



Due Date: 11/09/2023

Sold SPACE CITY DISTRIBUTION
To: 2205 Kansas Ave
Dickinson, TX 77539
United States

Ship SPACE CITY DISTRIBUTION
To: 2328 W BELFORT AVE
HOUSTON, TX 77054
United States

Order No: 231618

Customer: SPACE CITY

Ship Via: SFI SET UP TRUCK PP&A

Part Number: *3TE4824Y

Description: TE 48X24 1.00 X .688-WPHY70

-20 CVN

MSSSP75-19

Dated: 08/23/2023

PO Num: P-230602-3-2

Priority: 3 - STANDARD

Product Code: TEE

Master Job No:

Quote No: 19574

Total Qty Open: 2 EA

Qty Posted: 0 EA

Qty To Make: 2

Start Date: 09/05/2023
Contact: RONNIE RUZICKA

Phone:
Fax:

Job Notes

BCOO
B10853-1 - TESTING REQ'D
PIPE SHOP TRAVELER 280-2023
DO NOT ADD SCRAP; RECORD REMAINING DROP SIZE

Routing

Routed By:

Quantity 2

Step No Dept	Work Cntr / Vendor Operation	Description	Setup Time	Cycle Time	Total Time	Pieces Per Hour	--- Scheduled --- StartEnd		Run Quantity
10	PIPE 3 PLATE BURN	Burning Table Plate Burn					09/05/2023	09/05/2023	2
20	PIPE 6 FURNACE HEAT	Pipe Furnace Furnace heating					09/05/2023	09/05/2023	2

30	PIPE 4 BIG ROLL	Big Roller Roll on large roller	09/05/2023 09/05/2023	2
				
40	PIPE 7 STRING UP	Initial Weld String-up	09/05/2023 09/05/2023	2
				
50	PIPE 8 ID WELD # 1	ID Weld # 1 ID Weld	09/05/2023 09/05/2023	2
				
60	PIPE 12 PIPE GOUGE	Pipe Gouge Pipe gouge	09/06/2023 09/06/2023	2
				
70	PIPE 5 WELD PREP	Grind After Gouge Weld prep	09/06/2023 09/06/2023	2
				
80	PIPE 9 OD WELD	OD Weld OD Weld	09/07/2023 09/07/2023	2
				
90	FORGE 10 CYLINDER CUT	Cylinder Cut Cylinder Cut	09/12/2023 09/12/2023	2
				
100	FORGE 8 TRIM	Torch Cut Cut hole	09/21/2023 09/25/2023	2
				
110	FORGE 12 FORM/PRESS	2000 Ton Press Forming	09/25/2023 09/25/2023	2
				

120	FORGE 8 TRIM	Torch Cut Trim	10/04/2023 10/04/2023	2
				
130	FORGE 7 HEAT TREAT	Heat Treat Heat treat	07/02/2024 07/03/2024	2
				
140	FORGE 5-6 FORGE BLAST	Forge Shotblast Shot blast	07/03/2024 07/03/2024	2
				
150	PIPE 13 X RAY	Pipe X Ray X-ray	07/03/2024 07/03/2024	2
				
160	E1 MACHINING	E1 Extender Expander	07/03/2024 07/03/2024	2
				
170	M1 MACHINING	M1 Big Mill Machining	07/03/2024 07/04/2024	2
				
180	STAMP 1 STAMP	Stamping	07/04/2024 07/04/2024	2
				
190	INSPECT 1 INSPECTION	Inspection 1	07/04/2024 07/04/2024	2
				



Time per Piece (HR):	0.00	0.00	0.00	0.00
Total Time for Job (HR):	0.00	0.00	0.00	

Materials List

Quantity				Quantity: 2	
Needed	On Hand	Posted	Short	Unit	Description
10,073.00000	355,449.00000	10,073.00000	0.00000	LB	0PL15633
					PL0 1.5-A633-E
					Quantities from Bins/Lot Number:
					BCOO-09 (10073.0)
				Sub-Assy	Vendor
				NO	CLIFF STEEL

Marking Information:



FLEET-LINE

MADE IN USA
STEEL FORGINGS

BCOO
48X24
1.00X.688
WPHY70
231618-04

Pipe Shop Traveler Tee Cyl.

280-2023

8/23/2023

☐ Pipe Shop Copy
☐ Pipe Shop Original

Customer	SPACE CITY		SFI Order No	231618-04	Due Date	9/13/2023
Part	52.000	OD X	1.500 X	74.000	Ship Date	11/9/2023
Plate Size	1.500	X	158.651 X	74.000	NoPcs	2
Heat No.	R3384				Code	BCOO-09
Material	A633E		Test Material		Test No	

Cut 2 Plate(s) 1.500 X Thick X 158.651 Width X 74.000 Length 4994 Lbs.

