



**BHARAT HEAVY ELECTRICALS
LIMITED**

INDUSTRIAL VALVES PLANT
433, INDUSTRIAL COMPLEX
GOINDWAL SAHIB
DISTT. TARN TARAN- PUNJAB
SUB-CONTRACTING DEPT

No.
BHE:IVP:SC:EOI:YB&GF:
2023-24/01-DATED
12.04.2023

NOTICE INVITING **EXPRESSION OF INTEREST (EOI)** FOR MACHINING WORK OF "SS YOKE BUSHES AND SS GLAND FLANGES FOR GATE & GLOBE VALVES OF VARIOUS SIZES (2" TO 8").

BHARAT HEAVY ELECTRICALS LIMITED [BHEL] is manufacturing Industrial Valves and other Boiler accessories at its Industrial Valves Plant, Goindwal Sahib unit.

Expression of interest are invited from machining Vendors (BHEL encourages procurement from Micro and Small Enterprises (MSEs). BHEL seeks expression of Interest for **"SS Yoke Bushes and SS Gland Flanges for Gate & Globe valves of various sizes (2" to 8")** from suppliers who are having facility for doing the machining job. The various work centers involved in the machining jobs may include CNC/VMC/Slotter/lathe machine/milling machine etc. The sample of drawings are enclosed for reference.

Interested suppliers shall furnish the required EOI by **1700 Hrs. on or before 19.04.2023**. The EOI can be submitted personally or through email of following persons: -

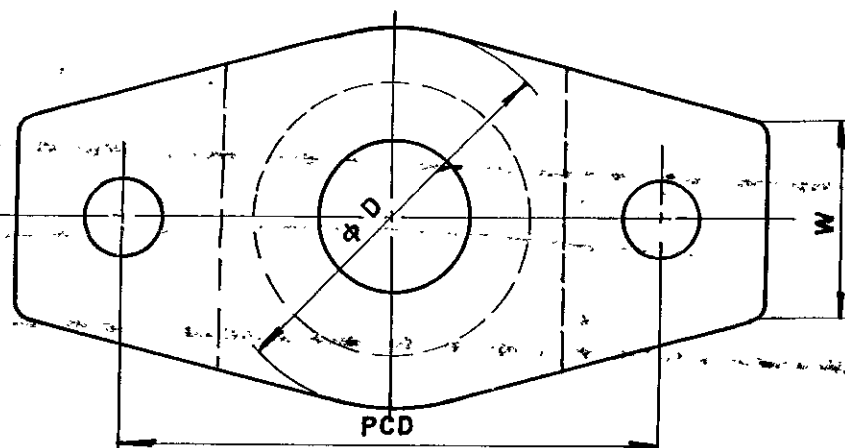
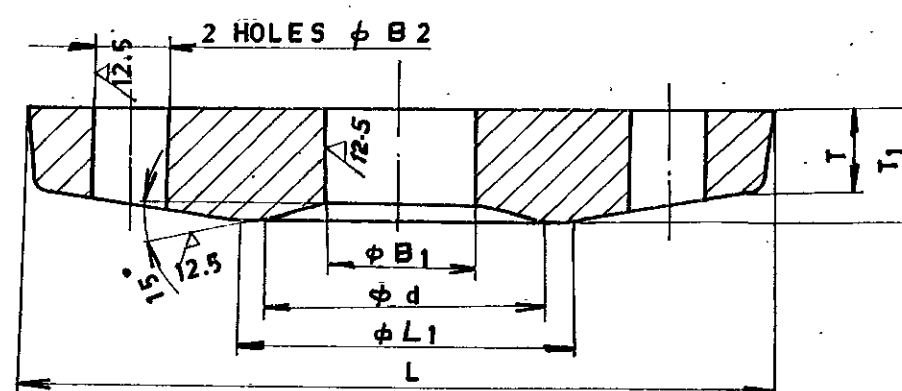
For any clarification vendors may visit to our plant on any working day from Monday to Saturday between 0900 Hrs to 1730 Hrs and contact undersigned regarding:

