



KUZE CLEAN PIPE

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HIGH CLEANLINESS SEAMLESS/ WELDED STAINLESS STEEL PIPE
FOR SEMICONDUCTOR/ LIQUID CRYSTAL PLANTS
FOR BIOCHEMICAL/ PHARMACEUTICAL/ FOOD PROCESSING PLANTS

CP11-1JE

●可登録KUZE 官网浏览产品信息。

Please visit our Web site for further information.

株式会社ステンレス久世 / 株式会社久世ベローズ工業所

STAINLESS KUZE CO., LTD. / KUZE BELLOWS KOGYOSYO CO., LTD.

URL/ <http://www.kuze.com/>



KUZE

不锈钢管件制造技术处于世界领先水平。

得益于不断成熟的前沿技术，KUZE追求更高品质的不锈钢管件。

KUZE不锈钢洁净管为满足客户的不同需求，迄今为止已进行了多次品质改良。

工厂彻底贯彻实施ISO9001认证品质管理系统，母材采购后，可进行冷加工、热处理及精密清洗等，具备综合生产能力。

未来，KUZE也将继续维持其技术的世界领先水平，从而更好地满足客户需求。

KUZE is a world leader in key technology.

Due to the speed of technological development, continuous improvement is necessary to produce the highest quality pipes.

KUZE Clean Pipes has continued to maintain its leading position by developing its integrated production methods to cover all areas such as the processing between cold drawing, heat treatment, and precision washing. Also, starting from the mother pipes acceptance procedures, all processes conform with our Quality Management System which is in accordance with ISO9001.

In the future KUZE will continue to develop its world-class technology in order to satisfy the needs of its customers.



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产品种类繁多，满足客户多样需求。

We support our customers by producing many different types of pipe.

KUZE产品种类繁多，可满足客户的不同需求。

根据客户的不问用途及目的，可选择高品质KUZE V-3(SUS316L) EP 规格不锈钢洁净管、或高性价比产品KUZEWEL SUS304 AP规格不锈钢洁净管。

KUZE supports its customers by producing a wide variety of pipes. For example the high quality V-3 grade SUS316L EP tube, or KUZEWEL which is a high performance SUS304 AP grade clean pipe. From the wide range available customers are sure to find a product that fits their specifications.

产品 Products

无缝洁净管 SEAMLESS CLEAN PIPE

无缝钢管制造尺寸范围广，涵盖小口径1/16"至大口径400A规格，钢种选择丰富，拥有一般SUS304 材质到高纯流体配管使用SUS316L三次熔炼(V-3)材质等多种钢种。

KUZE produces a wide variety of seamless steel pipes, from those manufactured with a general SUS304 material of (1/16" - 400A), to those produced with a triple melted SUS316L material (V-3), which is used for high purity fluid piping, in both small and large diameters.

有缝洁净管 (KUZEWEL). WELDED CLEAN PIPE

有缝钢管制造尺寸范围广，涵盖中径3/4"至大口径800A规格，具有优越的性价比。

Our welded pipe is particularly cost effective and can be provided in a wide range of diameters from medium to large (3/4" - 800A).

钢种 Steel Type

无缝洁净管 SEAMLESS CLEAN PIPE

标准钢种
Standard Material

SUS304
SUS316
SUS316L

适用于半导体、液晶面板行业的多次熔炼材质
Semiconductor/Liquid Crystal Plants
(Double/Triple melted steel, SUS316L)

V-3
V-2
V-1

有缝洁净管 (KUZEWEL) WELDED CLEAN PIPE

标准钢种
Standard Material

SUS304
SUS316L

半导体、液晶面板行业用
For Semiconductor/Liquid Crystal Plants

SUS316L

表面处理 Surface Condition



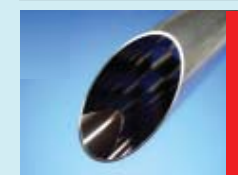
AP Grade
酸洗 Anneal & Pickled



MP Grade
机械研磨 Mechanical Polished
(Outer/Inner surface)



