



Maass Flange Corporation

6202 Lumberdale Rd
Houston, Texas 77092



Material Test Certification Certificate Conforms to EN 10204/3.1

ISO 9001:2000
Certified

Sold to: EDGEN MURRAY- ALLOY PRODUCTS GROUP- H-BREEN RD.
8300 BREEN RD.
HOUSTON, TX 77064

Cust. P.O.#: 102467
Order#: 181711

Item 5

Qty	Part Number	Part Description										Heatcode	HeatNumber	Material
1	25110003112	D-FIN F51-F60 10.00 600 RF WN STD (.365 WALL)										F65	42624	F51-F60
C	Min	P	S	Si	Ni	Cr	Mn	N	Cu	Ti	V		Co	W
0.010	1.010	0.020	0.0010	0.530	5.730	22.230	3.130	0.1710	0.220	0.003	0.060		.05	0.010
Cb	Cb+Ta	Al	Fe	Tensile		Yield	Elong.%	R of A %	BHN	Grain				
0.001		0.007		107,463		71,608	42.00	79.23	229.00					

CVN: CVN @ -46C, 108, 120, 122J; L/E 44, 51, 78 mils; shear 50, 60, 80%

Heat Treatment: Solution annealed at 1950F/1065C and water quenched.

Specification: UNS S31803/S32205; AVSA182/IM-09a F51/F60; NACE MRO175 & MRO103-2007; B16.5-2009 as applicable. No weld repair performed.
DIN EN 10222-5 1.4462. Melt practice EAF-AOD. Material is free from mercury contamination.

MADE IN THE USA

MTR: A262-E satisfactory; HRC 20; A923-C loss rate 0.00 MDD; A923-@ 500x below surface & center - unaffected structure; E562 ferrite @ 500x below surface 47.9%, center 47.0%

Item 6

Qty	Part Number	Part Description										Heatcode	HeatNumber	Material
2	2511000113	D-FIN F51-F60 10.00 150 RF BLD										F58	521760	F51-F60
C	Min	P	S	Si	Ni	Cr	Mn	N	Cu	Ti	V		Co	W
0.020	0.810	0.012	0.0080	0.420	5.400	22.450	3.120	0.1520						
Cb	Cb+Ta	Al	Fe	Tensile		Yield	Elong.%	R of A %	BHN	Grain				
		0.012		107,600		74,500	39.20	74.00	229.00					

CVN: CVN @ -50F; 67, 60, 63 ft-lbs, L/E 42, 38, 42 mils, shear 60, 60, 60%; A923-B @ -40F; 120, 129, 122 ft-lbs; L/E 63, 69, 64 mils; shear 100, 100, 100%

Heat Treatment: Solution annealed at 1950F/1065C and water quenched.

Specification: UNS S31803/S32205; AVSA182/IM-09a F51/F60; NACE MRO175 & MRO103-2007; B16.5-2009 as applicable. No weld repair performed.
DIN EN 10222-5 1.4462. Melt practice EAF-AOD. Material is free from mercury contamination.

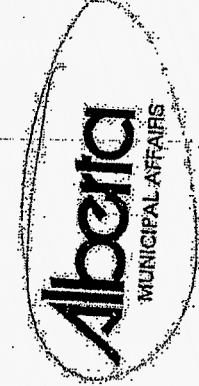
MADE IN THE USA

MTR: A923-C loss rate 0.7 MDD; E562 ferrite 48.5%; +/- 2.0%; Micro @ 500X

We certify that the material represented by this document has been tested and inspected and is in conformance with the purchase order, drawing(s) and specification requirements.

Approved by

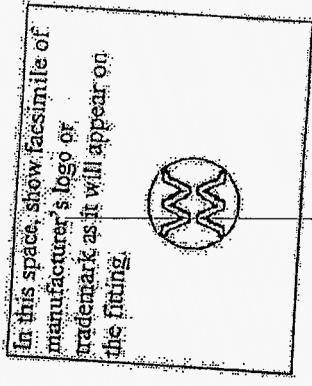
Harold Acord
Quality Assurance Inspector



ALBERTA (MANS USA)
(1) **ABSA**

Alberta Boilers Safety Association

AB-11.01/05



STATUTORY DECLARATION Registration of Fittings

I, David Cook

Vice President

(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)
of Maass Flange Corporation

located at 6202 Lumberdale Road, Houston, Texas 77062-47
(name of manufacturer)

(plant address)

I do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

- ☒ comply with the requirements of Attachment A which specifies the dimensions, materials of construction, pressure/temperature ratings and identification marking of the fittings, or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, Germanisber Lloyd Cert GmbH as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Pipe Flanges. In support of this application, the following information, calculations and/or test data are attached:
Catalogs

DECLARED before me at Maass Flange Corp. in the United States of America

this 16th day of December, 2005
(Month, Day, Year)

(print) David H. Cook

(sign) David H. Cook
(A Commissioner of Oaths)

(Signature of Applicant)

For Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category B16.5, B16.47, 3 B16.36 flanges, etc.

Registration Number: 0 B 6 4 7 2 - 2

Date Registered: JUL 15 2004

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Boiler Discipline.
(For the Administrator/Chief Inspector of Alberta)
Expiry Date: July 13, 2014