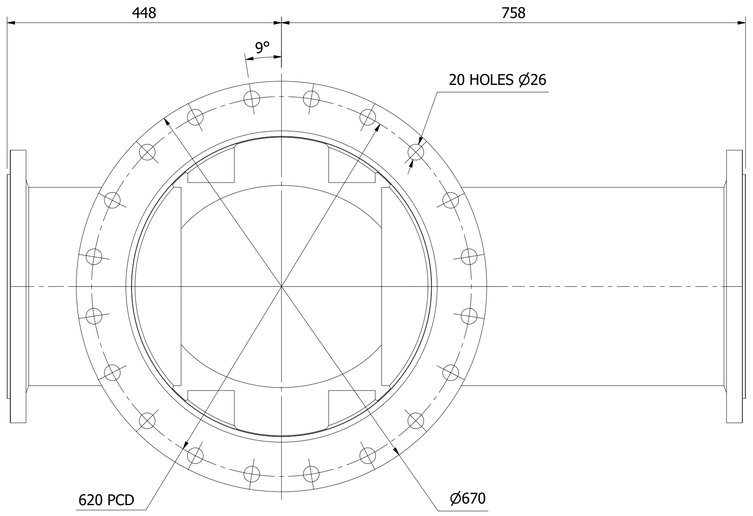
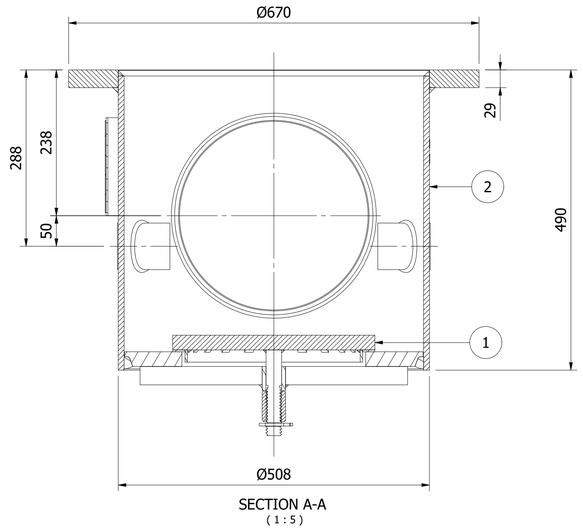
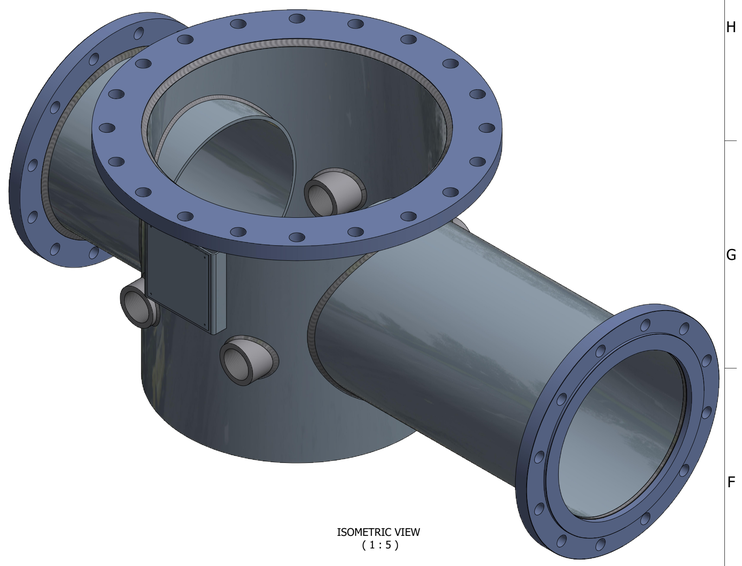
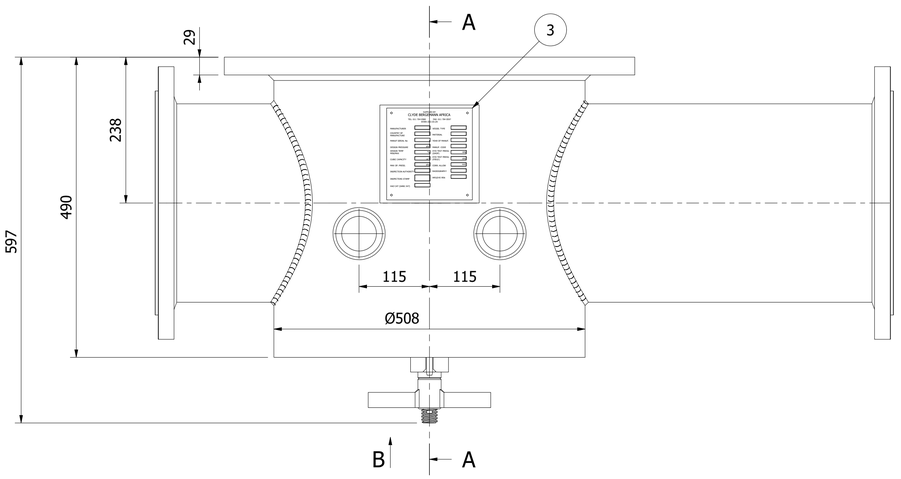




