TECHNOLOGICAL PROCESS NOT FOR PROCESS SHEET PRINT **Production Order Date** Plant: P006 Equipment No: HEH2521 101911974 15.02.2021 **WBS** Element **Customer / Project Name** Part No **Type** P-1032256100-17523 2x660 MW TANGEDCO UDANGUDI STPP STA 17523003 **Drawing No.-Var** E.Rev. T.Rev Name Of The Part Material No. 31750501418-00 00 31750501418-00 TUBESHEET HPH 9 HUB THK 180 00 Pos.No **BOM Otv Ord Qty** MUNt.Wt. **MDCC** St. Remarks 0001 1.000 1.000 EΑ IS06 18,400.000 YES **BOM Details** Pos.No IC **Material Code** P.No Remarks SPK MUFormula Key Matl.Spec Qty Size 1 Size 2 Size 3 **MPcs** 0010 HE9718584560 17523004 MA by QC, CIB verifi by customer HE51155-NA 1.000 EA 0.000 0.000 0.000 0.000 Material Description: TUBESHEET FORGING Reservation: Item: 0001 Picklist:1000640404 0013715602 **Operation Details** Time/ PC(L) Opr No W.C. Plant Ctl. kv Prep Time Time/ PC(M) **Total Time OC Signature** PRT Cat PRT No. **PRT Description Sub Operation Text** 0010 DE9863 P006 QM01 0.000 0.000 0.000 0.000 TUBE LAYOUT DRG.NO.3-17501-02237/Rev 00 Lifting lug drawing : 4-17501-03123 Verification & correlation of material with TC & attestation of material & Review of TCs and Transfer of material attestation marks. Inspection by QC,CIB and verification by CUSTOMER. DG4242 P006 ZP01 60.000 960.000 1,020.000 REFER SIDE VIEW AND DET.-Q. Clamp with open end up wards. True the

surface which is to be over laid and Turn Ø 1768/7 mm depth for OVERLAY

QM01

ZP01

1. Clamp the tube sheet for overlay on manipulator and clamp preheating

2.DURING OVERLAY at next operation, dress up by cleaning (grind, if

ZP01

QM01

ECR/ Rev No

REFER DRG.NO.3-17501-00544 FOR WELD DETAILS AND WPS.

0.000

30.000

60.000

0.000

Dt.

0.000

0.000

KN

0.000

120.000

5,682.000

0.000

Pro.Plnr

0.000

150.000

5,742.000

0.000

Rate Fixr / Tool Plnr

WA

Pg no

1

No.of Pgs

6

P006

P006

NOTE: Total thick of overlay should be 11 mm minimum

P006

Dt.

06.12.2022 00

Check the thickness of overlay w.r.t height "H" at different points.

1. Carryout PT examination on surface to be overlaid 2. Measure the height "H" at different points. Inspection by QC and verification by CUSTOMER. P006

with 45° chamfer.

DH9863

DH9523

necessary) after each layer.

DH2884

DH9863

Inspection of overlay surface.

Inspection by QC.

Chkd. By

fixtures. Clean the surface to be over laid.

STRIP OVERLAY (DETAIL - W/1) BASIC LAYER :- USE 309 L STRIP SUBSEQUENT LAYER: - USE 308 L STRIP

0030

0110

0130

YPR

St.

