAL*10,0) + 0.001 00011690 005464 1170 1WT=WT0TAL 00011700 005472 1171 G0 T0 4059 00011720 005473 1173 4055 1WT=0.0 00011730 005473 1174 C 00011740 005474 1175 4059 CONTINUE 00011750 005473 1176 C 00011760 005474 1176 C 00011760 005473 1176 C 00011760 005474 1176 C 00011760 005473 1176 & 1BT, 1HT, 1FT, 1WT 00011770 005474 1178 & 1BT, 1HT, 1FT, 1WT 00011780 005535 1179 4100 FORMAT(15, 16, 14, A3,	005453	1167		<u>IF (WTOTAL .GT. 1000.0) WTOTAL=999.9</u>	00011670
005400 1109 W101AL=(W101AL*10,0) + 0.001 00011690 005464 1170 1WT=WT0TAL 00011700 005472 1171 G0 T0 4059 00011710 005472 1172 00011720 00011720 005473 1173 4055 IWT=0.0 00011740 005474 1175 4059 CONTINUE 00011750 005474 1176 00011760 00011760 005474 1176 00011760 00011770 005475 1178 & IBT, IMT, IFT, IWT 00011780 005535 1179 4100 FORMAT(15, 16, 14, A3,	005456	1168	C		00011680
005464 1170 1WT=WT0TAL 00011700 005472 1171 00 T0 4059 00011710 005472 1172 00011720 00011720 005473 1173 4055 IWT=0.0 00011720 005474 1175 4059 CONTINUE 00011740 005474 1175 4059 CONTINUE 00011750 005474 1176 C 00011760 005474 1176 C 00011760 005474 1176 C 00011760 005474 1177 WRITE(18,4100) GRNO, DWGNO, HULL, DETAIL, REV, 00011770 005355 1178 & IBT, IMT, IFT, IWT 00011780 005535 1179 4100 FORMAT(5, 16, 14, A3, AS 00011790 005535 1180 & A5 A6 A4 A3 AS 00011790		1169		WI0IAL=(WI0TAL*10,0) + 0.00)	00011690
Jubit Intraction O0011710 005472 1172 C 00011720 005473 1173 4055 IWT=0.0 00011730 005473 1174 C 00011740 00011750 005474 1175 4059 CONTINUE 00011750 005474 1176 C 00011760 00011770 005474 1177 WRITE(18, 4100) GRNO, DWGNO, HULL, DETAIL, REV, 00011770 005535 1176 & IBT, IMT, IFT, IWT 00011770 00011780 005535 1179 4100 FORMAT (15, 16, 14, A3,	003464	1170		IWI=WIDIAL	00011700
003472 1172 00011720 005473 1173 4055 IWT=0.0 00011730 005473 1174 00011740 00011740 005474 1175 4059 CONTINUE 00011750 005474 1176 00011760 00011760 00-1771 1176 00011770 00011770 005355 1178 8 187, IMT, IFT, IWT 00011780 005535 1179 4100 FORMAT (15, 16, 14, A3,	005472	<u> </u>			00011710
0001730 00011730 005473 1174 00011740 005474 1175 4059 CONTINUE 005474 1175 4059 CONTINUE 005474 1176 00011750 005474 1176 00011760 005475 1177 WRITE(18,4100) GRNO, DWGNO, HULL, DETAIL, REV, 00011770 005435 1176 & IBT, IMT, IFT, IWT 00011780 005535 1179 4100 FORMAT(15, 16, 14, A3,	005472	11/2	U		00011720
1174 C 00011740 105473 1175 4059 CONTINUE 00011750 10:473 1176 C 00011760 10:473 1176 C 00011760 10:474 1177 WRITE(18,4100) GRNO, DWGNO, HULL, DETAIL, REV, 00011770 10:4335 1176 & IBT, IMT, IFT, IWT 00011780 10:5535 1179 4100 FORMAT(15, 16, 14, A3,	000473	11/3	4055	1WI#U.U	00011730
Inc. Inc. ODD1750 Inc. Inc. Inc. 0001760 Inc. Inc. 0001760 Inc. Inc. 0001770 Inc. Inc. Inc. Inc. Inc.	005 174	11/4	U AGEO	CONTINUE	00011740
III 70 C 00011760 101-17-1 1177 WRITE(18,4100) GRNO, DWGNO, HULL, DETAIL, REV, 00011770 101-17-1 1176 & IBT, IMT, IFT, IWT 00011780 1005535 1179 4100 FORMAT(15, 16, 14, A3,					
1177 WRTHE(16,41007 GRN0, DWGN0, HOLL, DETAIL, REV, 00011770 004335 1178 6 117,147 00011780 005535 1179 4100 FORMAT(15,16,14,33, 00011790 00011790 005535 1180 6 64 66 64 66		11/0	G		
0001780 005535 1179 4100 FORMAT(15,16,14,A3, 0001790 005535 1180 & A5 A6 A4 A3 A6	0010174	11//		WITHELTO, 41007 GRNO, DWGNO, HULL, DETAIL, REV,	00011770
$\frac{1173}{20000} = \frac{1173}{2000000000000000000000000000000000000$	0000000	1170	4100	= 101, 101, 101, 101	
	100000	1100	4100		
	1000000	1100	c	Α Αυ, Αυ, Αυ, Αυ, Αυ,	

004347	1063		00010630
004347	1064	C	000106.10
04350	1065	IF (TEMP(1), GT.0, 1) GO TO 3030	00010650
004357	1066	C C	00010660
004357	1067	C SEE IF 'V' JOINT (BUTTWELD)	00010670
004360	1068	IF (KOMPCH(IPREP(1),1,'P4',1,3),EQ, 0) FLAG1=1	00010680
004400	1069	IF (KOMPCH(IPREP(1),1,'P3 ',1,3) .EQ. 0) FLAG1=1	00010690
004420	1070	IF (KOMPCH(IPREP(1),1, 'PN-2',1,4) .EQ. 0) FLAG1=1	00010700
004440	1071	1F (KOMPCH(IPREP(1),1, 'PN-1',1,4) .EQ. 0) FLAG1=1	00010710
004460	1072	IF (KOMPCH(IPREP(1), 1, 'PN-3', 1, 4) .EQ. 0) FLAG1=1	00010720
004500	1073	1F (KOMPCH(IPREP(1), 1, 'PN-5', 1, 4) . EQ. 0) FLAG1=1	00010730
004520	1074	IF (KOMPCH(IPREP(1),1,'PN-8',1,4) .EQ. O) FLAG1=1	00010740
004540	1075	IF (KOMPCH(IPREP(1),1,'P22',1,3) .EQ. 0) FLAG1=1	00010750
004560	1076	IF (KOMPCH(IPREP(1),1,'P24',1,3),EQ, 0) FLAG1=1	00010760
004600	1077	IF (KOMPCH(IPREP(1),1,'P10',1,3) .EQ. 0) FLAG1=1	00010770
004620	1078	1F (KOMPCH(1PREP(1),1,'P5 ',1,3) .EQ. 0) FLAG1=1 .	00010780
004640	1079	1F (KOMPCH(1PREP(1),1,'P68A',1,4) .EQ. 0) FLAG1=1	00010790
004656	1080	C	00010800
004660	1081	3030 CONTINUE	00010810
004660	1082	IF (TEMP(2), GT. 0, 1) GO TO 3040	00010820
004667	1083	C	00010830
004667	1084	C SEE IF 'V' JOINT (BUTTWELD)	00010840
004670	1085	IF (KOMPCH(IPREP(3),1,'P4',1,3) .EQ. 0) FLAG2=1	00010850
004710	1086	IF (KOMPCH(IPREP(3), 1, 'P3 ', 1, 3) . EQ, O) FLAG2=1	00010860
004730	1087	1F (KOMPCH(1PREP(3), 1, 'PN-2', 1, 4) EQ. 0) FLAG2=1	00010870
204750	1088	IF (KOMPCH(IPREP(3), I, PN-1, I, 4), EG. 0) FLAGE	00010880
004770	1089	$1F (KONPOH(1PREP(3), 1, 'PN-3', 1, 4) \in G, 0) FLAG2=1$	00010890
005010	1090	$\begin{array}{c} \text{IF} (KOMPCH(IFREF(3), I, FN-3), I, 4) \in \mathbb{G} \\ \text{IF} (KOMPCH(IFREF(3), I, FN-3), I, 4) \in \mathbb{G} \\ \text{O} \text{IF} (A) = 0 \\ \text{IF} (A) = 0 \\ \text$	00010900
005030	1091	$\frac{1}{10} \frac{1}{100} \frac{1}{1000} \frac{1}{1000} \frac{1}{1000} \frac{1}{10000} \frac{1}{10000000000000000000000000000000000$	00010910
005030	1092	$\frac{1}{16} \left(\frac{1}{1600} + \frac{1}$	00010920
005070	1093	IF (KUMPCH(IFREF(3), 1, F24, 1, 3), EG, 0) ELAG2=1	00010930
005110	1094	$\frac{1}{16} = \frac{1}{16} $	00010950
005150	1095	[F (KompCH(1PDEP(2))] + (PSA) + (A) = (A) + (00010960
005150	1090		00010970
005100	1097		00010980
005170	1099	C EVERY STRAIGHT PIPE HAS A JOB SETUP TIME.	00010990
005170	1100		00011000
005172	1101		00011010
005172	1102	č	00011020
005173	1103	IF (FLAG1+FLAG2, GT, 0) GO TO 3050	00011030
005177	1104	c c	00011040
005200	1105	IF (AD1 .LT. 0.1) GO TO 3045	00011050
005204	1106	IF (TEMP(1) .LT. 0.1) GO TO 3050	00011060
005212	1107	C	00011070
005213	1108	3045 IF (ADN , LT. 0,1) GO TO 3100	00011080
005217	1109	IF (TEMP(2) . GT. 0.1) GO TO 3100	00011090
005226	1110	C	00011100
005227	1111	3050 CONTINUE	00011110
005227	1112	IF (0D10 . GT. 162) MPS1ZE=6	00011120
005234	1113	IF (0010 . GT. 202) MPSIZE=7	00011130
005237	1114	C	00011140
005241	1115	FTOTAL=FTOTAL+FABHRS(SETUP, MPSIZE)	00011150
005241	1116	C	00011160
005250	1117	3072 CONTINUE	00011170
005250	1118	C	00011180
005250	1119	JTSIZE=1	00011190
005252	1120	IF (OD10, GT, 1) JTSIZE=2	00011200
105257	1121	IE (0D10 OT A1) ITS17E=3	00011210

°1420-01	11-20-84	14,899	SUB. STDTIM(TEMP, AD1, ADN)STA25PICALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 18
1041061	1004		IF (LARG NF B) OF TO 2384	00010040
004064	1005	C		00010040
004064	1006	Ċ	THERE NEEDS TO BE A MACHINING VALUE ADDED ON LE THIS FLANGE	00010050
204064	1007	С	IS BUTT WELDED, BUT NOT IF IT IS SOCKET WELDED.	00010070
04065	1008	2382	IF (KOMPCH(FABNJT, 1, 'P41', 1, 3) .EQ. 0) GO TO 2385	00010080
204077	1009		IF (KOMPCH(FABNJT, 1, 'P14', 1, 3) .EQ. 0) GO TO 2385	00010090
204111	1010		IF (KOMPCH(FABNJT, 1, 'P2 ', 1, 3) . EQ. 0) GO TO 2385	00010100
204123	1011		IF (KOMPCH(FABNJT, 1, 'P15', 1, 3) .EQ, 0) GO TO 2385	00010110
004135	1012		IF (KOMPCH(FABNJT, 1, 'PN-7', 1, 4) .EQ. 0) GO TO 2385	00010120
204147	1013		1F (KOMPCH(FABNJT, 1, 'PN14', 1, 4), EQ. 0) GO TO 2385	00010130
04161	1014		IF (KOMPCH(FABNJT,1,'P17',1,3) .EQ. 0) GO TO 2385	00010140
JU4173	1015		IF (KOMPCH(FABNJT, 1, 'P16', 1, 3) .EQ. 0) GO TO 2385	00010150
04205	1016		IF (KOMPCH(FABNJT, 1, 'V28', 1, 3) .EQ. 0) GO TO 2385	00010160
204217	1017		IF (KOMPCH(FABNJT, 1, 'P43', 1, 3), EQ, 0) GO TO 2385	00010170
104230	1018	C		00010180
304230	1019	C	NOW DETERMINE WHICH MACHINING VALUE TO USE,	00010190
104230	1020	C	WHETHER FOR STRAIGHT BEVEL OR J BEVEL.	00010200
204230	1021	<u>c</u>	CPN-2 IS THE ONLY J BEVEL,) NOTE THAT ONLY BUTTWELDS	00010210
04231	1022	2204	REQUIRE BEVELS.	00010220
04233	1023	2304	TARGE TE (KOMPON/EADN(EA) 1 'PN-2' 1 4) EO ON TARGE	00010230
004245	1025	C	17 (NOFFCH(FABN(3,6),1, FN-2,1,4), EQ. 0) FARG=5	00010240
204247	1026	X	JTSI ZEE 1	00010250
204251	1027		F(JTOP(J) = 0.14), $TSJ7F=2$	00010280
204257	1028		F (JTOD(J) GT 46) JTS12F=3	00010270
004265	1029		F (JTOD(J), GT, 92) JTS12F=4	00010280
004273	1030		IF (JTOD(J), GT. 142) JTS17F=5	00010230
304277	1031	С		00010310
204301	1032		MTOTAL=MTOTAL+MCHING(IARG.JTSIZE)	00010320
204306	1033	C		00010330
004306	1034	С		00010340
004311	1035	2385	CONTINUE	00010350
204311	1036	C		00010360
204311	1037	<u> </u>	ARRAY NEAB TELLS NO. OF LINES PER FITTING.	00010370 `
204316	1038	2390	IND=IND+NFAB(K)	00010380
004316	1039	С		00010390
004321	1040	2395	CONTINUE	00010400
204321	1041	<u> </u>		00010410
JU4326	1042	•	GO TO 3100	00010420
004326	1043	C		00010430
04326	1044	U O		00010440
004320	1045	<u>U</u>	······	00010450
004326	1046	U C		00010460
004320	1047			00010470
004326	1046	č		00010480
004326	1049	<u>c</u>	CH DEND GHLY DETAILS, CHECK FOR FABRICATION	00010490
004327	1050	້າກາດ		00010500
004327	1052	, 3000	CONTINCE	00010510
004327	1053	č	FIRST CHECK IE TEMPLATE SET UP TIME IS NEEDED	00010520
004327	1054	V	IF (HRIEMP NE TT) GO TO 2020	00010530
004337	1055	C	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00010340
004340	1056	Ť	FTOTAL=FABHRC(SETUP MPS17E)	00010560
004345	1057	C		00010520
004345	1058	<u> </u>	IF NOT BOTH ENDS OF THE MAIN PIECE OF PIPE APE	00010580
004345	1059	č	TEMPLATED OR A CUT LENGTH IS REQUIRED OR THE END	00010500
004345	1060	č	PREP INDICATES A BUTWELD. THEN THIS DETAIL REQUIRES	00010600
004345	1061	č	A JOB SET-UP TIME EVEN THOUGH THERE ARE NO FITTINGS	00010610
004346	1062	3020	FLAGI=0	00010620
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P1420 01	11-20-84	14.899	SUB. STDTIM(TEMP, AD1, ADN)STA25P1CALCULATE STD. TIME VALUES LA	BEL STOTIM PAGE 17
103577	945	С	SEE IF 'V' JOINT	00009450
003600	946	2360	CONTINUE	00009460
003600	947		IF (KOMPCH(FABNJT, 1, 'P4 ', 1, 3) .EQ. 0) GO TO 2362	00009470
003612	948	•	IF (KOMPCH(FABNJT, 1, 'P3 ', 1, 3) . EQ. U) GO 10 2362	00009480
003623	949	C	THE FOLLOWING TAKES CARE OF THE CASES FN-TA, FN-TB,	00009500
003653	950	<u> </u>	NOTE THAT THE CASES OF 'PN-7' & 'PN-7B'HAVE BEEN	00009510
003623	952	č	REMOVED FROM CONSIDERATION BY THE SOCKET WELD SECTION.	00009520
003624	953	-	IF (KOMPCH(FABNJT, 1, 'PN-', 1, 3) .EQ. 0) GO TO 2362	00009530
003636	954		TE (KOMPCH(EABNJT.1.'P22'.1.3) .EQ. 0) GO TO 2362	00009540
003650	955		IF (KOMPCH(FABNJT, 1, 'P24', 1, 3) .EQ. 0) GO TO 2362	00009550
003662	956		IF (KOMPCH(FABNJT, 1, 'P10', 1, 3) .EG. 0) GO TO 2362	00009550
003674	957		$\begin{array}{c} \text{IF} (KOMPCH(FABN)I, I, PO ', I, J) \\ \text{IF} (KOMPCH(FABN)I, I) \\ $	00009580
003706	958	<u> </u>		00009590
003720	960	Ŭ	WRITE(6.2361) FABNJT.FABN(J.7)	00009600
003735	961	2361	FORMAT(' UNLISTED JOINT TYPE, NO VALUE GIVEN. JOINT',	00009610
003735	962		R ' TYPE=', 2A4)	00009620
003735	963		WRITE(6,9876)'ALL JOINT TYPES FAILED'	00009630
003742	964	С		00009640
003746	965	•	WTOTAL=WTOTAL+9000.0	00009850
003746	966	<u> </u>	04 14 0005	00009670
003751	967	c	60 10 2365	00009680
003751	969	č	· · ·	00009690
003752	970	2362	CONTINUE	00009700
003752	971		IF (KOMPCH(MAT(K),1,'CS',1,2) .EQ. 0) GO TO 2365	00009710
003765	972		IF (KOMPCH(MAT(K),1,'CM',1,2) .EQ. 0) GO TO 2367	00009720
D03777	973	С	CASE OF, CUN1 OR CRES	00009730
004000	974			00009740
p04002	975		IF (CUV)II (EU. 1) GO IO 2360	00009760
04008	970			00009770
04012	978		GO TO 2360	00009780
004012	979	С		00009790
004013	960	2365	CONTINUE	00009800
004013	961	C	CASE OF CARBON STEEL	00009810
004013	982	··· <u> </u>		00009820
004015	983		1F (CSV)11 ,EG. 1) 60 10 2360	00009840
004021	904			00009850
04025	986		GT 17 2380	00009860
004025	987	C		00009870
004026	988	2367	CONTINUE	00009880
004026	989	С	CASE OF CHROME MOLY	00009890
004026	990			
004030	991		IF (OMVJT1 ,EQ. 1) GO TO 2380	00009910
004034	992		UNVJII#1 1 ADO-5	00009930
04036	993		1ANG-0 BM TM 2380	00009940
004040	954	C		00009950
004040	996	č		00009960
004041	997	2380	WTOTAL=WTOTAL+WELDS(IARG, JTSIZE)	00009970
004046	998	C	-	00009980
004046	999	Ç	SOCKET WELDS DO NOT HAVE MACHINING TIME ,	00019330
004051	1000		IF (SWFLAG .EQ. 1) GO TO 2385	0'0'0'1 0'0'0'0'
004054	1001	C		00010010
p04054	1002	<u> </u>	FLANGES COULD BE SOCKET WELDS. IF SO. SKIP MACHINING STEP.	
po4055	1003		······································	00010030

