




CERTIFICATE - EN 10204 3.1



CUSTOMER : VAN LEEUWEN STAINLESS B.V. INDUSTRIEWEG 26, 4153 BW BEESD THE NETHERLANDS	MANUFACTURER'S SYMBOL 	ISO 9001 : 2008 - TUV NORD-44100011170-03 EXPIRY DATE : 21-01-2013	MTR NO. 922195 - 3
		AD 2000 MERKBLATT WO REG. NO. 07 202 1423 WP 1022 OS	DATE 16/02/2011
ORDER NO.: 929201 LC NO.: NLNL1NL10M162959 DT: 14-10-2010	TECHNICAL REQUIREMENT ACC. TO AD MERKBLATTEN W2/W9/W10 EXPIRY DATE: FEBRUARY 2011	MATERIAL SPECIFICATION EN 10222 - 5 : 2000	GRADE WNR 1.4404
	PEI 07/13/EC QMS REG. NO. 07 202 1423 WZ 1022 / 08 EXPIRY DATE: FEBRUARY 2011	DIMENSIONAL SPECIFICATION EN 1092 - 1	STAINLESS STEEL FLANGES

SR NO	ITEM DESCRIPTION	HEAT NO	QTY	CHEMICAL ANALYSIS										
				%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Ti	N2 PPM	
1	20/26.9 TYPE 01A	PN40	50	0.020	1.72	0.43	0.018	0.037	16.63	10.02	2.04	-	525	
2	40/48.3 TYPE 01A	PN40	250	0.020	1.72	0.41	0.017	0.039	16.70	10.08	2.02	-	495	
3	40/48.3 TYPE 01A	PN40	40	0.020	1.72	0.41	0.017	0.039	16.70	10.08	2.02	-	495	
4	300/323.9 TYPE 02A	PN10	3	0.021	1.72	0.49	0.023	0.042	16.64	10.04	2.00	-	505	
5	50 TYPE 05A	PN16	100	0.021	1.76	0.44	0.009	0.040	16.55	10.05	2.04	-	735	
6	50 TYPE 05A	PN40	50	0.020	1.70	0.45	0.015	0.041	16.50	10.09	2.09	-	550	
7	65 TYPE 05A	PN16	30	0.020	1.70	0.57	0.012	0.039	16.54	10.05	2.04	-	670	
8	15/21.3 TYPE 11B	PN40	100	0.026	1.76	0.47	0.060	0.045	16.90	10.10	2.04	-	550	

HEAT NO	ITEM DESCRIPTION	TENSILE STRENGTH (N/mm ²)	PROOF STRESS		ELONGATION % (50mm)	REDUCTION OF AREA %	IMPACT TEST CHARPY V-NOTCH AT -20 °C (JULLES)				REMARKS
			Rp0.2 (N/mm ²)	Rp1.2 (N/mm ²)			1	2	3	Avg	
			85298	20/26.9 TYPE 01A			PN40	574.94	252.14	308.16	
85290	40/48.3 TYPE 01A	PN40	538.68	240.45	279.73	60.40	72.54	229	211	233	224
85290	40/48.3 TYPE 01A	PN40	538.68	240.45	279.73	60.40	72.54	229	211	233	224
21189	300/323.9 TYPE 02A	PN10	562.42	256.38	298.15	52.20	71.26	223	206	211	213
82173	50 TYPE 05A	PN16	561.79	282.43	329.38	57.60	70.90	181	173	188	174
84091	50 TYPE 05A	PN40	545.47	261.66	330.37	51.60	70.51	178	164	182	168
83004	65 TYPE 05A	PN16	582.00	276.89	325.32	56.00	72.11	155	189	172	166
84717	15/21.3 TYPE 11B	PN40	556.23	270.59	320.22	57.20	73.03	178	165	180	174

HEAT TREATMENT : INDUCTION/ADD (RS)CONCAST
 SOLUTION ANNEAL RD AT 1050°C AND WATER QUENCHED
DIMENSIONS : CONFIRM WITH THE SPECIFICATION
SURFACE INSPECTION : SATISFACTORY
FLANGE FACE FINISH : Ra 1.60
PMI : NO OBJECTION (100% TESTED WITH MOBILE SPECTRO)
INTER GRANULAR CORROSION TEST : PASSED ICC TEST IN ACCORDANCE WITH DIN EN ISO 3651-2
MICRO OBSERVATION : NO CARBIDE PRECIPITATION OBSERVED ON THE GRAIN BOUNDARIES
RADIOACTIVITY TEST : ALL THE ABOVE MATERIAL IS TESTED FOR RADIOACTIVITY AND FOUND WITH IN THE LIMIT OF BACKGROUND RADIATION

* CARACTERISTIQUES GARANTIES *
 La Societe Viraj Forgings Ltd. garantit que les produits ci-dessus certifiés respectent en leur totalité les prescriptions de l'Article 15 de l'Arrêté Ministeriel du 24 mars 1978 modifié.
 C_{max} ≤ 0.25%, P_{max} ≤ 0.05%, S_{max} ≤ 0.05%
 Rp_{0.2} ≤ 500 N/mm², E_{0.2} ≤ 0.8%, A₅₀ (L₀ = 55V) ≥ 16% en 50mm, Rp_{1.2} ≤ 100%

THE CERTIFY THAT THE MATERIAL DESCRIBED ABOVE HAS BEEN TESTED IN ACCORDANCE WITH THE ORDER/CONTRACT AND IS OF INDIAN ORIGIN.
 Der RWTÜV hat mit Schreiben vom 13.08.2001 auf die Gegenzeichnung verzichtet


 VIRAJ FORGINGS
 VJAY KUMAR PILLAI
 MANAGER O.A.

RUE COPY valid for Yokogawa Europe B.V. order #35000267 our order 57568 - 0

242676