ST06

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Plant:P00	6	Ea	quipment No	o: HEH2:	521				101911974	15.02.202
Ty			Vork Order				C	ustomer		Part N
•		P-10 175	032256100- 523	17523/	2x660 l	MW TANGE	DCO UDANGU	DI STPP STA		17523003
Drawin	g NoVar		E.Rev.	T.Rev.	Mat	erial No.		N	ame Of The Part	
31750501	418-00	(00	00	31750501	418-00	TUBESHEET	'HPH 9 HUB T	THK 180	
Pos.No	BOM Qt	y	Ord Qty	MU	St.	Nt.Wt.			Remarks	
0001 1	.000		1.000) EA	IS06	18,400.000)			
	1						ation Details	<u> </u>		
Opr No	W.		Plan	t Ctl. k	y Pre	p Time	Time/ PC(M)	Time/ PC(L) Total Time	QC Signatu
PRT Cat			PRT No.				PRT De	escription		
•	ration Tex		non :				100.000	100.000	710.000	
0140	DG4242		P006	ZP01	60.00	et surface. (480.000	480.000	540.000	
inside fla Reverse Face to cl	at surface)								
0150	DG9863		P006	QM01			0.000	0.000	0.000	
			er laid surf		•	_				
			verification				0.000	0.000	0.000	
0160	DM8576		P006	QMQ'	_	0	0.000	0.000	0.000	
Acceptan	ce STD.	HE ′	ce and over 71046. and verification			ΛER.				
0170	DH9523		P006	ZP01	30.00		0.000	60.000	90.000	
Prepare a		e aux			_	ug on tube s	heet			
0173	DH9863		P006	QM01	0.00	0	0.000	0.000	0.000	
Inspection	n of fit-up	by	QC.			V	-	T		
0180	DH2852		P006	ZP01	15.00		300.000	300.000	315.000	
he drawi Pad to tul Lug to pa	ng. be sheet b	oy L2 V25-	201180 + L15300		7	g to pad as				
0185	DH9421		P006	ZP01	0.00		0.000	0.000	0.000	
			pad weld jo				0.000	0.000	0.000	
0186 Conduct	DH9863		P006	QM01	0.00	U	0.000	0.000	0.000	
	DP. n by QC.									
)187	DH2852		P006	ZP01	15.00	00	180.000	180.000	195.000	
	of lug to		by 1/2V30						1 2/0.000	
)188	DH9863		P006	QM01	0.00	0	0.000	0.000	0.000	
Conduct										
	n by QC.		ı			ı				
)189	DA9995		P006	ZP99	0.00	0	0.000	0.000	0.000	
_	i HPH Tu DF WORI		heet drillin	g		Г			1	
Chl	kd. By		Dt.	ECR/	Rev No	Dt.	Pro.l	Plnr	Rate Fixr / Tool Plnr	Pg no No

KN

WA

YPR

06.12.2022 00

Pgs

6

2

TECHNOLOGICAL PROCESS **Production Order Date** Plant:P006 Equipment No: HEH2521 101911974 15.02.2021 Work Order / PGMA Part No **Type** Customer P-1032256100-17523/ 2x660 MW TANGEDCO UDANGUDI STPP STA 17523003 17523 T.Rev. **Drawing No.-Var** E.Rev. Material No. Name Of The Part 31750501418-00 00 00 31750501418-00 TUBESHEET HPH 9 HUB THK 180 Pos.No **BOM Qty** Ord Qty MUNt.Wt. Remarks St. 0001 1.000 1.000 EA IS06 18,400.000 **Operation Details**

Opr No	W.C.	Plant	Ctl. ky	Prep Time	Time/ PC(M)	Time/ PC(L)	Total Time	QC Signature
PRT Cat	PRT No.				PRT De	escription		

Sub Operation Text

Note:- This scope of work is for Tube sheet drilling of Udangudi-1 HP Heater

Tube layout drg.no. :,,3-17501-02237 Rev.00 Common drg. for all HP Heaters of Udangudi-1.

Tube sheet drg.no. :,,3-17505-01418 Rev.00 -- HP Heater -9.

- 1.,,Tube sheet shall be loaded on vendors who were having the deep hole drilling machine facility. Drilling depth 660 mm minimum and crane capacity of 30T.
- 2.,,A certificate to be produced along with technical bid by mentioning machine specifications, make and date of manufacturing of machine and machine condition.
- 3.,,Tube sheet forging will be supplied with Stainless steel overlay, machining, inspections of overlaid surface, and hook welding on tube sheet for loading and unloading.
- 4.,,Tube sheet supplied with material attestation marks by concerned inspection agencies as per the quality plan.
- 5.,,Mock up piece (Drilling thk: 660 mm) 1 no. per machine shall be made and available for our BHEL Hyd QC inspection with vendor material prior to start of tube holes drilling on actual job. Two clusters of 7 holes each length of 660 mm minimum.
- 6.,,Clearance for drilling of tube holes to be taken from the BHEL Hyd OC.
- 7.,,All notes given on Tube sheet drawing shall be followed.
- 8.,,Mark axis on as per drawing and punch on marking at ends for further reference.
- 9.,,Every marking on tube sheet shall get inspection by BHEL Hyd QC.
- 10.,,All Tube holes to be drilled in single setting.
- 11.,,Get inspection of Tube holes after every 10 cycles for finish, ovality, ligament and drift.
- 12.,,Tube holes finish as indicated in the drawing shall be maintained.
- 13.,,Tube holes shall be drilled according to tube holes layout and as per tube sheet drawing.
- 14.,,Drift on Tube holes will not be acceptable.
- 15.,,Tie rod holes to be drilled and tapped on shell side as per drawing.
- 16.,,T3, T4 and T5 Tapped holes on periphery shall be done as per respective details of the drawing.
- 17.,,Chamfering of Tube holes both on shell side and Tube side shall be done as per det.-P of drg.
- 18.,,Get dimensional inspection of tube holes for layout, tube hole

