

尺寸公差 Tolerance

項目 Tolerance	1/4-3/8	8A-10A 1/2" - 3/4"	15A-65A 1" - 3"	80A-200A 4" - 6"	250A-300A
Outside Diameter(OD)	±0.1mm		±1%		
Wall Thickmess(WT)	±10%				
Straight End Lengh(L)	±DoNot Specify , - 0.4 mm				
Radius	±0.8mm		±1.6mm		±3.2mm
R+L(A)	±0.8mm		±1.6mm		±3.2mm

品質保證 Quality Assurance

各向量測試 Measurement Type	316LBA	316LEP
表面缺陷數(EA)Surface Defect (EA)	-----	≤20
氧化層厚度(A)Oxide Thinkness(A)	-----	≥20
鉻鐵比&氧化鉻對氧化鐵比 Cr/Fe Ratio	-----	≥1.5
微粒子數量 Particle Density	1PC@0.3um	1PC@0.1um
油份測定 (mg/ft²) Oil Density (Mg/ft²)	≤0.01	≤0.01

材質成份 Material

JIS	ASTM	C	Si	Mn	P	S	Ni	Cr	Mo
SUS304	(SISI 304)	≤0.08	≤1.00 (≤0.75)	≤2.00	≤0.040	≤0.030	8.00~11.00	18.00~20.00	-----
SUS304L	(AISI 304L)	≤0.030 (≤0.035)	≤1.00 (≤0.75)	≤2.00	≤0.040	≤0.030	9.00~13.00 (8.00~13.00)	18.00~20.00	-----
SUS316	(AISI 316)	≤0.08	≤1.00 (≤0.75)	≤2.00	≤0.040	≤0.030	10.00~14.00	16.00~18.00	2.00~3.00
SUS316L	(AISI 316L)	≤0.030 (≤0.035)	≤1.00 (≤0.75)	≤2.00	≤0.040	≤0.030	12.00~16.00 (10.00~16.00)	16.00~18.00	2.00~3.00

管內研磨處理 Inside Surface Process Grade

研磨方式 Process	等級稱呼 Abbteviatoin	尺寸範圍 Size Range	粗糙度 Roughness	
			RA	RY max
精抽+光輝處理 Cold Pilger Mill+BA	BA	≤100A	0.4um	3.0um
機械拋光(環狀) Mechanical Polishment (Circulation)	MP	65A≤OD≤100A	0.4um	3.0um
		125A≤OD≤300A	0.5um	4.0um
		≤800A	0.5um	5.0um
機械拋光(直線) MP (Longitudinal)	MP	65A≤OD≤100A	0.4um	3.0um
機械拋光+電解嚴磨 MP +Electropolishment	MP+EP	65A≤OD≤100A	0.3um	3.0um
		125A≤OD≤300A	0.3um	3.0um
BA+電解研磨 BA+EP	EP	≤50A	0.2um	0.5um

包裝等級 Package Grade

項目	AP	MP	MP+EP	BA	EP
最終洗淨 Final Cleaning	無油處理 Degreasing	無油處理 Degreasing	無油處理 Degreasing (C/R1000)	精密洗淨(C/R1000)	精密洗淨(C/R1000)
內表面處理 Inside Surface Proces	-----	機械拋光 MP	機械+電解 MP+EP	精抽+機械 Cold Pilger Mill	電解研磨 BA+EP
內表面粗糙度 Inside Surface Roughness	≤100A=(4")	RY≤2.5um	RY≤3.0um	RY≤2.0um	RY≤3.0um
	125A~350A	-----	RY≤4.0um	RY≤2.5um	-----
	≤800A	-----	RY≤5.0um	RY≤3.0um	-----

NIHON SUPER CLEAN PIPE AND TUBE

Standard: JIS G3459
 JIS G3463
 ASTM A269
 ASTM A312



SPECIFICATION						
PIPE SIZE (A - SIZE)				TUBE SIZE (INCH - SIZE)		
Normal Pipe	Outside Diameter at End	Wall Thickness at End		Normal Tube	Outside Dlameter at End	Wall Thlckness at End
		T				
	OD	5S	10S		OD	T(T1,T2)
8A	13.8	1.20	1.65	1/8"	3.18	0.7
10A	17.3	1.20	1.65	1/4"	6.35	1.0(0.89)
15A	21.7	1.65	2.10	3/8"	9.53	1.0(0.89)
20A	27.2	1.65	2.10	1/2"	12.70	1.0,1.24(1.65)
25A	34	1.65	2.80	5/8"	15.88	1.0(1.24)
32A	42.7	1.65	2.80	3/4"	19.05	1.24,1.65
40A	48.6	1.65	2.80	1"	25.40	1.24,1.85
50A	80.5	1.65	2.80	1 1/4"	31.80	1.65
65A	76.3	2.10	3.00	1 1/2"	38.10	1.65
80A	89.1	2.10	3.00	2"	50.80	1.65
100A	114.3	2.10	3.00	2 1/2"	63.50	1.65
125A	139.8	2.80	3.40	3"	76.20	1.65
150A	185.2	2.80	3.40	4"	101.60	2.11
200A	216.3	2.80	4.00	5"	127.00	2.77,3.05
250A	267.4	3.40	4.00	6"	152.40	2.77,3.05
300A	318.5	4.00	4.50			