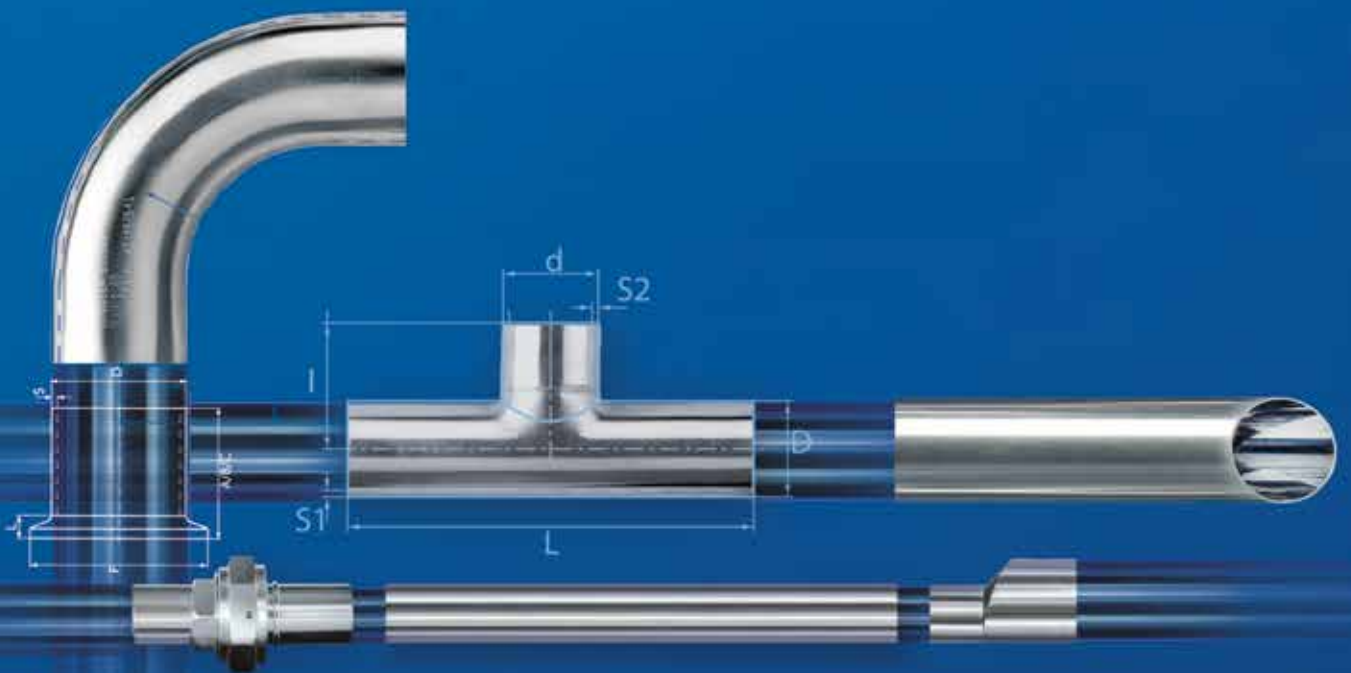


标准化组件

STANDARDIZED COMPONENTS



标准化管道和管件的规格和尺寸。



Specifications and Dimensions for Standardized Tubes and Fittings

质量和规范

Qualities and Specifications

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管材

Tubes

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弯头

Elbows

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三通

T-Pieces

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大小头

Reducers

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ZeroCon连接组件

ZeroCon Connection

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Dockweiler管帽和端盖

Dockweiler Cap and Endcaps

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COAX双套管系列

COAX Tubes and Fittings

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Flextron 不锈钢波纹软管

Flextron Hoses

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一般信息

General Information

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高纯度流体的输送工艺解决方案。

Process solutions for the transport of high purity fluids and gases.

Dockweiler是国际领先的不锈钢管道系统制造商，其核心业务是开发用于处理半导体、制药、分析和精细化学行业中的流体和气体介质的安装解决方案。

内表面处理满足高纯度要求

我们在机械和电化学表面处理方面有着数十年的经验，为高纯度工业应用提供质量上乘的产品。我们的处理范围涵盖着色、机械加工和超洁净电解抛光（在洁净室进行最终清洁）等。

在阳极清洁过程中，材料剥离3到5 μm ，而对于电解抛光过程，材料剥离更明显，最高可达20 μm 。

Dockweiler is a leading international manufacturer of stainless steel tube systems. The core business is the development of installation solutions for handling fluid and gaseous media in the semiconductor, pharmaceutical, analytical and fine chemistry industries.

Surface Treatment

We have decades of experience in mechanical and electrochemical surface treatments and finishes and we offer optimal quality for high purity industrial applications. The spectrum of treatments ranges from pickling to mechanical processes to ultra pure electropolishing with final cleaning in the clean room.

We offer two options for electrochemical processes: Anodic cleaning with a removal of 3 to 5 μm and electropolishing with a material removal of up to 20 μm .



手册 / Specifications

页码 / Page

TCC ltp

6-7

ultron ltp

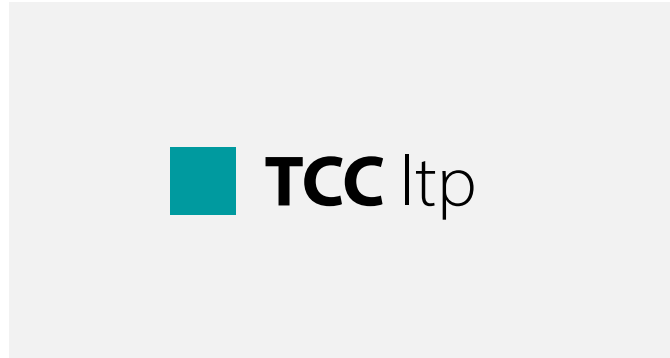
8-9

ultron vimvar

10-11

概述 / Generals

12-13



适用于半导体行业以及测量和控制技术领域
For semiconductor industry as well as measurement and control technology



TCC: 热电偶清洁管道管件
TCC: Thermocouple clean tubes and fittings

光亮表面(TCC)
Bright finish surface (TCC)



性价比极高
With excellent price-performance ratio

TCC LTP

尺寸 / Dimensions

英寸 / OD TUBING IMPERIAL

acc. to ASTM A269 / A270 / A632

1/8" to 6" (0.125 x 0.022 inch to 6.000 x 0.109 inch)

3.18 x 0.56 mm to 152.40 x 2.77 mm

A-Size acc. to JIS G 3459

管标号 / Schedule Number 5S 6A – 300A
(10.50 x 1.00mm – 318.00 x 4.00mm)

管标号 / Schedule Number 10S 6A – 300A
(10.50 x 1.20mm – 318.00 x 4.50mm)

管子 / PIPE UNS S31603 (316L)

符合ASTM A312标准管表号10S规定的直管。

Straight pipe as per ASTM A312 Schedule 10S:
219.08 x 3.76 mm to 609.60 x 6.35 mm

NPS 8 to NPS 24 Schedule 10

制造 / Manufacture:

≤ 1" OD (25.40 mm)	无缝	seamless
≥ 1 1/2" OD (38.10 mm)	焊接	welded
≤ 15A OD (21.70 mm)	无缝	seamless
≥ 20A OD (27.20 mm)	焊接	welded

材质 / Materials

SUS 316LTP acc. to JIS G3459, SEMI F 20 and ASTM A 269/A 632 for OD tubing and A-Size

UNS S31603 (316L) acc. to ASTM A 312 for NPS (PIPE) Dimensions

硬度相当于 / Hardness equivalent to:

max. 180 HV acc. to DIN EN ISO 6507-1

max. 90 HRB acc. to DIN EN ISO 6508-1

表面 / Surfaces

管道和管件 / TUBES AND TUBE FITTINGS

Ra ≤ 0.50 μm (20 μin)

Ra ≤ 1.00 μm (40 μin) **外表 / Outer surface**

管道和管件 / PIPE AND PIPE FITTINGS

Ra ≤ 0.8 μm (32 μin) **内表面 / Inner surface**

Ra ≤ 1.00 μm (40 μin) **外表 / Outer surface**

应当对管道管件的端部 (包括英制、管径和自定义尺寸) 进行轨道焊接预处理。
若管径超过200A, 可按照JIS G3459标准进行端面斜面预处理, 也可根据需要商定其他端面预处理方式。

Ends of tube and fittings in Imperial, A-Size and Custom Sized dimensions shall be prepared for orbital welding. Square cut and faced.
For A Size above 200 A a beveled end preparation as per JIS G3459 is possible. Different end preparations may be agreed on.