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
YPR	06.12.2022	00		KN	WA	3	6

TECHNOLOGICAL PROCESS **Production Order** Date Plant:P006 Equipment No: HEH2521 101911974 15.02.2021 Work Order / PGMA Part No **Type** Customer P-1032256100-17523/ 2x660 MW TANGEDCO UDANGUDI STPP STA 17523003 17523 Drawing No.-Var E.Rev. T.Rev. Material No. Name Of The Part 31750501418-00 00 00 31750501418-00 TUBESHEET HPH 9 HUB THK 180 Pos.No **BOM Qty** Ord Qty MUNt.Wt. Remarks St. 0001 18,400.000 1.000 EA IS06 1.000 **Operation Details** W.C. Plant Ctl. ky **Prep Time** Time/ PC(M) Time/ PC(L) Opr No **Total Time QC Signature** PRT Cat PRT No. **PRT Description Sub Operation Text** finish, ovality, ligament and drift as per quality plan. 19...Tube holes shall be answered to the BHEL Hyd supplied Go-No Go gauge. 20.,,Any deviation on the job is not acceptable. 21...Easily removable rust preventive shall be applied on all machined surfaces. 22.,,Machining of shell side step as per det.-R and tube side weld bevel as per det.-Q will be carried out at our BHEL Hyd works. 23...Submit dimensional report sheet along with dispatch of Tube sheet. 24...Machined Tube sheet shall be covered properly while transportation. BHEL Hyd will not provide any packing material. 0190 DG9414 P006 ZP04 0.000 0.000 0.000 0.000 Mark the axes A B C D. Refer Tube Layout Drg.: 3-17501-02237. 0200 DG4751 P006 ZP04 25,660.000 480.000 25,660.000 26,140.000 Drill 6040 x Ø 16.13 +/- 0.05 holes from shell side. PITCH SPACERS :- 10-88-9392 GO-NOGO GAUGE :- 30-08-60041 3 spindle hours are issued. DG9863 0210 P006 OM01 0.000 0.000 0.000 0.000 1.Inspection of holes after every 5 cycles. 2. Measure Skirt inside diameter and give dimension for turning the step on tube sheet. P006 0220 DG4242 ZP01 120.000 1,200.000 1,200.000 1,320.000 Clamp with overlay surface down wards<(>,<)> turn the step (Ø 2048* mm) to dimensions given by inspector to depth 12 mm<(>,<)> step turn to dimension Ø2250** mm to a depth 12mm with bevels 45° and 45° as per DET." R ". Machine the reference line " 0 " to a depth of 1 mm. Reverse and machine the weld bevel as per Det.-Q. TOOL FOR R11 / 1.9°: 30-11-60094 CHECKING TEMPLATE FOR R11 / 1.9°:30-08-60060 0230 DG9414 P006 ZP04 0.000 0.000 0.000 0.000 MARK FOR 1. Tie rod holes 16 x M20 on SHELL side. 2.ON PERIPHARY: Mark 3 Holes as per Det.-S for T4 & T5. Mark 1 Holes as per Det.-T for T3. DG9863 P006 0240 OM01 0.000 0.000 0.000 0.000 Chkd. By Dt. ECR/ Rev No Dt. Pro.Plnr Rate Fixr / Tool Plnr Pg no No.of Pgs YPR 06.12.2022 00 KN WA 4 6