BA Grade
光亮退火 Bright Annealed

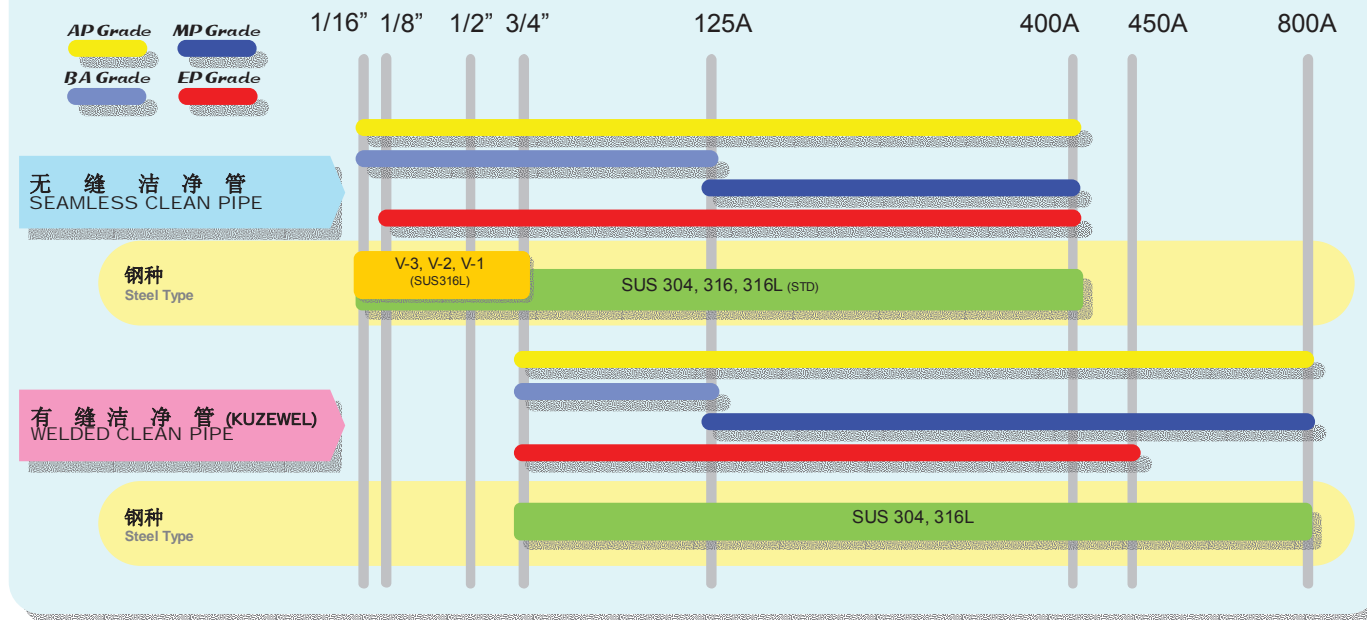


EP Grade
电解抛光 Electro Polished
(Inner surface)

制造范围广，满足客户不同需求。

We support our customers with our broad manufacturing range.

制造范围 Manufacturing Range



钢种 Steel Type

标准材质
Standard material

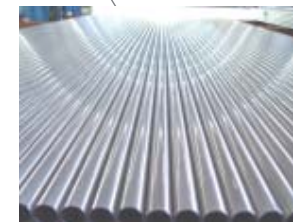
SUS304
SUS316
SUS316L

多次熔炼材质 SUS316L
Double/ Triple melted steel

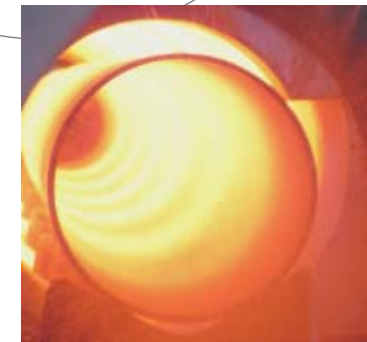
V-3
V-2
V-1

除标准 SUS304, SUS316, SUS316L外, 半导体/液晶面板行业可选择高纯流体用多次熔炼材质。(Seamless clean pipe)

Apart from standard SUS304, SUS316 and SUS316L stainless steel, pipes can also be produced from Double/ Triple melted steel, for use with high purity fluids in semiconductor and liquid crystal plants.



洁净钢管 (BA Grade)
Clean Pipe (BA Grade)