P1420 01	11-20-84	14.899	SUB. STDTIM(TEMP, AD1, ADN) STA25PICALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 16
203253 203266	886 887		IF (KOMPCH(TYPCOD(K),1,'F',1,1) .NE. 0) GO TO 2340 1ARG=8	00008860
203270	888		IF (FLG1 FO 1) CO TO 2280	00000070
303274	889			00008880
03276	890			00008890
203300	801			00008900
103300	031		60 10 2360	00008910
000000	092	C		00008920
202201	893	C	SEE IF BOSS	00008930
202201	894	2340	CONTINUE	00008940
<u>JU3301</u>	895		IF (KOMPCH(TYPCOD(K), 1, 'W', 1, 1), EQ, 0) GO TO 2342	00008950
JU3314	896		1F (KOMPCH(TYPCOD(K),1,'B',1,1) .NE. 0) GO TO 2350	00008960
J03327	897	2342	WTOTAL=WTOTAL+WELDS(15, JTSIZE)	00008970
003333	898	C	•	00008980
203333	899	C	THE MACHINING VALUE FOR BOSSES/WELDOLETS IS ALWAYS 0.4.	00008990
203336	900	2347	MTOTAL=MTOTAL+0. 4	00009000
203341	901		GO TO 2385	00009010
003341	902	C	· · · ·	00009020
203341	903	С	SEE IF SOCKET WELD OR FILLET WELD (TIMED THE SAME)	00000020
003342	904	2350	CONTINUE	00009040
003342	905		IF (KOMPCH(FABN.IT 1, 'P41' 1 3) FO 0) GG TG 2352	00009040
003354	906		$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $	00009050
003366	907		IF (KOMPCH(FABNIT) 'P2' 1 3) EQ. 0) GG TO 2352	0000000
003400	908		IF (KOMPONIEADNIE) I DE I O EO OL CO TO 2352	00009070
003412	900 909		$\begin{array}{c} \text{If (NOMPORTADIVI)}, \text{If ID}, \text{IJ},	00009080
003424	010		IF (KONFOR(FABNJI, 1, FN-7, 1, 4) EQ. 0) GO 10 2352	00009090
002426	510		IF (KOMPCH(FABNJI, (, PN14', I, 4) . EQ. 0) GO TO 2352	00009100
002450	911		IF (KONPCH(FABNJI, I, PI7, I, 3), EG, 0) GO TO 2352	00009110
003463	912		IF (KOMPCH(FABNJI, I, PIG', I, 3) .EG. 0) GO TO 2352	00009120
003462	913		IF (KOMPCH(FABNJT, 1, 'V28', 1, 3) .EQ. 0) GO TO 2352	00009130
003474	914		IF (KOMPCH(FABNJT, 1, 'P43', 1, 3) .EQ. 0) GO TO 2352	00009140
003506	915		<u>GO TO 2360</u>	00009150
003505	916	C		00009160
003507	917	2352	CONTINUE	00009170
003507	918		SWFLAG=1	00009180
003511	919		<u>1F (KOMPCH(MAT(K),1,'CS',1,2),EQ. 0) GO TO 2355</u>	00009190
003524	920		IF (KOMPCH(MAT(K), 1, 'CM', 1, 2) .EQ. 0) GO TO 2357	00009200
003536	921	С	CASE OF CUNI OR CRES	00009210
003537	922		IARG=12	00009220
003541	923		IF (CUSWI .EQ. 1) GO TO 2380	00009230
003545	924		CUSW1=1	00009240
003547	925		1ARG= 11	00009250
003551	926		GQ TQ 2380	00000200
003551	927	С		00003200
003552	928	2355	CONTINUE	00009280
003552	929	c c	CASE OF CARBON STEEL	00009200
003552	930	v		00009290
003554	021			00009300
003560	022			00009310
000000	902			00009320
003562	933			00009330
003564	934	•	GO TO 2380	00009340
003564	935	<u> </u>		00009350
003565	936	2357	CONTINUE	00009360
003565	937	C	CASE OF CHROME MOLY	00009370
003565	938		IARG=14	00009380
003567	939		<u>IF (OMSW1 , EQ. 1)</u> GO TO 2380	00009390
003573	940		OMSW1=1	00009400
003575	941		IARG=13	00009410
003577	942		GO TO 2380	00009420
003577	943	С		00009430
003577	944	C		00009440
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P1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN)STA25P1CALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 15
002765	627 829	IF (SHOPJT(J) .LT. 2) GO TO 2385	00008270 00008280
002771		SUEL AG-O	00008290
002777	029		00008300
002772	830		00008310
002773	831	$\frac{1}{10} = 1.10 \text{ model}$	00008320
<u>poz//5</u>	B32		00008330
003000	833		00008340
003001	834		00008350
003004	835		00008360
<u>່)ນບັບບໍລິອີ</u>	836		00008370
03013	837		00008380
103020	838	IF (FODIO .GI. II) JISIZE=4	00008390
003025	639	IF (FOD10 .GT. 13) JISI2E=5	00008400
<u>503032</u>	<u>840</u>	IF (FODIOGT. 16) JISIZEES	00008410
003037	841	IF (FODIO .GT. 22) JTSIZE=7	00008420
003044	842	IF (FODIO .GT. 27) JTSIZE=8	00008430
003051	843	IF (FODIO .GT. 32) JTSIZE=9	00008430
203056	844	IF (FOD10, GT, 37) JTSLZE=10	00008440
503063	845	IF (FODIO .GT. 42) JTSIZE=11	00008450
003070	846	1F (FUD10 .GT. 46) JTS1ZE=12	00008460
003075	847	IF (FOD10 .GT. 52) JTSIZE=13	00008470
003102	848	IF (FOD10, GT. 62) JTSIZE=14	00008480
003107	849	IF (FODIO .GT. 72) JTSIZE=15	00008490
03114	650	IF (FOD10 .GT. 82) JTS1ZE=16	00008500
003121	651	IF (FOD10 .GT. 92) JTS1ZE=17	00008510
003126	852	IF (FODIO , GT, 102) JTSIZE=18	00008520
003133	853	IF (FODIO . OT, 122) JTSIZE=19	00008530
003140	854	IF (FOD10 .GT, 142) JTS1ZE=20	00008540
03145	855	IF (FOD10 .GT. 162) JTS1ZE=21	00008550
003152	856	IF (FOD10, 0T, 182) JTS1ZE=22	00008560
003157	857	IF (FOD10 .GT, 202) JTS1ZE=23	00008570
003162	858	C	00008580
03164	859	2320 CONTINUE	00008590
03164	860	C	00008600
003164	861	C A SHOP JOINT ON THIS PIECE HAS BEEN FOUND.	00008610
003164	862	C TESTS MUST BE MADE FOR WHETHER IST OR LATER	00008620
003164	863	C OCCURANCE OF EACH KIND OF JOINT TYPE (EXCEPT BOSSES).	00008630
003164	864	C THESE ARE DONE USING FLG1. CUSW1. CMVJT1. ETC.	0008640
003164	865	6	00008650
003164	866	FABNJT≈FABN(J,6)	00008650
002165	867	C.	00008670
002165	868	C MAKE SURE THE JOINT TYPE IS NOT BLANK.	00008080
0.0165	860	GET JOINT TYPE FROM DUPLICATE POINT IF IT IS.	00008690
103105	870	IF (SITDUP(J) FQ. 9999) GO TO 2332	00008700
003174	070	IF (SITDUP(1) (T. 1) GO TO 2332	00008710
003201	071		00008720
003205		LE (KOMPCH(EABNIT) ' ', 1, 4) NE. 0) GO TO 2331	00008730
003206	673		00008740
003217	874		00008750
003220	875		00008760
<u>p02234</u>	876		000/3770
03235	877	r Abnji=r Abn(Sjiddr(J), G)	00008780
po3235	878	C	00008790
003247	679	2331 CONTINUE	00008800
003247	660	C BLANK DUT DUPLICATE JOINT	00008810
003247	881	SHOPJT(SJTDUP(J))=0	00008820
003252	882	C ·	00008830
003253	883	2332 CONTINUE	00008840
003253_	884	<u>C</u>	
003253	RRE R	TEST FOR FLANGE	0000000

