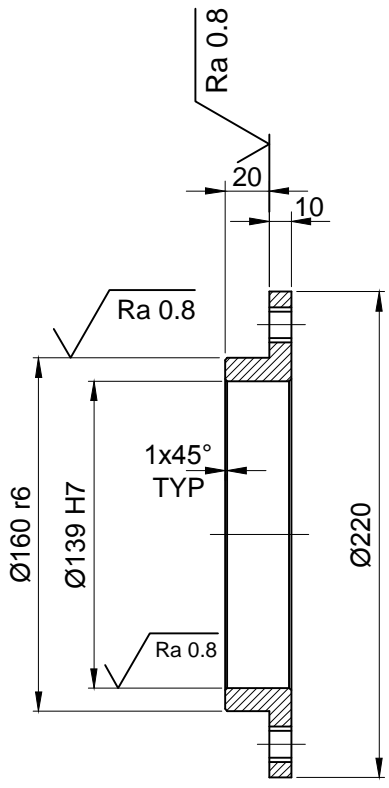




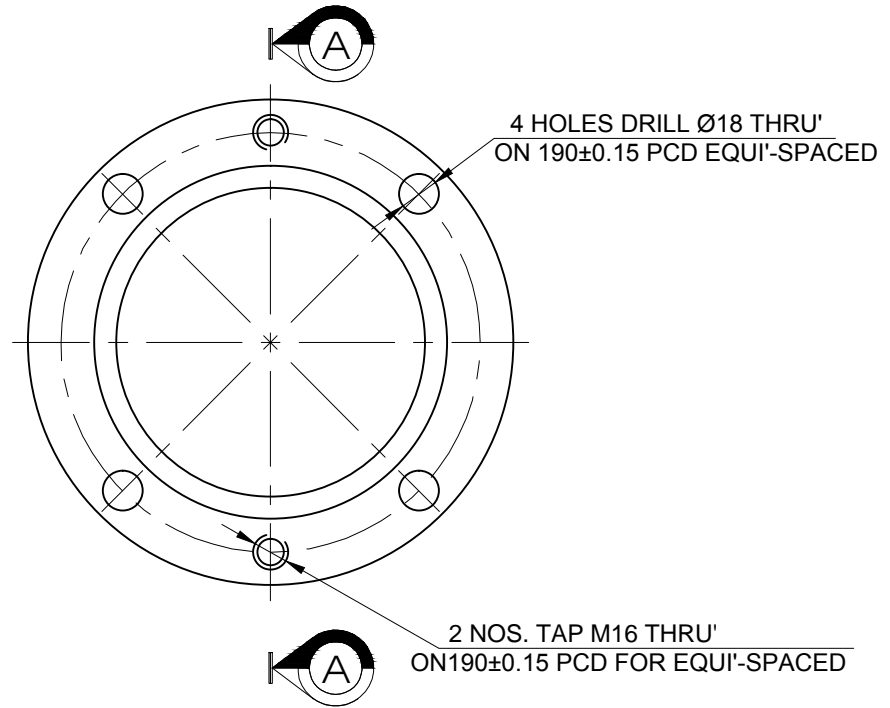
REV	DATE	ALTERED
01		CHECKED
		APPROVED

√ Ra 1.6 ( √ Ra 0.8 )

SIZE	TOLERANCE
Ø139 H7	+0.04 +0.
Ø160 r6	+0.09 +0.065



SECTION-AA



03	SPRING LOCK WASHER 16 - IS:3063			0.009
		STEEL	IS:4072	2
02	Hex.Head Bolt M 16x40 IS 1364-1/ ISO 4014			0.0950
		Gr.8.8 ,	ISO 898-1	2
01	RO 220 x 30 IS 1732			6
		E250A	IS:2062	2
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY

EQPT: CROSS PIERCING AND ELONGATION



Bharat Heavy Electricals Ltd  
SEAMLESS STEEL TUBE PLANT  
TIRUCHIRAPALLI - 620014

DRN	NAME	SIGNATURE	DATE
	V.KRISHNAKUMAR/M.K	<i>V.Krishnakumar/m.k</i>	25.03.14
CHD	G.LOGANATHAN	<i>G.Loganathan</i>	25.03.14
APPD	M.CHANDRAKUMAR	<i>M.Chandrakumar</i>	25.03.14