大口径管用连续退火炉
Continuous Annealing Furnace



大口径管冷拔设备 (400A)
Cold Draw-Bench up to 400A



大口径管拉伸设备 (450A)
Straightener up to 450A

外径范围 1/16" ~ 800A

“KUZE 洁净管” 涵盖范围广, 可对应所有客户需求。
客制造性价比优越的“KUZEWELL 洁净管” (有缝管)。

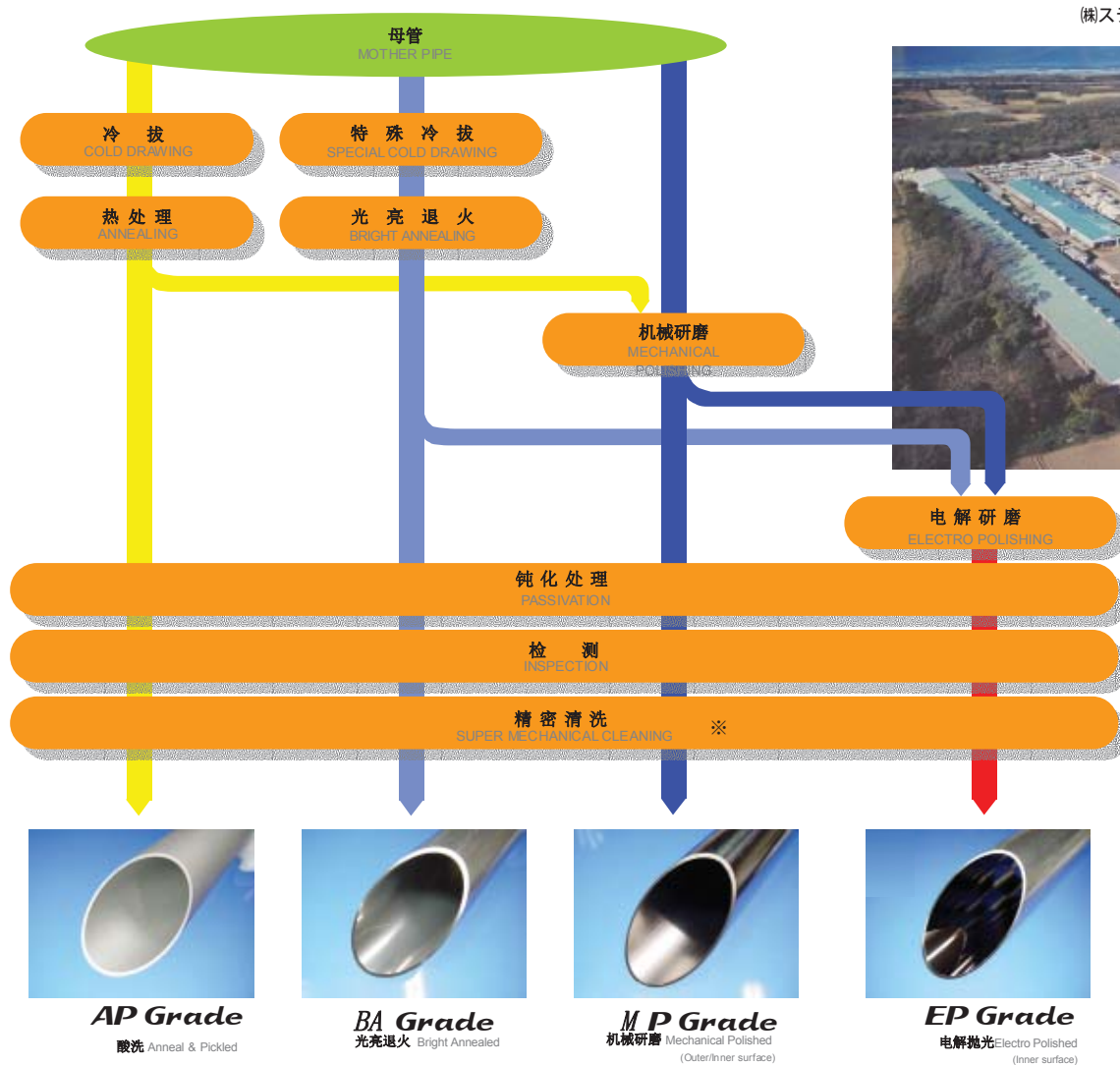
Outer diameter from 1/16" to 800A.

KUZE Clean Pipe comprises a broad range which will suit all requirements. Also manufactured is the "KUZEWELL clean pipe" (welded pipe) which is extremely cost effective.

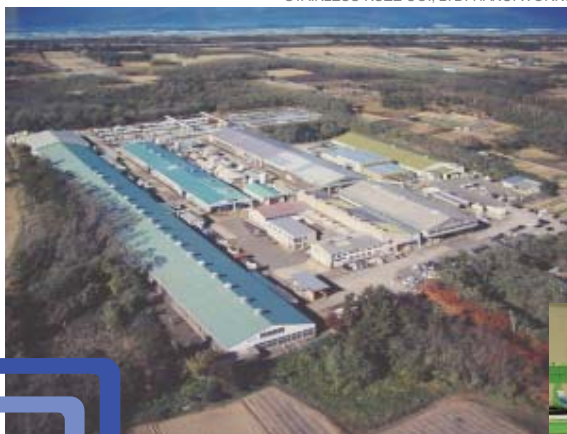
具备综合生产能力，以更好对应客户。

We support our customers needs with our totally integrated production system.