管件冷加工区域和圆周焊缝表面的Ra (内表面和外表面) 未定义。若外径≤5.00 mm, 不测量粗糙度。

根据CGA G-4.1-2018和ASTM G93标准, 进行脱油脱脂。

The Ra value in the cold worked area of fittings (inner and outer surface) and on the surface of circumferential welds is not defined. For dimensions OD ≤ 5.00 mm roughness is not measured.

Free of oil and grease acc. to CGA G-4.1-2018 and ASTM G93

详情请见第12-13页 / Further details page 12-13

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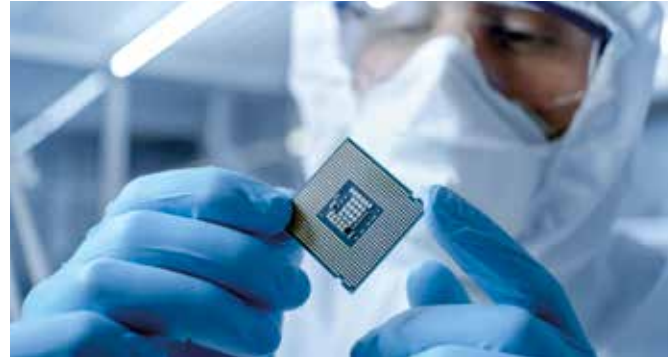
Technical terms of delivery | Quality and test procedures | Documentation, packaging and shipping

ultron ltp

gas applications
气体应用

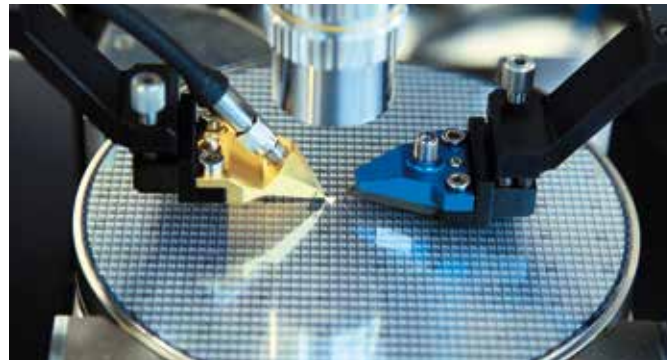
适用于半导体行业和精细化学

For semiconductor industry
and fine chemistry



纯度最高的润湿表面

Wetted surface
with highest purity



电解抛光内表面

Electropolished
inner surface



洁净室清洁和包装

Cleanroom
cleaning and packing



ultron ltp

尺寸 / Dimensions

英寸 / OD TUBING

acc. to ASTM A269 / A270 / A632

1/8" to 6" (0.125 x 0.022 inch to 6.000 x 0.109 inch)

3.18 x 0.56 mm to 152.40 x 2.77 mm

A-Size acc. to JIS G 3459

管标号 / Schedule Number 5S 6A – 300A
(10.50 x 1.00mm – 318.00 x 4.00mm)

管标号 / Schedule Number 10S 6A – 300A
(10.50 x 1.20mm – 318.00 x 4.50mm)

管子 / PIPE UNS S31603 (316L)

符合ASTM A312附表10S的直管。

Straight pipe as per ASTM A312 Schedule 10S:

219.08 x 3.76 mm to 609.60 x 6.35 mm

NPS 8 to NPS 24 Schedule 10

制造 / Manufacture:

≤ 1" OD	(25.40 mm)	无缝	seamless
≥ 1 1/2" OD	(38.10 mm)	焊接	welded
≤ 15A OD	(21.70 mm)	无缝	seamless
≥ 20A OD	(27.20 mm)	焊接	welded

材质 / Materials

SUS 316LTP acc. to JIS G3459, SEMI F 20 and
ASTM A 269/A 632 for OD tubing and A-Size

UNS S31603 (316L) acc. to ASTM A 312
for NPS (PIPE) Dimensions

硬度相当于 / Hardness equivalent to:

max. 180 HV acc. to DIN EN ISO 6507-1

max. 90 HRB acc. to DIN EN ISO 6508-1

表面 / Surfaces

管道和管件 / TUBES AND TUBE FITTINGS

Ra ≤ 0.25 μm (10 μin)

Ra ≤ 0.51 μm (20 μin) A Size > 150 A

Ra ≤ 1.00 μm (40 μin) 外表面 / Outer surface

Ra ≤ 0.13 μm (5 μin) 可定制 / on request

Ra ≤ 0.18 μm (7 μin) 可定制 / on request

管道和管件 / PIPE AND PIPE FITTINGS

Ra ≤ 0.51 μm (20 μin) 内表面 / Inner surface

Ra ≤ 1.00 μm (40 μin) 外表面 / Outer surface

应当对管道管件的端部 (包括英制、管径和自定义尺寸) 进行轨道焊接预处理。
若管径超过200A, 可按照JIS G3459标准进行端面斜面预处理, 也可根据
需要商定其他端面预处理方式。

Ends of tube and fittings in Imperial, A-Size and Custom Sized dimensions shall be prepared for orbital welding. Square cut and faced.
For A Size above 200 A a beveled end preparation as per JIS G3459 is possible. Different end preparations may be agreed on.

管件冷加工区域和圆周焊缝表面的Ra (内表面和外表面) 未定义。若外径≤5.00 mm, 不测量粗糙度。

根据CGA G-4.1-2018和ASTM G93标准, 进行脱油脱脂。

The Ra value in the cold worked area of fittings (inner and outer surface) and on the surface of circumferential welds is not defined. For dimensions OD ≤ 5,00 mm roughness is not measured.

Free of oil and grease acc. to CGA G-4.1-2018 and ASTM G93

清洁和包装 / Cleaning & packing

联邦10级/ISO 4级洁净室标准

Cleanroom Federal Class 10 / ISO Class 4

管道和管件双层PE袋包装

Tubes and fittings double bagged in PE

详情请见第12-13页 / Further details page 12-13

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ultron vimvar

gas applications
气体应用

为半导体产业打造高品质产品

High end quality
for semiconductor industry



纯度最高的湿润表面

Wetted surface
with highest purity



电抛光内表面

Hoses with electropolished
inner surface



洁净室清洁和包装

Cleanroom
cleaning and packing



ultron vimvar

尺寸 / Dimensions

英寸 / OD TUBING

acc. to ASTM A269 / A270 / A632

1/8" to 1" (0.125 x 0.022 inch to 1.000 x 0.065 inch)

3.18 mm x 0.56 mm to 25.40 mm x 1.65 mm

材质 / Materials

UNS S31603 (316L) VIMVAR double melted stainless steel
acc. to ASTM A 269/A 632 for OD tubing (Imperial)

For Flextron: The welding ends are made of UNS S31603 (316L) VIMVAR double melted material. The corrugated hoses are made of UNS S31603 (316L) acc. to ultron ltp.

Flextron 焊接末端由316L V+V材质制作而成, 而金属波纹管则由316L材质加工成型(参考Dockweiler ultron ltp)。

硬度相当于 / Hardness equivalent to:

max. 180 HV acc. to DIN EN ISO 6507-1

max. 90 HRB acc. to DIN EN ISO 6508-1

表面 / Surfaces

管道和管件 / TUBES AND TUBE FITTINGS

Ra ≤ 0.18 μm (7 μin)

Ra ≤ 0.13 μm (5 μin) 应要求 / on request

管子和接头的端部应准备好进行轨道焊接。方形切割和面对。

Ends of tube and fittings shall be prepared for orbital welding. Square cut and faced.

配件冷加工区域的Ra值(内侧和外侧)。

外表面) 和圆周焊缝的表面没有定义。对于外径≤5.00mm的尺寸, 不测量粗糙度。

根据CGA G-4.1-2018和ASTM G93标准, 进行脱油脱脂。

The Ra value in the cold worked area of fittings (inner and outer surface) and on the surface of circumferential welds is not defined. For dimensions OD ≤ 5.00 mm roughness is not measured.

