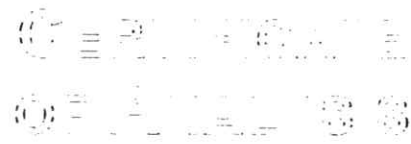




Manufacturing Headquarters
 3001 Darrell Road - Island Lake, Illinois 60084
 phone: 847-526-2166
 fax: 847-526-2241
 toll free: 800-323-1659

Flow Line Division
 2733 Industrial Drive - Sulphur, OK 73086
 ph: 580-622-2048
 fax: 580-622-2058
 toll free: 1-888-533-3722



Customer: _____ No.: _____
 Address: _____
 PO #: _____ Phone #: _____
 Attention: _____ Fax #: _____

Date: **May 23rd, 2018**
 DT #: _____
 Job #: _____
 S.O. #: _____

	ITEM - P/N, Description, Material, Heat Treat	HEAT CODE	QTY	HB	YIELD psi	TENSILE psi	EL%	RA%	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	Al	V
1	P/N: 150341 3 FIG1502 BW SCHXXH M Kemper ES-250, AISI 4130, Normalized, Quenched & Tempered @ 1140°F	GP48	12	266	90,000	113,000	20.0	66.0	0.3	0.52	0.014	0.022	0.25	0.12	1.04	0.18	0.29	0.035	0.003
	LONGITUDINAL CHARPY V-NOTCH IMPACT (ft-lbs) @ -20 ° F											44	40	48	Average 44.00				
2	P/N: 150342 3 FIG1502 BW SCHXXH F Kemper ES-250, AISI 4130, Normalized, Quenched & Tempered @ 1140°F	GX89	12	269	109,700	130,200	20.0	71.2	0.3	0.53	0.006	0.005	0.24	0.17	1.05	0.23	0.15	0.031	0.002
	LONGITUDINAL CHARPY V-NOTCH IMPACT (ft-lbs) @ -22 ° F											89	86	88	Average 87.67				
3	P/N: 150393 3 FIG1502 NUT Kemper ES-330, AISI 4140, Normalized, Quenched & Tempered @ 1200°F	GQ18	12	295	119,700	137,400	15.0	51.9	0.4	0.89	0.011	0.006	0.24	0.13	0.99	0.2	0.33	0.022	0.003
	LONGITUDINAL CHARPY V-NOTCH IMPACT (ft-lbs) @ -22 ° F											34.5	37.5	43.5	Average 38.50				

WE CERTIFY THIS ANALYSIS IS AS FURNISHED ON THE ORIGINAL MILL REPORT OR OBTAINED BY ADDITIONAL LABORATORY TEST - NO WELD REPAIR WAS PERFORMED - THIS MATERIAL WAS NOT EXPOSED TO MERCURY OR OTHER ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURE DURING PROCESSING OR WHILE IN OUR POSSESSION

KEMPER VALVE & FITTINGS CORP.

[M1104917 | 252010-2034 | GP48] [LN: 1] [ST028049-1 | D31502XXHAMUN]