制造工艺 Manufacturing Process



(株)ステンレス久世 羽咋工場 (石川県羽咋市)
STAINLESS KUZE CO., LTD. HAKUI WORKS



从拉拔到电解研磨、精密清洗等，所有加工在KUZE 羽咋工厂完成，工厂生产严格贯彻实施品质管理系统，向客户提供优质产品。

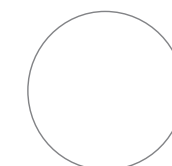
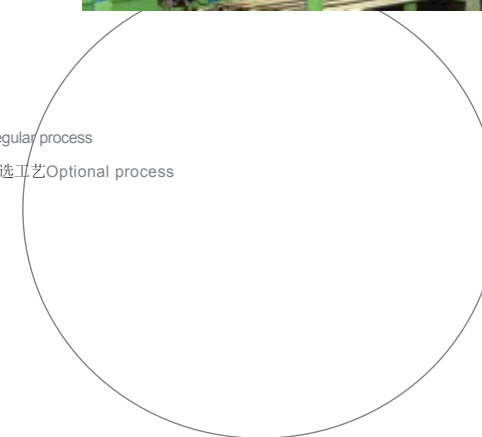
In our Hakui works, we utilize an integrated production system for all processes, including cold working, electro polishing and precision washing. Products are then dispatched in accordance with our thorough Quality Management System.



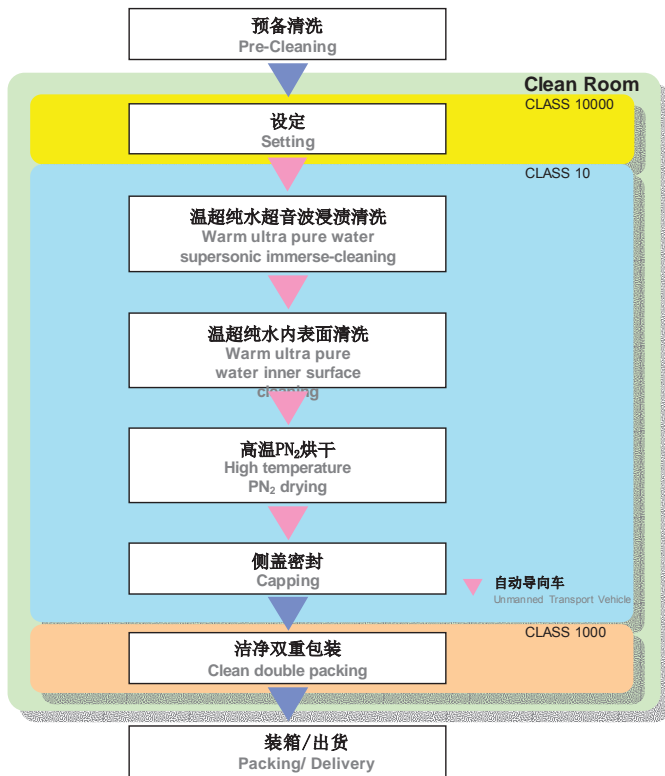
特殊冷拔设备
Special Cold Draw-Bench

※ EP Grade: 标准工艺 Regular process

AP/BA/MP Grade: 备选工艺 Optional process



精密清洗工艺 Super Mechanical Cleaning Process



无尘室 (自动导向车)
Clean Room (Unmanned Transport Vehicle)

特征

Features

确立总系统

可实施EP管、BA管、MP管及AP管从制造到精密清洗的全部工艺流程。

Established integrated systems

We manufacture all EP, BA, MP and AP pipes using well-established integrated systems, from manufacturing through to super mechanical cleaning.

清洗区占地面积广

无尘室有效面积为 382.5m², 占地广, 可实施清洗的钢管规格最长可达6m (20ft)。

Cleaning in a spacious clean room

Our spacious clean room has a usable area of 382.5 m², which enables us to clean pipes with a maximum length of up to 6m (20ft).

高洁净度清洗环境

从温超纯水清洗、高温PN₂烘干到管帽密封的所有生产流程均在Class 10级无尘室中实施进行。

Cleaning in accordance with Class 10 cleanliness ratings

Cleaning with ultra pure warm water, drying with high temperature PN₂ and capping are performed in clean ambient conditions, which comply with Class 10 cleanliness ratings.

彻底实施盐害预防对策

无车市空调系统采用精密过滤器、海盐粒子过滤器及除臭过滤器。

Salt damage preventative measures

Particle filters and deodorising filters are used to totally eliminate the possibility of salt damage.