Free of oil and grease acc. to CGA G-4.1-2018 and ASTM G93

FLEXTRON

Ra ≤ 0,60 μm (i/d 表面峰值 / surface valley) 内部表面凹陷区

Ra ≤ 0,40 μm (i/d 表面峰值 / surface valley) 内部表面凹陷区

清洁和包装 / Cleaning & packing

洁净室联邦10级/ISO4级

Cleanroom Federal Class 10 / ISO Class 4

管材和管件采用双层袋装, 并进行密封。

Tubes and fittings sleeved and sealed in double bagging

详情请见第12-13页 / Further details page 12-13

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Technical terms of delivery | Quality and test procedures | Documentation, packaging and shipping

质保和测试程序

Quality and test procedures

	ultron itp	ultron vimvar	TCC itp
验证基本测试证书 / Verification of basic test certificate	■	■	■
目视检查 / Visual inspection	■	■	■
对光亮成品管进行内窥镜检查 / Endoscopic inspection of bright finished tubes	■	■	■
核查尺寸 / Verification of dimensions	■	■	■
粗糙度测量 / Roughness measurements	■	■	■
电导率测试(去离子水) / Conductivity test (DI water)	■	■	
对去离子水进行TOC测量 / TOC-measurement of DI water	■	■	
颗粒度检测 / Particle measurements	■	■	
SEM 扫描电镜 / SEM / Scanning Electron Microscope	■	■	
XPS / ESCA / X-ray Photoelectron Spectroscopy / Electron Spectroscopy for Chemical Analysis	■	■	
俄歇分析(AES) / Auger analysis (AES)	■	■	

交付技术条款

制造和测试

ASTM A 269/A 632/A 312 (PIPE)
DIN EN 10217-7/10216-5
长度为4000或6000 mm

电抛光管道外径 ≤ 5.00 mm时, 管道长度
将为3000 mm。

端部预处理

已完成轨道焊接预处理

标记始终包含

DOCKWEILER | DW编号
尺寸 | 材料 | 炉号

管道管件均有永久性标记
管件使用针戳标记或激光标记

Technical terms of delivery

Manufacture and testing

ASTM A 269 / A 632 / A 312 (Pipe),
DIN EN 10217-7 / 10216-5
Length 4000 or 6000 mm

Length for electropolished tubes OD ≤ 5.00 mm
will be 3000 mm.

End preparation

Prepared for orbital welding

Marking always with

DOCKWEILER | DW-Number
Dimension | Material | Heat number

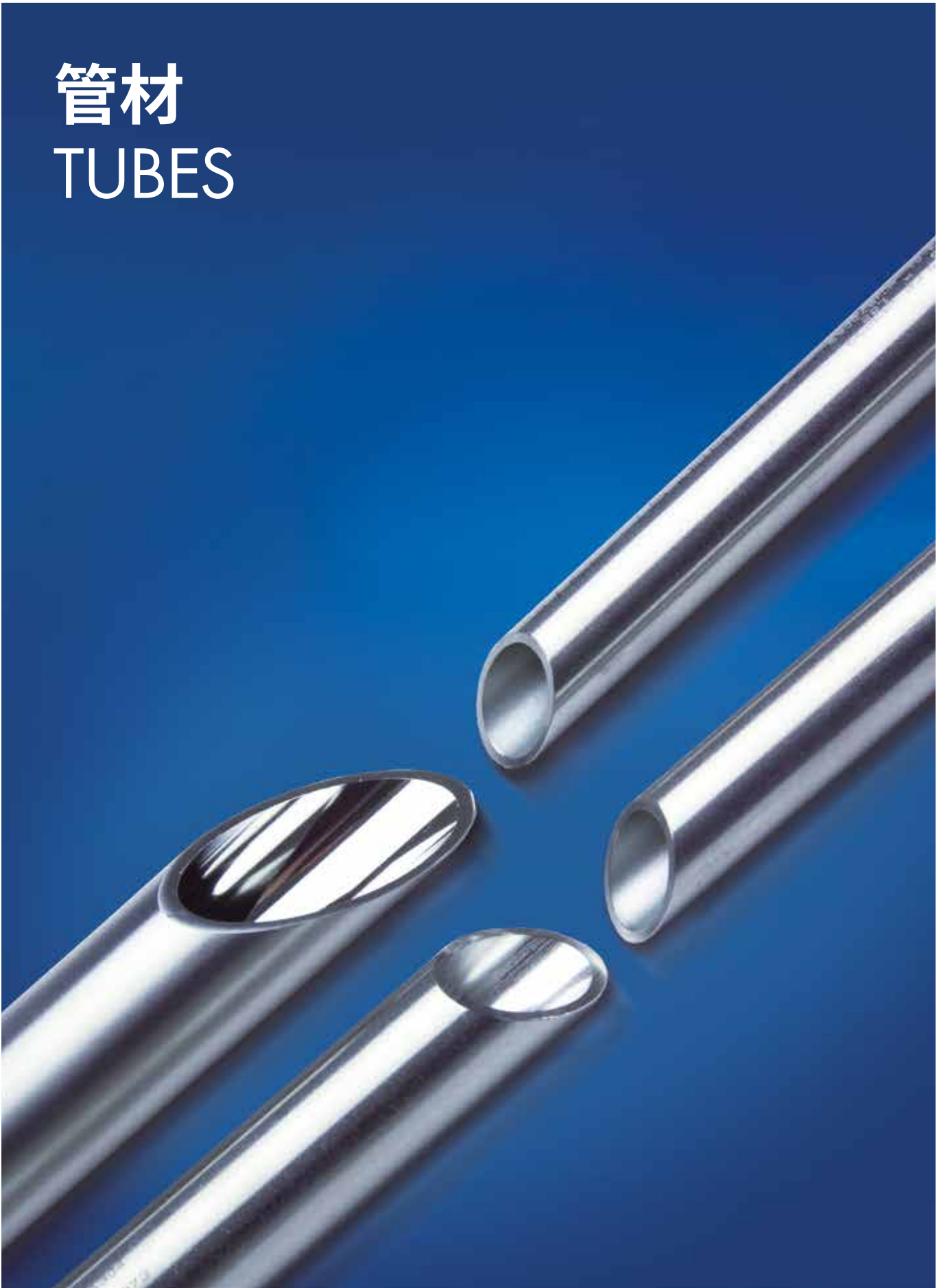
Tubes and fittings are permanently marked.
Fittings are needle, laser marked or etched.

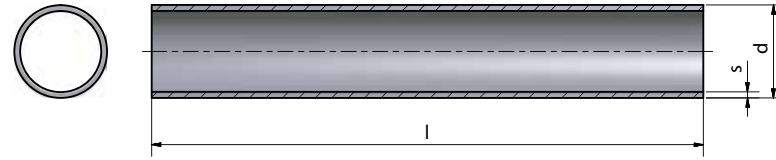
文件编制、包装和运输

Documentation, Packaging and Shipping

	ultron itp	ultron vimvar	TCC itp
文档 / Documentation			
根据EN 10204的Dockweiler检验3.1证书 Dockweiler Inspection Certificate 3.1 according to EN 10204	■	■	■
WebCert在线文档(可选) WebCert online documentation optional	■	■	■
包装 / Packaging			
箔片上的批次标签包含详细的质量信息。 Batch label on the foil contains the detailed quality information	■	■	■
填充氮气(99.9998%, 包括惰性气体)的管道。 Tubes filled with N2 (99.9998% incl. inert gas)	■	■	
光亮退火的管子和配件用透明的PE帽封闭。 Bright finished tubes and fittings are closed with transparent PE caps			■
以PA/PE薄膜和黄色PE管帽封闭, 以PE袋密封。 Closed with PA/PE squares and yellow PE caps, sleeved and sealed in PE	■	■	
管道管件用PE袋独立包装。 Tubes and fittings individually sealed in PE foil	■	■	■
所有尺寸均双层包装。 All dimensions double sleeved	■	■	
运输 / Shipping			
用管状容器或木箱运送管道。 Delivery of tubes in tubular container or wooden crate	■	■	■
管件装入牢固的纸箱中, 内含减震填充物。 Fittings in strong cardboard box with shock-absorbing filler	■	■	■

管材 TUBES





TCC ltp	ultron ltp	ultron vimvar	基础订货号 Basic Order Code	
TCT	ULT	UV	-	2
TCT	ULT	UV	-	4
TCT	ULT	UV	-	6
TCT	ULT	UV	-	8
TCT	ULT	UV	-	12
TCT	ULT	UV	-	16
TCT	ULT	-	-	24
TCT	ULT	-	-	32
TCT	ULT	-	-	40
TCT	ULT	-	-	48
TCT	ULT	-	-	64
TCT	ULT	-	-	96

英寸 Imperial	d / s	重量 Weight
寸 / Inch	mm	kg / m
1/8	3.18 x 0.56	0.0368
1/4	6.35 x 0.89	0.1241
3/8	9.53 x 0.89	0.1966
1/2	12.70 x 1.24	0.3511
3/4	19.05 x 1.65	0.7198
1	25.40 x 1.65	0.9824
1 1/2	38.10 x 1.65	1.5077
2	50.80 x 1.65	2.0331
2 1/2	63.50 x 1.65	2.5585
3	76.20 x 1.65	3.0838
4	101.60 x 2.11	5.2627
6	152.40 x 2.77	10.3909