DEPT	SSSTP	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
	456	Ø/M/∅ IS:2102	1:2.5	12	-	-
TITLE					REF TO OLD DWG NO	ITEM
CPE - DETAIL OF FLANGE FOR INLET SIDE - PUSHER ROD ASSY					4180-11/0112018-14.019	-
CARD CODE					DRAWING NO :	REV
U 01					4-7-1123-11-10254	00

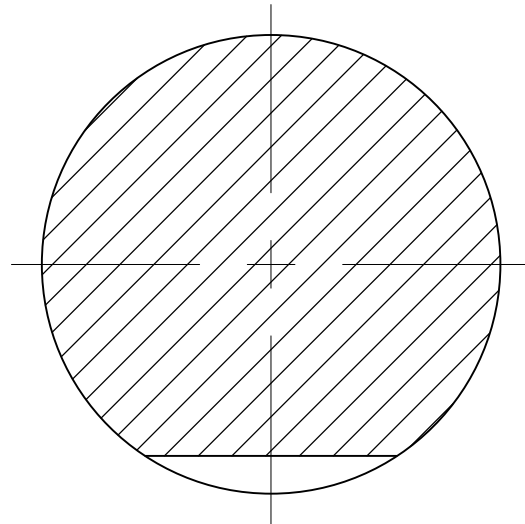
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DRAWING NO: 3-7-1123-11-10168

