



APPROVED
AD 2000 WO
PED 97/23/EC
MANUFACTURER

VIRAJ

Forgings Ltd.

CERTIFICATE - EN 10204 3.1

CUSTOMER : M/S. VAN LEEUWEN STAINLESS B.V. INDUSTRIESWEG 28 4153 BW BEESD	MANUFACTURER'S SYMBOL	AD 2000 MERKBLATT W0 REG. NO. 04 202 W 130 02 00024	MTR NO. FRG/24389 - D
		TECHNICAL REQUIREMENT ACC. TO	DATE 04.10.2006
		AD MERKBLATTER W2/W0/W10	MATERIAL SPECIFICATION EN 10222 - 5
		PED 97/23/EC QMS REG. NO. 04 202 2 440 02 00002	GRADE WNR 1.4404
DIMENSIONAL SPECIFICATION DIN STANDARD		STAINLESS STEEL FLANGES	

CHEMICAL ANALYSIS														
SR NO	ITEM DESCRIPTION	HEAT NO	QTY	%C	%Mn	%SI	%S	%P	%Cr	%Ni	%Mo	%Ti	N2 PPM	
1	50	DIN2527	ND40	72350	60	0.028	1.73	0.53	0.021	16.67	10.02	2.05	-	690
2	80	DIN2527	ND40	71637	10	0.020	1.68	0.55	0.012	16.70	10.02	2.05	-	600
3	150	DIN2527	ND40	72414	5	0.018	1.80	0.49	0.018	16.68	10.55	2.03	-	600
4	NW40	DIN2566	ND16	69377	35	0.021	1.73	0.44	0.019	16.82	10.22	2.02	-	910
5	40/48.3	DIN2576	ND10	72368	200	0.025	1.72	0.46	0.024	16.70	10.00	2.02	-	570
6	65/63.5	DIN2576	ND10	70364	20	0.020	1.77	0.52	0.007	16.75	10.00	2.02	-	650
7	65/76.1	DIN2633	ND16	71456	150	0.026	1.74	0.46	0.006	16.65	10.05	2.04	-	770

MECHANICAL PROPERTIES										IMPACT TEST				REMARKS
HEAT NO.	ITEM DESCRIPTION	TENSILE STRENGTH (N/mm2)	PROOF STRESS		ELONGATION % (L=5D)	REDUCTION OF AREA %	CHARPY V-NOTCH 10x10mm (J/CM)							
			Rp=0.2% (N/mm2)	Rp=1% (N/mm2)			1	2	3	AVG				
72350	50	DIN2527	ND40	545.88	270.11	60.24	67.80	182	188	178	183			
71637	80	DIN2527	ND40	554.60	284.75	56.62	71.93	192	198	200	197			
72414	150	DIN2527	ND40	556.71	273.14	60.06	69.39	200	204	208	204			
69377	NW40	DIN2566	ND16	554.20	289.99	56.88	71.84	204	198	190	197			
72368	40/48.3	DIN2576	ND10	534.67	286.97	57.84	69.44	196	204	212	204			
70364	65/63.5	DIN2576	ND10	555.12	290.47	56.35	70.00	186	182	178	182			
71456	65/76.1	DIN2633	ND16	562.14	290.69	55.85	71.98	186	182	188	185			

MELTING PROCESS : INDUCTION/OD (BS)CONCAST
 HEAT TREATMENT : SOLUTION ANNEALED AT 1050°C AND WATER QUENCHED
 DIMENSIONS : CONFIRM WITH THE SPECIFICATION
 SURFACE INSPECTION : SATISFACTORY
 PW : NO OBJECTION(100% TESTED WITH MOBILE SPECTRO)
 INTER GRANULAR CORROSION TEST : PASSED IGC TEST IN ACCORDANCE WITH DIN EN ISO 1491-2
 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 objet du present certificat respectent en leur totalite les prescriptions de l'Article 15 de l'Arrete Ministeriel du 24 mars 1978 modifie.
 C<=0.28%, P<=0.05%, S<=0.05%
 Rm<=800 N/mm2, E<=0.9xRm, A%(Lo=5.65So)min.16% en long. R(A-2p)=10500

WE CERTIFY THAT THE MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE ORDER/CONTRACT AND IS OF INDIAN ORIGIN.

Der RWTÜV hat mit Schreiben vom 13.08.2001 auf die Gengenzeichnung verzichtet

INSPECTOR'S STAMP: VF 1

FORGINGS LABEL: VIRAJ FORGINGS LTD. BEP/100

POS: 1

TRUE COPY valid for Yokogawa Europe B.V. order #3500031340, our order 12857 - 0

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BV 200607003