TCC ltp	ultron ltp	基础订货号 Basic Order Code	
TCT	ULT	-	NPS96
TCT	ULT	-	NPS128
TCT	ULT	-	NPS160
TCT	ULT	-	NPS192
TCT	ULT	-	NPS256
TCT	ULT	-	NPS320

PIPE NPS Schedule 10S	d / s	重量 Weight
DN / NPS	mm	kg / m
6	168.28 x 3.40	14.0400
8	219.08 x 3.76	20.2700
10	273.05 x 4.19	28.2100
12	323.85 x 4.57	36.5400
16	406.40 x 4.78	48.0700
20	508.00 x 5.54	69.9500

TCC ltp	ultron ltp	基础订货号 Basic Order Code	
TCT	ULT	-	
TCT	ULT	-	
TCT	ULT	-	

特殊尺寸 Special Sizes	d / s
寸 / Inch	mm
1/4	6.35 x 1.00
3/8	9.53 x 1.00
1/2	12.70 x 1.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。 / Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded

TCC ltp	ultron ltp	基础订货号 Basic Order Code	
TCT	ULT	-	15A
TCT	ULT	-	20A
TCT	ULT	-	25A
TCT	ULT	-	32A
TCT	ULT	-	40A
TCT	ULT	-	50A
TCT	ULT	-	65A
TCT	ULT	-	80A
TCT	ULT	-	90A
TCT	ULT	-	100A
TCT	ULT	-	125A
TCT	ULT	-	150A
TCT	ULT	-	200A
TCT	ULT	-	250A
TCT	ULT	-	300A

JIS G 3459	d / s	重量 Weight	
A	SCH	mm	kg/m
15A	5S	21.70 x 1.65	0.8290
20A	5S	27.20 x 1.65	1.0600
25A	5S	34.00 x 1.65	1.3400
32A	5S	42.70 x 1.65	1.7000
40A	5S	48.60 x 1.65	1.9400
50A	5S	60.50 x 1.65	2.4300
65A	5S	76.30 x 2.10	3.9100
80A	5S	89.10 x 2.10	4.5800
90A	5S	101.60 x 2.10	5.2400
100A	5S	114.30 x 2.10	5.9100
125A	5S	139.80 x 2.80	9.6200
150A	5S	165.20 x 2.80	11.4000
200A	5S	216.30 x 2.80	15.0000
250A	5S	267.40 x 3.40	22.5000
300A	5S	318.50 x 4.00	31.5000

TCC ltp	ultron ltp	基础订货号 Basic Order Code	
TCT	ULT	-	15A10S
TCT	ULT	-	20A10S
TCT	ULT	-	25A10S
TCT	ULT	-	32A10S
TCT	ULT	-	40A10S
TCT	ULT	-	50A10S
TCT	ULT	-	65A10S
TCT	ULT	-	80A10S
TCT	ULT	-	90A10S
TCT	ULT	-	100A10S
TCT	ULT	-	125A10S
TCT	ULT	-	150A10S
TCT	ULT	-	200A10S
TCT	ULT	-	250A10S
TCT	ULT	-	300A10S

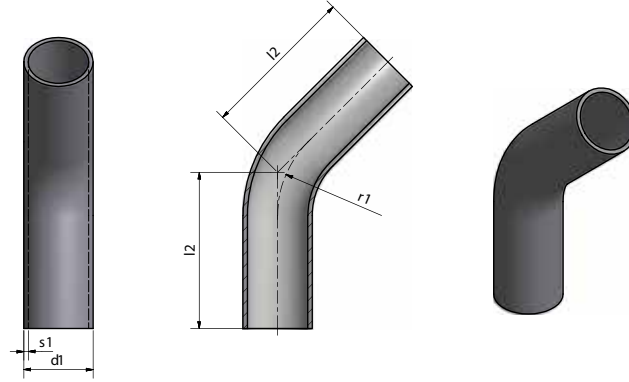
JIS G 3459	d / s	重量 Weight	
A	SCH	mm	kg/m
15A	10S	21.70 x 2.10	1.0300
20A	10S	27.20 x 2.10	1.3200
25A	10S	34.00 x 2.80	2.1900
32A	10S	42.70 x 2.80	2.8000
40A	10S	48.60 x 2.80	3.2100
50A	10S	60.50 x 2.80	4.0500
65A	10S	76.30 x 3.00	5.5100
80A	10S	89.10 x 3.00	6.4800
90A	10S	101.60 x 3.00	7.4200
100A	10S	114.30 x 3.00	8.3700
125A	10S	139.80 x 3.40	11.6000
150A	10S	165.20 x 3.40	13.8000
200A	10S	216.30 x 4.00	21.3000
250A	10S	267.40 x 4.00	26.4000
300A	10S	318.50 x 4.50	35.4000

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。 / Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded

弯头 ELBOWS





TCC ltp	ultron ltp		基础订货号 Basic Order Code
TCT	ULT	-	4L - 4
TCT	ULT	-	4L - 6
TCT	ULT	-	4L - 8
TCT	ULT	-	4L - 12
TCT	ULT	-	4L - 16
TCT	ULT	-	4L - 24
TCT	ULT	-	4L - 32
TCT	ULT	-	4L - 40
TCT	ULT	-	4L - 48
TCT	ULT	-	4L - 64
TCT	ULT	-	4L - 96

英寸 Imperial	d1	s1	l2	r1
寸 / Inch	mm			
1/4	6.35	0.89	50.80	14.30
3/8	9.53	0.89	50.80	28.60
1/2	12.70	1.24	57.20	27.00
3/4	19.05	1.65	57.20	28.60
1	25.40	1.65	57.20	38.10
1 1/2	38.10	1.65	63.50	57.20
2	50.80	1.65	76.20	76.20
2 1/2	63.50	1.65	85.70	95.30
3	76.20	1.65	92.10	114.30
4	101.60	2.11	114.30	152.40
6	152.40	2.77	158.80	228.60

TCC ltp	ultron ltp		基础订货号 Basic Order Code
TCT	ULT	-	4L - 15A
TCT	ULT	-	4L - 20A
TCT	ULT	-	4L - 25A
TCT	ULT	-	4L - 32A
TCT	ULT	-	4L - 40A
TCT	ULT	-	4L - 50A
TCT	ULT	-	4L - 65A
TCT	ULT	-	4L - 80A
TCT	ULT	-	4L - 100A
TCT	ULT	-	4L - 125A
TCT	ULT	-	4L - 150A
TCT	ULT	-	4L - 200A
TCT	ULT	-	4L - 250A
TCT	ULT	-	4L - 300A

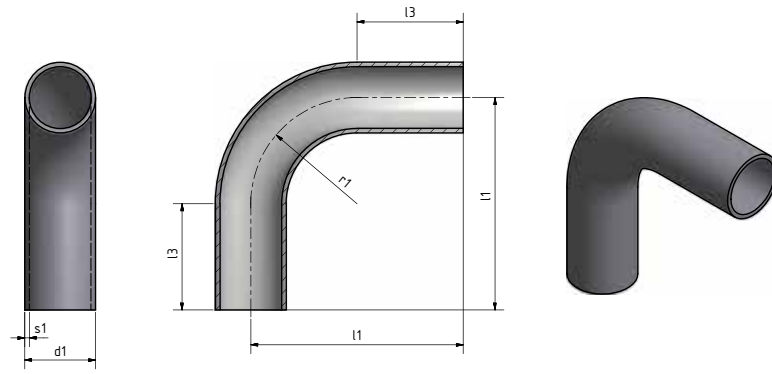
JIS G 3459 5S	d1	s1	l2	r1
A-Size	mm			
15A	21.70	1.65	52.00	38.10
20A	27.20	1.65	52.00	38.10
25A	34.00	1.65	52.00	38.10
32A	42.70	1.65	66.00	47.60
40A	48.60	1.65	70.00	57.20
50A	60.50	1.65	78.00	76.20
65A	76.30	2.10	91.00	95.30
80A	89.10	2.10	99.00	114.3
100A	114.30	2.10	115.00	152.40
125A	139.80	2.80	145.00	190.50
150A	165.20	2.80	155.00	228.60
200A	216.30	2.80	195.00	304.80
250A	267.40	3.40	237.00	381.00
300A	318.50	4.00	269.00	457.20

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 15A OD (21.70 mm) 无缝 seamless
≥ 20A OD (27.20 mm) 已焊接 welded