Items details and requirement

Rohit Kumar Engineer (Sub-Cont)	Gopal Singh Sr.Manager(Sub-Cont)
01859-224689	01859-224669
9999723400	9410395245
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SL. NO.	NEW DRG. NO.	SUPERSEDED DRG. NO.	RAW MATERIAL DETAILS			RAW MATL. wt.(kg)	φ D	φ d	PCD	φ B ₁	φ B ₂	L	L ₁	T	T ₁	W				NOMINAL STEM DIA.	FWt (K. g)	APPLICABLE TYPE NOS:-	SL. NO.	
			SPECN.	PRODUCT	CODE																			
1.	2-V-0203-01812/1	4-V-203-3362	SA 105	Ⓒ	3-V-1370-03038F	92017072	0.61	50	33	76	22	14	115	60	13	16	30			20	0.50	203, 204, 245, 253, 273, 274, 298, 2242, 2321, 2330, 2332, 2335, 2343, 2344, 2361, 2362, 2373, 2388, 2430, 2433, 2322, 2438, 2444.	1	
2.	2-V-1370-01812/1	4-V-1370-3304/1								85											0.53	1370, 1377, 1389, 1505, 1455, 1465, 1477, 1487.	2	
3.	2-V-1372-01812/1	4-V-1372-3310		Ⓒ	3-V-1372-03038F	92017073	1.05	65	45	100	26	18	135	75	17	20	35			24	0.88	1371, 1372, 1378, 1379, 1390, 1391, 1497, 1506.	3	
4.	2-V-0101-01812/2	4-V-101-3367		Ⓒ	3-V-1370-03038F	92017072	0.61	50	45		26										0.52	101, 102, 103, 169, 1432, 177.	4	
5.	2-V-0104-01812/2	4-V-104-3368		Ⓒ				49		80		11	115	60	13	16	30			28	0.49	104, 170, 1300.	5	
6.	2-V-1373-01812/1	4-V-1373-3316/2	SA 105	Ⓒ	3-V-1373-03038F	92017074	1.70	75	54	115	34	18	155	85	20	25	40			32	1.42	1373, 1380, 1393, 1502, 1458, 1468, 1480, 1490,	6	
7.	2-V-0109-01812/1	4-V-109-3381								100													109,	7
8.	2-V-0537-01812/1	4-V-537-3382								86													537,	8
9.	2-V-0105-01812/1	4-V-105-3369		Ⓒ	3-V-1372-03038F	92017073	1.05	65	54		34	11	135	75	17	20	35					0.85	105, 171.	9
10.	2-V-0538-01812/1	4-V-538-3383						57		38	14													
11.	2-V-1374-01812/1	4-V-1374-3345/1	SA 105	Ⓒ	3-V-1373-03038F	92017074	1.70	75	57	115	38	18	155	85	20	25	40			36	1.38	1374, 1381, 1394, 1507, 1374, 1394, 1459, 1469, 1481, 1491, 1504.	11	
12.	2-V-0106-01812/1	4-V-106-3370		Ⓒ	3-V-1372-03038F	92017073	1.05	65		92		11	135	75	17	20	35					0.80	106, 1173.	12
13.	2-V-1375-01812/1	4-V-1375-3333/1		Ⓒ	3-V-1375-03038F	92017075	2.15	80	66	135	42	18	180	90	22	26	40				40	1.80	1375, 1376, 1382, 1395, 2481.	13
14.	2-V-2476-01812/1	—		Ⓒ	3-V-1372-03038F	92017073	1.05	65	45	96	26		14	135	75	17	20	35			24	0.90	2476, 2477	14
15.	2-V-2478-01812/1	—							49	100	30										28	0.88	2478, 2479.	15
16.	2-V-2480-01812/1	—	SA 105	Ⓒ	3-V-1373-03038F	92017074	1.7	75	57	115	38	14	155	85	20	25	40			36	1.39	2480,	16	
17.	2-V-0539-01812/1	4-V-539-3849				92017074				66	110	42						18						
18.	2-V-1423-01812/1	2-V-1396-01847	SA 105		3-V-1423-03038F	92017088	0.129	30	25	46	14	9	66	30	8	12	20			12	0.119	1396-1399, 1420-1423, 1403-1405, 1539-1541, 1426-1429, 2453, 2459, 2486.	18	
19.	2-V-2465-01812/1	2-V-2465-01847/1	ASTM A 182-F 316		3-V-2465-03038F	92017090																	1498-1501, 2465.	19
20.	2-V-0205-01812/1	(OPEN SLOT DESIGN) 4-V-0205-3363	SA 105	Ⓒ	3-V-1370-03038F	92017072	0.61	50	39	82	24	14	115	60	13	16	30			22	0.53	205, 275, 2222, 2298, 2323, 2345, 2368, 2206, 2208, 2233, 2327, 2339, 2369, 2251.	20	




RETRACED ON 26.7.88
APPD. BY:- S.K. & Kan.

