

FUTURE ALLOYS

ALLOY 317L

SPECIFICATIONS	UNS S31703	ASTM A-240	ASME SA-240								
CHEMICAL COMPOSITION %	MIN	NI 11.0	CR 18.0	MO 3.0	MN ---	SI ---	C ---	N ---	S ---	P ---	FE ---
	MAX	15.0	20.0	4.0	2.0	0.75	0.03	0.1	0.03	0.045	balance
	POISSON'S RATIO 0.3	MELTING RANGE 2540 - 2630 °F			DENSITY 0.29 lb/in ³			ELECTRICAL RESISTIVITY 79.0 microhm-cm at 68° F			
PHYSICAL PROPERTIES	TEMPATURE, °F			70		212		392		572	
	COEFFICIENT OF THERMAL EXPANSION IN/IN °F x 10 ⁻⁶			---		9.2		10.1		10.8	
	THERMAL CONDUCTIVITY Bru · FT/FT ² · hr · °F			7.8		---		---		---	
	MODULAS OF ELASTICITY DYNAMIC, psi x 10 ⁶			29		---		---		---	
MECHANICAL PROPERTIES	TENSILE STRENGTH 75,000 psi					ELONGATION % 40					
	0.2% YEILD STRENGTH 30,000 psi					HARDNESS MAX, Bhn 217					
APPLICATIONS	Food, Pharmaceutical, Marine, Architecture										