超音波清洗+温超纯水浸渍清洗

清洗之前, 先用温超纯水浸渍清洗, 之后用超音波清洗配合温超纯水浸渍清洗同时进行清洗工序。

Combined application of supersonic cleaning

After preliminary, warm, pure water immersion cleaning, supersonic cleaning is applied together with warm, ultra pure water immersion cleaning.

引进自动导向车

为预防粉尘发生, 引进自动导向车, 降低污染。

Unmanned vehicles are used for transportation

An unmanned vehicle and dust-free transportation systems are utilized to protect pipes from contamination during in-house transportation.

精密清洗质量保证值

Super Mechanical Cleaned Quality Assurance Values

检测项目 Inspection Items	保证值 Assurance Values			
	AP Grade	BA Grade	MP Grade	EP Grade
油分检测 Oil content measurement	0.1mg/ft ² 以下 0.1mg/ft ² or lower		0.01mg/ft ² 以下 0.01mg/ft ² or lower	
颗粒检测 Particle count	大于 0.3μm 颗粒少于 5/cf No. of particle above 0.3μm is 5/cf or less	大于 0.1μm 颗粒数量少于 5/cf No. of particle above 0.3μm is 5/cf or less		大于 0.1μm 颗粒少于 1/cf No. of particle above 0.3μm is 5/cf or less
液体电阻测试 Liquid resistivity measurement 离子析出检测 Eluant ion check			大于 5MQ-cm 5MQ-cm or over	
离子色谱分析 Ion chromatography analysis 离子析出检测 Eluant ion check			小于 10ng/cm ² 10ng/cm ² or lower	小于 5ng/cm ² 5ng/cm ² or lower
露点测量 Dew point measurement			低于 -75°C -75°C or lower	

Note: 保证值适用于半导体及液晶面板行业。
*离子色谱分析及露点检测为选择性项目。
These are assurance values for semiconductor/liquid crystal plants.
* Ion chromatography analysis and Dew point measurement are optional items.



洁净双重包装
Clean Double Packing

标准尺寸/尺寸公差

STANDARD SIZE/ DIMENSION TOLERANCE

半导体/液晶面板行业适用标准尺寸

STANDARD SIZES FOR SEMICONDUCTOR AND LIQUID CRYSTAL PLANTS

For AP | BA | MP | EP Grade

外径 Outer Diameter			壁厚 Wall Thickness (mm)		
mm	inch	A size	mm	SCH5S	SCH10S
3.18	1/8"		0.51 ^{*1}	0.71 ^{*1}	
6.35	1/4"		0.89 ^{*1}	1.0 ^{*1}	
9.53	3/8"		0.89 ^{*1}	1.0 ^{*1}	
12.7	1/2"		1.0 ^{*1}	1.24 ^{*1}	
15.88	5/8"		1.0 ^{*1}	1.24 ^{*1}	
19.05	3/4"		1.24 ^{*1}	1.65	
25.4	1"		1.24 ^{*1}	1.65	
10.5		6A		1.0 ^{*1}	1.2 ^{*1}
13.8		8A		1.2 ^{*1}	1.65 ^{*1}
17.3		10A		1.2 ^{*1}	1.65 ^{*1}
21.7		15A		1.65	2.1 ^{*1}
27.2		20A		1.65	2.1 ^{*1}
34.0		25A		1.65	2.8 ^{*1}
42.7		32A		1.65	2.8 ^{*1}
48.6		40A		1.65	2.8 ^{*1}
60.5		50A		1.65	2.8 ^{*1}
76.3		65A		2.1	3.0 ^{*1}
89.1		80A		2.1	3.0 ^{*1}
101.6		90A		2.1	3.0 ^{*1}
114.3		100A		2.1	3.0 ^{*1}
139.8		125A		2.8	3.4
165.2		150A		2.8	3.4
216.3		200A		2.8	4.0
267.4		250A		3.4	4.0
318.5		300A		4.0	4.5
355.6		350A		4.0	5.0
406.4		400A		4.5	5.0
457.2		450A		4.5 ^{*2}	5.0 ^{*2}
508.0		500A		5.0 ^{*2}	5.5 ^{*2}
558.8		550A		5.0 ^{*2}	5.5 ^{*2}
609.6		600A		5.5 ^{*2}	6.5 ^{*2}
660.4		650A		5.5 ^{*2}	8.0 ^{*2}
711.2		700A		5.5 ^{*2}	8.0 ^{*2}
762.0		750A		6.5 ^{*2}	8.0 ^{*2}
812.8		800A			8.0 ^{*2}

Note:
标准规格为 4m/支。其他规格欢迎咨询。

1 仅限无缝钢管。
2 仅限有缝钢管。
Nominal pipe length is 4m. Please contact us for details of other sizes.
1 Only available as SEAMLESS CLEAN PIPE.
2 Only available as WELDED CLEAN PIPE.