	ASTM A 182-F 316	SOLUTION HEATTREATED	46	
	SA 105	NORMALISED	10	
ITEM NO.	MATL.SPECN.	HEAT TREATMENT	SCRAP SORT	TYPE OF IDENTIFICATION

NOTE:-

1. FOR SL. NOS. ABOVE 20 REF. DRG. 2-V-0000-01896
2. FOR GLAND FLANGES MADE OUT OF PLATES & BLANKINGS REF. 2-V-0000-01847

 Bharat Heavy Electricals Ltd., BOILER PLANT UNIT TIRUCHIRAPALLI-620 014	DRN	NAME T. R. R.	SIGN <i>[Signature]</i>	DATE	NO. VAR
	CHD	N.D. PRL	N.D. PRL	26-7-88	
	APPD	B. JAGADEESAN		22-1-75	

REV. 3	DATE	ALTERED: P.R.K. APPROVED: <u>8-9</u>	REV. 2	DATE 27.6.75	ALTERED: K.B. APPROVED: R.K.	REV. 01	DATE 15.4.75	ALTERED: V.G.K. CHECKED: <u>B-6</u>
C	NEW TABULATED DRAWINGS FOR FORGINGS INCLUDED.		B	SL.NO. 20 ADDED. (PREVIOUSLY THIS VARIETY WAS OF SLOTTED TYPE, AND NOW CHANGED TO HOLE AS PER WORK SIMPLIFICATION SUGGESTION ?)		ZONE @		SL.NO. 18 & 19 INCLUDED. DIMENSION 55 IS CORRECTED TO 50.