Type	$H_{ij}H$			TE	CH	INOL	OGICAL	PROCES	S	Production Order	Date
P-1032256100-17523/ 2x660 MW TANGEDCO UDANGUDI STPP STA 17523003 1752	Plant:P006	Е	quipment N	No: HEH2	2521					101911974	15.02.2021
17523	Туре	Type Work Order / PGMA							Customer		Part No
31750501418-00 00				0-17523/		2x660 N	MW TANGEI	DCO UDANGI	UDI STPP STA		17523003
Pos.No BOM Qty Ord Qty MU St. Nt.Wt. Remarks	Drawing NoV	ar	E.Rev.	T.Rev.		Mate	rial No.		Name	Of The Part	
1.000 1.00	31750501418-00		00	00	317	7505014	18-00	TUBESHEE	T HPH 9 HUB THK	180	
Oper No	Pos.No BOM (ty	Ord Qt	y MU		St.	Nt.Wt.		R	Remarks	
Opr No W.C. Plant Ctl. ky Prep Time Time/ PC(M) Time/ PC(L) Total Time QC Signature PRT Cat PRT No. PRT Description Sub Operation Text Inspection of marking of holes on Tube Sheet. Inspection by QC. 0250 DG4662 P006 ZP04 30.000 2,126.000 2,126.000 2,156.000 SHELL SIDE : 1.Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2.Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5 : 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45°: STD. 0260 DG4821 P006 ZP04 120.000 240.000 240.000 360.000 ON PERIPHARY. REFER DetS. 1. Pre-drill & drill 1 x Ø 18, drill Ø for 1/2"NPT , drill Ø 34/16 mm and tap 1/2" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18, drill Ø for 1/2"NPT , drill Ø 38/16 mm and tap 1/2" NPT as per DetT for T3. 027	0001 1.000		1.00	00 EA	IS(06	18,400.000				
PRT Cat							Opera	tion Details			
Sub Operation Text Inspection of marking of holes on Tube Sheet. Inspection by QC. 10250 DG4662 P006 ZP04 30.000 2,126.000 2,126.000 2,156.000 SHELL SIDE: 1.Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2.Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5: 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45° stp. 1.Drill and tap 16 x M20 tie rod holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45° stp. 1.Drill and tap 3/4° NPT as per DetS. 1. Pre-drill & drill 3 x Ø 23 drill Ø for 3/4"NPT ,drill Ø 34/16 mm and tap 3/4" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18, drill Ø for 1/2"NPT ,drill Ø 28/16 mm and tap 1/2" NPT as per DetT for T3. 1.Drill and tap 1/2" NPT as per DetT for T3.	Opr No V	V.C.	Pla	nt Ctl.	ky	Prep	Time	Time/ PC(M)	Time/ PC(L)	Total Time	QC Signatur
Inspection of marking of holes on Tube Sheet. Inspection by QC. 0250 DG4662 P006 ZP04 30.000 2,126.000 2,126.000 2,156.000 SHELL SIDE: 1.Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2.Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5: 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45°: STD. 0260 DG4821 P006 ZP04 120.000 240.000 240.000 360.000 ON PERIPHARY. REFER DetS. 1. Pre-drill & drill 3 x Ø 23, drill Ø for 3/4"NPT, drill Ø 34/16 mm and tap 3/4" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18, drill Ø for 1/2"NPT, drill Ø 28/16 mm and tap 1/2" NPT as per DetT for T3. 0270 DG9863 P006 QM01 0.000 0.000 0.000 0.000 Final inspection including dimensional conformity, tube hole size finish, ovality, overlay thickness uniformity. Inspection by QC. 0280 DH9284 P006 ZP01 12.000 0.000 0.000 0.000 0.000 Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000 0.000 2,126.000 2,126.0	PRT Cat		PRT No.					PRT I	Description		