半导体/液晶面板行业适用尺寸公差

DIMENSION TOLERANCES FOR SEMICONDUCTOR AND LIQUID CRYSTAL PLANTS

For AP Grade

外径 (mm) Outer Diameter	外径公差 Outer diameter tolerance	壁厚 (mm) Wall Thickness	壁厚公差 Wall thickness tolerance
up to 27.2	±0.3mm	up to 2.0	±0.2mm
34.0 – 318.5	±1%	over 2.0	±10%
355.6 – 508.0	±0.5% ^{*1}	4.0/4.5/5.0/5.5	+15% -12.5%
558.8 – 812.8		5.0/5.5/6.5	-12.5% ^{*2}
		8.0	-10% ^{*2}

Note:
该尺寸公差适用于标准尺寸。
标准尺寸外的尺寸公差请咨询KUZB。*1 根据周长进行测量。
*2 下限值。
These tolerances are applicable to standard sizes. Please contact us for the tolerances of any other sizes.
*1 The outer diameter is calculated according to the length of the circumference.
*2 Minimum value

For BA | MP | EP Grade

外径 Outer Diameter			外径公差 (mm)	壁厚公差
mm	inch	A size	Outer diameter tolerance	Wall thickness tolerance
3.18	1/8"		+0.06 -0	±12.5%
6.35	1/4"		+0.05 -0	
9.53	3/8"		+0.06 -0	
12.7	1/2"		+0.07 -0	
15.88	5/8"		+0.08 -0	
19.05	3/4"		+0.09 -0	
25.4	1"		±0.10	
10.5		6A	±0.08	±10%
13.8		8A		
17.3		10A		
21.7		15A	±0.10	
27.2		20A		
34.0		25A		
42.7		32A	±0.30	
48.6		40A		
60.5		50A		
76.3		65A	±0.60	
89.1		80A	±0.70	
101.6		90A	±0.80	
114.3		100A	±1.00	
139.8		125A	±1.0%	
165.2		150A		
216.3		200A		
267.4		250A		
318.5		300A		
355.6		350A		
406.4		400A		
457.2		450A		
508.0		500A		
558.8		550A		
609.6		600A		
660.4		650A		
711.2		700A		
762.0		750A		
812.8		800A		

Note:
该尺寸公差适用于标准尺寸。
请注意：根据表面处理不同，制造范围不同。标准尺寸外的尺寸公差请咨询KUZB。
These tolerances are applied to standard sizes.
The manufacture range changes with surface condition.
Please contact us for details of other sizes.

生物、医药及食品行业适用 标准尺寸及尺寸公差

STANDARD SIZES AND DIMENSION TOLERANCES FOR BIOCHEMICAL, PHARMACEUTICAL AND FOOD PROCESSING PLANTS

For BA | MP | EP Grade

外径 (mm) Outer Diameter	外径公差 (mm) Outer diameter tolerance	壁厚 (mm) Wall Thickness	壁厚公差 Wall thickness tolerance
25.4	±0.15	1.2	±10%
31.8	±0.16	1.2	
38.1	±0.19	1.2	
50.8	±0.25	1.5	
63.5	±0.25	2.0	
76.3	±0.25	2.0	
89.1	+0.30 -0.40	2.0	
101.6	+0.35 -0.40	2.0	
114.3	+0.40 -0.60	3.0	
139.8	+0.40 -0.80	3.0	
165.2	+0.40 -1.20	3.0	

Note:
标准规格为 4m/支。其他规格欢迎咨询。
外径根据周长测量计算。
请注意：根据表面处理不同，制造范围不同。
标准尺寸外的尺寸公差请咨询KUZB。
Nominal pipe length is 4m. Please contact us for other sizes.
The outer diameter is calculated according to the length of the circumference.
The manufacture range changes with surface condition.
Please contact us for details of other sizes.