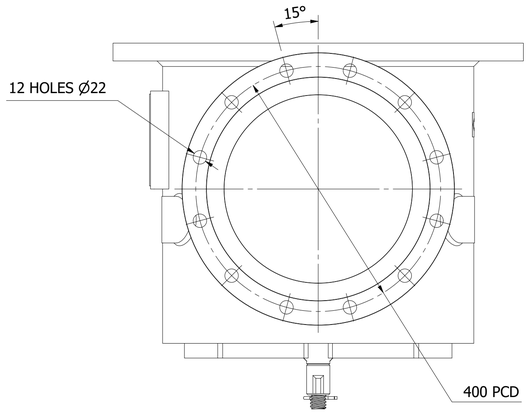
SECTION A-A
(1 : 5)

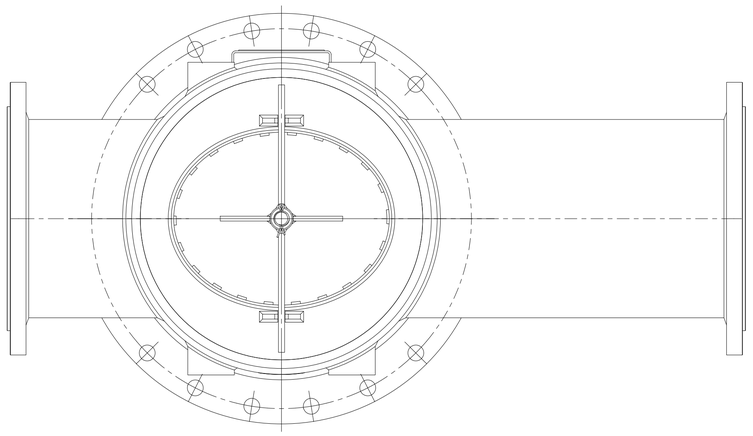


ISOMETRIC VIEW
(1 : 5)



FRONT VIEW
(1 : 5)





VIEW ON B
(1 : 5)

VESSEL DESIGN DATA
VESSEL NAME: MD-PUMP 500 x 300 T-PIECE ASSEMBLY
VESSEL TAG No:

DESIGN CODE:	PD5500 CATEGORY 2 2012
OPERATING PRESSURE:	250 kPa
DESIGN PRESSURE:	700 kPa
SHOP HYDRAULIC TEST PRESSURE:	1240 kPa
FIELD HYDRAULIC TEST PRESSURE:	1090 kPa
OPERATING TEMPERATURE:	150 °C
MAXIMUM DESIGN TEMPERATURE:	200 °C
MINIMUM TEMPERATURE:	5 °C
DURATION OF HYDRAULIC TEST:	30 Min
STRESS RELIEF:	NOT REQUIRED
CORROSION ALLOWANCE:	SHELL 1.0mm BRANCH 1.0mm
EMPTY MASS OF T-BOX:	180 kg
VOLUME OF T-BOX:	0.09 m³
SANS 347 FLUID CATEGORY :	FLUID GROUP 2
SANS 347 HAZARD CATEGORY :	II

INSPECTION NOTES:

1. RADIOGRAPHIC EXAMINATION IN ACCORDANCE WITH DESIGN CODE. MINIMUM REQUIREMENTS:

   10% OF FULL LENGTH OF ALL FULL PENETRATED BUTT WELDS, EXAMINATION TO INCLUDE INTERSECTION OF LONGITUNIAL AND VERTICAL WELDS.