GLAND FLANGE

CARD CODE	DRAWING NO.
U 01	2-V-0000-0181

03

1		2		3		4		5		6		7		8																					
99670-0000-A-2																																			
DRAWING NO.																																			
S. NO.		COMP. CODE		DRAWING NO.		MATERIAL SPECIFICATION		RAW MATL SIZE		MATERIAL CODE		GROSS WT.		NET WT.		SCRAP SORT		MxP-6g		TrxP		H		L1		L2		øD		H1		PCD			
1		93 059 075 0000		2-V-2301-02955/1		IS 305 Gr.AB1		CERTIFY		ø30x22		160063550000		0.11		0.05		60		M24x1.5		Tr12x3-7H		18		2		1.5		-		-		-	
2		-		2-V-0231-02955/1						ø40x30		160063560000		0.30		0.13		60		M30x1.5		Tr14x2-7H		28		2		1.5		-		-		-	
3		-		2-V-2252-02955/1						ø40x35		160063560000		0.35		0.12		60		M30x1.5		Tr16x4-7H		32		2.5		1.5		-		-		-	
4		93 060 169 0000		2-V-0203-02955/1						ø40x45		160063560000		0.44		0.12		60		M30x1.5		Tr20x4-7H		40		2.5		1.5		-		-		-	
5		93 061 200 0000		2-V-2251-02955/1						ø50x45		160061980000		0.69		0.15		60		M39x1.5		Tr22X5-7H		41		3.5		1.5		-		-		-	
6		93 102 033 0000		2-V-2257-02955/1						ø50x45		160061980000		0.69		0.20		60		M42X2		Tr24X5-8H		40		3.5		2		-		-		-	
7		93 060 115 0000		2-V-0206-02955/1						ø50x55		160061980000		0.85		0.45		60		M45X1.5		Tr24X5-8H		48		3.5		1.5		-		-		-	
8		93 102 032 0000		2-V-0207-02955/1						ø50x55		160061980000		0.85		0.55		60		M45X1.5		Tr26X5-8H		52		3.5		1.5		-		-		-	
9		93 006 532 0000		2-V-2247-02955/1						ø50x55		160061980000		0.85		0.25		60		M48X2		Tr28X5-8H		50		3.5		2		-		-		-	
10		93 060 911 0000		2-V-0208-02955/1						ø50x60		160061980000		0.93		0.55		60		M48X2		Tr28X5-8H		56		3.5		2		-		-		-	
11		93 061 201 0000		2-V-2258-02955/1						ø70x60		160063540000		1.81		1.20		60		M60X2		Tr32X6-8H		55		4		2		-		-		-	
12		93 060 910 0000		2-V-0210-02955/1						ø70x75		160063540000		2.26		0.73		60		M50X1.5		Tr32X6-8H		71		4		1.5		-		-		-	
13		93 058 447 0000		2-V-2476-02955/2						ø50x55		160061980000		0.85		0.46		60		M45x2		Tr24x3-8H		50		3.5		2		4		10		33	
14		93 058 684 0000		2-V-2478-02955/2						ø50x65		160061980000		1.00		0.55		60		M48x2		Tr28x3-8H		60		3.5		2		4		10		38	
15		93 060 619 0000		2-V-2480-02955/2						ø70x95		160063540000		2.63		1.15		60		M60x4		Tr36x3-8H		88		3.5		3		6		15		47	
16		-		2-V-2481-02955/1						ø70x102		160063540000		2.83		1.34		60		M64x4		Tr40X3-8H		95		3.5		3		-		-		-	
17		93 101 379 0000		2-V-2670-02955/2		ø80x120		160063490000		4.73		1.47		60		M64x4		Tr44x4-8H		115		3.5		3		6		15		54					
18		93 105 485 0000		2-V-2477-02955/1		SA 439 TYPE-D2		ø50x55		-		0.85		0.46		60		M45x2		Tr24x3-8H		50		3.5		2		4		10		33			
19		93 105 486 0000		2-V-2685-02955/1				ø50x65		-		1.00		0.55		60		M48x2		Tr28x3-8H		60		3.5		2		4		10		38			
20		93 105 644 0000		2-V-2690-02955/1				ø55x70		922000550000		1.33		0.55		60		M48x2		Tr28x3-8H		60		3.5		2		4		10		38			
21		93 105 645 0000		2-V-2928-02955/1				ø70x110		920180630000		3.62		1.15		60		M60x4		Tr36x3-8H		88		3.5		3		6		15		47			
22		93 106 960 0000		2-V-M416-02955		IS 305 Gr.AB1		ø70x60		-		1.81		0.40		60		M60X2		Tr32X6-8H		55		4		2		-		-		-			
23		93 107 037 0000		2-V-M420-02955				ø50x45		160061980000		0.70		0.40		60		M48X2		Tr28X5-8H		39		3.5		2		-		-		-			
24		93 107 098 0000		2-V-M418-02955/1				ø50x45		160061980000		0.80		0.40		60		M45X1.5		Tr24X5-8H		30		3.5		1.5		-		-		-			
25		93 108 211 0000		2-V-P338-02955/1		SA 439 TYPE-D2		ø82x120		-		4.73		0.40		60		M64x4		Tr44x4-8H		115		3.5		3		6		15		54			
26		932055920000		2-V-2930-02955		SG IRON		-		92 206 064		2.58		1.47		10		M64x4		Tr44x4-8H		115		3.5		3		6		15		54			
27		932055930000		2-V-2887-02955				-		92 206 065		2.63		1.15		10		M60x4		Tr36x3-8H		88		3.5		3		6		15		47			
28		932055940000		2-V-P481-02955				-		92 206 066		1.055		0.55		10		M48x2		Tr28x3-8H		60		3.5		2		4		10		38			
29		932055950000		2-V-2684-02955				-		92 206 066		1.055		0.46		10		M45x2		Tr24x3-8H		50		3.5		2		4		10		33			