钢种/化学成分

MATERIAL/ CHEMICAL COMPOSITION

无缝洁净钢管 SEAMLESS CLEAN PIPE

标准钢种
Standard Material

		C	Si	Mn	P	S	Ni	Cr	Mo
SUS304TP	JIS	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-11.00	18.00-20.00	
	代表例 Typical example	0.02	0.47	1.09	0.028	0.002	9.07	18.25	
SUS316TP	JIS	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	10.00-14.00	16.00-18.00	2.00-3.00
	代表例 Typical example	0.02	0.45	0.84	0.026	0.001	11.16	17.28	2.17
SUS316LTP	JIS	max 0.030	max 1.00	max 2.00	max 0.045	max 0.030	12.00-16.00	16.00-18.00	2.00-3.00
	管理值※ Control value	max 0.027	max 0.50	max 1.00	max 0.035	max 0.0025	12.50-13.10	16.50-17.50	2.00-3.00
	代表例 Typical example	0.019	0.35	0.71	0.027	0.001	12.64	16.68	2.20
SUS304TBS	JIS	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-10.50	18.00-20.00	
	代表例 Typical example	0.02	0.43	1.04	0.030	0.006	9.09	18.50	
SUS316LTBS	JIS	max 0.030	max 1.00	max 2.00	max 0.045	max 0.030	12.00-15.00	16.00-18.00	2.00-3.00
	代表例 Typical example	0.019	0.37	0.76	0.025	0.001	12.59	17.37	2.15

Note: ※ 适用于外径小于100A 规格
※ Control value of SUS316L is set for 100A or smaller pipe.

多次熔炼不锈钢材质(SUS316LTP) 半导体/液晶面板用
Double/ Triple Melted Steel for Semiconductor and Liquid Crystal Plants

		C	Si	Mn	P	S	Ni	Cr	Mo	O _(ppm)
V-3	管理值 Control value	max 0.010	max 0.30	max 0.03	max 0.020	max 0.003	14.00-15.00	16.00-17.00	2.00-3.00	max 10
	代表例 Typical example	0.005	0.15	0.01	0.005	0.001	14.85	16.75	2.90	6
V-2	管理值 Control value	max 0.015	max 0.50	max 0.05	max 0.020	max 0.003	14.00-15.00	16.00-17.00	2.00-3.00	max 20
	代表例 Typical example	0.006	0.09	0.03	0.004	0.002	14.72	16.37	2.83	8
V-1	管理值 Control value	max 0.020	max 0.50	max 0.30	max 0.030	max 0.003	14.00-15.00	16.00-17.00	2.00-3.00	max 30
	代表例 Typical example	0.007	0.41	0.22	0.022	0.002	14.79	16.26	2.88	6

半导体/液晶面板行业适用 多次熔炼不锈钢材质(SUS316LTP)
Double/ Triple Melted Steel for Semiconductor and Liquid crystal Plants
V-3: 三次熔炼材质 Triple Melted Steel (VIM + VAR + VAR)
V-2: 二次熔炼材质 Double Melted Steel (VIM + VAR)
V-1: 二次熔炼材质 Double Melted Steel (EF/RH + VAR)

VIM: 通过真空诱导炉溶解 Vacuum Induction Melting
VAR: 通过真空电弧炉(再次)溶解 Vacuum Arc Remelting
EF: 电炉 Electro Furnace
RH: 回流式真空脱气炉 Rheinstahl Hüttenwerke Heraeus

有缝洁净钢管 (KUZEWELL) WELDED CLEAN PIPE

标准钢种
Standard Material

		C	Si	Mn	P	S	Ni	Cr	Mo
SUS304TP	JIS	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-11.00	18.00-20.00	
	代表例 Typical example	0.04	0.50	0.76	0.036	0.014	8.08	18.14	
SUS316LTP	JIS	max 0.030	max 1.00	max 2.00	max 0.045	max 0.030	12.00-16.00	16.00-18.00	2.00-3.00
	代表例 Typical example	0.015	0.60	1.80	0.032	0.002	13.03	17.27	2.08
SUS304TBS	JIS	max 0.08	max 1.00	max 2.00	max 0.045	max 0.030	8.00-10.50	18.00-20.00	
	代表例 Typical example	0.04	0.55	0.78	0.030	0.007	8.04	18.06	
SUS316LTBS	JIS	max 0.030	max 1.00	max 2.00	max 0.045	max 0.030	12.00-15.00	16.00-18.00	2.00-3.00
	代表例 Typical example	0.012	0.57	1.69	0.025	0.004	12.10	17.38	2.09

适用于半导体、液晶面板行业
For Semiconductor and Liquid Crystal Plants

		C	Si	Mn	P	S	Ni	Cr	Mo
SUS316LTP (For semiconductor/ liquid crystal plants)	JIS	max 0.030	max 1.00	max 2.00	max 0.045	max 0.030	12.00-16.00	16.00-18.00	2.00-3.00
	管理值※ Control value	max 0.030	max 0.50	max 1.00	max 0.045	max 0.005	12.00-16.00	16.00-18.00	2.00-3.00
	代表例 Typical example	0.014	0.38	0.76	0.033	0.001	12.88	17.34	2.22

Note: ※ 适用于外径小于100A 规格
※ Control value of SUS316L is set for 100A or smaller pipe.