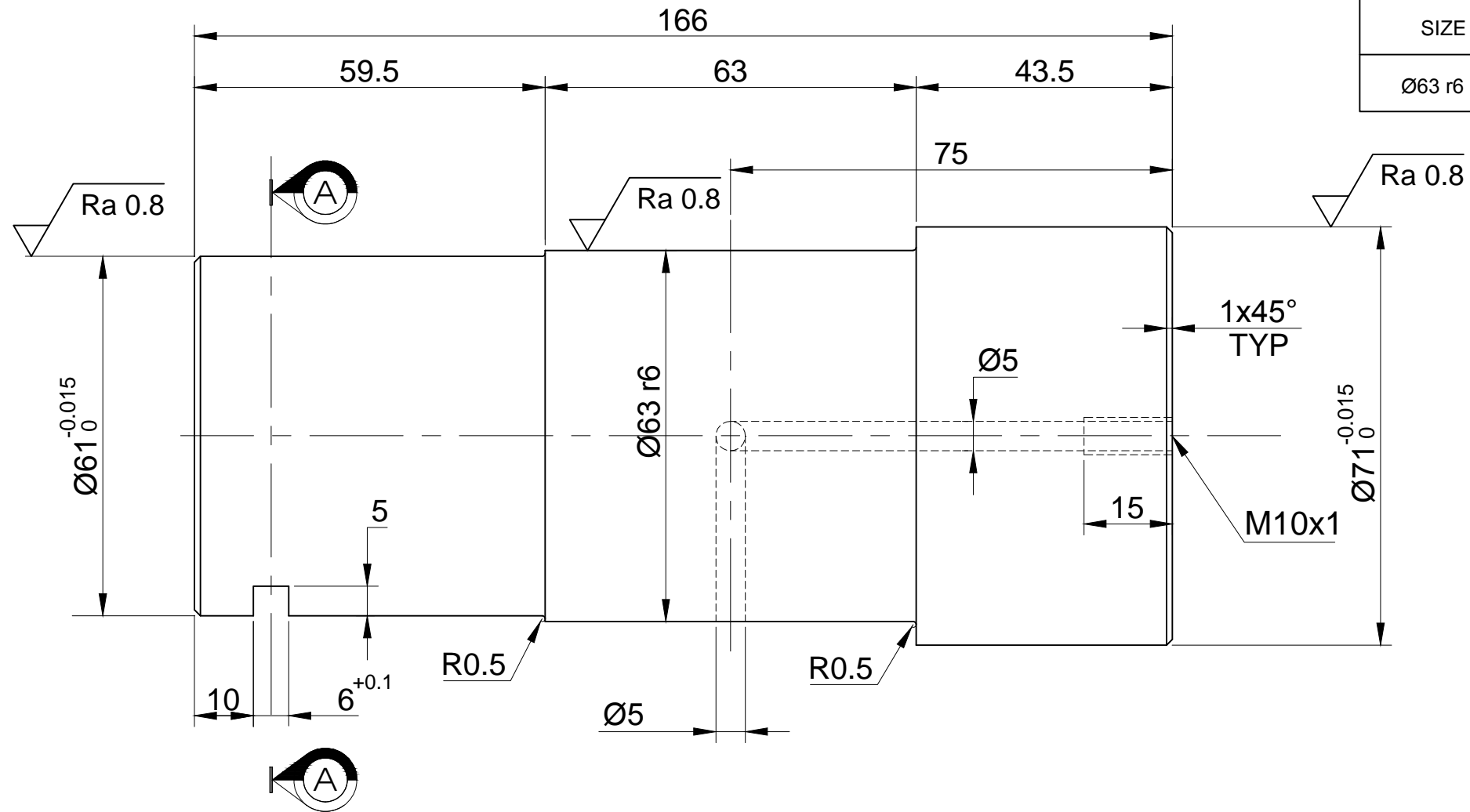
ALL DIMENSIONS ARE IN MILLIMETRES

Ra 1.6 (Ra 0.8)

SIZE	TOLERANCE
Ø63 r6	+0.06 +0.041



SECTION-AA



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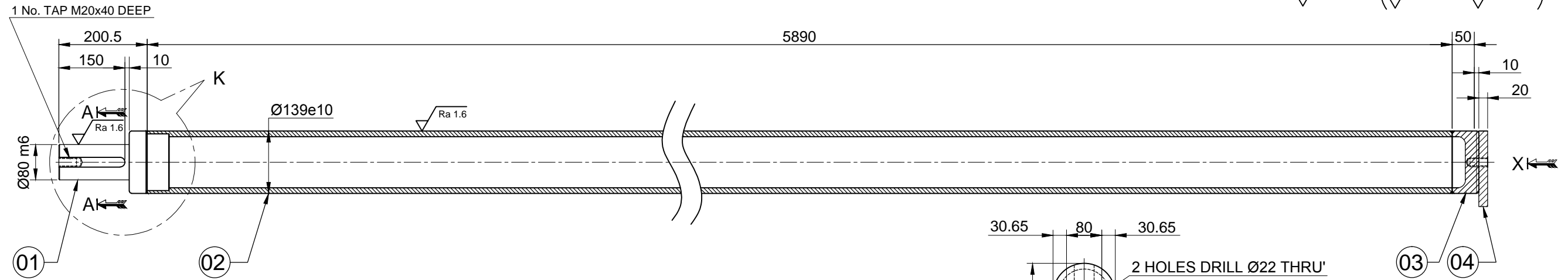
02	BUTTON HEAD GREASE NIPPLE IS:4009 - 1		STEEL Gr.4.8, IS:1367	1
01	PIN		40NiCr4Mo3	1
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY

EQPT: CROSS PIERCING AND ELONGATION

Bharat Heavy Electricals Ltd		DRN	NAME	SIGNATURE	DATE
SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014			V.KRISHNAKUMAR/M.K	<i>V. Krishnakumar/m.k</i>	31.03.14
			G.LOGANATHAN	<i>G. Loganathan</i>	31.03.14
			M.CHANDRAKUMAR	<i>M. Chandrakumar</i>	31.03.14

REV	DATE	ALTERED
01		CHECKED
		APPROVED

DEPT	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
SSTP	φ/M/F	1:1	4.3	-	-
CODE	IS: 2102			REF TO OLD DWG NO	
456				4180-14/0101056-00.101	
TITLE			CARD CODE	DRAWING NO :	REV
CPE - PIN FOR INLET SIDE - PUSHER ROD ASSY			U 01	3-7-1123-11-10168	00

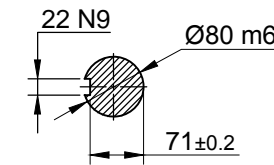


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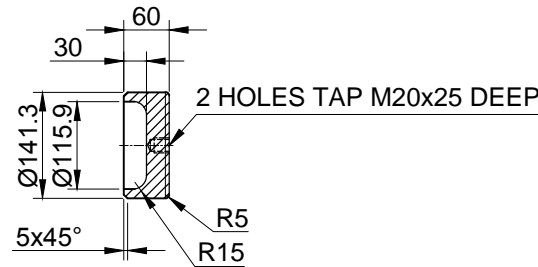
02