Σ8890-0000-Λ-Σ

ON DIMWARD

SL. No.	DRAWING No.	COMP. CODE	MATL. SPECN.	DIMENSIONS										SCRAP SORT	WT. (kg)	REMARKS
				øD	ød	PCD	øB1	øB2	L	L1	T	T1	W			
01	3-V-N081-06883/02	931040430000	SA 105 NR CERTIFY	50	33	85	21	14	115	60	13	16	30	10	0.53	2"-300 CL.
02	3-V-N025-06883/02	931040440000		50	33	90	24	14	115	60	13	16	30	10	0.54	3"-150&300 CL.
03	3-V-N001-06883/02	931040450000		75	54	115	31	18	155	85	20	25	40	10	1.42	6"-150 CL.
04	3-V-N017-06883/02	931040460000		75	54	115	34	18	155	85	20	25	40	10	1.39	6"-300 CL.
05	3-V-N009-06883/02	931040470000		75	57	115	34	18	155	85	20	25	40	10	1.38	8"-150 CL.
06	3-V-N089-06883/02	931040480000		75	57	115	38	18	155	85	20	25	40	10	1.34	8"-300 CL.
07	3-V-N057-06883/02	931040490000		80	66	135	38	18	180	90	22	26	40	10	1.8	10"-150 CL.
08	3-V-N041-06883/02	931040500000		80	66	135	41	18	180	90	22	26	40	10	1.77	12"-150 CL.
09	3-V-N065-06883/02	931040510000		80	66	135	44	18	180	90	22	26	40	10	1.74	10"-300 CL.
10	3-V-N338-06883/01	931062620000	SA 182 F316 SH CERTIFY	50	33	90	24	14	115	60	13	16	30	46	0.54	3"-150&300 CL.
11	3-V-N339-06883/01	931062630000	SA 182 F316 SH CERTIFY	75	54	115	31	18	155	85	20	25	40	46	1.42	6"-150 CL.
12	3-V-N201-06883/01	931079590000	SA105 NR CERTIFY	50	33	85	21	14	115	60	9	12	30	10	0.40	2"-150 CL.
13	3-V-NP35-06883	932042190000	SA240TY304 SH,CERTIFY	75	57	115	34	18	155	85	20	25	40	46	1.38	8"-150 CL.
14	3-V-NK32-06883	932047450000	SA240TY304 SH,CERTIFY	65	45	100	28	18	135	75	17	20	35	46	0.86	4"-150 CL.
15	3-V-NP55-06883	932048360000	SA 182 F316 SH CERTIFY	80	66	135	38	18	180	90	22	26	40	10	1.8	10"-150 CL.
16	3-V-NP56-06883	932047530000		80	66	135	41	18	180	90	22	26	40	10	1.77	12"-150 CL.
17	3-V-P725-06883	932047940000	SA240TY304 SH CERTIFY	65	49	100	30	14	135	75	17	20	35	46	0.88	4"-300 CL SV
18	3-V-P726-06883	932047950000		75	57	115	38	14	155	85	20	25	40	46	1.39	6"-300 CL SV
19	3-V-NK66-06883	932053640000		50	33	90	24	14	115	60	13	16	30	46	0.54	3"-150&300 CL.

✓

12.5

✓

12.5

15

øB1

ød

L1

L

12.5

15

R1.5

T

T1

øD

øB2-2HOLES

W

PCD

365-121

DEPT VL

CODE 320

TITLE

CS

BHARAT HEAVY ELECTRICALS LTD.,
UNIT: HIGH PRESSURE BOILER PLANT.
TIRUCHIRAPALLI_620014.

SCALE N.T.S.

WEIGHT (KG).

CARD CODE U 01

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT

REFERENCE INFORMATIONSDRAWING NO. 3-V-0000-06883

REV 07

CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.

NO OFF

DESCRIPTION

MATL CODE

MATL SPECN

HEAT TREATMENT

SCRAP SORT

NET WT (kg)

GROSS WT (kg)

DRAWING No

ITEM No

REV. 07

DATE 21.06.19

ALTERED R.P.SINGH CHD & APPD SSK & KRS

REV. 06

DATE 10.06.19

ALTERED R.P.SINGH CHD & APPD SSK & KRS

SL.No. 19 INCLUDED.