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D02522 768 1308 FTOTAL=FTOTAL+FABIRS(BR2FL0, FF312E) D000760 D02531 770 1395 CONTINUE D000760 D02531 772 ARAY NFAB TELLS NG, OF LINES PER FITTING. D000770 D02531 773 C D000770 D000770 D02531 774 C D000770 D000770 D02534 774 C D000770 D000770 D02534 774 C D000770 D000770 D02541 776 C D000770 D000770 D02541 766 C D000770 D000770 D02541 768 C D0007700 D000770 <th>P1420 01</th> <th>11-20-84</th> <th>14.899 SUB. STDTIM(TEMP, AD1, ADN) STA25PICALCULATE STD. TIME VALUES</th> <th>LABEL STDTIM PAGE 14</th>	P1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN) STA25PICALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 14
Dp3556 768 769 0000750 D02531 770 100 00011NUE 0000770 D02531 772 100 00011NUE 0000770 D02536 773 100 00011NUE 0000770 D02564 774 1005 00011NUE 0000770 D02564 774 1005 00011NUE 0000770 D02564 776 0 0000770 0 D02574 776 0 0000770 0 D02541 766 0 0000770 0 D02541 768 0 0000770 0 D02550 766 FL0101 0 0000770 D02550 766 FL0101 0 0 0000770 D02550 766 FL0101	002522	768	1308 FTOTAL=FTOTAL+FABHRS(BRZFLG, FESIZE)	00007680
Docssi 776 1080 CONTINUE CONCEPTION 002531 771 C ARRAY MEAS TELLS NO. OF LINES PER FITTING. CONCEPTION 002536 774 C ARRAY MEAS TELLS NO. OF LINES PER FITTING. CONCEPTION 002536 774 C LINE INDERGRES. CONCEPTION 002541 775 C C CONCEPTION 002541 776 C CONCEPTION CONCEPTION 002541 786 C CONCEPTION CONCEPTION 002541 786 C CONCEPTION CONCEPTION 002541 786 C CONCEPTION CONCEPTION 002550 787 C FIGUID ON TINUE CONCEPTION 002550 787 C FIGUID ON TINUE CONCEPTION 002550	002526	769	C C	00007690
D02531 771 C ARRAY NFAB TELLS NO. OF LINES PER FITTING. C0007720 D02531 772 C D3D INDE INDE INDE INDE INDE INDE INDE IND	002531	770	1389 CONTINUE	00007700
D02531 772 C ARKAY NFAB TELLS NO. OF LINES PER FITTING. 00007780 D02531 773 1395 (AME THAPEAGK) 00007780 00007780 D02541 776 0 00007780 0000780 D02541 776 0 0000780 0000780 D02541 763 0 0000780 0000780 D02541 764 0 0000780 0000780 D02541 764 0 0000780 0000780 D02554 764 NSIZE 0000780 0000780 D02554 766 IF (0010 0.7 tb IVSIZE-2 0000780 0000780 D02556 769 IF (0010 0.7 tb IVSIZE-2 00007980 00007980 D02567 766 <td< td=""><td>002531</td><td>771</td><td>C</td><td>00007710</td></td<>	002531	771	C	00007710
D42536 773 1390 INDENDATE 00007730 D42536 774 1395 CONTINUE 00007730 D42541 774 C 00007770 D42541 776 C 00007770 D42541 776 C 00007770 D42541 776 C 00007770 D42541 776 C 00007770 D42541 778 C 00007780 D42541 780 0 00007780 D42541 783 C 00007780 D42541 783 C 0000780 D42541 783 F (D10 0.1 111111111111111111111111111111111111	002531	772	C ARRAY NFAB TELLS NO. OF LINES PER FITTING.	00007720
Dubbis 774 C 00007740 00007760 00007760 00007760 00007760 00007760 00007760 00007780 00007760 00007760 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 00007780 0000780 0000780 0000780 0000780 0000780 0000780 0000780 0000780 0000780 0000780 0000780 00000780 0000780 0000780 0000780 0000780 0000780 0000780 0000790 00000790 00000000 00007910 00007920 000000000 00007920 00007920 0000000000 00007920 00007920 0000000000 00007920 00007920 0000000000 00007920 00007920 0000000000 000007940 00007940	002536	773	1390_IND=IND+NFAB(K)	00007730
D02541 775 1355 CONTINUE 00007750 002541 777 0 00007750 00007750 002541 777 0 00007750 00007750 002541 778 0 00007750 00007750 002541 760 00007750 00007750 002541 764 0 00007760 002541 764 0 00007760 002541 764 0 00007640 002554 764 0 00007640 002555 766 FL010.01.61 1111145125-4 00007640 002556 789 IF (0010.01.81 M3125-2 00007900 00007940 002556 789 IF (0010.01.131 M5125-4 00007920 00007920 002556 789 IF (0010.01.221 M3125-5 00007920 00007920 002560 793 IF (0010.01.221 M3125-6 00007920 00007920 002561 790 IF (0010.01.221 M3125-12 000007950 00007920	002536	774	C	00007740
Dot2541 776 C D0007760 D02541 777 C 00007780 D02541 777 C 00007780 D02541 778 C 00007780 D02541 780 00007780 00007780 D02541 782 0000780 0000780 D02541 782 0000780 0000780 D02541 784 0000780 0000780 D02541 786 FL0150 0000780 D02550 786 FL0150 0000780 D02550 786 FL0150 0000780 D02550 786 FL0150 01.1491252 0000780 D02550 786 FL010.01.01.1111451254 0000780 0000780 D02566 791 FL0010.01.11145254 0000780 0000780 D02567 795 FL0010.01.1145254 00000780 0000780 D02581 798 FL0010.01.21481251 00000780 0000780 D02612 756 <t< td=""><td>002541</td><td>775</td><td>1395 CONTINUE</td><td>00007750</td></t<>	002541	775	1395 CONTINUE	00007750
D02541 777 0 0000770 002541 778 0 00007780 002541 780 0 00007780 002541 782 0 00007780 002541 782 0 00007780 002541 782 0 0000780 002541 782 0 0000780 002541 782 0 0000780 002550 786 F.Lais 0000780 0025561 780 18122*1 0000780 0025561 780 17.0010.07.01.01.W312*4 0000780 0025561 780 17.0010.07.01.01.W312*5 0000780 0025561 793 17.0010.07.01.01.W312*5 0000790 0025661 793 17.0010.07.10.01.W312*5 0000790 002561 793 17.0010.07.10.01.W312*5 0000790 002562 795 17.0010.07.20.01.W312*5 0000790 002620 794 17.0010.07.20.01.W312*5 00000790 002812	002541	776	c .	00007760
D02541 778 C 00007700 D02541 778 C 00007700 D02541 781 C 00007400 D02541 782 C 00007400 D02541 783 C 00007400 D02541 783 C 00007400 D02541 784 C 00007740 D02541 784 C 00007740 D02550 76 2000 IVbrL 00007740 D02550 76 C 00007740 00007740 D02550 787 C C 00007740 D02550 787 F C010 071 11 WSIZe-2 C 00007780 D02550 783 F C010 071 11 WSIZe-2 C 00007780 D02550 793 F C010 071 14 WSIZe-2 C 00007780 D02551 798 F C010 071	002541	777	C'	00007770
002541 779 C 00007780 002541 762 0000780 0000780 002541 764 0000780 0000780 002541 764 0000780 0000780 002541 764 0000780 0000780 002550 767 FL01=0 0000780 002554 768 FL01=0 0000780 002554 769 FL010.0.0.1.01 NISIZE-1 0000780 002554 769 IF (0010.0.1.0) NISIZE-3 00007900 002560 781 IF (0010.0.1.0) NISIZE-5 00007940 002600 794 IF (0010.0.1.2) NISIZE-5 00007940 002612 785 IF (0010.0.1.2) NISIZE-5 00007940 002612 785 IF (0010.0.1.2) NISIZE-5 00007940 002612 785 IF (0010.0.1.2) NISIZE-16 00007940 0026261 789 IF (0010.0.1.2) NISIZE-16 000007960 0026263 601	002541	778	C	00007780
MARMAIL 740 C 00007810 VARMAIL 761 C 00007810 VARMAIL 763 C 00007810 VARMAIL 764 C 00007810 VARMAIL C 00007810 00007810 VARMAIL C 00007910 00007910 VARMAIL C 00007910 00007900 VARMAIL C 00007920 00007920 VARMAIL C 00007920 00007920 VARMAIL C 00007920 00007920 VARMAIL C C 00007920 VARMAIL C C 00007920 VARMAIL C C 00007920 VARMAIL	002541	779	C	00007790
U2541 741 C 00007810 002841 762 00007820 00007820 002841 764 00007820 00007820 002841 764 00007820 00007820 002850 766 FL01=0 00007800 0028550 766 C 00007800 002856 764 UNSIZE=1 00007800 002856 764 INSIZE=1 00007800 002856 761 IF (C010_GT_6_0_H)USIZE=3 00007800 002857 782 IF (C010_GT_6_0_H)USIZE=3 00007900 002857 783 IF (C010_GT_6_0_H)USIZE=3 00007930 002860 784 IF (C010_GT_6_0_H)USIZE=3 00007930 002812 785 IF (C010_GT_6_0_H)USIZE=3 00007930 002812 785 IF (C010_GT_6_0_H)USIZE=3 00007930 002812 786 IF (C010_GT_6_0_H)USIZE=3 00007930 002814 786 IF (C010_GT_6_0_H)USIZE=1 00007930 002815 795 IF	002541	780	C	00007800
042541 762 C 00007820 025341 763 C 00007830 02546 765 C 00007830 02550 767 C 00007830 002552 767 C 00007830 002552 767 C 00007830 002552 788 1F (0010.07.6) 002552 789 1F (0010.07.6) 002554 789 1F (0010.07.6) 002556 791 1F (0010.07.6) 002556 792 1F (0010.07.10) 002566 793 1F (0010.07.10) 002567 792 1F (0010.07.2) 002617 792 1F (0010.07.2) 0026263 794 1F (0010.07.2) 0026264 799 1F (0010.07.2) 0026263 799 1F (0010.07.2) 0026264 799 1F (0010.07.2) 0026263 </td <td>002541</td> <td>781</td> <td>C</td> <td>00007810</td>	002541	781	C	00007810
002541 783 C ***** WELDING ***** 00007840 002540 764 2000 [ND:1 00007840 00007840 002550 767 C 00007840 00007840 002551 766 IWSIZE-1 00007840 00007840 002554 789 IF (0D10.07.6) 01111 WSIZE-2 00007840 002554 789 IF (0D10.07.6) WSIZE-3 00007940 002554 789 IF (0D10.07.10) WSIZE-5 00007940 002600 793 IF (0D10.07.22) WSIZE-5 00007940 002612 785 IF (0D10.07.22) WSIZE-7 00007940 002612 785 IF (0D10.07.22) WSIZE-7 00007940 002617 786 IF (0D10.07.22) WSIZE-7 00007940 002612 785 IF (0D10.07.22) WSIZE-15 00007940 002612 787 IF <t< td=""><td>002541</td><td>782</td><td>C</td><td>00007820</td></t<>	002541	782	C	00007820
028541 784 00007040 07540 785 2000 HVB1 00007040 002850 789 FL01=0 00007040 002855 789 FL01=0 00007040 002855 789 FL01=0 00007040 002855 789 FL0010.0f.0 0 HS12E=2 00007040 002856 791 FL0010.0f.0 0 HS12E=3 00007900 002856 791 FL0010.0f.1 10 HS12E=5 00007930 0028261 798 FL0010.0f.221 HS12E=5 00007930 0028262 793 FL0010.0f.321 HS12E=5 00007930 0028262 793 FL0010.0f.321 HS12E=12 00007970 0028261 796 FL0010.0f.321 HS12E=14 00007970 0028263 798 FL0010.0f.321 HS12E=14 000007970 0028263 798 FL0010.0f.7221 HS12E=14 00000800 0028264 799 FL0010.0f.7221 HS	002541	783	C ***** WELDING *****	00007830
UB7440 745 2000 [Mp:1] 00007850 002550 766 F(d)=0 00007870 002554 766 00007870 002554 766 00007870 002554 769 00007870 002556 790 1F 10010 0T. 8) 1183122=3 00007800 002566 790 1F 10010 0T. 8) 1183122=3 00007800 002567 792 1F 10010 0T. 13) 118122=4 00007930 002605 794 1F 10010 0T. 22) 118122=4 00007950 002612 795 1F 10010 0T. 42) 118122=4 00007950 002614 796 1F 10010 0T. 42) 118122=1 00007970 002614 796 1F 10010 0T. 42) 118122=1 00007970 002636 796 1F 10010 0T. 42) 118122=1 0000800 0026250 601 <td>002541</td> <td>784</td> <td>C · · · ·</td> <td>00007840</td>	002541	784	C · · · ·	00007840
002550 766 FL01=0 00007360 002550 767 C 00007370 002551 768 INS12E+1 00007370 002551 769 IF 0010 01 01 M4252-4 00007300 002556 790 IF 0010 01 01 M4252-4 00007300 002556 793 IF (0010 01 11 M41252-4 00007300 002566 793 IF (0010 01 11 M51252-5 00007300 0026205 793 IF (010 07 221 M51252-5 00007350 002611 795 IF (010 07 221 M51252-5 00007350 002623 797 IF (010 07 221 M51252-13 00007390 002624 797 IF (010 07 221 M51252-13 000007390 002625 601 IF (0010 67 221 M51252-13 00000800 0026264 604 <t< td=""><td><u>202546</u></td><td>785</td><td>2000 IND=1</td><td>00007850</td></t<>	<u>202546</u>	785	2000 IND=1	00007850
D02550 787 C D0007870 D02552 788 IF 0010 01 01 01 01 01 01 0007860 D02551 788 IF 0001 01 01 01 01 00077800 D02556 791 IF 00010 01 01 0007980 00007980 D02567 792 IF 0010 01 181 1812E=5 00007980 D026050 794 IF 0010 01 221 1812E=6 00007930 D02612 795 IF f<0010	02550	786	FLG1=0	00007860
D02552 786 INSIZE-1 00007660 D022561 780 IF (DD10.0T.6) NNSIZE-2 00007900 D02267 783 IF (DD10.0T.6) NNSIZE-3 00007900 D02267 783 IF (DD10.0T.10) NNSIZE-3 00007900 D02670 783 IF (DD10.0T.10) NSIZE-3 00007920 D02600 783 IF (DD10.0T.20) NSIZE-3 00007920 D02600 783 IF (DD10.0T.20) NSIZE-3 00007920 D02617 796 IF (DD10.0T.20) NSIZE-3 00007960 D02624 797 IF (DD10.0T.20) NSIZE-12 00007960 D02636 799 IF (DD10.0T.42) NSIZE-12 00007960 D02643 600 IF (DD10.0T.42) NSIZE-12 00007960 D02644 600 IF (DD10.0T.42) NSIZE-12 00000600 D02656 602 IF (DD10.0T.42)	002550	787	C	00007870
D02554 789 [F C010 .6T. LNS1ZE-2 O0007890 002566 781 IF C010 .6T. .81 WS1ZE-3 00007800 002576 782 IF C010 .6T. 13 WS1ZE-3 00007800 002606 723 IF C010 .6T. 13 WS1ZE-3 00007800 002612 785 IF C010 .6T. 21 WS1ZE-5 00007800 002612 785 IF C010 .6T. 21 WS1ZE-1 00007800 002612 795 IF C010 .6T. 42 WS1ZE-1 00007800 002631 796 IF C010 .6T. 42 WS1ZE-13 00007800 002655 602 IF C010 .6T. 22 WS1ZE-13 0000600 002656 603 IF C010 .6T. 22 WS1ZE-13 0000600 002667 604 IF <td>002552</td> <td>788</td> <td>IWSIZE=1</td> <td>00007880</td>	002552	788	IWSIZE=1	00007880
Dig2561 790 IF C010 .67. B) 1VS1ZE-3 00007910 002566 791 IF C010 .67. 1N NVS1ZE-3 00007920 002506 792 IF C010 .67. 1N NVS1ZE-3 00007930 002605 794 IF C010 .67. 2N NVS1ZE-3 00007940 002617 785 IF C010 .67. 2N NVSZE-3 00007950 002624 786 IF C010 .67. 2N NVSZE-9 00007950 002636 786 IF C010 .67. 42) NVSZE-12 00007980 002643 786 IF C010 .67. 42) IVSZE-13 0000800 002650 601 IF C010 .67. 42) IVSZE-13 0000800 002657 604 IF C010 .67. 1VSIZE=16 00000800 002670 605 <	002554	789	IF (OD10 . OT, 6) IWSIZE=2	00007890
DU2596 791 IF CDD10 GT MSIZE=4 D0007910 D022573 792 IF CDD10 GT MSIZE=5 D0007920 D02600 793 IF CDD10 GT MSIZE=5 D0007940 D02610 793 IF CDD10 GT 221 MSIZE=8 D0007950 D02617 793 IF CDD10 GT 221 MSIZE=8 D0007950 D026241 793 IF CDD10 GT 21 MSIZE=10 D0007950 D02636 799 IF CDD10 GT 221 MSIZE=12 D0007950 D02643 800 IF CDD10 GT 221 MSIZE=13 D000000 D02655 602 IF CDD10 GT 221 MSIZE=15 D0000000 D02667 604 IF CDD10 GT 122 MSIZE=16 D0000000 D02701 806 IF CDD10 GT<	002561	790	IF (OD10 .GT. 8) IWSIZE≈3	00007900
Dd2273 792 IF (DD10.0T.13) IWSIZE=5 D0007920 Dd2800 793 IF (DD10.0T.18) IWSIZE=5 D0007930 Dd2805 794 IF (DD10.0T.22) IWSIZE=7 D0007930 Dd2812 795 IF (DD10.0T.22) IWSIZE=8 D0007930 Dd2812 797 IF (DD10.0T.22) IWSIZE=9 D0007930 Dd2812 797 IF (DD10.0T.22) IWSIZE=9 D0007930 Dd2812 797 IF (DD10.0T.22) IWSIZE=9 D0007930 Dd2812 797 IF (DD10.0T.22) IWSIZE=10 D0007930 Dd2812 798 IF (DD10.0T.42) IWSIZE=10 D0007930 Dd2812 798 IF (DD10.0T.42) IWSIZE=12 D0007930 Dd2814 798 IF (DD10.0T.42) IWSIZE=12 D000030 Dd2859 B01 IF (DD10.0T.22) IWSIZE=14 D0000800 Dd2862 B03 IF (DD10.0T.22) IWSIZE=15 D0008030 Dd2864 IF (DD10.0T.122) IWSIZE=15 D0008030 Dd2864 IF (DD10.0T.122) IWSIZE=15 D0008030 Dd2870 B04 IF (DD10.0T.122) IWSIZE=15	002566	791	IF (OD10 .GT. 11) IW\$IZE=4	00007910 .
U22500 793 IF (ODIO. eff 16) USIZE=6 00007930 002605 794 IF (ODIO. eff 27) USIZE=7 00007940 002617 796 IF (ODIO. eff 27) USIZE=8 00007950 002617 796 IF (ODIO. eff 37) USIZE=10 00007950 002631 798 IF (ODIO. eff 37) USIZE=11 00007950 002634 800 IF (ODIO. eff 46) USIZE=13 00000590 002655 601 IF (ODIO. eff 62) USIZE=14 00006000 002655 602 IF (ODIO. eff 62) USIZE=15 00006020 002656 603 IF (ODIO. eff 62) USIZE=15 00006060 002674 605 IF (ODIO. eff 62) USIZE=15 00006060 002674 605 IF (ODIO. eff 142) USIZE=17 00006060 002706 607 IF (ODIO. eff 142) USIZE=19 00006060 <	002573	792	IF (OD10 .GT. 13) IWSIZE=5	00007920
D02605 794 IF (0D10. GT. 22) IVS12E=7 00007940 D02612 795 IF (0D10. GT. 22) IVS12E=6 00007950 D02624 797 IF (0D10. GT. 32) IVS12E=10 00007970 D02633 798 IF (0D10. GT. 32) IVS12E=10 00007980 D02634 800 IF (0D10. GT. 42) IVS12E=12 00007990 D02635 601 IF (0D10. GT. 72) IVS12E=13 0000500 D02655 602 IF (0D10. GT. 72) IVS12E=14 00006020 D026567 604 IF (0D10. GT. 92) IVS12E=16 00006030 D02670 806 IF (0D10. GT. 122) IVS12E=17 00006050 D02674 905 IF (0D10. GT. 122) IVS12E=18 00006050 D02674 905 IF (0D10. GT. 122) IVS12E=12 00006060 D02701 806 IF (0D10. GT. 122) IVS12E=12 00006060 D02713 806 IF (0D10. GT. 122) IVS12E=12 00006060 D02725 610 IF (0D10. GT. 122) IVS12E=23 00006060 D02730 611 C L0CP THR0UGH ARRAY OF FITTINGS. 00006100	002600	793	IF (0D10.GT. 16) IW\$1ZE=6	00007930
D02612 795 IF (D010 GT. 27) IVS1ZE-9 00007950 D026247 797 IF (D010 GT. 37) IVS1ZE-9 00007970 D02634 798 IF (D010 GT. 37) IVS1ZE-9 00007970 D02634 799 IF (D010 GT. 46) IVS1ZE-12 00007990 D02643 600 IF (D010 GT. 46) IVS1ZE-13 00008000 D02655 602 IF (D010 GT. 62) IVS1ZE-15 00008020 D026562 603 IF (D010 GT. 62) IVS1ZE-16 00008040 D02674 805 IF (D010 GT. 82) IVS1ZE-17 00008040 D02706 807 IF (D010 GT. 142) IVS1ZE-19 00008060 D02706 807 IF (D010 GT. 142) IVS1ZE-19 00008060 D02706 807 IF (D010 GT. 142) IVS1ZE-19 000008070 <t< td=""><td>002605</td><td>794</td><td>IF (ODIO .GT. 22) IWSIZE=7</td><td>00007940</td></t<>	002605	794	IF (ODIO .GT. 22) IWSIZE=7	00007940
D02617 796 IF (DD10, 0T, 32) IWS1ZE+9 D0007960 D02622 797 IF (DD10, 0T, 32) IWS1ZE+10 D0007980 D02633 798 IF (DD10, 0T, 42) IWS1ZE+12 D0007980 D02636 799 IF (DD10, 0T, 42) IWS1ZE+12 D0007990 D02636 601 IF (DD10, 0T, 52) IWS1ZE+12 D0008000 D02655 602 IF (DD10, 0T, 72) IWS1ZE+14 D0008000 D026567 804 IF (DD10, 0T, 92) IWS1ZE+16 D0006000 D02657 804 IF (DD10, 0T, 122) IWS1ZE+18 D0006000 D02674 805 IF (DD10, 0T, 122) IWS1ZE+18 D0006000 D02674 805 IF (DD10, 0T, 122) IWS1ZE+18 D0006000 D02706 607 IF (DD10, 0T, 122) IWS1ZE+20 D0006000 D02726 610 IF (OD10, 0T, 122) IWS1ZE+22 D0006000 D02726 610 IF (OD10, 0T, 122) IWS1ZE+23 D0006010 D02726 610 IF (OD10, 0T, 122) IWS1ZE+20 D0006010 D02730 611 C D0006100 D00006100	002612	795	IF (OD10 .GT, 27) IWSIZE=8	00007950
002624 797 IF (0010, 6T, 42) WsizE=10 00007970 002631 798 IF (0010, 6T, 42) WsizE=11 00007980 002633 600 IF (0010, 6T, 42) WsizE=13 00007980 002635 601 IF (0010, 6T, 52) WsizE=13 0000800 002655 602 IF (0010, 6T, 52) WsizE=15 0000800 002657 604 IF (0010, 6T, 52) WsizE=17 0000800 002674 604 IF (0010, 6T, 122) WsizE=17 00008060 002671 606 IF (0010, 6T, 122) WsizE=17 00008060 002706 607 IF (0010, 6T, 122) WsizE=20 00008060 002713 608 IF (0010, 6T, 122) WsizE=22 00008060 002723 609 IF (0010, 6T, 122) WsizE=22 00008060 002724 609 IF (0010, 6T, 122) WsizE=22 00008060 002730 611 C 0000800 00008100 002730 612 C	002617	796	IF (ODIO .GT. 32) IWSIZE×9	00007960
D02631 796 IF (D10., 6T, 42) WSIZE=11 00007980 D02636 799 IF (D10., 6T, 52) WSIZE=12 00007980 D02635 601 IF (D10., 6T, 52) WSIZE=13 0000800 D02655 602 IF (D10., 6T, 52) WSIZE=14 0000802 D02662 603 IF (D10., 6T, 72) WSIZE=15 0000802 D02662 603 IF (D10., 6T, 72) WSIZE=16 0000802 D02667 604 IF (D10., 6T, 12) WSIZE=17 0000802 D02671 606 IF (D10., 6T, 12) WSIZE=19 0000806 D02706 607 IF (D10., 6T, 12) WSIZE=21 0000806 D027272 608 IF (D10., 6T, 12) WSIZE=21 0000806 D02730 611 C 2021 WSIZE=23 00008100 D02730 612 C 2000 WO008120 00008120 D02730 612	002624	797	IF (0D10 . GT. 37) IWSIZE=10	00007970
D02636 799 IF CD10 GT 461 INSIZE-12 D0007990 D02643 BO0 IF CD10 GT S2 INSIZE-13 D0008000 D02655 BO1 IF (DD10.GT.S2) INSIZE-14 D0008000 D02657 BO2 IF (DD10.GT.S2) INSIZE-15 D0008000 D02667 BO4 IF (DD10.GT.S2) INSIZE-16 D0008000 D02667 BO4 IF (DD10.GT.S2) INSIZE-17 D0008000 D02670 BO6 IF (DD10.GT.122) INSIZE-19 D0008060 D02705 BO7 IF (DD10.GT.142) INSIZE-20 D0008060 D02730 BO8 IF (DD10.GT.182) INSIZE-22 D0000800 D02730 B11 C D0000810 D000800 D000810 D02730 B12 C D0000810 D000810 D000810 D02731 B16 D7 THING IS STAVING, IGNGE IT AND CONTINUE, 00008150 D0	002631	798	IF (OD10 .GT. 42) IWSIZE=11	00007980
002643 600 IF (0010, GT, 52) IVS1ZE=13 00006000 002655 601 IF (0010, GT, 62) IVS1ZE=14 00006020 002665 603 IF (0010, GT, 62) IVS1ZE=15 00006030 002667 604 IF (0010, GT, 92) IVS1ZE=16 00006030 002674 605 IF (0010, GT, 92) IVS1ZE=17 00008060 002674 605 IF (0010, GT, 122) IVS1ZE=19 00008060 002705 806 IF (0010, GT, 142) IVS1ZE=20 00008070 002725 810 IF (0010, GT, 122) IVS1ZE=22 00008090 002726 610 IF (0010, GT, 122) IVS1ZE=23 000080100 002730 611 C 00008100 00008100 00008100 002730 613 C 00008100 00008100 00008100 002735 617 C L007 THR0UGH ARRAY OF FITTINGS. 00008160 00008150	002636	799	IF (OD10 .GT. 46) IWSIZE=12	00007990
002650 601 IF (0010	002643	800	IF (0D10 .GT. 52) IWSIZE=13	00008000
002655 602 IF (0D10, 6T, 72) IWSIZE=15 00000020 002662 603 IF (0D10, 6T, 82) IWSIZE=17 00000030 002667 604 IF (0D10, 6T, 92) IWSIZE=17 00000030 002674 805 IF (0D10, 6T, 122) IWSIZE=17 00000030 002701 606 IF (0D10, 6T, 122) IWSIZE=19 00000000 002713 608 IF (0D10, 6T, 162) IWSIZE=20 00000000 002720 609 IF (0D10, 6T, 162) IWSIZE=21 00000000 002730 611 C 0000000 0000000 002730 611 C 0000000 0000000 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00000010 002732 616 D0 2395 K=1, NF 000000150 00000150 002735 616 D0 2395 K=1, NF 00000010 00000170 002735 616 D0 2395 K=1, NF 000000170 00000170 002735 618 IF (KOMPCH IPEC(4, K), 1, 'S', 1, 1) EQ. 0) GO TO 2390 000000170 000000170 002755	002650	601	IF (OD10 .GT. 62) IWSIZE=14	00008010
D02662 603 IF (D106T62) IWSIZE=16 00006030 D02667 604 IF (D106T92) IWSIZE=17 00008040 D02670 606 IF (DD106T92) IWSIZE=19 00008060 D02706 607 IF (DD106T122) IWSIZE=19 00008070 D02706 607 IF (DD106T122) IWSIZE=21 00008070 D02707 609 IF (DD106T122) IWSIZE=22 00008090 D02725 610 IF (DD106T202) IWSIZE=23 00008100 D02730 611 C 0000810 00008100 00008100 D02730 613 C 00008100 00008130 00008160 D027330 615 C 00008160 00008160 00008160 D02735 616 Df 2395 K=1, NF 00008160 00008180 D02735 618 IF HMSTETTING IS STAVING, IGNORE IT AND CONTINUE. 00008180 <t< td=""><td>02655</td><td>802</td><td>IF (OD10, GT. 72) IWSIZE=15</td><td>00008020</td></t<>	02655	802	IF (OD10, GT. 72) IWSIZE=15	00008020
D02667 604 IF (0D10.6T.92) IVSIZE=17 00006040 002674 905 IF (0D10.6T.122) IVSIZE=18 00006050 002701 606 IF (0D10.6T.122) IVSIZE=19 00008060 002713 606 IF (0D10.6T.142) IVSIZE=20 00008060 002713 608 IF (0D10.6T.182) IVSIZE=21 00008060 002725 610 IF (0D10.6T.182) IVSIZE=22 00008100 002730 611 C 00008100 00008100 002730 612 C 00008100 00008100 002730 614 C LCOP THROUGH ARRAY OF FITTINGS. 00008150 002730 615 C 00008150 00008150 002732 616 DC 2395 K=1,NF 00008150 00008150 002735 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008150 002750 620 C ELIMINATE ONE LINE FITTINGS. 00008150 002755 621 IF (NFAB(K), EQ.1) GO TG 2390 00008150 000008150 002755	002662	803	IF (OD10 .GT, 82) $IWSIZE=16$	00008030
002874 805 IF (0010, 0T, 102) IWSIZE=16 00008050 002706 606 IF (0010, 0T, 142) IWSIZE=19 00008060 002706 607 IF (0010, 0T, 162) IWSIZE=20 00008070 002706 607 IF (0010, 0T, 162) IWSIZE=21 00008070 002725 610 IF (0010, 0T, 162) IWSIZE=22 00008090 002730 611 C 00008100 00008100 002730 612 C 00008100 002730 613 C 00008130 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008160 002730 615 C 00008150 00008160 002735 016 DC 2395 K=1, NF 00008160 00008160 002735 616 IF (KOMPCH(IPEC(4, K), 1, 'S', 1, 1) EQ. 0) GO TO 2390 00008160 002755 620 C ELIMINATE ONE LINE FITTINGS. 0000	02667	804	IF (OD10 .GT. 92) IWSIZE=17	00008040
002/01 606 IF (0D10.61.122) IWSIZE=19 00008060 002706 607 IF (0D10.61.12) IWSIZE=20 00008070 002713 608 IF (0D10.61.12) IWSIZE=21 00008080 002720 609 IF (0D10.61.12) IWSIZE=22 00008070 002725 610 IF (0D10.61.20) IWSIZE=23 00008100 002730 611 C 00008100 002730 613 C 00008100 002730 613 C 00008100 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008150 002732 616 D0 2935 K=1, NF 00008150 00008160 002735 616 D0 2935 K=1, NF 00008160 00008170 002735 618 IF (KOMPCH(IPEC(4, K), 1, 'S', 1, 1) .EQ.0) GO TO 2390 00008160 002750 620 C ELIMINATE ONE LINE FITTINGS. 00008160 002755 623 C 00008200 00008200 002755 623 C 000008200 00008220 <tr< td=""><td>002674</td><td>805</td><td>F (ODIO , GT. 102) WSIZE=16</td><td>00008050</td></tr<>	002674	805	F (ODIO , GT. 102) WSIZE=16	00008050
002706 807 IF (0010, 6T, 142) IW\$1ZE=20 00008070 002713 608 IF (0010, 6T, 162) IW\$1ZE=21 00008060 002725 610 IF (0010, 6T, 202) IW\$1ZE=23 00008100 002730 611 C 0000810 002730 612 C 0000810 002730 614 C LCOP THROUGH ARRAY OF FITTINGS. 00008140 002730 614 C LCOP THROUGH ARRAY OF FITTINGS. 00008140 002730 615 C 00008150 00008150 002735 816 Dd 2395 K=1, NF 00008160 00008170 002735 818 IF (KOMPCH(IPEC(4, K), 1, 'S', 1, 1) .EQ. 0)G0 TO 2390 00008160 002750 819 C 00008100 00008100 002751 621 IF (NFAB(K) ,EQ. 1) GC TO 2390 00008120 002755 622 C 00008200 00008200 002755 623 C 00008210 00008200 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002755 625 INDENDE1[ND+NAB(K)-1]	002701	806	IF (0D10, GT, 122) IWSIZE=19	00008060
D02/13 B0B IF (DD10.GT.162) IWS1ZE=21 00008080 002720 609 IF (DD10.GT.202) IWS1ZE=22 00008000 002730 610 IF (DD10.GT.202) IWS1ZE=23 00008100 002730 611 C 0000810 002730 612 C 00008120 002730 613 C 00008120 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008130 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008150 002732 616 Dd 2395 K=1,NF 00008150 00008150 002735 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008180 002750 619 C 00008180 00008180 002750 620 C ELIMINATE ONE LINE FITTINGS. 00008190 002755 622 C 00008200 0000820 002755 623 C 0000820 0000820 002755 624 C SE IF ANY JOINTS THIS PIECE	002706	807	IF (ODIO .GT. 142) IWSIZE=20	00008070
Odd/20 609 IF (ODD.GT. 182) IWSIZE=22 O0006090 002725 610 IF (ODI.GT. 182) IWSIZE=23 00008100 002730 611 C 0000810 0000810 002730 612 C 0000810 0000810 002730 613 C 00008120 00008120 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008150 002730 615 C 00008150 00008150 002735 616 D0 2395 K=1, NF 00008160 002735 618 IF (KOMPCHCH IPEC(4, K), 1, 'S', 1, 1) EQ. 0) 60 T0 2390 00008160 002750 619 C ELIMINATE ONE LINE FITTINGS. 00008100 00008200 002751 621 IF (NFAB(K), EQ. 1) GO TO 2390 00008200 00008200 002755 622 C ELIMINATE ONE LINE FITTINGS. 00008200 00008200 002755 623 C <	002713	808	IF (OD10, GT, 162) [WS1ZE=21	00008080
002/25 610 IF (0010,GT. 202) IWSIZE=23 00008100 002/30 611 C 00008100 002/30 613 C 00008120 002/30 613 C 00008120 002/30 614 C L00P THROUGH ARRAY OF FITTINGS. 00008120 002/30 614 C L00P THROUGH ARRAY OF FITTINGS. 00008140 002/30 616 D0 2395 K=1, NF 00008160 00008160 002/35 616 D0 2395 K=1, NF 00008160 00008170 002/35 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008170 002/35 618 IF (KOMPCH(IPEC(4, K), 1, 'S', 1, 1) .EQ. 0) GO TO 2390 00008190 002/35 619 C 00008190 00008200 002/35 620 C ELIMINATE ONE LINE FITTINGS. 000008200 002/35 622 C 00008200 00008200 002/35 622 C 00008200 00008200 002/35 623	002720	609	IF (ODIO . GT. 182) IWSIZE=22	00008090
D02/30 611 C 00008110 002730 612 C 00008120 002730 613 C 00008130 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008130 002730 615 C 00008150 00008160 002735 616 D0 2395 K=1, NF 00008160 00008170 002735 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE, 00008170 00008180 002735 618 IF (KOMPCH(IPEC(4, K), 1, 'S', 1, 1) . EQ. 0)60 TO 2390 00008180 002750 619 C 00008190 00008200 002751 621 IF (NFAB(K) , EQ. 1) GO TO 2390 00008210 002755 622 C 00008220 002755 623 C 00008220 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008220 002756 625 INDEND 00008260 00008260	002725	810	IF (0D10 .GT. 202) IWSIZE=23	00008100
D02/30 612 C 00008120 002730 613 C 00008130 002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008140 002730 615 C 00008150 00008150 002732 816 D0 2395 K=1,NF 00008170 00008170 002735 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008180 002735 818 IF (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0)60 TO 2390 00008180 002750 819 C 00008190 002751 821 IF (NFAB(K) .EQ. 1) GO TO 2390 00008200 002755 822 C 00008220 002755 822 C 00008220 002755 824 C SEE IF ANY JOINTS THIS PIECE 00008230 002755 824 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 825 INDEND=IND+NFAB(K) - 1 00008250 00008250 002763 826 D0 2385 J=IND, INDEND 000008260	002730	811	C .	00008110
U22/30 013 C 00008130 002730 014 C L00P THROUGH ARRAY OF FITTINGS. 00008130 002730 015 C 00008150 00008160 002732 016 D0 2395 K=1,NF 00008160 00008160 002735 017 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008170 002735 018 IF (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0)G0 TO 2390 00008180 002750 019 C 00008190 002751 020 ELIMINATE ONE LINE FITTINGS. 00008190 002755 022 C 00008200 002755 022 C 00008220 002755 022 C 00008220 002755 024 C SEE IF ANY JOINTS THIS PIECE 00008220 002756 024 C SEE IF ANY JOINTS THIS PIECE 00008220 002756 025 INDEND 00008250 00008250 002756 025 INDEND 00008250 00008250 <td>02730</td> <td>812</td> <td>C .</td> <td>00008120</td>	02730	812	C .	00008120
002730 614 C L00P THROUGH ARRAY OF FITTINGS. 00008140 002730 615 C 00008150 00008150 002732 616 D0 2395 K=1,NF 00008160 00008170 002735 617 C 1F THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008180 002735 618 IF (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0) G0 TO 2390 00008180 002750 619 C 00008200 00008200 002751 621 IF (NFAB(K) .EQ. 1) GO TO 2390 00008220 002755 622 C 00008220 002755 623 C 00008220 002755 623 C 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 625 INDEND= IND+NFAB(K)-1 00008250 00008250 002763 626 D0 2385 J=IND, INDEND 00008260 00008260	<u>202730</u>	<u> </u>		00008130
002730 615 C 00008150 002732 616 D0 2395 K=1,NF 00008160 002735 617 C IF THIS FITTING IS STAVING, IGNORE 1T AND CONTINUE. 00008170 002735 618 IF (KOMPCH(IPEC(4,K),1,'S',1,1) EQ. 0)60 TO 2390 00008180 002750 619 C 00008200 002751 621 IF (NFAB(K) EQ. 1) GO TO 2390 00008200 002755 622 C 00008220 002755 623 C 00008220 002755 623 C 00008220 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008220 002756 625 INDEND= IND+NFAB(K)-1 00008250 002756 623 C 00008220 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008250 002756 625 INDEND= IND+NFAB(K)-1 00008250 002763 626 D0 2385 J= IND, INDEND 00008260	002730	814	C LOOP THROUGH ARRAY OF FITTINGS.	00008140
002/32 816 D0 2395 K=1,NF 00008160 002735 617 C IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008170 002735 818 IF (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0)G0 T0 2390 00008180 002750 819 C 00008190 002750 820 C ELIMINATE ONE LINE FITTINGS. 00008200 002755 621 IF (NFAB(K) .EQ. 1) G0 T0 2390 00008220 002755 622 C 00008220 002755 623 C 00008230 002755 824 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 825 INDEND= IND+NFAB(K) - 1 00008250 002756 826 D0 2385 J=IND, INDEND 00008260	002730	615		00008150
002/35 B1/ C IF IHIS FITTING IS STAVING, IGNORE IT AND CONTINUE. 00008170 002735 818 IF (KOMPCH(IPEC(4,K),1,'S',1,1).EQ.0)G0 T0 2390 00008180 002750 819 C 00008190 002751 820 C ELIMINATE ONE LINE FITTINGS. 00008200 002755 822 C 00008220 00008220 002755 823 C 00008230 00008230 002755 824 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 825 INDEND=IND+NFAB(K)-1 00008250 00008250 002763 826 D0 2385 J=IND, INDEND 00008250 00008250	002732	816	DO 2395 K=1, NF	00008160
002735 016 1F (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0) G0 TO 2390 00008180 002750 019 C 00008190 002750 820 C ELIMINATE ONE LINE FITTINGS. 00008200 002751 821 1F (NFAB(K), EQ. 1) GO TO 2390 00008210 002755 822 C 00008220 002755 623 C 00008230 002755 824 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 825 INDEND=IND+NFAB(K)-1 00008250 002763 826 DO 2385 J=IND, INDEND 00008260	002/35	<u> </u>	C IF THIS FLITING IS STAVING, IGNORE IT AND CONTINUE.	00008170
002750 619 C 00008190 002750 620 C ELIMINATE ONE LINE FITTINGS. 00008200 002751 621 IF (NFAB(K), EQ. 1) GO TO 2390 00008210 002755 622 C 00008220 002755 623 C 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 625 INDEND=IND+NFAB(K)-1 00008250 002763 626 DO 2385 J=IND, INDEND 00008260	02735	818	IF (KOMPCH(IPEC(4,K),1,'S',1,1) .EQ. 0)60 TO 2390	00008180
002/50 620 C ELIMINATE ONE LINE FITTINGS, 00008200 002751 621 IF (NFAB(K), EQ. 1) GO TO 2390 00008210 002755 622 C 00008220 002755 623 C 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 625 INDEND=IND+NFAB(K)-1 00008250 002763 626 DO 2385 J=IND, INDEND 00008260	02/50	819		00008190
U02/01 021 IF (NFAB(K), EQ. 1) GO TO 2390 00008210 002755 022 00008220 002755 023 0 002755 023 0 002755 023 0 002755 024 0 002755 024 0 002755 025 INDEND=IND+NFAB(K)-1 002756 025 INDEND 002763 02 0305	02750	820	C ELIMINATE ONE LINE FITTINGS,	00008200
D02755 B22 C 00008220 002755 623 C 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 625 INDEND±IND+NFAB(K)-1 00008250 002763 626 D0 2385 J=IND, INDEND 00008260	002751	821	IF (NFAB(K) , EQ. 1) GO TO 2390	00008210
002755 623 C 00008230 002755 624 C SEE IF ANY JOINTS THIS PIECE 00008240 002756 625 INDEND±IND+NFAB(K)-1 00008250 002763 626 D0 2385 J=IND, INDEND 00008260	002755	622	C	00008220
002755 824 C SEE IF ANY JOINTS THIS PIECE . 00008240 002756 825 INDEND≐IND+NFAB(K)-1 00008250 002763 826 D0 2385 J=IND, INDEND 000082€0	002755	623	C	00008230
<u>002756 825 INDEND≐IND+NFAB(K)-1 00008250</u> 002763 826 D0 2385 J=IND, INDEND 000082€0	002755	824	C SEE IF ANY JOINTS THIS PIECE	00008240
P02763 826 D0 2385 J= IND, INDEND 00008260	002756	825	<u>INDENDE INDENEAB(K) - 1</u>	00008250
	poz763	826	DO 2385 J=IND, INDEND	00008560