03

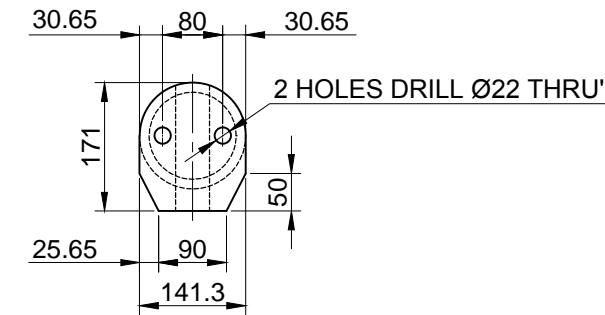
04



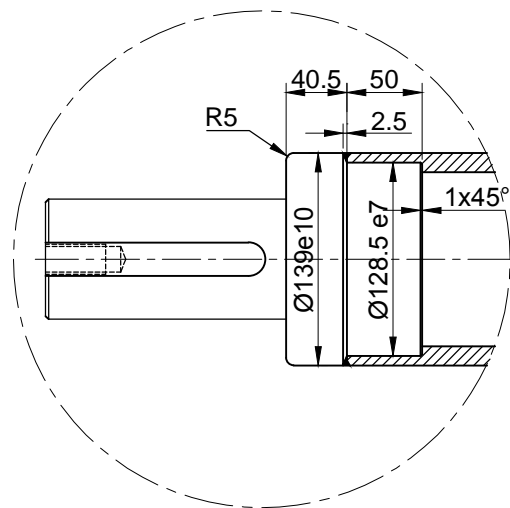
SECTION - AA



ITEM No.-03



VIEW-X  
ITEM No.-04



DETAIL - K  
ITEM No.-01  
SCALE 1 : 5

SIZE	TOLERANCE
Ø139 e10	-0.085 -0.245
Ø128.5 e7	-0.085 -0.125
Ø80 m6	+0.03 +0.011
Ø22 N9	0 -0.052

08	SOCKET HD.CAP BOLT M20x300 IS:2269 / ISO 4762		Gr.12.9, ISO 898-1	1
07	KEY 22x14x150LG. (FLAT END ONE SIDE)		EN-9 IS:1570	1
06	SPRING LOCK WASHER 20 IS:3063		STEEL IS:4072	2
05	HEX.HD. BOLT M20 x45 IS 1364-1 / ISO 4014		Gr 8.8 , ISO 898-1	2
04	PL 171x142x20 IS 1730		E 250 A IS 2062	1
03	RO 142x60 IS 1732		E 250 A IS 2062	1
02	PIPE SEAMLESS (OD 141.30x12.7 THK.x5890LG)		SEAMLESS TUBE IS:3589	1
01	SHAFT		EN-9 IS:1570	1
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
			MATL SPEC	QTY

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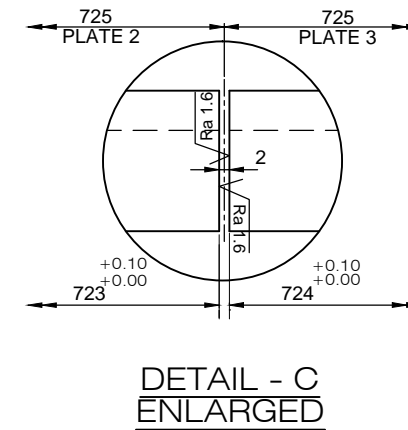
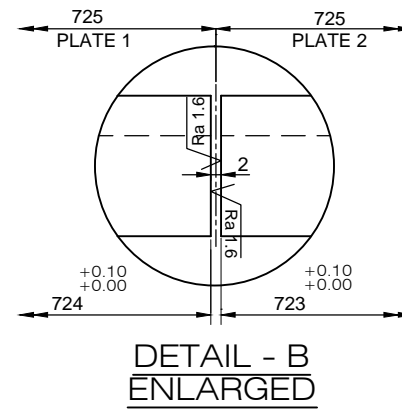
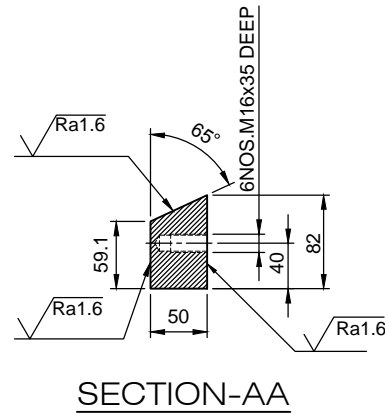
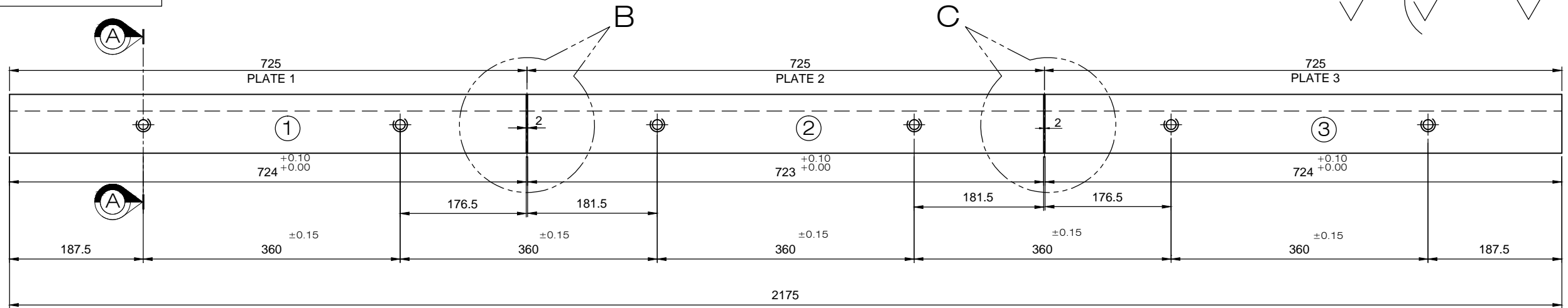
EQPT: CROSS PIERCING AND ELONGATION								
	Bharat Heavy Electricals Ltd		DRN	V.KRISHNAKUMAR/M.K	SIGNATURE	<i>V. Krishnakumar/m.k</i>	DATE	29.03.14
	SEAMLESS STEEL TUBE PLANT		CHD	G.LOGANATHAN	SIGNATURE	<i>G. Loganathan</i>	DATE	29.03.14
	TIRUCHIRAPALLI - 620014		APPD	M.CHANDRAKUMAR	SIGNATURE	<i>M. Chandrakumar</i>	DATE	29.03.14
DEPT	SSSTP	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	-		
CODE	456	φ/M/F IS: 2102	1:10	264	REF TO OLD DWG NO	4180-13/0101056-00.101		
TITLE	CPE - SHAFT & PIPE FOR INLET SIDE PUSHER ROD ASSY				CARD CODE	DRAWING NO :		REV
					U 01	3-7-1123-11-10167		00