Per Sketch #

From (1) Plate(s) 1.500 Thick X 132.000 Wide X 360.000 Long

Stamp Plates With Heat Code BCOO-09

Scarf to 158.651 + 1/8" -0" Per Sketch Below

Condition Grind Weld Bevels

Roll Hot To 52.000 " O.D.

Tack Weld Using 5/32 " Dia. E9018M Electrodes Per Procedure # SMAW-HSLA-132-REV. 1

Use Weld Procedure SAW-HSLA-101-REV. 11

Weld I.D. Using 3/16 " Dia. LINCOLN LA-85 Wire and LINCOLN 888 Flux.

Backgouge to Sound Metal and Condition Grind O.D. Weld Groove

Weld O.D. Using 3/16 " Dia. LINCOLN LA-85 Wire and LINCOLN 888 Flux.

Hot Reroll to Roundup

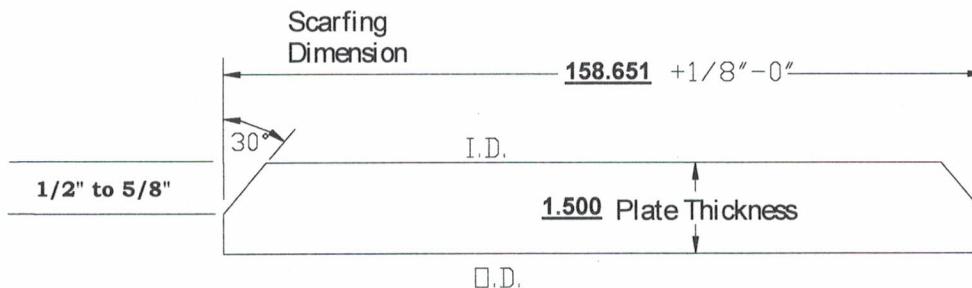
Torch Cut Into 0 Pcs @ 0 Inches

Paint Mark on Cylinder SPACE CITY 231618-04

Stamp Each Cylinder in (2) Places With Heat Code BCOO-09

Fitting Description: (2)TE 48X24 Y70

Comments: NO SCRAP, RECORD REMAINING DROP



OUTLET DIA = 24.794"

MATERIAL SIZE 52" O.D. x 1.50" PLT.
LENGTH 74"

HOLE CUTTING DATA:

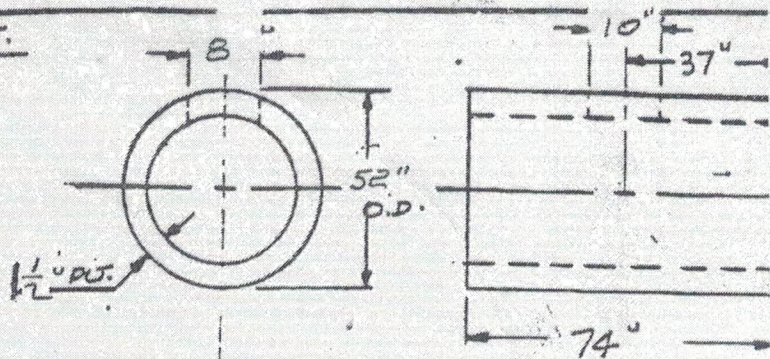
HOLE SIZE 8 x 10" OVAL

GRIND $\frac{1}{8}$ " RADIUS ON
HOLE EDGES I.D. & O.D.

OVALING DATA:
MACHINE 2000 TON PRESS

OVAL : HOT

OVAL WIDTH 48 1/4" ± 1/4"



PREFORM DATA:

PRESS: MACHINE #2000T SET UP #^{NONE} 48" UPPER DIE #^{INSERTABLE} 50303 LOWER DIE 50305
48x24" INSERT #50305-2

1ST FORM HEAT TO 1650°F.

QUENCH IN 30 1/2 INCHES OF WATER
CLOSE DIES TO 4" AND
PULL 12 1/2" DIA. PLUG (4 "PULL ROD)"

2ND Form

RE-HEAT TO 1650°F.