J			
1420 01	11-20-84	14.699 SUB. STUTIM (TEMP, AUT, AUN) STAZSPTCALCULATE STU. TIME VALUES	LADEL STOTIN PAGE 15
002257	709	1315 CONTINUE	00007090
002257	710	IF (KOMPCH(TYPCOD(K), 3, '0', 1, 1) , NE. 0) 00 TO 1370	00007100
002272	711	FTOTAL=FTOTAL+FABHRS(SLPFLG,FFSIZE)	00007110
002301	712	GO 10 1380	00007120
002301	713	c	00007130
002301	714	C SEE IF BRANCH	00007140
002302	715	1320 CONTINUE $(X, Y,	00007150
002302	710	TF (KOMPCH(TTFCOD(K), T, F, T, T) . NE. 07 80 10 1340	00007170
002314	718	SEE IF EITHER ENDPT IS ON THE MAIN PIPE	00007180
002315	719	IF (SHOPJT(IND).EQ.2 .AND. SJTDUP(IND).EQ.9999) GO TO 1330	00007190
002325	720	IF(SHOPJT(IND+1),EQ.2 .AND, SJTDUP(IND+1),EQ.9999)GO TO 1330	00007200
002335	721	GO TO 1370 ·	00007210
002335	722	<u>C</u>	00007220
002336	723		00007230
002335	724	PIDIAL=FIDIAL+FABHRS(DRANCH,FFS12E)	00007250
002345	725		00007260
002345	727	C SEE IF BOSS	00007270
002346	728	1340 CONTINUE	00007280
002346	729	IF (KOMPCH(TYPCOD(K),1,'B',1,1) .NE. 0) GO TO 1350	00007290
002361	730	ETOTAL=FTOTAL+FABHRS(BOSS,FFSIZE)	00007300
202370	731	GO TO 1380	00007310
002370	732		00007320
002370	733	C SEE IF WELDDEEL	00007330
102371	734	1350 CONTINUE	00007350
02404	736	FTOTAL=FTOTAL+FABHRS(WELDG, FFS1ZE)	00007360
002413	737	GO TO 1380	00007370
202413	738	<u>c</u>	00007380
02413	739	C SEE IF SLEEVE	00007390
002414	740	1360 CONTINUE	00007400
002414	741	IF (KOMPCH(TYPCOD(K),1,'S',1,1), NE. 0) GO 10 1370	00007410
202427	742	FIDIAL=FIDIAL+FABHRS(SLEEVE, FFS12E)	00007420
JU2438	743		00007440
002436	744	C THEN THIS MUST BE A STD NAVY FITTING	00007450
002437	746	1370 CONTINUE	00007460
202437	747	FTOTAL=FTOTAL+FABHRS(NAVFTG, FFSIZE)	00007470
002443	748	C	00007480
002443	749	C SEE IF BRAZED	00007490
202446	750	1380 CONTINUE	00007510
JU2446	751	C SEE IF ANY JUINIS THIS FIELE	00007520
JU2446	702		00007530
102455	754	(F (SHOPJT(J), LT. 2) GO TO 1369	00007540
02461	755	C	00007550
02461	756	C A SHOP JOINT ON THIS PIECE HAS BEEN FOUND	00007560
002462	757	IF (KOMPCH(FABN(J,6),1,'B',1,1) .NE. 0) GO TO 1389	00007570
<u> 202475</u>	758	SHOP JT (J) = 0	00007580
002475	759		00007590
20:2475	760	C A BRAZED JOINT HAS BEEN FOUND, SEE IF FLANGE.	0007610
002477	761	IF (KOMPCH(IYPCOD(K), I, 'F', I, I) . EQ. 0) 60 10 1368	0007620
102511	/62	C A NORMAL BRAZED ELITING HAS BEEN FAIIND	00007630
102011	703	FTOTAL=FTOTAL+FABHRS(BRZFIT, FFSIZE)	00007640
102521	765	GØ TØ 1389	00007650
002521	766	C	00007660
002521	767	A NORMAL BRAZED FLANGE HAS BEEN FOUND	00007670

