



1303 North Service Road East, Unit #1, Oakville, ON L6H 1A7 Phone: (905)842-1700;Fax: (905)842-5802

316/L SEAMLESS PIPE

MATERIAL SPECIFICATIO	NS PI	REPARED BY: H.POPE	REVISION	NDATE: 03/15/2013	
MATERIAL	316/316L STAINLESS STE LENGTH 20-24' PI	EL SEAMLESS PIPE _AIN ENDS	COLD/HOT FINISHED DUAL CERTIFIED		
SPECIFICATIONS		ALL SPECIFICATIONS WITH LATEST YEAR REVISIONS ASTM A 312, ASTM A262 PRACTICE E, ASTM A 999			
CHEMICAL ANALYSIS	ASIM A 312, ASIM A 262 ASME SA 312, NACE MR	-			
Carbon (C)	.035	Tensile Strength	75 KSI	515 Mpa	
Manganses (Mn)	2.00	i chiche en englin	101101	o to inpu	
Phosphorus (P)	.045	Yield Strength	30 KSI	205 Mpa	
Sulfur (S)	.03				
Silicon (Si)	1.00	Elongation	35%		
Chromium (Cr)	16.00-18.00	2 inch min %			
Nickel (Ni)	10.00-14.00				
Molybdenum (Mo)	2.00-3.00				
Titanium (Ti)		Hardness	90 HRB	maximum	
Nitrogen (N)		H E			
Copper (Cu)	o % of Cobalt must be reported				
Cobalt (Co) Th Other	ne % of Cobalt must be reported				
All singular chemistry values an		All singular mochanical v			
		All singular mechanical values are			

MAXIMUM unless otherwise noted

All singular mechanical values are <u>MINIMUM</u> unless otherwise noted

OTHER TEST(S) AND/OR REQUIREMENTS

BEND AND FLATTENING TEST ULTRASONIC, EDDY CURRENT, OR HYDROSTATIC PRESSURE TESTED TYPE OF NON-DESTRUCTIVE ELECTRIC TEST PREFORMED, OR ACTUAL HYDROSTATIC TEST PRESSURE FOR MATERIAL SUBJECT TO THIS TEST. A MERCURY FREE CONTAMINATION STATEMENT A NO WELD REPAIR STATEMENT PMI (Positive Material Identification) TESTED. LINE MARKING TO INCLUDE PMI SOLUTION ANNEALED TEMP. 1900 F / 1040 C MINIMUM AND WATER QUENCHED OR RAPIDLY COOLED HEAT TREATMENT, FINISHED CONDITION AND MELTING PROCESS MUST BE REPORTED. PLAIN ENDS, RANDOM 20-24' LENGTHS ALL PIPE TO BE CONTINUOUSLY LINE MARKED. MARKING INK MUST NOT CONTAIN HALOGENS. EACH SIZE AND HEAT MUST BE BUNDLED SEPARATELY AND CLEARLY TAGGED STANDARD SEA WORTHY PACKING. COMPLETELY WRAPPED WITH LIFTING NYLON STRAPS BUNDLE WEIGHT 2000 LBS MAXIMUM

IMPORTANT:

ORIGINAL CERTIFICATES OF CHEMICAL & PHYSICAL ANALYSIS REQUIRED TWO (2) WEEKS BEFORE SHIPMENT ARRIVES ALL TEST REPORTS MUST STATE COUNTRY OF ORIGIN

ALL TEST REPORTS MUST HAVE THE POSITION AND NAME OF AUTHORIZED PERSON PRINTED ALL TEST REPORTS MUST BE SIGNED