Inspection of marking of holes on Tube Sheet. Inspection by QC. 0250 DG4662 P006 ZP04 30.000 2,126.000 2,126.000 2,156.000 SHELL SIDE: 1.Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2.Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5: 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45°: STD. 0260 DG4821 P006 ZP04 120.000 240.000 240.000 360.000 ON PERIPHARY. REFER Det S. 1. Pre-drill & drill 3 x Ø 23, drill Ø for 3/4"NPT, drill Ø 34/16 mm and tap 3/4" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18, drill Ø for 1/2"NPT, drill Ø 28/16 mm and tap 1/2" NPT as per DetT for T3. 0270 DG9863 P006 QM01 0.000 0.000 0.000 0.000 Final inspection including dimensional conformity, tube hole size finish, ovality, overlay thickness uniformity. Inspection by QC. 0280 DH9284 P006 ZP01 12.000 0.000 0.000 0.000 0.000 Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000 0.000 Calcal Tables (April 1 and 1 a	Sub Operation T	ext									
Inspection by QC.			g of holes	on Tube S	Shee	t.					
SHELL SIDE: 1. Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2. Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5: 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45°: STD. 0260	Inspection by QO	<u>. </u>								<u>, </u>	
1.Drill and tap 16 x M20 tie rod holes to depth 30 mm. 2.Chamfer the tube holes on shell side to R1.5 DetP. TOOL FOR R 1.5 : 10-26-9166 ON OVERLAY SIDE: Chamfer the tube holes to 0.8 x 45° as per DetP. TOOL FOR 0.8 x 45°: STD. 0260	0250 DG46	52	P006	ZP04		30.00	0 2	,126.000	2,126.000	2,156.000	
ON PERIPHARY. REFER Det S. 1. Pre-drill & drill 3 x Ø 23 ,drill Ø for 3/4"NPT ,drill Ø 34/16 mm and tap 3/4" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18 ,drill Ø for 1/2"NPT ,drill Ø 28/16 mm and tap 1/2" NPT as per DetT for T3. 0270 DG9863 P006 QM01 0.000 0.000 0.000 0.000 Final inspection including dimensional conformity ,tube hole size ,finish ,ovality ,overlay thickness uniformity. Inspection by QC. 0280 DH9284 P006 ZP01 12.000 0.000 60.000 72.000 Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000		5 x N	120 tie roo	d holes to	dept	th 30 m	ım.				
1. Pre-drill & drill 3 x Ø 23 ,drill Ø for 3/4"NPT ,drill Ø 34/16 mm and tap 3/4" NPT as per DetS for T4 & T5. 2. Pre-drill & drill 1 x Ø 18 ,drill Ø for 1/2"NPT ,drill Ø 28/16 mm and tap 1/2" NPT as per DetT for T3. 0270	1.Drill and tap 1 2.Chamfer the tu TOOL FOR R 1. ON OVERLAY Chamfer the tube	be hose to be hole	oles on sho 0-26-9166 E: es to 0.8 x	ell side to 6	R1.	.5 Detl					
Final inspection including dimensional conformity ,tube hole size ,finish ,ovality ,overlay thickness uniformity. Inspection by QC. 0280 DH9284 P006 ZP01 12.000 0.000 60.000 72.000 Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000	2.Chamfer the tu TOOL FOR R 1. ON OVERLAY Chamfer the tub TOOL FOR 0.8	be hose side to be hole at 45°	oles on sho 0-26-9166 3: es to 0.8 x P: STD.	ell side to 5 45° as pe	R1.	5 Detl	P.	240.000	240.000	360.000	
,finish ,ovality ,overlay thickness uniformity. Inspection by QC. 0280 DH9284 P006 ZP01 12.000 0.000 60.000 72.000 Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000	1.Drill and tap 1 2.Chamfer the to TOOL FOR R 1. ON OVERLAY Chamfer the tub TOOL FOR 0.8 0260 DG48: ON PERIPHAR' 1. Pre-drill & dritap 3/4" NPT as 2. Pre-drill & dritap 1/2" NPT as	be how the state of the state o	bles on sho 0-26-9160 2: es to 0.8 x 2: STD. P006 EFER Det \$\infty\$ \tilde{9} 23 \text{dri} dr	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3.	/4"N	.5 Detl etP. 120.00 NPT ,dr.	P. 00 00 00 01 034/16	mm and	111		
Gas cut the aux. hook and pad welded on tube sheet. 0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000	1.Drill and tap 1 2.Chamfer the tu 2.Chamfer the tu TOOL FOR R 1. ON OVERLAY Chamfer the tub TOOL FOR 0.8 0260 DG48: ON PERIPHAR' 1. Pre-drill & dri tap 3/4" NPT as 2. Pre-drill & dri tap 1/2" NPT as	SIDE hole hole k 45° 21 7. Rill 3 x per Dill 1 x per Dill 3 x	Dies on sho 0-26-9160 Dies to 0.8 x P: STD. P006 EFER Det x Ø 23 ,dri DetS for 5 x Ø 18 ,dri DetT for 6 P006	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3. QM0	R1 R1 r De	.5 Detl etP. 120.00 NPT ,dr 0.000	P. 00 00 00 01 01 02 01 02 02	mm and mm and	111		