1420 01	11-20-84	14.899	SUB. STDTIM(TEMP, AD1, ADN)STA25PICALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 12
)2027	650	С	ADD IN JOB SET-UP TIME FIRST	00006500
02031	651	•	FTOTAL = FABHRS(SETUP MPSIZE)	00006510
32035	652	C		00006520
02035	653	č	ADD IN ANY TIME REQUIRED FOR TEMPLATE FROM SHIP	00006530
02037	654	-	IF (HRTEMP, EQ. 'T') FTOTAL=FTOTAL+FABHRS(TEMPL, MPS1ZF)	00006540
<u> 22053</u>	655	С		00006550
02053	656	C		00006560
22053	657	Ċ		00006570
02053	658	С		00006580
<u> 22053 </u>	659	C	LOOP THROUGH ARRAY OF FITTINGS.	00006590
02053	660	Ċ		00006600
02056	661		DØ 1395 K=1,NF	00006610
02061	662	C	IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE	00006620
22061	663		IF (KOMPCH(IPEC(4,K),1,'S',1,1), EQ. 0)00 TO 1390	00006630
22074	664	C		00006640
32074	665	C	ELIMINATE ONE LINE FITTINGS	00006650
02075	666		IF (NFAB(K) .EQ. 1) GO TO 1390	00006660
25101	667	C		00006670
32102	668		FFS1ZE=MPS1ZE	00006680
J2104	669		IF (FITSAM(K)) 60 TO 1305	00006690
J2107	670	C		00006700
<u>J2110</u>	671		F0D10=F1T0D(K)	00006710
J2113	672		FFS1ZE=1	00006720
J2115	673		, IF (FOD10 . GT. 32) FFSIZE=2	00006730
J2122	674		IF (F0D10, GT, 52) FFSIZE=3	00006740
22121	675			00006750
72141	670			00006760
12146	670			00006770
02151	670	c	IF (FODTO . 61, 202) FF312E*7	00006780
52153	680	1305		00006790
02153	681	c c	IS THIS A SPECIFIED SPECIAL FITTING?	00006810
02153	682	č		00006820
02153	683	č	FIRST TEST FOR SLIP-ON FLANGE	00006830
02153	684		IF (KOMPCH(TYPCOD(K), 1, 'F', 1, 1) NF. 0) 90 TO 1320	00006840
02165	685	С		00006850
02165	686	Č	SEE IF THIS IS A FLANGE TO FLANGE (BOLTED).	00006860
02165	687	С	TEST IS DONE BY CHECKING IF THE CENTER OF THE FLANGE HAS	00006870
02165	688	С	A POINT IT MATCHES TO ON THIS SAME DETAIL.	00006880
32166	689		INDCEN= IND	00006890
02170	690		IF (KOMPCH(FABN(INDCEN,4),1,'C',1,1) .EQ. 0) GO TO 1310	00006900
<u> </u>	691	Ç		00006910
02203	692		INDCEN= IND+1	00006920
02206	693		IF (KOMPCH(FABN(INDCEN,4),1,'C',1,1) .EQ. 0) GO TO 1310	00006930
02220	694	C		00006940
02220	695	¢	NO CENTER FOUND FOR THIS FLANGE 77777	00006950
02221	696		GO TO 1315	00006960
02221	697	C		00006970
02222	698	1310	D IF (SHOPJT(INDCEN) .LT. 1) GO TO 1315	00006980
02227	699		_FTOTAL=FTOTAL+FABHRS(FLGFLG,FFS1ZE)	00006990
02233	700	C		00007000
02233	701	С	RESET SO MATCHING FLANGE WON'T BE COUNTED	00007010
02233	702	С	AS WELL.	00007020
02236	703		SHOPJT(INDCEN)=0	00007030
02240	704		IF(SJTDUP(INDCEN) .GT. 125) GO TO 1390	00007040
02245	705		IF(SJTDUP(INDCEN) .LT, 1) GØ TØ 1390	00007050
022 52	706		SHOPJT(SJTDUP(INDCEN))=0	· 00007060
02256	<u>707</u>		<u>60 TO 1390</u>	00007070
02256	708	C		00007080
				χ.