REV	DATE	ALTERED
01		CHECKED
		APPROVED

DRAWING NO: 3-7-1123-11-10166

ALL DIMENSIONS ARE IN MILLIMETRES

✓ (✓ Ra 3.2 ✓ Ra1.6)



NOTE :-  
HARDNESS 95-110 BHN

CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
05	SPRING LOCK WASHER 16 IS:3063		STEEL , IS:4072	12
04	HEX . SOCKET HD.CAP SCREW - M16x90 - IS:2269/ ISO:4762		Gr 12.9, ISO 898-1	12
03	WEAR PLATE - 3		Gc-Cu Sn 12 DIN - 1705	20
02	WEAR PLATE - 2		Gc-Cu Sn 12 DIN - 1705	20
01	WEAR PLATE - 1		Gc-Cu Sn 12 DIN - 1705	20
			MATL SPEC	QTY

EQPT: CROSS PIERCING AND ELONGATION

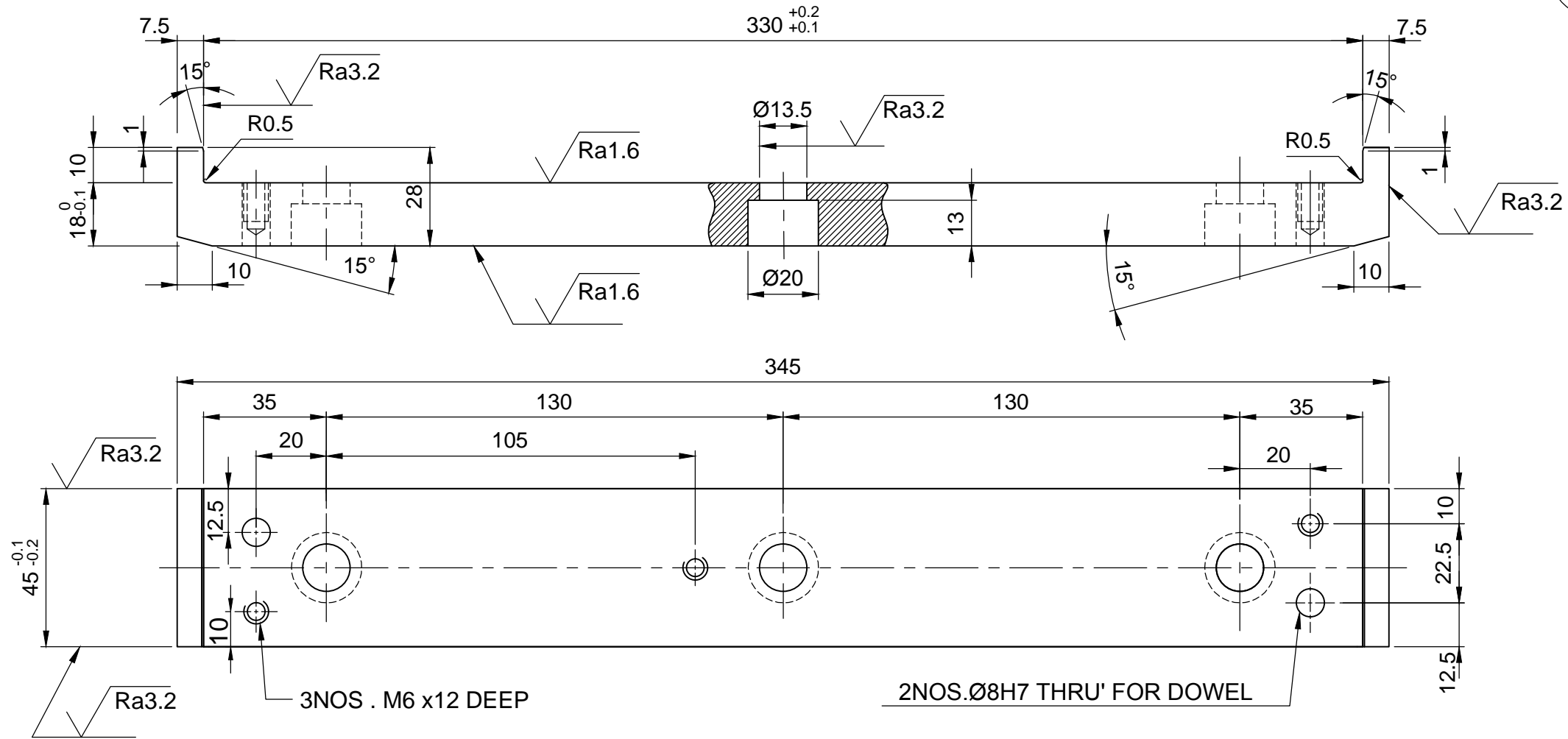
DRN	NAME	SIGNATURE	DATE
	V.KRISHNAKUMAR/M.K	<i>V. Krishnakumar/m.k</i>	29.03.14
CHD	G.LOGANATHAN	<i>G. Loganathan</i>	29.03.14
APPD	M.CHANDRAKUMAR	<i>M. Chandrakumar</i>	29.03.14

REV	DATE	ALTERED	CHECKED	APPROVED
01				

DEPT	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
SSTP	φ/M/∅	1:5	120	-	-
456	IS: 2102			REF TO OLD DWG NO 4180-12/0101056-00.101	
TITLE <b>CPE - WEAR PLATE FOR INLET SIDE - PUSHER ROD ASSY</b>				CARD CODE U 01	DRAWING NO : <b>3-7-1123-11-10166</b>
					REV 00

DRAWING NO: 3-7-1123-11-10165

ALL DIMENSIONS ARE IN MILLIMETRES



SIZE	TOLERANCE
Ø8 H7	+0.015 0

**NOTE :-**

DOWEL HOLE DRILL TO BE DONE AFTER POSITION THE LEDGE AT ASSY

**NOTE :-**

HARDNESS 95-110 BHN

03	PARALLEL PIN ISO2338 - Ø8m6x50		0.02
		40C8 IS:2393	4
02	HEX.SOC. HD.CAP SCREW M12x35 - IS 2269 / ISO4762		0.0429
		Gr.12.9, ISO898-1	6
01	LEDGE		4.6
		Gc-Cu Sn 12 IS:306	2
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE
			UNIT WT
			MATL SPEC
			QTY

EQPT: CROSS PIERCING AND ELONGATION



Bharat Heavy Electricals Ltd  
SEAMLESS STEEL TUBE PLANT  
TIRUCHIRAPALLI - 620014

DRN	NAME	SIGNATURE	DATE
	V.KRISHNAKUMAR/M.K	<i>V. Krishnakumar/m.k</i>	25.03.14
CHD	G.LOGANATHAN	<i>G. Loganathan</i>	25.03.14
APPD	M.CHANDRAKUMAR	<i>M. Chandrakumar</i>	25.03.14