QUENCH IN 20 1/2 INCHES OF WATER
CLOSE DIES TO 3 1/2" AND

PULL 14 1/2' DIA. PLUG (4" PULL ROD)

3rd FORM

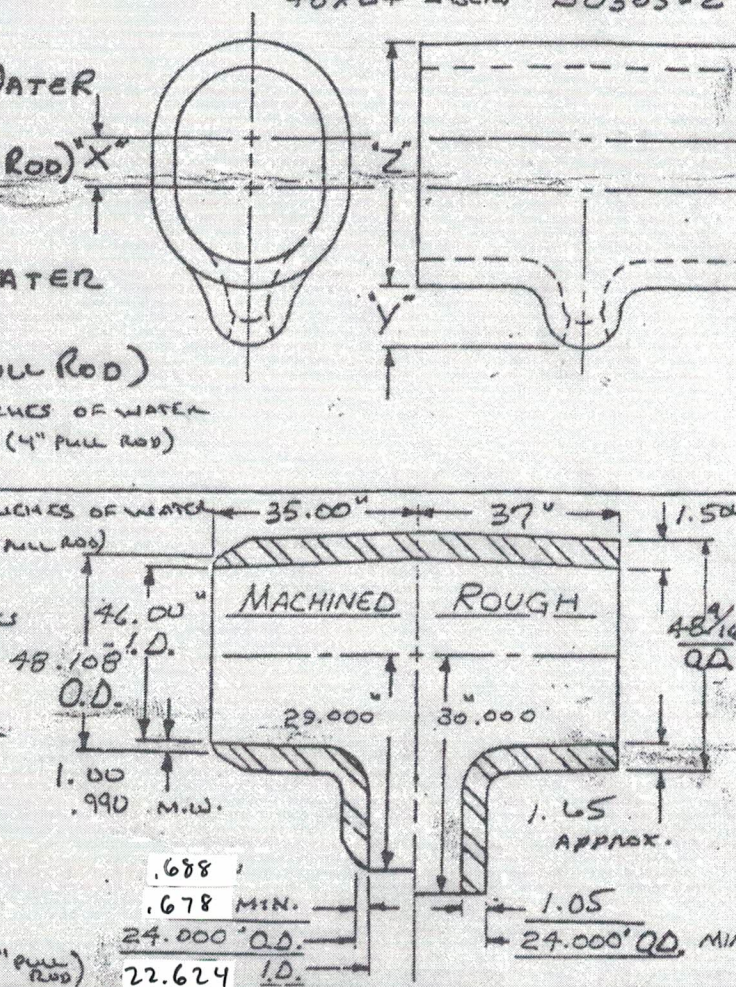
REHEAT TO 1650°F, QUENCH IN 27 INCHES OF WATER
CLOSE DIES TO 3" AND PULL 16 5/8 PULL (4" PULL ROD)

4714 FORM

REHEAT TO 11050°F, QUENCH IN 24" INCHES OF WATER
CLOSE DIES TO 2 AND PLUS 18 1/2 PLUS (4" ALL AROUND)

5-TH⁺ Equilibrium

REHEAT TO 1650°F, QUENCH IN 22 INCHES
OF WATER, CLOSE DIES TO 1" AND
PULL 20' PLUG (4" PULL ROD)



Final Form:

REHEAT TO 1650°F, DO NOT QUENCH
CLOSE DIES HOT AND FULL 2 7/8 DIA PLUG

			DATE 9-25-89	48" .100" x 24" 1488	DWG. NO.
			SCALE NONE	Y-65 REDUCING	
			DRAWN BOU	TEE MFG. DATA	48
			CHECKED		

FORM BY EXTRUSION PER CARD: _____

PRE CUT ENDS

IF ORDER SIZE IS LARGER THAN FURNACE LOAD, SERIALIZE UNDER CUTTER STAMP PRIOR TO HEAT TREAT

HEAT TREATMENT PER QCP 8.1 REV.1: (WITH TEST MAT'L B- _____)

HEAT TREAT 3/4 HR @ 1650°F **WATER QUENCH** FURNACE LOAD # _____

TEMPER 11/2 HR @ 1100 °F - AIR COOL - FURNACE LOAD# _____

SHOTBLAST TO NEAR WHITE FINISH

100% RADIOGRAPH WELD SEAM PER SPEC. XL-RT-100 (LATEST REVISION) _____

MACHINE PER MSS-SP75-19

BORE RUN I.D. STRAIGHT TO: 45.250 + 1/4 -0 46.000
1.000
0.990

BORE OUTLET I.D. STRAIGHT TO: 22.124 + 1/8 -0 22.624
0.688
0.678

CONDITION GRIND

STAMP PER MSS-SP75-19

PAINT

PAINT MARK: _____

END PROTECT/PALLETIZE