		·	S LABEL STATIM PAGE 11
1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, ADI, ADN)STA25PICALCULATE STD. TIME VALUE.	
101633	591	C C	00005920
01635	<u>592</u>	DO 1078 KELING LE STAVING LENGE IT AND CONTINUE	00005930
01637	593	C IF THIS FLITTING IS STATING, TONORE IT AND CONTINUE	00005940
01637	594	IF (KOMPCH(IPEC(4,K),I, 5,I,I) .Ed. 0.00 10 10/0	00005950
101652	595		00005960
<u>)01652</u>	596		00005970
01653	597	IF (NFAB(K) , EQ. 1) GO TO TO TO	00005980
01657	598		00005390
101660	599		00006000
101672	600	INDEND= 1ND+NEAB(K) = 1	00006010
101673	601		00006020
101700	602		00006030
101703	603		00006040
101710	605	1F (SITDUP(J), GT, 125) GO TO 1072	00006050
101715	806	IF (SJTDUP(J) .LT. 1) GO TO 1074	00006060
101721	607	6	00006070
101721	608	LARG= JTF (T(SJTDUP(J))	00006080
101727	609	I=FITOD(IARG)	00006090
101732	610	IF (], GE, FITOD(K)) GO TO 1074	00006100
01735	611	C	00006110
) 01736	612	$F \mid TOD(K) = 1$	00006120
01741	613	FITSAM(K)=FITSAM(IARG)	00006130
01745	614	GO TO 1074 .	00006140
01745	615	C	00006150
001746	616	1072 CONTINUE	00006160
01746	617	FITOD(K) = OD10	00006120
01751	618	FITSAM(K)=.T.	00006180
001751	619	C	00006200
)01753	620	1074 CONTINUE	00006210
01753	621	C	00006220
01753	622		00006230
01753	623	C ARRAY NEAB TELLS NO. OF LINES PER FITTING.	00006240
1 01760	624	1076_IND=IND+NFAB(K)	00006250
)0 1760	625	C	00006260
01763	626	1078 CONTINUE	00006270
01763	627	C	00006280
)0 1763	628		00006290
01763	629		00006300
01763	630		00006310
101763	631	***** FABRICATION *****	00006320
101763	604		00006330
101763	033		00006340
101763	034 02K		00006350
01763	626	· · · · · · · · · · · · · · · · · · ·	00006360
101762	637		00006370
101703	638	1ND= 1	00006380
01770	639	C C	00006390
101772	R40	1300 CONTINUE	00006400
101772	641	C MPSIZE IS MAIN PIECE SIZE CATAGORY (LINE IN ARRAY)	00006410
01772	642	MPSIZE=1	00006420
01773	643	1F (0D10 .GT. 32) MPSIZE=2	00006430
102000	644	1F (0D10 .0T. 52) MPSIZF=3	00006440
002005	645	IF (OD10 . GT. 82) MPSIZE=4	00006450
002012	646	1F (OD10 .GT. 122) MPS1ZE=5	00006470
02017	647	1F (OD10 .GT. 162) MPSIZE=6	00006480
101024	648	IF_(0D10_,0T, 202)_MP\$1ZE=7	00000100
	640		00000490

71-120 01	11-20-84	14.899	SUB. STDTIM(TEMP, ADI, ADN)STA25PICALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 10
001421	532	С	THIS IS A MAJOR JOINT. COMPARE THE SIZES OF	00005320
001421	533	Ċ	THE 2 FITTINGS AT THE JOINT. BUT TRANSFER IF	00005330
001421	534	C	THE SPECIAL CASE OF THE MAIN PIPE JOINT.	00005340
001422	535		(F (SJTDUP(J) . GT. 125) GO TO 1041	00005350
001427	536		IF (SJTDUP(J) .LT, 1) GO TO 1045	00005360
201433	537	C		00005370
001434	538		JTOD(J)=FITOD(K)	00005380
001440	539		JTSAME(J)=FITSAM(K)	00005390
001441	540	C.		00005400
001444	541		ARG=JTFIT(SJTDUP(J))	00005410
001451	542		I=FITOD(IARG)	00005420
001454	543		IF (1 .GE. FITOD(K)) GO TO 1045	00005430
001457	544	С	•	00005440
001460	545			00005450
001463	546		SHOPJT(SJTDUP(J))=2	00005460
001470	547		JTOD(J)=!	00005470
001473	548		JTSAME(J)=FITSAM(IARG)	00005480
001477	549		JTOD(SJTDUP(J))=1	00005490
po1504	550		JTSAME(SJTDUP(J))=FITSAM(IARG)	00005500
001507	551	C		00005510
001507	552	C	SET FOURTH LETTER OF THE TYPE CODE TO 'R' (REDUCING)	00005520
001512	553		CALL CONCAT(TYPCOD(K), 4, 'R', 1, 1)	00005530
001512	554	C		00005540
001523	555		GO TO 1045 .	00005550
001523	556	C		00005560
001524	557	1041	CONTINUE	00005570
001524	558	C	NOW SET OTHER END OF THE PIECE TO BE THE MINOR JOINT	00005580
001524	559		IF (ROMPCH(TYPCOD(K), 1, 'S', 1, 1), EQ. 0) GO TO 1044	00005590
01537	560		DO 1043 JJ=IND, INDEND	00005600
001541	<u></u>			00005610
001551	00Z		IF (SHOPJI(JJ) .NE. 2) GO TO TO43	00005620
001554	505			00005630
001561	504			00005640
001566	560			00005650
001573	500	1042		00005670
001573	568	043	LONT INCE	00005670
001573	569	č	SET EMURTH LETTER HE THE TYPE CARE TH 'R' (DEDUCING)	00005690
001600	570	¥	CALL CONCAT (TYPEOD(K) & 'P' 1 1)	00005700
001600	571	C		00005710
001611	572	1044	CONTINUE	00005720
001611	573		$JT(p(J)) = dp_1 q$	00005730
001614	574		JTSAME(J)=,T.	00005740
001614	575	C		00005750
001616	576	1045	CONTINUE	00005760
001616	577	C		00005770
001616	578	Ċ		00005780
001616	579	Č	ARRAY NFAB TELLS NO. OF LINES PER FITTING.	00005790
b01623	580	1060	IND=IND+NFAB(K)	00005800
001626	581	1065	CONTINUE	00005810
001626	582	C		00005820
001626	583	C		00005830
001626	584	Ċ		00005840
001626	585	Č		00005850
001626	586	c		00005860
001633	587	-	1ND=1	00005870
001633	588	С		00005880
001633	589	С	MAKE SURE FITTING INFORMATION IS IN ORDER AND READY	00005890
001633	590	C.	FOR FAB. & WELDINGLOOP THROUGH ARRAY OF FITTINGS.	00005900

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21420 01	11-20-84	14.899	SUB. STDTIM(TEMP.AD1.ADN)STA25P1CALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 9
01176	473		JTOD(INDEND) = E ITOD(K)	00004730
01202	474		JTSAME(INDEND)=FITSAM(K)	00004740
01206	475		JTOD(INDCEN)=FITOD(K)	00004750
01212	476		JTSAME(INDCEN)=FITSAM(K)	00004760
01213	477	C		00004770
01216	478		<u>IF (KOMPCH(FABN(INDEND,4).1.'E'.1.1) .EQ. 0) GO TO 1022</u>	00004780
001230	479	C		00004790
001231	480		INDEND= IND+ 1	00004800
01234	481		INDCEN= IND	00004810
01236	482		IF (KOMPCH(FABN(INDEND, 4), 1, E', 1, 1) .EQ. 0) GO TO TO22	00004820
001250	483	C		00004830
01250	484	C	NO END FOUND FOR THIS BOSS/WELDOLE177777	00004840
01251	485		GO TO 1060 ·	00004850
01251	486	<u>C</u>		00004860
01252	487	1022	IF (SHOPJI(INDEND) .GI. T) GO TO TO25	00004880
001256	488	C	OFT FND TO MAJOD IGINT & DEOFT MATCHING IGINT TO MINOD	00004000
01256	489	C	SEI END TO MAJOK JOINT & RESEI MATCHING JOINT TO MINOR	00004090
201257	490		S - D U - S + 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	00004900
01262	491		IF (STIDUP(INDEND), GI, 125) GU IU 1025	00004920
JU1267	492			00004920
JU1274	493	•	SHOP JI(SJIDOP(INDEND)) = 1	00004930
01274	494	1025	LE (SHOP IT (INDOEN) IT 2) OG TO 1000	00004950
	495	1020	TF (SHOF ST(THDCEN) . LT. 2) GO TO TOGO	00004960
01305	490	č	SET CENTED TO MINOR JOINT & RESET MATCHING JOINT TO MAJOR	00004970
01305	497	U U	SET CENTER TO MINOR JOINT & RECEITATION TO THOUSE	00004980
01308	490			00004990
01313	499		Such tr (Indela) = 1	00005000
01320	500		SHOP (T(S)TOUP(INDEFN))=2	00005010
01330	502			00005020
01330	503	C.		00005030
01330	504	č	SEE IF BRANCH	00005040
001331	505	1029	CONTINUE	00005050
01331	506		IF (KOMPCH(TYPCOD(K), 1, 'P', 1, 1) , NE, 0) GO TO 1038	00005060
001343	507	C		00005070
001343	508	č	SEE IF EITHER ENDPT IS ON THE MAIN PIPE	00005080
001344	509		IF (SHOPJT(IND).EQ.2 .AND. SJTDUP(IND).EQ.9999) GO TO 1034	00005090
001354	510		IF(SHOPJT(IND+1), EQ. 2, AND, SJTDUP(IND+1), EQ. 9999) GO TO 1034	00005100
001364	511		GO TO 1038	00005110
01364	512	C		00005120
001365	513	1034	CONTINUE	00005130
001365	514		JTOD(IND) = FITOD(K)	00005140
001371	515		JTSAME(IND)=FITSAM(K)	00005150
001375	516		JT0D(IND+1)=F1T0D(K)	00005160
001401	517		JTSAME(IND+1)=FITSAM(K)	00005170
001405	518		GO TO 1060	
001405	519	C		00005190
001406	520	1038	CONTINUE	00005210
001406	521	C		00005210
001406	522	<u> </u>	LOOP THROUGH ARRAY OF FILLINGS AND DELEMINE WHICH JOINIS	00005220
001406	523	C	AKE REDUCING. HAVE THE SMALLER OF THE TWO FITTINGS	00005230
001406	524	C	BE THE ONE WHERE THE JOINT IS FLAGGED AS THE MAJOR	00005240
001406	525	C	JOINI (SHOPJT=2).	00005260
001406	526	<u> </u>		00005270
001406	527	С	SEE IF ANY JOINIS IMIS PIECE	00005270
001406	528			00003200
001413	529		DO 1045 JEIND, INDEND	00005200
	570		1F (SHOPJI(J), [.],]) GO IO (045	