TCC ltp	ultron ltp		基础订货号 Basic Order Code
TCT	ULT	-	9L - 4
TCT	ULT	-	9L - 6
TCT	ULT	-	9L - 8
TCT	ULT	-	9L - 12
TCT	ULT	-	9L - 16
TCT	ULT	-	9L - 24
TCT	ULT	-	9L - 32
TCT	ULT	-	9L - 40
TCT	ULT	-	9L - 48
TCT	ULT	-	9L - 64
TCT	ULT	-	9L - 96

英寸 Imperial	d1	s1	l1	l3	r1
寸 / Inch	mm				
1/4	6.35	0.89	66.70	52.40	14.30
3/8	9.53	0.89	66.70	38.10	28.60
1/2	12.70	1.24	76.20	49.20	27.00
3/4	19.05	1.65	76.20	47.60	28.60
1	25.40	1.65	76.20	38.10	38.10
1 1/2	38.10	1.65	95.30	38.10	57.20
2	50.80	1.65	120.70	44.50	76.20
2 1/2	63.50	1.65	139.70	44.40	95.30
3	76.20	1.65	158.80	44.50	114.30
4	101.60	2.11	203.20	50.80	152.40
6	152.40	2.77	292.10	63.50	228.60

TCC ltp	ultron ltp		基础订货号 Basic Order Code
TCT	ULT	-	9L - 15A
TCT	ULT	-	9L - 20A
TCT	ULT	-	9L - 25A
TCT	ULT	-	9L - 32A
TCT	ULT	-	9L - 40A
TCT	ULT	-	9L - 50A
TCT	ULT	-	9L - 65A
TCT	ULT	-	9L - 80A
TCT	ULT	-	9L - 100A
TCT	ULT	-	9L - 125A
TCT	ULT	-	9L - 150A
TCT	ULT	-	9L - 200A
TCT	ULT	-	9L - 250A
TCT	ULT	-	9L - 300A

JIS G 3459 5S	d1	s1	l2	l2	r1
A-Size	mm				
15A	21.70	1.65	75.00	36.90	38.10
20A	27.20	1.65	75.00	36.90	38.10
25A	34.00	1.65	75.00	36.90	38.10
32A	42.70	1.65	94.00	46.40	47.60
40A	48.60	1.65	104.00	46.80	57.20
50A	60.50	1.650	123.00	46.80	76.20
65A	76.30	2.10	147.00	51.70	95.30
80A	89.10	2.10	166.00	51.70	114.30
100A	114.30	2.10	204.00	51.60	152.40
125A	139.80	2.80	250.00	59.50	190.50
150A	165.20	2.80	290.00	61.40	228.60
200A	216.30	2.80	375.00	70.20	304.80
250A	267.40	3.40	461.00	80.00	381.00
300A	318.50	4.00	537.00	79.80	457.20

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

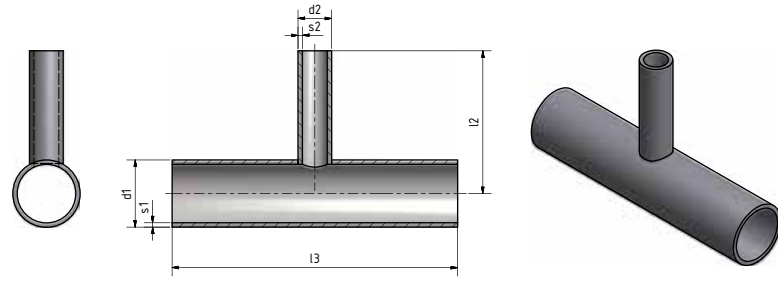
制造。/ Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 15A OD (21.70 mm) 无缝 seamless
≥ 20A OD (27.20 mm) 已焊接 welded

三通 T-PIECES





TCC lip	ultron lip	基础订货号 Basic Order Code	英寸 Imperial	d1 x d2	s1	s2	l3	l2	
寸 / Inch	mm								
TCT	ULT	-	TE - 4 - 4	1/4 x 1/4	6.35 x 6.35	0.89	0.89	89.00	44.50
TCT	ULT	-	RT - 6 - 4	3/8 x 1/4	9.53 x 6.35	0.89	0.89	89.00	44.50
TCT	ULT	-	TE - 6 - 6	3/8 x 3/8	9.53 x 9.53	0.89	0.89	89.00	44.50
TCT	ULT	-	RT - 8 - 4	1/2 x 1/4	12.70 x 6.35	1.24	0.89	95.20	47.60
TCT	ULT	-	RT - 8 - 6	1/2 x 3/8	12.70 x 9.53	1.24	0.89	95.20	47.60
TCT	ULT	-	TE - 8 - 8	1/2 x 1/2	12.70 x 12.70	1.24	1.24	95.20	47.60
TCT	ULT	-	RT - 12 - 4	3/4 x 1/4	19.05 x 6.35	1.65	0.89	101.60	50.80
TCT	ULT	-	RT - 12 - 6	3/4 x 3/8	19.05 x 9.53	1.65	0.89	101.60	50.80
TCT	ULT	-	TE - 12 - 12	3/4 x 3/4	19.05 x 19.05	1.65	1.65	101.60	50.80
TCT	ULT	-	RT - 16 - 4	1 x 1/4	25.40 x 6.35	1.65	0.89	108.00	54.00
TCT	ULT	-	RT - 16 - 6	1 x 3/8	25.40 x 9.53	1.65	0.89	108.00	54.00
TCT	ULT	-	RT - 16 - 8	1 x 1/2	25.40 x 12.7	1.65	1.24	108.00	54.00
TCT	ULT	-	RT - 16 - 12	1 x 3/4	25.40 x 19.05	1.65	1.65	108.00	54.00
TCT	ULT	-	TE - 16 - 16	1 x 1	25.40 x 25.40	1.65	1.65	108.00	54.00
TCT	ULT	-	RT - 24 - 4	1 1/2 x 1/4	38.10 x 6.35	1.65	0.89	120.60	60.30
TCT	ULT	-	RT - 24 - 6	1 1/2 x 3/8	38.10 x 9.53	1.65	0.89	120.60	60.30
TCT	ULT	-	RT - 24 - 8	1 1/2 x 1/2	38.10 x 12.70	1.65	1.24	120.60	60.30
TCT	ULT	-	RT - 24 - 12	1 1/2 x 3/4	38.10 x 19.05	1.65	1.65	120.60	60.30
TCT	ULT	-	RT - 24 - 16	1 1/2 x 1	38.10 x 25.40	1.65	1.65	120.60	60.30
TCT	ULT	-	TE - 24 - 24	1 1/2 x 1 1/2	38.10 x 38.10	1.65	1.65	120.60	60.30
TCT	ULT	-	RT - 32 - 4	2 x 1/4	50.80 x 6.35	1.65	0.89	146.00	66.70
TCT	ULT	-	RT - 32 - 6	2 x 3/8	50.80 x 9.53	1.65	0.89	146.00	66.70
TCT	ULT	-	RT - 32 - 8	2 x 1/2	50.80 x 12.70	1.65	1.24	146.00	66.70
TCT	ULT	-	RT - 32 - 12	2 x 3/4	50.80 x 19.05	1.65	1.65	146.00	66.70
TCT	ULT	-	RT - 32 - 16	2 x 1	50.8 x 25.40	1.65	1.65	146.00	66.70
TCT	ULT	-	RT - 32 - 24	2 x 1 1/2	50.80 x 38.10	1.65	1.65	146.00	66.70
TCT	ULT	-	TE - 32 - 32	2 x 2	50.80 x 50.8	1.65	1.65	146.00	73.00
TCT	ULT	-	RT - 40 - 4	2 1/2 x 1/4	63.50 x 6.35	1.65	0.89	158.80	73.00
TCT	ULT	-	RT - 40 - 6	2 1/2 x 3/8	63.50 x 9.53	1.65	0.89	158.80	73.00
TCT	ULT	-	RT - 40 - 8	2 1/2 x 1/2	63.50 x 12.70	1.65	1.24	158.80	73.00
TCT	ULT	-	RT - 40 - 12	2 1/2 x 3/4	63.50 x 19.05	1.65	1.65	158.80	73.00
TCT	ULT	-	RT - 40 - 16	2 1/2 x 1	63.50 x 25.40	1.65	1.65	158.80	73.00
TCT	ULT	-	RT - 40 - 24	2 1/2 x 1 1/2	63.50 x 38.10	1.65	1.65	158.80	73.00
TCT	ULT	-	RT - 40 - 32	2 1/2 x 2	63.50 x 50.80	1.65	1.65	158.80	73.00
TCT	ULT	-	TE - 40 - 40	2 1/2 x 2 1/2	63.50 x 63.50	1.65	1.65	158.80	79.40
TCT	ULT	-	RT - 48 - 4	3 x 1/4	76.20 x 6.35	1.65	0.89	171.50	79.40
TCT	ULT	-	RT - 48 - 6	3 x 3/8	76.20 x 9.53	1.65	0.89	171.50	79.40
TCT	ULT	-	RT - 48 - 8	3 x 1/2	76.20 x 12.70	1.65	1.24	171.50	79.40
TCT	ULT	-	RT - 48 - 12	3 x 3/4	76.20 x 19.05	1.65	1.65	171.50	79.40
TCT	ULT	-	RT - 48 - 16	3 x 1	76.20 x 25.40	1.65	1.65	171.50	79.40

