

		TECHNOLOGICAL PROCESS NOT FOR PROCESS SHEET PRINT					Production Order	Date
Plant: P002		Equipment No:					101910221	06.02.2021
Type		WBS Element		Customer / Project Name				Part No
		P-1229200002-13901		G I P C L -VADODARA				13901003
Drawing No.-Var		E.Rev.	T.Rev	Material No.		Name Of The Part		
01390131154		01	01	01390131154-00		BEARING SHELL ASSY.		
Pos.No	BOM Qty	Ord Qty	MU	St.	Nt.Wt.	Remarks		MDCC
0001	1.000	1.000	EA	IS02	402.000	BEARING SHELL ASSY.		YES

BOM Details

Pos.No	IC	Material Code			P.No	Remarks				
Matl.Spec		SPK	Qty	MU	Size 1	Size 2	Size 3	Formula Key	MPcs	St.
0010		L	TG9216653043			13901004				
HY19566			1.000	EA	0.000		0.000	0.000		ST02
									0.000	
Material Description : TOP HALF OF BEARING SHELL CASTING					Reservation : 0013704507		Item : 0001		Picklist:	

0020	L	TG9216653051			13901005					
HY19566		1.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : BOTTOM HALF OF BEARING SHELL CASTING					Reservation : 0013704507		Item : 0002		Picklist:	

0030	L	TGN128500002			13901006					
			7.000	KG	0.000	0.000	0.000		0.000	ST02
Material Description : 89% TIN BERING ALLOY					Reservation : 0013704507		Item : 0003		Picklist:	

0040	L	TGN128500002			13901007					
			10.000	KG	0.000	0.000	0.000		0.000	ST02
Material Description : 89% TIN BERING ALLOY					Reservation : 0013704507		Item : 0004		Picklist:	

0050	L	41390131552-00			13901008					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : THREADED PIECE					Reservation : 0013704507		Item : 0005		Picklist:	

0060	L	41390131534-00			13901010					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : SUPPORT RING				Reservation : 0013704507		Item : 0006		Picklist:		

0070	L	41390131505-00			13901012					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : WASHER DIA 10				Reservation : 0013704507		Item : 0007		Picklist:		

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
	17.02.2021	00		AKM	KSR	1	5

		TECHNOLOGICAL PROCESS NOT FOR PROCESS SHEET PRINT					Production Order	Date
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Drawing No.-Var		E.Rev.	T.Rev	Material No.		Name Of The Part		
01390131154		01	01	01390131154-00		BEARING SHELL ASSY.		
Pos.No	BOM Qty	Ord Qty	MU	St.	Nt.Wt.	Remarks		MDCC
0001	1.000	1.000	EA	IS02	402.000	BEARING SHELL ASSY.		YES

BOM Details

Pos.No	IC	Material Code			P.No	Remarks				
Matl.Spec		SPK	Qty	MU	Size 1	Size 2	Size 3	Formula Key	MPcs	St.
0080		L	HY9601206027			13901014				
HY9601206			2.000	EA	0.000		0.000	0.000		ST41
					0.000					
Material Description : PLUG PIPE THRD G 1/4					Reservation : 0013704507		Item : 0008		Picklist:	

0090	L	41390131498-00			13901015					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : WASHER ID/OD=14.2/17.9					Reservation : 0013704507		Item : 0009		Picklist:	

0100	L	41390131243-00			13901017					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : SIDE SUPPORT				Reservation : 0013704507		Item : 0010		Picklist:		

0110	L	41390131242-00			13901019					
	30	2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : LOCK WASHER				Reservation : 0013704507		Item : 0011		Picklist:		

0120	L	41390131293-00			13901021					
30		1.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : OIL STOPPER					Reservation : 0013704507		Item : 0012		Picklist:	

0130	L	AA7123123352			13901023						
AA7123123			4.000	EA	0.000		0.000	0.000		0.000	ST41
Material Description : SCREW CAP SOC P M20X75-12.9					Reservation : 0013704507		Item : 0013		Picklist:		