0285 DH9421 P006 ZQ01 0.000 0.000 0.000 0.000	1.Drill and tap 1 2.Chamfer the tue TOOL FOR R 1. ON OVERLAY Chamfer the tue TOOL FOR 0.8 0260 DG48: ON PERIPHAR 1. Pre-drill & dri tap 3/4" NPT as 2. Pre-drill & dri tap 1/2" NPT as 0270 DG98: Final inspection finish ,ovality ,o	SSIDE hold hold hold hold hold hold hold hold	Dies on sho 0-26-9160 Est to 0.8 x ESTD. P006 EFER Det Ø 23 ,dri DetS for 5 Ø 18 ,dri DetT for 7 P006 ding dime	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3. QM0 ensional c	R1 R1 rr De	5 Detl etP. 120.00 NPT ,dr NPT ,dr 0.000 prmity ,	P. 00 00 00 01 01 02 01 02 02	mm and mm and	111		
	1.Drill and tap 1 2.Chamfer the to 1.Chamfer the to 1.Chamfer the to 1.CON OVERLAY 1.Chamfer the tub 1.COL FOR 0.8	be hold since the second secon	bles on sho 0-26-9160 E: es to 0.8 x P: STD. P006 EFER Det	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3. QM0 ensional coss uniforr	R1 R1 R1	25 DetletP. 120.00 NPT ,dr. 0.000 0.000 0.000 0.000	00 ill Ø 34/16 : ill Ø 28/16 : tube hole si:	mm and mm and 0.000 ze	0.000	0.000	
0290 DH9421 P006 OFNL 0.000 0.000 0.000 0.000	1.Drill and tap 1 2.Chamfer the tu COOL FOR R 1. ON OVERLAY Chamfer the tub TOOL FOR 0.8 0260 DG48: ON PERIPHAR' 1. Pre-drill & dri tap 3/4" NPT as 2. Pre-drill & dri tap 1/2" NPT as 0270 DG98: Final inspection finish ovality of Inspection by QC 0280 DH92:	bbe hote hote hote hote hote hote hote hot	bles on sho 0-26-9160 Est to 0.8 x Strict P006 EFER Det to Ø 23 ,dri DetS for Strict Ø 18 ,dri DetT for P006 ding dime	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3. QM0 ensional c ss uniforr	R1 R1 R1	5 Detl etP. 120.00 NPT ,dr 0.000 ormity ,	ill Ø 34/16 iill Ø 28/16 iill Ø 28/16 iill Ø 20/16 iill Ø	mm and mm and 0.000 ze	0.000	0.000	
	1.Drill and tap 1 2.Chamfer the tu TOOL FOR R 1. ON OVERLAY Chamfer the tub TOOL FOR 0.8 0260 DG48: ON PERIPHAR 1. Pre-drill & dri tap 3/4" NPT as 2. Pre-drill & dri tap 1/2" NPT as 0270 DG98: Final inspection ,finish ,ovality ,c Inspection by QC 0280 DH92: Gas cut the aux.	be hold to	poles on sho 0-26-9160 E: es to 0.8 x P: STD. P006 EFER Det x Ø 23 ,dri DetS for T x Ø 18 ,dri DetT for T P006 ding dime y thicknes	45° as pe ZP04 S. ill Ø for 3 T4 & T5. ill Ø for 1 T3. QM0 ensional costs uniforn ZP01 welded on	R1 R1 r De	120.00 NPT ,dr. 0.000 Ormity ,	P	mm and 0.000 ze 0.000	60.000	0.000 72.000	

Send to WC - 3631

Further process with Skirt assembly in WC - 3631.

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
YPR	06.12.2022	00		KN	WA	5	6

Revision status of WPSes applicable for HE & Fab

S.No	WPS Number	WPS latest Revision	Description
1	WE001	04	QW-482 welding Procedure Specification
2	WE003	04	QW-482 welding Procedure Specification
3	WE004	02	WPS-WE004
4	WE005	01	WPS-WE005
5	WE006	07	Welding Procedure Speecification
6	WE007	01	WPS-WE007
7	WE008	01	WPS-WE008
8	WE169	00	Welding Procedure Speecification
9	WE170	00	Welding Procedure Speecification
10	WE171	00	Welding Procedure Speecification
11	WE172	00	Welding Procedure Speecification
12	WE173	00	Welding Procedure Speecification
13	WE174	00	Welding Procedure Speecification
14	WE175	00	Welding Procedure Speecification



Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
YPR	06.12.2022	00		KN	WA	6	6