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°1420 01	11-20-84	14.890 SUB. STDTIM(TEMP, AD1, ADN)STA25P1CALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 8
000756	414	C ELIMINATE ONE LINE FITTINGS	00004140
00757	415	IF (NFAB(K) . EQ. 1) GO TO 1060	00004150
000763	416	<u>c</u>	00004160
000763	417	C IS THIS A SPECIFIED SPECIAL FITTING?	00004170
000763	418	C	00004180
100763		C FIRST TEST FOR FLANGE	00004190
000764	420	1F (KOMPCH(TYPCOD(K),1,'F',1,1) .NE. 0) GO TO 1019	00004200
200776	421	C	00004210 .
000776	422	C TEST IS DONE BY CHECKING IF THE END OF THE FLANGE HAS	00004220
300776	423	C A POINT IT MATCHES TO ON THIS SAME DETAIL,	00004230
JU0777	424		00004240
301001	425	INDCEN= IND+1	00004250
201014	426	IF (KOMPCH(FABN(INDEND, 4), 1, 'E', 1, 1) . EQ. 0) GO TO 1012	00004260
201018	427		00004270
201017	426		00004280
201022	429	INDUENEIND	00004290
001036	430	TF (KOMPCH(FABN(FNDEND, 4), 1, 'E', 1, 1) , EQ. 0) GO 10 1012	00004300
001036	432		00004310
001037	433	GO TO LOSA	00004320
001037	434		00004330
001040	435	1012 1F (SHOP.IT(INDEND) GT 1) GG TG 1014	00004350
001044	436		00004360
001044	437	C SET END TO MAJOR JOINT & RESET MATCHING JOINT TO MINOR	00004370
0010.45	438	SHOP JT (INDEND) = 2	00004380
001050	439	IF(SJTDUP(INDEND), GT. 125) GO TO 1016	00004390
001055	440	IF(SJTDUP(INDEND), LT. 1) GO TO 1016	00004400
001062	441	SHOPJT(SJTDUP(INDEND))=1	00004410
001067	442	GO TO 1015	00004420
001067	443	C	00004430
001070	444	1014 CONTINUE	00004440
001070	445	IF(SJTDUP(INDEND) .GT. 125) GÖ TÖ 1016	00004450
001075	446	IF(SJTDUP(INDEND) .LT. 1) GO TO 1016	00004460
001101	447	<u> </u>	00004470
001102	448	1015 CONTINUE	00004480
001102	449	IARG=JTFIT(SJTDUP(INDEND))	00004490
001107	450	JTOD(INDEND) = FITOD(IARG)	00004500
001113	401	JISAME (INDENDIEFIISAM (IARG)	00004510
001122	402		00004520
001123	400	$ \begin{array}{c} F(T) = F(T)$	00004530
001127	404		00004540
001130	456		00004560
001130	457		00004570
001133	458	FITSAM(K)=.T.	00004580
001135	459	JTOD(INDEND)= OD 10	00004590
001140	460	JTSAME(INDEND)=.T.	00004600
001142	461	GO TO 1060	00004610
001142	462	C	00004620
001143	463	1019 CONTINUE	00004630
001143	464	C NEXT TEST FOR BOSS	00004640
þ01143	465	IF (KOMPCH(TYPCOD(K),1,'\\',1,1) .EQ. 0) GO TO 1020	00004650
po1156 、	466	IF (KOMPCH(TYPCOD(K),1,'B',1,1) .NE. 0) GO TO 1029	00004660
001170	467	C	00004670
001170	468	C TEST IS DONE BY CHECKING IF THE END OF THE BOSS HAS	00004680
001170	469	C A POINT IT MATCHES TO ON THIS SAME DETAIL.	00004690
001171	470	1020 INDEND=IND	00004700
01173		<u>INDCEN= IND+1</u>	00004710
001173	472	C	00004720
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P1420 01	11-20-84	14.899	SUB. STDTIM(TEMP, AD1, ADN)STA25P1CALCULATE STD. TIME VALUES	LABEL STOTIM PAGE 7
000505	355	С	A SHOP JOINT ON THIS PIECE HAS BEEN FOUND.	00003550
000506	356		FABNJT=FABN(J.6)	00003560
200507	357	C		00003570
000507	358	Ċ	MAKE SURE THE JOINT TYPE IS NOT BLANK.	00003580
000507	359	Ċ	GET JOINT TYPE FROM DUPLICATE POINT IF IT IS.	00003590
00516	360	•	IF (KOMPCH(FABNAT, 1, 1, 1, 1, 1, 1, 1, 1, NE, 0) GO TO 1001	00003600
000527	361	C		00003610
000530	362	· ·	IF (SITDUP(1) FO 9999) GO TO 1001	00003620
000535	363			00003620
000541	364	C		00003630
000542	365	· · · · ·	IF (KOMPCH(FARN(SITDUP(1) 6) 1 ' 1 4) FO 0) CO TO 1002	00003640
000556	366	C		00003650
000557	367	4	FABN IT=FABN(SITDUP(1) 6)	00003670
000557	368	c		00003670
00557	260	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	NOU CHECK EOD DOGT HELD JOINT TYPES	00003880
00571	309	Ŭ1001	CONTINUE	00003050
000571	370	1001		00003700
	371		TF (KOMPCH(FABNJT, 1, P61, 1, 3) .EQ. 0) OG TO 1002	00003710
	3/2		IF (NOTECHITADINI, 1, P62, 1, 3) . EQ. 0) GO 10 1002	00003720
000013	3/3		IF (KUMPCH(FABNJ1, 1, 1963, 1, 3) .EQ. 0) GO TO 1002	00003730
	374		IF (NOMPCHIFABNJI, 1, 1967, 1, 3) .EQ. 0) GO TO TOOZ	00003740
000641	375		IF (KOMPCH(FABNJT, 1, 'P68', 1, 3) .EG. 0) GO TO 1002	00003750
000653	376		IF (KOMPCH(FABNJT, 1, 'P70', 1, 3) . EG. 0) GO TO 1002	00003760
000665	377		IF (ROMPCH(FABNJT, 1, 'P72', 1, 3) .EQ. 0) GO TO 1002	00003770
000677	378		GO TO 1003 .	00003780
000677	379	C		00003790
000700	380	1002	CONTINUE	00003800
000700	381	C	SET FIRST LETTER OF THE TYPE CODE TO 'B' (BOSS)	00003810
000700	382		CALL CONCAT(TYPCOD(K),1,'B',1,1)	00003820
00700	383	Ċ	•	00003830
000711	384	1003	CONTINUE	00003840
00711	385	C		00003850
000716	386	1004	CONTINUE	00003860
000716	367		IF (ODFLAG .EQ. 1) GO TO 1006	00003870
000721	366	Ç		00003880
000721	389	C	SUBROUTINE GETCOD SCANS THE DESCRIPTION & FINDS THE O.D.	00003890
000721	390	C	WHEN THE 'ODFLAG' IS 2.	00003900
000721	391	C	ALSO DETERMINE RELATION TO MAIN PIPE PIECE.	00003910
000722	392	1005	CONTINUE	00003920
000722	393		ODFLAG=2	00003930
000724	394		CALL GETCOD(JJ)	00003940
000724	395	С		00003950
000724	396	Ċ	ARRAY NEAB TELLS NO. OF LINES PER FITTING.	00003960
000730	397	1006	IND=IND+NFAB(K)	00003970
000730	398	c		00003980
00733	399	1008	CONTINUE	00003990
000733	200 200	r 1000	2011 113E	00000000
00733	400	<u> </u>		00004010
100733	401	č		00004010
00700	402	Č Č		00004020
00733	403	ů č		00004030
	404	U U		00004040
	405	~	IND= I	00004050
000740	406	U		
JU0740	407	C	MARE SURE FITTING INFORMATION IS IN ORDER AND READY	00004070
00740	408	<u> </u>	FOR FAB. & WELDINGLOOP THROUGH ARRAY OF FITTINGS.	00004080
00740	409	Ç		00004090
000742	410		DØ 1065 K=1,NF	00004100
	411	C	IF THIS FITTING IS STAVING, IGNORE IT AND CONTINUE	00004110
000743		•		
000743 <u>000743</u>	412		IF (KOMPCH(1PEC(4, K), 1, 'S', 1, 1) , EQ, 0) GO TO 1060	00004120

°1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN)STA25PICALCULATE STD. TIME VALUES LA	BEL STDTIM PAGE 6	
000277	296	IF (KOMPCH(FABN(K.6).1.'S '.1.4) .EQ. 0) GO TO 940	00002960	
000312	297	IF (KOMPCH(FABN(K, 6), 1, 'U ', 1, 4), EQ. 0) GO TO 940	00002970	
000325	298	SHOP JT (K) = 1	00002980	
000330	299	SHOPJT(J)=2	00002990	
000333	300	SJTDUP(K)=J	00003000	
000336	301	SJTDUP(J)=K	00003010	
200341	302	GO TO 940	00003020	•
200342	303	920 CONTINUE	00003030	
000342	304		00003040	
200347	305	925 CONTINUE	00003050	
200347	306	IF (NP .EQ. 0) GO TO 940	00003060	
000352	307	DO 930 J=1. NPPPTS	00003070	
200355	308	IF (IPTA .NE, IPOINT(J)) GO TO 930	00003080	
000362	309	SJTDUP(K)=9999	00003090	
000365	310	SHOPJT(K)=2	00003100	
000370	311	GO TO 940	00003110	
000371	312	930 CONTINUE	00003120	
000376	313	940 CONTINUE	00003130	
000376	314	C	00003140	
000376	315	C	00003150	
000376	316	C	00003160	
000403		1F (NTRUEF , EQ, 0) GO TO 3000	00003170	
000405	318	C	00003180	
000405	319	C .	00003190	
000405	320	C	00003200	
200406	321		00003210	
200406	322	C	00003220	
000406	323	C MAKE SURE FITTING INFORMATION IS IN ORDER AND READY	00003230	
000406	324	C FOR FAB. & WELDINGLOOP THROUGH ARRAY OF FITTINGS.	00003240	
300406	325		00003250	
200410	320	DU TUUG NET,NF	00003200	
200411	324		00003280	
000477	329		00003290	
000424	330		00003300	
000425	331	1F (NFAB(K) . EQ. 1) GO TO 1006	00003310	
000431	332	c c	00003320	
000432	333	J]≖K	00003330	
000434	334	ODFLAG=0	00003340	
200434	335		00003350	
00434	336	C MAKE SURE THERE IS A TYPE CODE VALUE.	00003360	
00435	337	IF (KOMPCH(TYPCOD(K),1,'XXX',1,3),NE, 0) GO TO 1000	00003370	
000447	338	C	00003380	
000447	339	C SUBROUTINE GETCOD SCANS THE DESCRIPTION & GUESSES A TYPE CODE	00003390	
000447	340	C WHEN THE 'DDFLAG' IS 1.	00003400	
000450	341		00003410	
000452	342	CALL GETCOD(JJ)	00003420	
000452	343		00003430	
000452	344	C SOME FITTINGS ARE NEARLY IDENTICAL TO BOSSES IN THE WAY	00003440	
000452	345	C HEY ARE WELDED ONTO THE PIPE, EXAMINE ALL MISC, FILE	00003450	
000452	346	C IINGS CHECKING FOR ROOT WELD JOINT TYPES WHICH INDICATE	00003400	
000452	347	LOO CONTINUES IS TO BE TREATED AS A BUSS.	00003480	
000400	348	$\frac{1}{100} = \frac{1}{1000} = \frac{1}{10000} + \frac{1}{10000} + \frac{1}{10000} + \frac{1}{100000} + \frac{1}{1000000} + \frac{1}{10000000000000000000000000000000000$	00003490	
000430			00003500	
000471	300		00003510	
000476	352		00003520	
000501	352	16 (SHOPJICA) 11 1 GO TO 1003	00003530	
000505	354	C	00003540	
		-	·····	

	007	A SUMPLY DIMENSIONED 125 HAS FOUD POSSIBLE INTEGER	00002370
0077	237	C SHOPST, DIMENSIONED 125, THE FOR CONTROL IN FARM	00002380
	230	REFERS TO A ONE LINE FITTING. =0 IF THE POINT NUMBER	00002390
1077 ·	240	C DOES NOT MATCH ANY OTHER POINT WITHIN THE DETAIL,	00002400
0077	241	C AND =1 OR 2 DEPENDING ON THE OCCURANCE OF THE	00002410
0077	242	C MATCHED POINT IN THE DETAIL.	00002420
0077	243	C ·	00002430
0077	244	C SJTDUP HAS THE POSITION WITHIN ARRAY FABN THAT	00002440
0077	245	C . THE MATCHING POINT OCCURS. (IF THE POINT IS	00002450
0077	246	C ON THE MAIN PIPE, THE VALUE GIVEN IS 9999).	00002460
0077	247	C	00002470
0077	248	C 'NTRUEF' IS THE # OF TRUE FITTINGS (NO STAVING	00002480
0077	249	C OR ONE LINE FITTINGS).	00002490
<u> 0101</u>	250	NTRUEF = NF	00002510
0101	251		00002510
0103	252		00002530
0105	253		00002540
	254	C SET UP ELAG TO SKIP ONE LINE FITTINGS	00002550
	200	C SEL UF FLAG TO SATE ONE LINE FITTINGS	00002560
0112	200		00002570
	207		00002580
0134	250	<u> </u>	00002590
0134	260	a_{10} shop JT(IND) = 1	00002600
0140	261	NTRUEF=NTRUEF-1	00002610
0142	262	DO 830 J= IND. INDEND	00002620
0145	263	8:00 JTF1T(J)=25	00002630
0155	264	GO TO 890	00002640
0155	265	C	00002650
0155	266	C SETUP ARRAY MATCHING FITTING ARGUMENT	00002660
0155	267	C NUMBER WITH JOINT ARGUMENT NUMBER, I.E., WHICH	00002670
0155	268	C FITTING DOES THIS JOINT APPLY TO?	00002680
0156	269	840 CONTINUE	00002690
00156	270	DO 650 J≈IND. INDEND	00002700
00161	271	850 JTFTT(J)=K	00002720
00162	272		00002730
0171	273		00002740
0174	2/4	805 CONTINUE	00002750
0174	2/3		00002760
0201	270		00002770
0201	. 278		00002780
0207	279	C SKIP ONE LINE FITTINGS	00002790
0207	280	1F (SHOPJT(K) ,EQ, -1) 00 TO 940	00002800
0213	281	C	00002810
0213	282	C ALSO SKIP THOSE THAT HAVE BEEN ALREADY MATCHED.	00002820
0214	283	IF (SHOPJT(K) .EQ. 2) GO TO 940	00002830
0220	284	C	00002940
0221	285	SJTDUP(K)=0	00032850
0223	286	SHOPJT(K)=0	00002000
0225	287	IPTA=IABN(K, 5)	00002070
0226	288	C	00002000
0230	289	IF (K, EQ, MAXIND) GO TO 925	00002030
0234	290		00002910
00237	291	IF (IABN(J,5) .NE. IFIA) GO TO 920	00002920
00244	292	IF (SHOPJI(J), EUIJ GO IO 920	00002930
)0250	293	C JOINIS HAI ARE SURFWED OR THREADED ARE IGNORED.	00002940
00251	294	IF (KOMPCH(FABN(J, 6), (J, 8), (J, 9),	