0140	L	HY7171152197			13901024					
HY7171152-00		2.000	EA	0.000	0.000	0.000		0.000	ST41	
Material Description : PIN TAPER EXT THRD 12X100				Reservation : 0013704507		Item : 0014		Picklist:		

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
	17.02.2021	00		AKM	KSR	2	5

		TECHNOLOGICAL PROCESS NOT FOR PROCESS SHEET PRINT		Production Order	Date
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Type	WBS Element	Customer / Project Name			Part No
	P-1229200002-13901	G I P C L -VADODARA			13901003
Drawing No.-Var	E.Rev.	T.Rev	Material No.	Name Of The Part	
01390131154	01	01	01390131154-00	BEARING SHELL ASSY.	
Pos.No	BOM Qty	Ord Qty	MU	St.	Nt.Wt.
0001	1.000	1.000	EA	IS02	402.000
BEARING SHELL ASSY.					YES

BOM Details

Pos.No	IC	Material Code			P.No	Remarks				
Matl.Spec	SPK	Qty	MU	Size 1	Size 2	Size 3	Formula Key	MPcs	St.	
0150	L	AA7151113048		13901025						
AA7151113		2.000	EA	0.000	0.000	0.000		0.000	ST02	
Material Description : NUT HEX P M12-BR					Reservation :	Item : 0015	Picklist:			
					0013704507					

0160	L	AA7161001072		13901026						
AA7161001		2.000	EA	0.000	0.000	0.000		0.000	ST41	
Material Description : WASHER MCD 13-ST					Reservation :	Item : 0016	Picklist:			
					0013704507					

0170	L	AA7121123371		13901027						
AA7121123		4.000	EA	0.000	0.000	0.000		0.000	ST41	
Material Description : SCREW HEX M12X35-8.8					Reservation :	Item : 0017	Picklist:			
					0013704507					

0180	L	31390131056-00		13901028						
		2.000	EA	0.000	0.000	0.000		0.000	IS02	
Material Description : LABYRINTH RING ASSEMBLY					Reservation :	Item : 0018	Picklist:			
					0013704507					

0190	L	AA7121123118		13901034						
AA7121123		18.000	EA	0.000	0.000	0.000		0.000	ST41	
Material Description : SCREW HEX M 8X20-8.8					Reservation :	Item : 0019	Picklist:			
					0013704507					

0200	L	HY7169099071		13901035						
HY7169099		18.000	EA	0.000	0.000	0.000		0.000	ST41	
Material Description : LUG WASHER LOCK 8.4					Reservation :	Item : 0020	Picklist:			
					0013704507					

Operation Details

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 Description				
Sub Operation Text								
0030	CB5165	P002	ZP99	40.000	500.000	500.000	540.000	

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
	17.02.2021	00		AKM	KSR	3	5

