

F10146

1/4" High Pressure Nipple x 4" Long 60K



TEST REPORT



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ISO/IEC 17025
Materials Testing Laboratory

TMI Mill# 44116	TMI Lot # 50255	Customer PO. # 14752	Quantity 2800 ft
Sold to: Swagelok 4922 Pittsburgh Ave. Erie, PA, 16509-6207		Type & Grade 316/316-L Seamless	Size 0.2430"/0.2480" OD 0.0790"/0.0830" ID
Specifications Part# TU4H60 (23-24') Reference Only IPT-35 Rev. 7, [Chem Only: ASTM-A213/A213M Rev. 11a], 110 KSI Min. Tensile, Yield 100 KSI min, ELONG 18% MIN			

Chemical Analysis

HEAT#: 530635

Melt Source / Analysis: SANDVIK-SWEDEN

C	Mn	P	S	Si	Cr	Ni	Mo	Cu
.018	1.642	.019	.001	.368	17.018	11.283	2.065	0.183

Mechanical Properties

Tensile Strength		0.2% Offset Yield Strength		% Elongation	Hardness
136,000	PSI	104,000	PSI	19	* HRC22
135,000	PSI	102,000	PSI	20	* HRC22
134,000	PSI	101,000	PSI	18	* HRC22
137,000	PSI	103,000	PSI	18	* HRC22
136,000	PSI	108,000	PSI	18	* HRC22

Visual	Passed	Dimensional	Passed
Embrittlement	PASSED	Eddy Current	PASSED 10% Notch Level
Profilometer	ID RMS 58	Hydrostatic	PASSED 60,000 PSI
Microstructure	NO CONTINUOUS INTERGRANULAR CARBIDE PRECIPITATION	Micro Examination	NO CARBURIZATION

BORE SAMPLES PASSED

APPROVED FOR PRODUCTION
Jeff Kent
DATE/TIME 12-5-13

Nicholas Ricci

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Nicholas Ricci, Plant Metallurgist 12/06/2012 Page 1 of 1