P1420 01	11 - 20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN) STA25P1CALCULATE STD. TIME VALUES	LABEL STDTIM PAGE 4
000012	178		00001700
000012	179		00001780
000012	180		
000012	181		00001800
000012	182	C 1 25" THRU 4 0"	00001810
000012	182		00001820
000012	184		00001830
000012	104		00001840
000012	100		00001850
600012	187		00001860
000012	107		00001870
000012	100		00001880
000012	109		00001890
000012	190		00001900
000012	100	· · · · · · · · · · · · · · · · · · ·	00001910
000012	192		00001920
000012	193	2 ***** BENDING *****	00001930
000012	194		00001940
100012	195	C DETERMINE BENDING VALUE FIRST	00001950
000015	190	IF (NP EQ. 0) GO TO 700	00001960
00013	197	TF (NB . EQ. 0) GO TO 700	00001970
000017	190		00001980
00022	199		00001990
000022	200		00002000
000027	201	1F(0D10.01, 65) = 3	00002010
000034	202	BIOTAL=BNDHRS(NB, T)	00002020
000040	203		00002030
b00040	204		00002040
000040	205		00002050
000040	200	C ***** SET UP ARRAYS FOR FABRICATION *****	00002060
000040	207		00002070
000040	200		00002080
000042	209	200 CONTINUE	00002090
000042	211		00002100
000042	212		00002110
000042	212		00002120
000045	214		00002130
000045	215		00002140
000045	216	C MESIZE IS MAIN DIFOR SIZE DATAORDY (LINE IN ADDAY)	00002150
000046	217	MPS12E IS MAIN FIELE SIZE CATAGORY (LINE IN ARRAY)	00002160
000050	210	IN 0126-1 If (MD10 OT 20) MD8175-0	00002170
000055	210	11 (4010 .01, 32) HF3125-2	00002180
000062	220	11 10010 01 921 UF312E-3	00002190
000067	201		00002200
600072	222	n (0010.01, 122/ PFSIZE=3	00002210
500074	222	LE (NE EQ. 0) 00 TO 2000	00002220
000076	221	C C	00002230
000076	225		00002240
000076	226		00002250
000076	220		00002260
000076	220	C INDE TIDEX INTO FABN ARAT, ALSO NOTE, FABN(IND, 4)	00002270
00076	220	C IS THE EVENT (CENTER OR END) AND FABN(IND, 5) IS THE	00002280
000078	229	C POINT NOMBER.	00002290
000077	230		00002300
000077	231		00002310
000077	232	ULLERMINE WHICH JOINIS ARE SHOP JOINTS	00002320
	233	C (HOSE WITHIN A PARTICULAR DETAIL) AS	00002330
000077	234	C OPPOSED TO THOSE MADE ON THE SHIP (I.E., THOSE	00002340
	230	JOINIS BEIWEEN DEIAILS),	00002350
h000//	230		00002360

1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN)STA25PICALCULATE STD. TIME VALUES LABE	L STDTIM PAGE 3
			00001190
00012	119		00001200
00012	121		00001210
00012	122		00001220
00012	123	C TIME VALUES FOR WELDING	00001230
00012	124	REAL WELDS(15,23)	00001240
00012	125	DATA WELDS/	00001250
00012	126	CARG. NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	00001260
00012	127	C 0.5",	00001270
00012	128	<u> </u>	00001280
00012	129		00001200
00012	130		00001310
00012	131		00001320
00012	133		00001330
00012	134	6 1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0	00001340
00012	135	C 1.5"	00001350
00012	136	8 1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0	00001360
00012	137	C 2.0"	00001370
00012	138	£ 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00001380
00012	139	C 2.5"	00001390
00012	140	<u>8</u> 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00001400
00012	141		00001470
00012	142		00001430
00012	143		00001440
00012	144		00001450
00012	146	8 1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0	00001460
00012	147	C 4.5"	00001470
00012	148	8 1, 0,	00001480
00012	149	C 5.0"	00001490
00012	150	د	00001500
00012	151		00001510
00012	152	a 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00001520
00012	153		00001540
00012	154		00001550
100012	100		00001560
00012	157		00001570
100012	158	k 1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0	00001580
00012	159	C 10.0"	00001590
00012	160	8 1, 0, 1,	00001600
00012	161	C 14.0"	00001610
00012	162	& 1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1,0	00001620
100012	163	C 14.0"	00001630
00012	164		00001650
100012	165		00001660
100012	168		00001670
100012	107		00001680
100012	160		00001690
100012	170		00001700
100012	171	C 24.0"	00001710
100012	172	£ 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00001720
100012	173	C .	00001730
100012	174	C	00001740
100012	175	C C	
100012		CIME VALUES FOR MACHINING OF NON-NUC, IN NUCLEAR SHOP	
100012	177	REAL MCHING(5,5)	

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P1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN) STA25PICALCULATE STD. TIME VALUE	S LABEL STDTIM PAGE 2
000012	60	С	0000000
000012	61	c	0000610
000012	62	COMMON/STDHRS/TYPCOD(25), MACHNO, OD10, HRTEMP	00000010
000012	63	CHARACTER TYPCOD, HRTEMP*1, FABNJT*4, FABN*4	00000630
000012	64	INTEGER IBT, IMT, IFT, IWT	00000640
000012	<u> </u>	<u> </u>	00000650
000012	55	INTEGER MACHNO, OD10, SHOPJT(125), SJTDUP(125)	00000660
000012	07 68	6, IABN(125,16)	00000670
600012	69	G, FLAGI, FLAGZ, INDCEN, INDEND, MPSIZE, IWSIZE, IARG, SWFLAG	0000680
000012	70		00000690
000012	71	COMMON/GETOD/ODFLAG. FITOD(25), FITSAM(25)	00000700
000012	72	INTEGER ODFLAG, FITOD, JTFIT(125), JTSIZE, FFSIZE, FOD10, JTOD(125)	00000720
000012	73	LOGICAL FITSAM, JTSAME(125)	00000720
000012	74	C	00000740
000012	75	DATA SHOPJT/125×0/	00000750
000012	76	DATA SJTDUP/125×0/	00000760
000012		<u> </u>	00000770
000012	78	EQUIVALENCE (FABN, IABN)	00000780
h00012	/9 80		00000790
000012	80 A 1		0000800
000012	<u>82</u>	EAL DOUBSTO AND A THE BENDING MACHINES	00000810
600012	83	REAL DIVURSEIU,37 DATA BUNUBS/	00000820
000012	84	C NG, GF BENDS 1 2 3 A 5 6 7 8 9 10	0000830
000012	85	C 0.5" THRU 3.5"	00000840
000012	86	8 1.0. 1.0. 1.0. 1.0. 1.0. 1.0. 1.0. 1.0	0000080
000012	87	C 4.0" THRU 6.0"	00000800
000012	88	& 1.0, 1.0, 1.0, 1 [°] , 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00000880
000015	89	<u>C 7.0" THRU</u>	00000890
000012	90	& 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	00000900
000012	91	C	00000910
000012	92	C	00000920
000012			00000930
	94	G INDIGE TA EADDIGATIAN ADDAY	0000940
000012	96		00000950
000012	97	INTERER SETTIP NAVETA SUPERA BRANCH BASS HELDA SUFEVE	00000960
000012	98	& BRZFIT, BRZFIG, TEMPL, FLGFIG, MCDU, DUSS, MCLDU, SLEEVE,	
000012	99	C = 8 = 9 = 10 = 11	00000800
000012	100	DATA SETUP, NAVFTG, SLPFLG, BRANCH, BOSS, WELDO, SLEEVE,	00001000
000015	101	& BRZFIT, BRZFLG, TEMPL, FLGFLG/1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11/	00001010
000012	102	C	00001020
000012	103	C TIME VALUES FOR FABRICATION	00001030
000012	104	REAL FABHRS(11,7)	00001040
000012	105	DATA FABHRS/	00001050
000012	100	CARG # 1 2 3 4 5 6 7 8 9 10 1	1 00001060
000012	100		00001070
	109	α Γ.Ο, Τ.Ο, Τ.Ο, Τ.Ο, Τ.Ο, Τ.Ο, Τ.Ο, Τ.Ο, Τ	,0, 00001080
000012	110		00001090
000012	111	C 5.5" THRU 8.0"	.0, 00001100
210000	112		
000012	113	C 8.5" THRU 12.0"	
000012	114	& 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	0 00001130
000012	115	C 12.5" THRU 16.0"	00001150
000012	116	8 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	.0. 00001160
booo15		<u>C 16.5" THRU 20.0"</u>	00001170
000012	118	& 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0, 1.0,	.0, 00001180'

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P1420 01	11-20-84	14.899 SUB. STDTIM(TEMP, AD1, ADN) STA25PICALCULATE STD. TIME VALUES LAB		1
000000	1			·
000012	2		0000010	
p00012	3	SUBROUTINE STITUM, ADT, ADT, ADD, ADD, ADD, ADD, ADD, ADD	00000020	
000012	4		0000030	
000012	5	CNF INTEGER # OF FITTINGS	00000040	
000012	6	C NTRUEF INTEGER # OF FITTINGS MINUS THE EVOLUTED FITTINGS	00000050	
000012	7	C NP INTEGER # OF PIPES	00000060	
000012	6	C NX INTEGER # OF EXTRUSIONS	00000070	
000012	9	C NB INTEGER # OF BENDS	0000080	
000015	10	C NPPPTS INTEGER # OF POINTS ON THE PIPE PIFCE	00000090	
000012	11	C MAXIND INTEGER # OF EVENTS (ENDS PLUS CENTERS) ON THE DETAIL	00000110	
000012	12	C NFAB INTEGER ARRAY-# OF POINTS THIS PIECE	00000120	
000012	13	C IPEC CHAR. ARRAY-PIECE NUMBER (THE 13TH CHAR. IS 'S' IF THE	00000120	
000012	14	C PIECE IS STAVING)	00000130	
000012	15	C TYPCOD CHAR. ARRAY-TYPE CODE, IT IS 'XXX' IF THIS PIECE	00000150	
000012	16	C IS NOT IN CAPCATS	00000160	
000012	17	C OD REAL NOMINAL SIZE OF THE MAIN PIPE PIECE	00000170	a state of the sta
000012	18	C ODIO INTEGER THE NOMINAL SIZE OF THE MAIN PIPE PIECE X 10. THEN	00000180	
000012	19	C ROUNDED. (THE INTEGER VALUE IS EASIER TO WORK WITH)	00000190	(7)
000012	20	C FITOD INTEGER ARRAY-THE NOMINAL SIZE OF THE FITTING X 10. & ROUNDED	. 0000200	Ră - 1
000012	21	C JTOD INTEGER ARRAY-THE NOMINAL SIZE OF THE JOINT X 10, & ROUNDED.	00000210	C [3]
000012		C FITSAM LOGICAL TRUE LE FITTING O.D. IS SAME AS MAIN PIECE	00000220	65 57
	23	C FALSE OTHERWISE	00000230	
000012	24	C JISAME LOGICAL TRUE IF JOINT O.D. IS SAME AS MAIN PIECE	00000240	
000012	25	C FALSE OTHERWISE	00000250	T is Electric
000012	26	<u>C MPSIZE INTEGER MAIN PIECE SIZE CATAGORY (LINE IN TABLE)</u>	00000260	
000012	27	C FFSIZE INTEGER FITTING SIZE CATAGORY (LINE IN FAB, TABLE)	00000270	
000012	28	C JISIZE INTEGER FITTING SIZE CATAGORY (LINE IN WELDING TABLE)	00000280	
000012	53	C MAT CHAR, ARRAY-MATERIAL CODE	00000290	Ċ.
000012		<u>C IDES CHAR. ARRAY-DESCRIPTION</u>	00000300	
000012	31	C LEMP REAL ARRAY-EXTRA PIPE LENGTH ADDED ONTO END OF PIPE	00000310	
000012	32	C HRIEMP CHAR. FLAG INDICATING WHETHER DETAIL IS 'TEMPLATE FROM SHIP	0000320	Grand C.
100012	24	C SHUPJI INTEGER ARRAY-FLAG TELLING TYPE OF JOINT (SEE EXPLANATION IN	PROGRAM)	675
000012		SUPJI INTEGER ARRAY-ARGUMENT WITHIN SHOPJT THAT THE MATCHING	00000340	i baam
000012	36		00000350	
000012	37	C CSSUI INTEGER TO IF THE FIRST FLANGE JOINT THIS DETAIL	00000360	
000012	38	C CUISUI INTEGER -0 IF THE FIRST CARBON SIELL SOCKET WELD JOINT THIS D	ETAIL370	
200012	39	C COMSUL INTEGER O IF THE FIRST COPPER-NICKEL SOCKET WELD JOINT THIS	DETAILBO	
000012	40	C CSVITI INTEGER TO IF THE FIRST CHER METAL SOCKET WELD JOINT THIS DE	TAIL0390	
000012	41	C CIVITI INTEGER O IF THE FIRST CARDON SIELE BUIWELD JOINT THIS DETA	IL000400	
000012	42	C GMV.IT1 INTEGER TO IF THE FIRST COPPER NICKEL BUT WELD JOINT THIS DET	AIL00410	
000012	43	C AD1 REAL I ENGLI THE PROUT OFFE AND A GE DIGE THE DIGHT HIS DETAL	<u>L0000420</u>	
000012	44	C ADN REAL LENGTH TO BE CUT OFF END N OF PIPE	00000430	
000012	45	C BTOTAL REAL NORMAL TIME VALUE FOR DENDING	00000440	
200012	46	C FTOTAL REAL NORMAL TIME VALUE FOR BENDING	00000450	
000012	47	C WTOTAL REAL NORMAL TIME VALUE FOR VENDING	00000460	
000012	48	C MTOTAL REAL NORMAL TIME VALUE FOR MACHINING	00000470	
000012	49	C	00000480	
000012	50	C 'KOMPCH' IS A FUNCTION THAT COMPARES CHARACTERS	00000490	
000012		C IN THE EXAMPLE 'KOMPCHIA B C D E)' THE ARGUMENTS ARE VARIABLE	00000500	
000012	52	C STRING 'A', STARTING IN CHARACTER 'B' OF THAT STAING.	0000510	
000012	53	C VARIABLE STRING 'C'. STARTING IN CHARACTER 'D' OF THAT STRING'	00000520	
000012	54	C COMPARING FOR 'E' CHARACTERS.	00000530	
00012	55	C THE FUNCTION EQUALS O IF THEY MATCH		
00012	56	C .	00000550	
000012	57	COMMON/FITING/ OD. NP. NX. NB. NF. MAT(25) IDES(6.25) DETAIL	00000560	
00015	58	4 HULL(5), NFAB(25), IPEC(4, 25), FARN(128, 16), IPEINT(28, NPDDTS	00000570	
000012	59	8 REV, GRNO(4), DWGNO(5)	00000580	

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