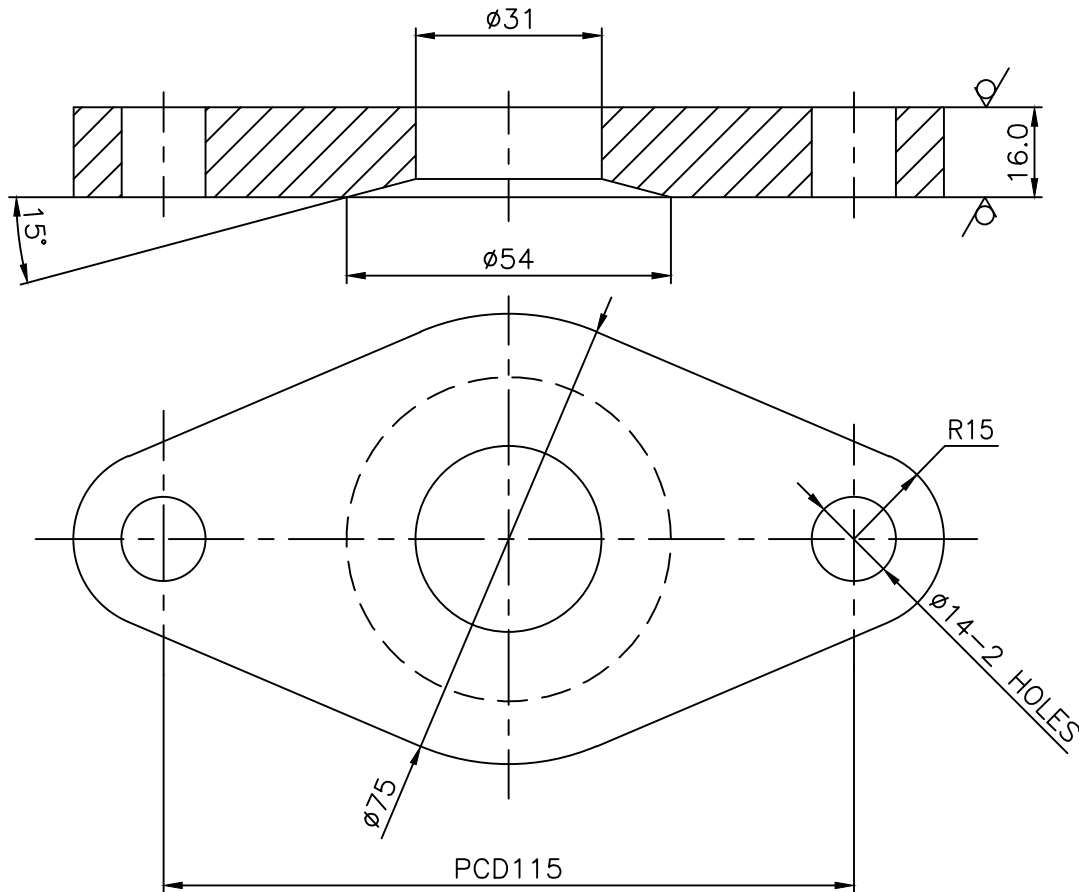
SL.No. 14 TO 18 INCLUDED.




Size A3

FOR TOLERANCES OF UNTOLERANCED DIMENSIONS

ALL DIMENSIONS ARE IN MILLIMETRES.
DURING MANUFACTURE REFER RELEVANT QCP/QP

REV	DATE	ALTERED	R.P.SINGH
01	29.05.18	CHD & APPD	SSK & KRS
SL.No. 02 INCLUDED			



02	SUGG. MIN. SIZE PL.16-150X80	15 114 439	SA240TY304 CERTIFY	SH	46	0.76	1.51	4-V-NP33-26439	009	
								93 204 217 0000		
01	SUGG. MIN. SIZE PL.16-150X80	15 011 026	IS 2062 FE 410WA CERTIFY	NORMALISED	10	0.76	1.51	4-V-NC06-26439	009	
								93 110 806 0000		
NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No	
								COMP.CODE		
<div> 365-122</div> <div>BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI 620014.</div>						DRN	NAME M.SRINIVASAN	SIGN	DATE 02.04.03	NO.OF VAR
					CHD	P.BOOMINATHAN		02.04.03		
					APPD	K.S.RAMAN		02.04.03		
DEPT VL			SCALE	WEIGHT (KG).		REFERENCE INFORMATIONS				NO. OF ITEMS
CODE 320			NTS	-		CAD :C326439				
TITLE					CARD CODE	DRAWING NO.				REV
GLAND FLANGE					U 01	4-V-0000-26439				01