拉伸测试

TENSION TEST

		0.2%耐力 (N/mm ²) Yield Strength	拉伸强度 (N/mm ²) Tensile Strength	拉伸(%) Elongation	
半导体/液晶面板行业 For Semiconductor/ Liquid Crystal Plants	SUS304TP	JIS	min 205	min 520	min 35
		代表例 Typical example	251	619	59
	SUS316TP	JIS	min 205	min 520	min 35
		代表例 Typical example	278	605	53
	SUS316LTP	JIS	min 175	min 480	min 35
		代表例 Typical example	260	587	62
生物、医药及食品行业 For Biochemical/ Pharmaceutical/ Food Processing Plants	SUS304TBS	JIS	-	min 520	min 35
		代表例 Typical example	-	605	55
	SUS316LTBS	JIS	-	min 480	min 35
		代表例 Typical example	-	552	61

硬度测试

HARDNESS TEST

		维氏硬度 Vickers Hardness 代表例 Typical example	
无缝洁净钢管 SEAMLESS CLEAN PIPE	SUS316LTP-S-C OD34.0mmxWT1.65	144	
有缝洁净钢管 (KUZEWEL) WELDED CLEAN PIPE	SUS316LTP-A-C OD34.0mmxWT1.65	母材部分 Base Metal	焊接部分 Weld Bead
		138	147

	无缝洁净钢管 SEAMLESS CLEAN PIPE	有缝洁净钢管(KUZEWEL) WELDED CLEAN PIPE
微结构图像 Micro structure x100		
粒度图像 Grain size x100		
SEM 图像 SEM x400 EP Grade 内表面 Inner surface		

内表面粗糙度

INNER SURFACE ROUGHNESS

适用于半导体、液晶面板行业

FOR SEMICONDUCTOR AND LIQUID CRYSTAL PLANTS

外径 Outer Diameter mm	壁厚 Wall Thickness mm	内表面粗糙度保证值 Inner surface roughness assurance value			
		AP Grade	BA Grade	MP Grade	EP Grade
3.18	0.51	Ry ≤ 25μm Ra ≤ 100μinch	Ry ≤ 4.5μm	Ry ≤ 0.5μm Ra ≤ 10μinch	
6.35	1.0				
9.53	1.0				
12.7	1.0				
15.88	1.0				
19.05	1.24				
25.4	1.24				
10.5	1.0				
13.8	1.2				
17.3	1.2				
21.7	1.65				
27.2	1.65				
34.0	1.65				
42.7	1.65				
48.6	1.65				
60.5	1.65				
76.3	2.1				
89.1	2.1				
101.6	2.1				
114.3	2.1				
139.8	2.8				
165.2	2.8				
216.3	2.8				
267.4	3.4				
318.5	4.0				
355.6	4.0				
406.4	4.5				
457.2	4.5				
508.0	5.0				

Note:
关于其他尺寸的相关保证值, 请向KUZE咨询。
KUZE可供应其他特殊规格。

Please contact us for other size assurance values than those shown here.
We can supply also other special edition.

适用于生物、医药及食品行业

FOR BIOCHEMICAL, PHARMACEUTICAL AND FOOD PROCESSING PLANTS

外径 Outer Diameter mm	壁厚 Wall Thickness mm	内表面粗糙度保证值 Inner surface roughness assurance value		
		BA Grade	MP Grade	EP Grade
25.4	1.2	Ra ≤ 0.5μm	Ra ≤ 0.3μm	Ra ≤ 0.4μm
31.8	1.2			
38.1	1.2			
50.8	1.5			
63.5	2.0			
76.3	2.0			
89.1	2.0	Ra ≤ 0.6μm	Ra ≤ 0.3μm	Ra ≤ 0.4μm
101.6	2.0			
114.3	3.0			
139.8	3.0	Ra ≤ 0.7μm	Ra ≤ 0.7μm	Ra ≤ 0.4μm
165.2	3.0			

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Fitting KUZE Co., Ltd. of the KUZE Group is a Leading maker of clean fittings for ultra-high purity fluids (KUZE Clean Fittings - KCF). We recommend that you use our KUZE CLEAN PIPE together with our fittings. (The fittings and pipes are made of the same material, by the same process.)

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