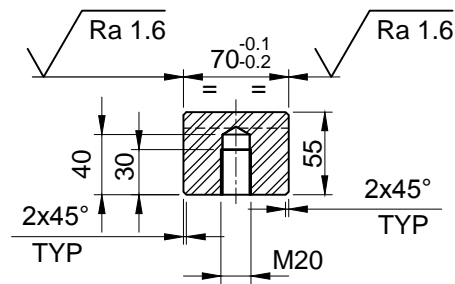
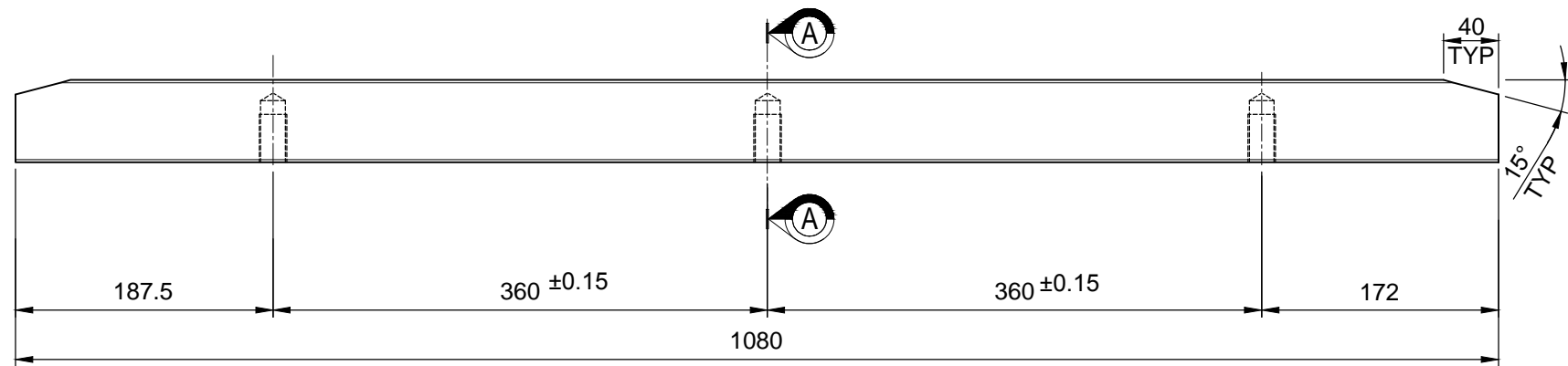
REV	DATE	ALTERED
01		CHECKED
		APPROVED

DEPT	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
SSTP	φ/M/F	1:5	9.2	-	-
CODE	IS: 2102			REF TO OLD DWG NO	
456				4180-10/0112018-14.040	
TITLE	CPE - LEDGE FOR INLET SIDE - PUSHER ROD ASSY			DRAWING NO :	REV
				3-7-1123-11-10165	00
		CARD CODE			
		U 01			

DRAWING NO: 3-7-1123-11-10164

ALL DIMENSIONS ARE IN MILLIMETRES

√ Ra 3.2 (√ Ra 1.6)



SECTION A-A

NOTE :-

1.HARDNESS SHOULD BE 230-260 BHN.

03	SPRING LOCK WASHER 20 - IS:3063		STEEL	12	0.0152
02	HEX. SOCKET HD. CAP SCREW M20x70 - IS:2269 / ISO 4762		Gr.12.9, ISO 898-1	12	0.138
01	WEAR PLATE		42CrMo4	4	31.5
ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT	
			MATL SPEC	QTY	

EQPT: CROSS PIERCING AND ELONGATION



Bharat Heavy Electricals Ltd  
SEAMLESS STEEL TUBE PLANT  
TIRUCHIRAPALLI - 620014

DRN	V.KRISHNAKUMAR/M.K	SIGNATURE	<i>V. Krishnakumar/m.k</i>	DATE	25.03.14
CHD	G.LOGANATHAN	SIGNATURE	<i>G. Loganathan</i>	DATE	25.03.14
APPD	M.CHANDRAKUMAR	SIGNATURE	<i>M. Chandrakumar</i>	DATE	25.03.14