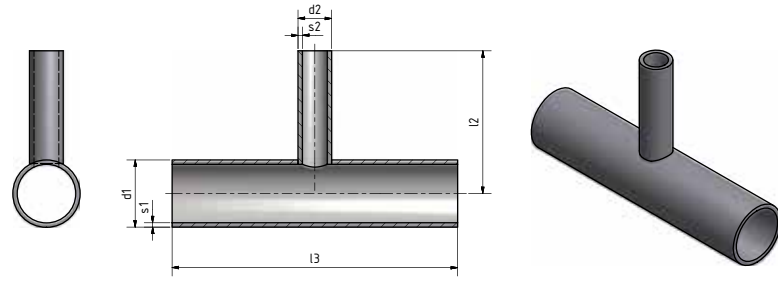
其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。 / Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded

TCC lip	ultron lip	基础订货号 Basic Order Code	英寸 Imperial	d1 x d2	s1	s2	l3	l2	
寸 / Inch	mm								
TCT	ULT	-	RT - 48 - 24	3 x 1 1/2	76.20 x 38.10	1.65	1.65	171.50	79.40
TCT	ULT	-	RT - 48 - 32	3 x 2	76.20 x 50.80	1.65	1.65	171.50	79.40
TCT	ULT	-	RT - 48 - 40	3 x 2 1/2	76.20 x 63.50	1.65	1.65	171.50	79.40
TCT	ULT	-	TE - 48 - 48	3 x 3	76.20 x 76.20	1.65	1.65	171.40	85.70
TCT	ULT	-	RT - 64 - 8	4 x 1/2	101.60 x 12.70	2.11	1.24	209.60	92.10
TCT	ULT	-	RT - 64 - 12	4 x 3/4	101.60 x 19.05	2.11	1.65	209.60	92.10
TCT	ULT	-	RT - 64 - 16	4 x 1	101.60 x 25.40	2.11	1.65	209.60	92.10
TCT	ULT	-	RT - 64 - 24	4 x 1 1/2	101.60 x 38.10	2.11	1.65	209.60	92.10
TCT	ULT	-	RT - 64 - 32	4 x 2	101.60 x 50.80	2.11	1.65	209.60	98.40
TCT	ULT	-	RT - 64 - 40	4 x 2 1/2	101.60 x 63.50	2.11	1.65	209.60	98.40
TCT	ULT	-	RT - 64 - 48	4 x 3	101.60 x 76.20	2.11	1.65	209.60	98.40
TCT	ULT	-	TE - 64 - 64	4 x 4	101.60 x 101.60	2.11	2.11	209.60	104.80
TCT	ULT	-	RT - 96 - 32	6 x 2	152.40 x 50.80	2.77	1.65	285.80	130.20
TCT	ULT	-	RT - 96 - 48	6 x 3	152.40 x 76.20	2.77	1.65	285.80	130.20
TCT	ULT	-	RT - 96 - 64	6 x 4	152.40 x 101.60	2.77	2.11	285.80	130.20
TCT	ULT	-	TE - 96 - 96	6 x 6	152.40 x 152.40	2.77	2.77	285.80	142.90

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。 / Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 焊接 welded



TCC ltp	ultron ltp	基础订货号		JIS G 3459 5S	d1 x d2	s1	s2	l3	l2
		Basic Order Code							
TCT	ULT	-	TE - 15A - 15A	15A x 15A	21.70 x 21.70	1.65	1.65	118.00	59.00
TCT	ULT	-	RT - 20A - 15A	20A x 15A	27.20 x 21.70	1.65	1.65	110.00	55.00
TCT	ULT	-	TE - 20A - 20A	20A x 20A	27.20 x 27.20	1.65	1.65	130.00	65.00
TCT	ULT	-	RT - 25A - 15A	25A x 15A	34.00 x 21.70	1.65	1.65	118.00	59.00
TCT	ULT	-	RT - 25A - 20A	25A x 20A	34.00 x 27.20	1.65	1.65	118.00	59.00
TCT	ULT	-	TE - 25A - 25A	25A x 25A	34.00 x 34.00	1.65	1.65	136.00	68.00
TCT	ULT	-	RT - 32A - 15A	32A x 15A	42.70 x 21.70	1.65	1.65	136.00	62.00
TCT	ULT	-	RT - 32A - 20A	32A x 20A	42.70 x 27.20	1.65	1.65	136.00	62.00
TCT	ULT	-	RT - 32A - 25A	32A x 25A	42.70 x 34.00	1.65	1.65	136.00	62.00
TCT	ULT	-	TE - 32A - 32A	32A x 32A	42.70 x 42.70	1.65	1.65	176.00	88.00
TCT	ULT	-	RT - 40A - 15A	40A x 15A	48.60 x 21.70	1.65	1.65	136.00	65.00
TCT	ULT	-	RT - 40A - 20A	40A x 20A	48.60 x 27.20	1.65	1.65	136.00	65.00
TCT	ULT	-	RT - 40A - 25A	40A x 25A	48.60 x 34.00	1.65	1.65	136.00	65.00
TCT	ULT	-	RT - 40A - 32A	40A x 32A	48.60 x 42.70	1.65	1.65	154.00	77.00
TCT	ULT	-	TE - 40A - 40A	40A x 40A	48.60 x 48.60	1.65	1.65	190.00	95.00
TCT	ULT	-	RT - 50A - 15A	50A x 15A	60.50 x 21.70	1.65	1.65	136.00	71.00
TCT	ULT	-	RT - 50A - 20A	50A x 20A	60.50 x 27.20	1.65	1.65	136.00	71.00
TCT	ULT	-	RT - 50A - 25A	50A x 25A	60.50 x 34.00	1.65	1.65	136.00	71.00
TCT	ULT	-	RT - 50A - 32A	50A x 32A	60.50 x 42.70	1.65	1.65	166.00	83.00
TCT	ULT	-	RT - 50A - 40A	50A x 40A	60.50 x 48.60	1.65	1.65	166.00	83.00
TCT	ULT	-	TE - 50A - 50A	50A x 50A	60.50 x 60.50	1.65	1.65	204.00	102.00
TCT	ULT	-	RT - 65A - 15A	65A x 15A	76.30 x 21.70	2.10	1.65	144.00	79.00
TCT	ULT	-	RT - 65A - 20A	65A x 20A	76.30 x 27.20	2.10	1.65	144.00	79.00
TCT	ULT	-	RT - 65A - 25A	65A x 25A	76.30 x 34.00	2.10	1.65	144.00	79.00
TCT	ULT	-	RT - 65A - 32A	65A x 32A	76.30 x 42.70	2.10	1.65	176.00	90.00
TCT	ULT	-	RT - 65A - 40A	65A x 40A	76.30 x 48.60	2.10	1.65	176.00	90.00
TCT	ULT	-	RT - 65A - 50A	65A x 50A	76.30 x 60.50	2.10	1.65	176.00	90.00
TCT	ULT	-	TE - 65A - 65A	65A x 65A	76.30 x 76.30	2.10	2.10	242.00	121.00
TCT	ULT	-	RT - 80A - 15A	80A x 15A	89.10 x 21.70	2.10	1.65	144.00	85.00
TCT	ULT	-	RT - 80A - 20A	80A x 20A	89.10 x 27.20	2.10	1.65	144.00	85.00
TCT	ULT	-	RT - 80A - 25A	80A x 25A	89.10 x 34.00	2.10	1.65	144.00	85.00
TCT	ULT	-	RT - 80A - 32A	80A x 32A	89.10 x 42.70	2.10	1.65	144.00	85.00
TCT	ULT	-	RT - 80A - 40A	80A x 40A	89.10 x 48.60	2.10	1.65	176.00	96.00
TCT	ULT	-	RT - 80A - 50A	80A x 50A	89.10 x 60.50	2.10	1.65	176.00	96.00
TCT	ULT	-	RT - 80A - 65A	80A x 65A	89.10 x 76.30	2.10	2.10	176.00	96.00
TCT	ULT	-	TE - 80A - 80A	80A x 80A	89.10 x 89.10	2.10	2.10	206.00	103.00
TCT	ULT	-	RT - 80A - 100A	80A x 100A	89.10 x 114.30	2.10	2.10	260.00	130.00
TCT	ULT	-	RT - 100A - 15A	100A x 15A	114.30 x 21.70	2.10	1.65	144.00	98.00
TCT	ULT	-	RT - 100A - 20A	100A x 20A	114.30 x 27.20	2.10	1.65	144.00	98.00
TCT	ULT	-	RT - 100A - 25A	100A x 25A	114.30 x 34.00	2.10	1.65	144.00	98.00

