

CERTIFIED MATERIAL TEST REPORT
Hackney Ladish, Inc.

P.O. Box 803466 - 5495 Beltline Rd. #290 - Dallas, TX 75254

Phone: (800) 527-4500 Fax: (214) 269-5601

Request for: TAMSA

Date: 06/04/07

Sold to: TAMSA

Ship to:

Heat Code	Quantity	Description / Specifications
EF02VE		1-1/2 STD WELD CAP A/SA 234 - 01 WPB (SMLS) A516-70 106/B1W7128 NORM. 1650 NACE MR0175

Chemical Analysis

Heat Code	Test	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Al
EF02VE	M	.220	1.040	.012	.005	.210	.120	.060	.040	< .010	.0340

Chemical Analysis (cont.)

Heat Code	N	V	B	Ti	Cb	Sn	W	Pb	Co	CE
EF02VE	.0080	< .010	<.0005	<.0100	<.010	.006	<.002	<.001	<.050	.417

Physical Properties

Heat Code	Tensile KSI	Type	Thickness	Yield KSI	% Elong. (4D)	% RA	Hardness HB
EF02VE	83.8	T		59.1	23.0	62.0	138

Charpy Results

Heat Code	Size x 10mm	Type	Temp. (F)	Foot Pounds	Later. Expansion	% Shear
EF02VE						

Test: M=Mill Product

Type: T=Transverse

We certify that the material herein described has been manufactured in accordance with the above standards and specifications and satisfies all the requirements of the latest editions unless otherwise noted. We certify these fittings capable of passing a hydrostatic test compatible with their rating. The above figures are correct as contained in the records of the Company. This information has been electronically transmitted to our customer.
/S/ Glinda LaFleur