2. MAGNETIC PARTICLE AND/OR DYE PENETRANT EXAMINATION FULL LENGTH OF WELDS ATTACHING NOZZLES, BRANCHES AND COMPENSATING PLATES TO SHELL AND END PLATES.
   AT LEAST 10% OF THE LENGTH OF ALL OTHER ATTACHMENT WELDS TO PRESSURE COMPONENTS.

GENERAL NOTES:

1. VESSEL SURFACE TEMPERATURE IS ABOVE 60 °C, BUT THE VESSEL IS NOT THERMALLY INSULATED.

GENERAL NOTES
1) ALL DIMENSIONS ARE INTERNAL.
2) FLANGES TO BE FITTED WITH HOLES OFF CENTRE (i.e. 2 HOLES TOP)
3) ALL GASKETS TO BE 2mm KLINGERSIL C4300.
4) 300NB FLANGES - BOLTING TO EN4042 GR 4.6 WITH GR 4 NUTS.
5) 500NB FLANGE - BOLTING TO SA193-B7 / SA194-2H BOLTS AND NUTS
6) FABRICATOR TO SUPPLY ALL BOLTS, NUTS AND WASHERS (+5% EXTRA TO BE INCLUDED).
7) WELDING TO REFER EN ISO 15614-1:2004 + A:1
8) BUTT WELDED PIPE FITTINGS TO COMPLY WITH ASTM A234 GRADE WPB, SIZES TO ANSI B16.9.
9) ALL RUBBER HOSES TO HAVE MIN R=10xDIA.
10) ALL ITEMS TO BE CLEARLY HARD MARKED, APPROX 300mm FROM FIXED FLANGE, WITH ITEM & DRAWING NUMBER.
11) PAINTING MUST BE DONE AS PER SPECIFICATION ON ORDER.
12) NO PAINT ON MATING FLANGE FACES.
13) APPLY RUST - PREVENTATIVE COATING TO MATING FLANGE FACES.

PARTS LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	MATERIAL	MASS	TOTAL MASS
1	2.SBJP-MEC-STD-002	1	MAN HOLE COVER ASSY		22.433 kg	22.433 kg
2	2.SBJP-MEC-STD-003	1	500 x 300 T-PIECE WELDED ASSEMBLY	Welded Steel Mild	183.635 kg	183.635 kg
3	2.SBJP-MEC-STD-004	1	NAME PLATE 150x140	STST GR 304	0.254 kg	0.254 kg

CBZ DRAWING NO:	ST1613-000
ESKOM NO:	-

TRANS-AFRICA PROJECTS

AS-BUILT

REV	
DATE	
MEC. ENG. APPROVED	
SIGN	

D.O.	REV	DATE	
-	0	2022/08/22	REDRAWN - T-BOX
			* * REVISION * *
			INDEX REFERENCE :

DRG REGISTER		
DESIGN APPROVED		
KKS APP.		
DO AUTH.		
CHKD BY		
DRAWN BY	15-Nov-12	GWO
SCALE	1:5 U.O.S.	

REV BY	CHKD BY	AUTH BY	KKS APP
JM	SM	HvL	

REFERENCE DRAWINGS

AUTHORISED FOR ESKOM BY	DATE

CLYDE BERGEMANN AFRICA
Eskom
Eskom
Rotek Industries

KUSILE POWER STATION
DUST HANDLING AND CONDITIONING PLANT UNIT 4
MD-PUMP 500 x 300 T-PIECE ASSEMBLY

2.SBJP-MEC-STD-001

SPF CODE	SHEET	REV
	1/1	0

Size **A1**