

Meet demands for higher system pressure

COST-EFFECTIVE HS-50 HIGH PRESSURE HYDRAULIC TUBING™



Hydraulic System Engineers searching for steel tubing to meet today's demands now have a cost-effective solution: HS-50 High Pressure Hydraulic Tubing™ featuring a minimum yield strength of 50,000 psi and 30% minimum

BENEFITS:

- Design for higher system pressures
- Reduce overall system weight
- Reduce fluid turbulence and flow velocity
- Improve fluid flow volume
- Reduce system heat generation



HS-50 High Pressure Hydraulic Tubing™ fills a void in the market for DOM tubing that meets the SAE J2614 specification. HS-50 High Pressure Hydraulic Tubing™ is a High Strength Low Alloy (HSLA) DOM tubing developed to meet the mechanical and chemical composition requirements of SAE J2614. Find out more at www.plymouth.com/hs50.

For even higher pressures, ask us about HS-90™.

Design for
**HIGHER SYSTEM
PRESSURES**



Reduce
**OVERALL
SYSTEM WEIGHT**



Reduce
**FLUID TURBULENCE
& FLOW VELOCITY**



Improve
**FLUID FLOW
VOLUME**



Reduce
**SYSTEM HEAT
GENERATION**



MECHANICAL REQUIREMENTS	YIELD STRENGTH		TENSILE STRENGTH		ELONGATION	APPLICABLE SPECIFICATION
	MPa min	psi min	MPa min	psi min	% min	
HS-50 High Pressure Hydraulic	345	50,025	500	72,500	30	SAE J2614

CHEMICAL COMPOSITION	C% MAX	Mn% MAX	S% MAX	P% MAX	Si% MAX	Al% MAX	MICRO ALLOYING ELEMENTS (Nb, Cb, Ti, V) MAX
HS-50 High Pressure Hydraulic	0.18	1.5	0.035	0.035	0.35	max	0.15

STANDARD SIZE AVAILABILITY*												
TUBE OD (IN.)	TUBE WALL (IN.)											
	0.035	0.049	0.054	0.058	0.065	0.083	0.088	0.095	0.100	0.109	0.120	0.134
	0.375											
	0.500											
	0.625											
	0.750											
	0.875											
	1.000											
	1.125											
	1.250											
	1.375											
	1.500											
	1.625											
	1.750											

*Custom sizes available upon request.

DESIGN BURST PRESSURES FOR 1/2" OD TUBE						
TUBE OD, IN.	WALL THICKNESS, IN.	TUBE ID, IN.	DESIGN PRESSURE, PSI (4:1 DESIGN FACTOR)			
			STEEL 1010 (SAE J524 AND J525)	STEEL 1021 (SAE J2467)	STAINLESS STEEL (304, 316) 4130, HSIA, PLYMOUTH HS-50 HYDRAULIC	COPPER
0.500	0.049	0.402	2,700	3,250	4,050	1,300
0.500	0.058	0.384	3,250	3,900	4,850	1,550
0.500	0.065	0.370	3,650	4,400	5,500	1,750
0.500	0.072	0.356	4,100	4,900	6,150	1,950
0.500	0.083	0.334	4,800	5,750	7,200	2,300
0.500	0.095	0.310	5,550	6,650	8,350	2,650
0.500	0.109	0.282	6,450	7,750	9,750	3,100
0.500	0.120	0.260	7,200	8,650	10,800	3,450

Contact us today to discuss your product requirements and specifications. Our technical team is eager to assist you!



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Made in the USA

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