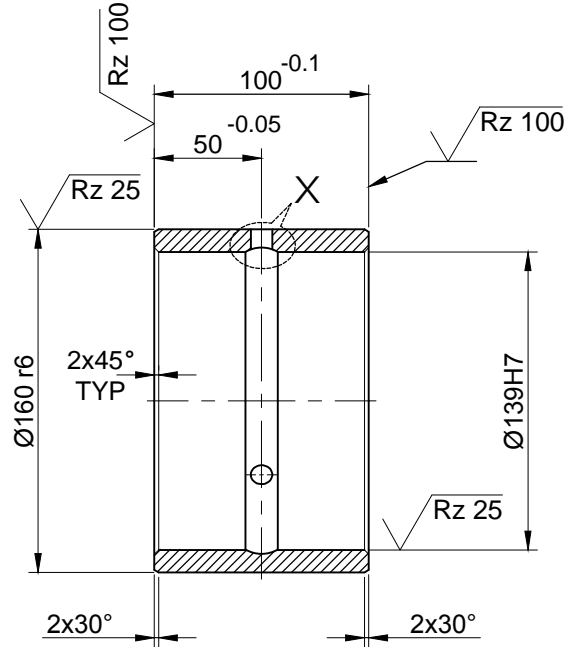
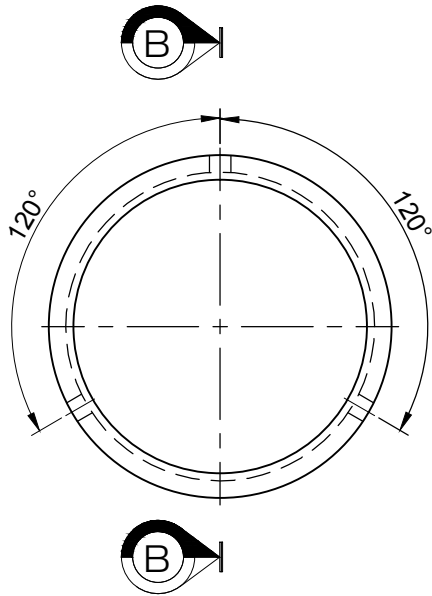
REV	DATE	ALTERED
01		CHECKED
		APPROVED

DEPT	SSSTP	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
456		φ/M/F IS: 2102	1:5	126	-	-
TITLE					REF TO OLD DWG NO	
CPE - WEAR PLATE FOR INLET SIDE - PUSHER ROD ASSY					4180-09/0112018-13.025	
CARD CODE					DRAWING NO :	REV
U 01					3-7-1123-11-10164	00

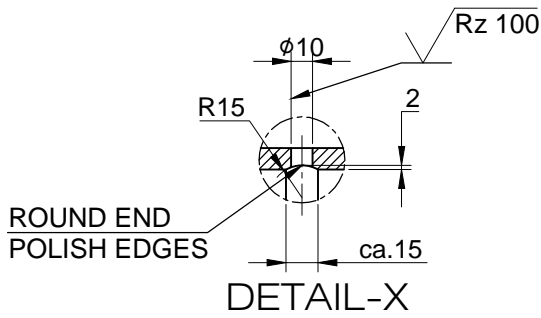
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REV 01	DATE	ALTERED
		CHECKED
		APPROVED


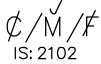
SIZE	TOLERANCE
Ø139 H7	+0.04 +0.
Ø160 r6	+0.09 +0.065



SECTION-BB



DETAIL-X

CAUTION: THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.	01	BUSH Ø160 x 100			4
				Gz-Cu Sn 12 DIN 1705	2
	ITEM NO	DESCRIPTION	DRAWING NO	MATL CODE	UNIT WT
				MATL SPEC	QTY
EQPT: CROSS PIERCING AND ELONGATION					
 Bharat Heavy Electricals Ltd SEAMLESS STEEL TUBE PLANT TIRUCHIRAPALLI - 620014		DRN	NAME V.KRISHNAKUMAR/M.K	SIGNATURE <i>V. Krishnakumar/m.k</i>	DATE 25.03.14
		CHD	G.LOGANATHAN	<i>G. Loganathan</i>	25.03.14
		APPD	M.CHANDRAKUMAR	<i>M. Chandrakumar</i>	25.03.14
DEPT SSTP	GRADE OF UNTOL. DIM	SCALE	WEIGHT (Kg)	REF TO ASSY DWG NO	ITEM
CODE 456	 IS: 2102	1:2.5	8	-	-
TITLE			CARD CODE	REF TO OLD DWG NO	REV
CPE - DETAIL OF BUSH FOR INLET SIDE - PUSHER ROD ASSY			U 01	4180-11/0112018-14.019	00
			DRAWING NO :	4-7-1123-11-10255	