		TECHNOLOGICAL PROCESS				Production Order		Date	
Plant:P002		Equipment No:				101910221		06.02.2021	
Type		Work Order / PGMA		Customer				Part No	
		P-1229200002-13901/ 13901		G I P C L -VADODARA				13901003	
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01390131154		01	01	01390131154-00		BEARING SHELL ASSY.			
Pos.No	BOM Qty	Ord Qty	MU	St.	Nt.Wt.	Remarks			
0001	1.000	1.000	EA	IS02	402.000	BEARING SHELL ASSY.			
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 Description					
Sub Operation Text									
Mill the contact surface of both the halves as per marking. Mill one face of both halves taking light cut for holding on lathe.									
0040	CB5228	P002	ZP99	40.000	450.000	450.000	490.000		
In the top half mill 2 grooves R20 and maintain dimension as per Sec G-G & H-H.									
0050	CG9421	P002	ZP99	0.000	0.000	25.000	25.000		
Deburr the pcs.									
0070	CB4652	P002	ZP99	30.000	550.000	550.000	580.000		
Place the top half on the bottom shell. Match the profile and clamp. Drill 4 holes dia17.24 for M20 to depth 55+40 as per Sec G-G. Drill 2 holes dia12 for taper pin 12 diagonally opposite 55+40 as per Sec- HH. After dismantling in bottom half chamfer and tap 4 holes M20 to depth 40 as per Sec-GG. In bottom half View- UU & HH for eye bolts, drill 4 holes dia17.25 for M20 to depth 35 and spot face dia40. Chamfer and tap M20 to depth 35. In top half, for eye bolt drill 2 holes dia17.25 for M20 to depth 35 & spot face dia 40. Chamfer and tap M20 to depth 35 as per View-T. In top half, enlarge 4 holes dia 17.25 to dia 23 & spot face dia 40 .Counter bore 2 taper pin holes dia 16 depth 20 & spot face dia 40 as per SecH-H.									
0090	CG9528	P002	ZP99	10.000	0.000	110.000	120.000		
Deburr and clean the contact surfaces. Re-tap the threaded hole and bolt the halves together, keeping 12mm thick spacer at the parting plane as per Fig1. Keep the machined faces one side while bolting.									
0100	CB4142	P002	ZP99	70.000	650.000	650.000	720.000		
Hold on outside dia. Turn inside dia 324 & helical dovetail groove dia332/30deg maintaining pitch 32 as per Sec-AA and Fig-1. 20-11-2401 : Dovetail tool.									
0110	CG9421	P002	ZP99	0.000	0.000	50.000	50.000		
Dismantle both the halves. Remove 12 mm thick spacer and assemble both halves.									
0120	CB4142	P002	ZP99	60.000	480.000	480.000	540.000		
Face both sides to thickness 334 i.e., 2mm allowance on each side. Turn dia410 H7 with 2mm allowance per surface i.e., dia406 to depth 34. Turn									
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		17.02.2021	00			AKM	KSR	4	5

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Drawing No.-Var		E.Rev.	T.Rev.	Material No.		Name Of The Part			
01390131154		01	01	01390131154-00		BEARING SHELL ASSY.			
Pos.No	BOM Qty	Ord Qty	MU	St.	Nt.Wt.	Remarks			
0001	1.000	1.000	EA	IS02	402.000	BEARING SHELL ASSY.			
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 Description					
Sub Operation Text									
dia605 straight for spherical dia600.1. Turn step dia 495 to depth 14 (12+2mm allowance face) on both sides as per section. Turn dia 495 to width 12+2 allowance on the face on both sides as per sec A-A.									
0140	CG9421	P002	ZP99	0.000	0.000	120.000	120.000		
Dismantle both the halves and deburr.									
0160	CB5227	P002	ZP99	40.000	300.000	300.000	340.000		
In bottom half, mill the groove width 270 depth 34 (i.e., 2mm allowance on face) on both sides as per Sec A-A & view-UU.									
0180	CB4652	P002	ZP99	30.000	780.000	780.000	810.000		
In bottom half drill one hole dia6 through in stages using long drill dia 6 as per detail-D. On both ends enlarge the hole to dia 11.75 for G 1/4" to depth 20. Chamfer and tap G 1/4" threads to depth 15 as per detail-D. Drill 2 holes dia 6 to open through horizontal hole dia 6 as per detail-D. Enlarge the holes with Flat drill dia 18 to depth to centre line 170+15+5.6 as per Sec.C-C. Counter bore dia 40 H7 to depth maintaining dimension 170 to centre line. Chamfer and tap M20x1.5 to depth 15 as per Sec.C-C. Fix the bottom half on the angle block and set for drilling inclined hole at 25deg as per Sec.C-C. Drill 1 hole dia 4 at 25deg to open into the hole dia 40 H7. Reset & drill 1 more hole as per sec C-C.									
0200	CG9421	P002	ZP99	10.000	0.000	90.000	100.000		
Deburr both halves.									
0210	CG9528	P002	ZP99	20.000	0.000	100.000	120.000		
Deburr and clean the jacking oil holes. Keep the Washer pos 8 in position as per Sec.C-C. Screw thread piece pos 6 tightly in position as per Sec.C-C. Close the horizontal hole dia 6 on both ends with pos 9 & 10 as per Detail-D.									

Chkd. By	Dt.	ECR/ Rev No	Dt.	Pro.Plnr	Rate Fixr / Tool Plnr	Pg no	No.of Pgs
	17.02.2021	00		AKM	KSR	5	5