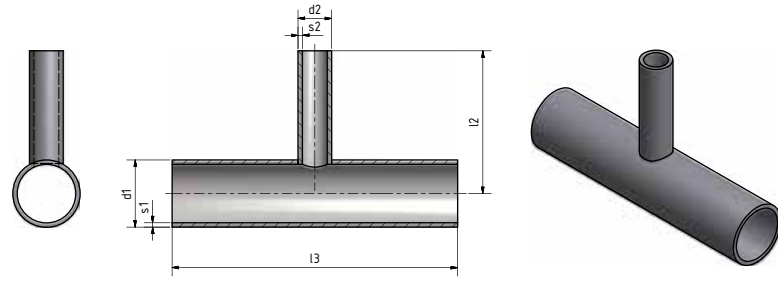
其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 15A OD (21.70 mm) 无缝 seamless
≥ 20A OD (27.20 mm) 已焊接 welded

TCC ltp	ultron ltp	基础订货号		JIS G 3459 5S	d1 x d2	s1	s2	l3	l2
		Basic Order Code							
TCT	ULT	-	RT - 100A - 32A	100A x 32A	114.30 x 42.70	2.10	1.65	176.00	109.00
TCT	ULT	-	RT - 100A - 40A	100A x 40A	114.30 x 48.60	2.10	1.65	176.00	109.00
TCT	ULT	-	RT - 100A - 50A	100A x 50A	114.30 x 60.50	2.10	1.65	176.00	109.00
TCT	ULT	-	RT - 100A - 65A	100A x 65A	114.30 x 76.30	2.10	2.10	232.00	116.00
TCT	ULT	-	RT - 100A - 80A	100A x 80A	114.30 x 89.10	2.10	2.10	232.00	116.00
TCT	ULT	-	TE - 100A - 100A	100A x 100A	114.30 x 114.30	2.10	2.10	290.00	145.00
TCT	ULT	-	RT - 125A - 15A	125A x 15A	139.80 x 21.70	2.80	1.65	200.00	120.00
TCT	ULT	-	RT - 125A - 20A	125A x 20A	139.80 x 27.20	2.80	1.65	200.00	120.00
TCT	ULT	-	RT - 125A - 25A	125A x 25A	139.80 x 34.00	2.80	1.65	200.00	120.00
TCT	ULT	-	RT - 125A - 32A	125A x 32A	139.80 x 42.70	2.80	1.65	240.00	130.00
TCT	ULT	-	RT - 125A - 40A	125A x 40A	139.80 x 48.60	2.80	1.65	240.00	130.00
TCT	ULT	-	RT - 125A - 50A	125A x 50A	139.80 x 60.50	2.80	1.65	240.00	130.00
TCT	ULT	-	RT - 125A - 65A	125A x 65A	139.80 x 76.30	2.80	2.10	280.00	140.00
TCT	ULT	-	RT - 125A - 80A	125A x 80A	139.80 x 89.10	2.80	2.10	280.00	140.00
TCT	ULT	-	RT - 125A - 100A	125A x 100A	139.80 x 114.30	2.80	2.10	280.00	140.00
TCT	ULT	-	TE - 125A - 125A	125A x 125A	139.80 x 139.80	2.80	2.80	320.00	160.00
TCT	ULT	-	RT - 150A - 15A	150A x 15A	165.20 x 21.70	2.80	1.65	220.00	140.00
TCT	ULT	-	RT - 150A - 20A	150A x 20A	165.20 x 27.20	2.80	1.65	220.00	140.00
TCT	ULT	-	RT - 150A - 25A	150A x 25A	165.20 x 34.00	2.80	1.65	220.00	140.00
TCT	ULT	-	RT - 150A - 32A	150A x 32A	165.20 x 42.70	2.80	1.65	260.00	150.00
TCT	ULT	-	RT - 150A - 40A	150A x 40A	165.20 x 48.60	2.80	1.65	260.00	150.00
TCT	ULT	-	RT - 150A - 50A	150A x 50A	165.20 x 60.50	2.80	1.65	260.00	150.00
TCT	ULT	-	RT - 150A - 65A	150A x 65A	165.20 x 76.30	2.80	2.10	300.00	160.00
TCT	ULT	-	RT - 150A - 80A	150A x 80A	165.20 x 89.10	2.80	2.10	300.00	160.00
TCT	ULT	-	RT - 150A - 100A	150A x 100A	165.20 x 114.30	2.80	2.10	300.00	160.00
TCT	ULT	-	RT - 150A - 125A	150A x 125A	165.20 x 139.80	2.80	2.80	340.00	170.00
TCT	ULT	-	TE - 150A - 150A	150A x 150A	165.20 x 165.20	2.80	2.80	340.00	170.00
TCT	ULT	-	RT - 200A - 15A	200A x 15A	216.30 x 21.70	2.80	1.65	240.00	160.00
TCT	ULT	-	RT - 200A - 25A	200A x 25A	216.30 x 34.00	2.80	1.65	240.00	160.00
TCT	ULT	-	RT - 200A - 32A	200A x 32A	216.30 x 42.70	2.80	1.65	280.00	170.00
TCT	ULT	-	RT - 200A - 40A	200A x 40A	216.30 x 48.60	2.80	1.65	280.00	170.00
TCT	ULT	-	RT - 200A - 50A	200A x 50A	216.30 x 60.50	2.80	1.65	280.00	170.00
TCT	ULT	-	RT - 200A - 65A	200A x 65A	216.30 x 76.30	2.80	2.10	320.00	180.00
TCT	ULT	-	RT - 200A - 80A	200A x 80A	216.30 x 89.10	2.80	2.10	320.00	180.00
TCT	ULT	-	RT - 200A - 100A	200A x 100A	216.30 x 114.30	2.80	2.10	320.00	180.00
TCT	ULT	-	RT - 200A - 125A	200A x 125A	216.30 x 139.80	2.80	2.80	360.00	190.00
TCT	ULT	-	RT - 200A - 150A	200A x 150A	216.30 x 165.20	2.80	2.80	360.00	190.00
TCT	ULT	-	TE - 200A - 200A	200A x 200A	216.30 x 216.30	2.80	2.80	380.00	190.00
TCT	ULT	-	RT - 250A - 25A	250A x 25A	267.40 x 34.00	3.40	1.65	260.00	190.00
TCT	ULT	-	RT - 250A - 32A	250A x 32A	267.40 x 42.70	3.40	1.65	300.00	200.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 15A OD (21.70 mm) 无缝 seamless
≥ 20A OD (27.20 mm) 已焊接 welded



TCC lip	ultron lip	基础订货号 Basic Order Code
TCT	ULT	RT - 250A - 40A
TCT	ULT	RT - 250A - 50A
TCT	ULT	RT - 250A - 65A
TCT	ULT	RT - 250A - 80A
TCT	ULT	RT - 250A - 100A
TCT	ULT	RT - 250A - 125A
TCT	ULT	RT - 250A - 150A
TCT	ULT	RT - 250A - 200A
TCT	ULT	TE - 250A - 250A
TCT	ULT	RT - 300A - 25A
TCT	ULT	RT - 300A - 32A
TCT	ULT	RT - 300A - 40A
TCT	ULT	RT - 300A - 50A
TCT	ULT	RT - 300A - 65A
TCT	ULT	RT - 300A - 80A
TCT	ULT	RT - 300A - 100A
TCT	ULT	RT - 300A - 150A
TCT	ULT	RT - 300A - 200A
TCT	ULT	RT - 300A - 250A
TCT	ULT	TE - 300A - 300A

JIS G 3459 5S	d1 x d2	s1	s2	l3	l2
A-Size	mm				
250A x 40A	267.40 x 48.60	3.40	1.65	300.00	200.00
250A x 50A	267.40 x 60.50	3.40	1.65	300.00	200.00
250A x 65A	267.40 x 76.30	3.40	2.10	340.00	210.00
250A x 80A	267.40 x 89.10	3.40	2.10	340.00	210.00
250A x 100A	267.40 x 114.30	3.40	2.10	340.00	210.00
250A x 125A	267.40 x 139.80	3.40	2.80	380.00	220.00
250A x 150A	267.40 x 165.20	3.40	2.80	380.00	220.00
250A x 200A	267.40 x 216.30	3.40	2.80	380.00	220.00
250A x 250A	267.40 x 267.40	3.40	3.40	460.00	230.00
300A x 25A	318.50 x 34.00	4.00	1.65	300.00	230.00
300A x 32A	318.50 x 42.70	4.00	1.65	340.00	240.00
300A x 40A	318.50 x 48.60	4.00	1.65	340.00	240.00
300A x 50A	318.50 x 60.50	4.00	1.65	340.00	240.00
300A x 65A	318.50 x 76.30	4.00	2.10	380.00	250.00
300A x 80A	318.50 x 89.10	4.00	2.10	380.00	250.00
300A x 100A	318.50 x 114.30	4.00	2.10	380.00	250.00
300A x 150A	318.50 x 165.20	4.00	2.80	500.00	260.00
300A x 200A	318.50 x 216.30	4.00	2.80	500.00	260.00
300A x 250A	318.50 x 267.40	4.00	3.40	500.00	260.00
300A x 300A	318.50 x 318.50	4.00	4.00	534.00	267.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

制造。/ Manufacture: ≤ 15A OD (21.70 mm) 无缝 seamless
≥ 20A OD (27.20 mm) 已焊接 welded

TCC lip	ultron lip	基础订货号 Basic Order Code
TCT	ULT	RT - 15A - 4
TCT	ULT	RT - 15A - 6
TCT	ULT	RT - 15A - 8
TCT	ULT	RT - 15A - 12
TCT	ULT	RT - 16 - 15A
TCT	ULT	RT - 20A - 4
TCT	ULT	RT - 20A - 6
TCT	ULT	RT - 20A - 8
TCT	ULT	RT - 20A - 12
TCT	ULT	RT - 20A - 16
TCT	ULT	RT - 25A - 4
TCT	ULT	RT - 25A - 6
TCT	ULT	RT - 25A - 8
TCT	ULT	RT - 25A - 12
TCT	ULT	RT - 25A - 16
TCT	ULT	RT - 32A - 4
TCT	ULT	RT - 32A - 6
TCT	ULT	RT - 32A - 8
TCT	ULT	RT - 32A - 12
TCT	ULT	RT - 32A - 16
TCT	ULT	RT - 40A - 4
TCT	ULT	RT - 40A - 8
TCT	ULT	RT - 40A - 12
TCT	ULT	RT - 40A - 16
TCT	ULT	RT - 50A - 4
TCT	ULT	RT - 50A - 8
TCT	ULT	RT - 50A - 12
TCT	ULT	RT - 50A - 16
TCT	ULT	RT - 65A - 4
TCT	ULT	RT - 65A - 8
TCT	ULT	RT - 65A - 12
TCT	ULT	RT - 65A - 16
TCT	ULT	RT - 80A - 4
TCT	ULT	RT - 80A - 8
TCT	ULT	RT - 80A - 12
TCT	ULT	RT - 80A - 16
TCT	ULT	RT - 100A - 4
TCT	ULT	RT - 100A - 8
TCT	ULT	RT - 100A - 12
TCT	ULT	RT - 100A - 16
TCT	ULT	RT - 125A - 4
TCT	ULT	RT - 125A - 8
TCT	ULT	RT - 125A - 12
TCT	ULT	RT - 125A - 16
TCT	ULT	RT - 150A - 8
TCT	ULT	RT - 150A - 12
TCT	ULT	RT - 150A - 16
TCT	ULT	RT - 200A - 8
TCT	ULT	RT - 200A - 12
TCT	ULT	RT - 200A - 16

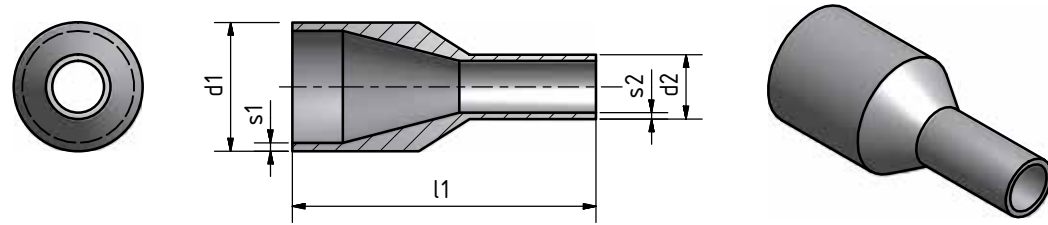
其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

JIS G 3459 5S / Imperial	d1 x d2	s1	s2	l3	l2
A-Size / Inch	mm				
15A x 1/4	21.70 x 6.35	1.65	0.89	94.00	44.00
15A x 3/8	21.70 x 9.53	1.65	0.89	94.00	44.00
15A x 1/2	21.70 x 12.70	1.65	1.24	94.00	44.00
15A x 3/4	21.70 x 19.05	1.65	1.65	104.00	52.00
15A x 1	25.40 x 21.70	1.65	1.65	110.00	55.00
20A x 1/4	27.20 x 6.35	1.65	0.89	94.00	47.00
20A x 3/8	27.20 x 9.53	1.65	0.89	94.00	47.00
20A x 1/2	27.20 x 12.70	1.65	1.24	94.00	47.00
20A x 3/4	27.20 x 19.05	1.65	1.65	110.00	55.00
20A x 1	27.20 x 25.40	1.65	1.65	110.00	55.00
25A x 1/4	34.00 x 6.35	1.65	0.89	94.00	50.00
25A x 3/8	34.00 x 9.53	1.65	0.89	94.00	50.00
25A x 1/2	34.00 x 12.70	1.65	1.24	94.00	50.00
25A x 3/4	34.00 x 19.05	1.65	1.65	118.00	59.00
25A x 1	34.00 x 25.40	1.65	1.65	118.00	59.00
32A x 1/4	42.70 x 6.35	1.65	0.89	114.00	54.00
32A x 3/8	42.70 x 9.53	1.65	0.89	114.00	54.00
32A x 1/2	42.70 x 12.70	1.65	1.24	114.00	54.00
32A x 3/4	42.70 x 19.05	1.65	1.65	136.00	62.00
32A x 1	42.70 x 25.40	1.65	1.65	136.00	62.00
40A x 1/4	48.60 x 6.35	1.65	0.89	114.00	57.00
40A x 1/2	48.60 x 12.70	1.65	1.24	114.00	57.00
40A x 3/4	48.60 x 19.05	1.65	1.65	136.00	65.00
40A x 1	48.60 x 25.40	1.65	1.65	136.00	65.00
50A x 1/4	60.50 x 6.35	1.65	0.89	114.00	63.00
50A x 1/2	60.50 x 12.70	1.65	1.24	114.00	63.00
50A x 3/4	60.50 x 19.05	1.65	1.65	136.00	71.00
50A x 1	60.50 x 25.40	1.65	1.65	136.00	71.00
65A x 1/4	76.30 x 6.35	2.10	0.89	122.00	71.00
65A x 1/2	76.30 x 12.70	2.10	1.24	122.00	71.00
65A x 3/4	76.30 x 19.05	2.10	1.65	144.00	79.00
65A x 1	76.30 x 25.40	2.10	1.65	144.00	79.00
80A x 1/4	89.10 x 6.35	2.10	0.89	122.00	77.00
80A x 1/2	89.10 x 12.70	2.10	1.24	122.00	77.00
80A x 3/4	89.10 x 19.05	2.10	1.65	144.00	85.00
80A x 1	89.10 x 25.40	2.10	1.65	144.00	85.00
100A x 1/4	114.30 x 6.35	2.10	0.89	122.00	90.00
100A x 1/2	114.30 x 12.70	2.10	1.24	122.00	90.00
100A x 3/4	114.30 x 19.05	2.10	1.65	144.00	98.00
100A x 1	114.30 x 25.40	2.10	1.65	144.00	98.00
125A x 1/4	139.80 x 6.35	2.80	0.89	160.00	110.00
125A x 1/2	139.80 x 12.70	2.80	1.24	160.00	110.00
125A x 3/4	139.80 x 19.05	2.80	1.65	200.00	120.00
125A x 1	139.80 x 25.40	2.80	1.65	200.00	120.00
150A x 1/2	165.20 x 12.70	2.80	1.24	180.00	130.00
150A x 3/4	165.20 x 19.05	2.80	1.65	220.00	140.00
150A x 1	165.20 x 25.40	2.80	1.65	220.00	140.00
200A x 1/2	216.30 x 12.70	2.80	1.24	200.00	150.00
200A x 3/4	216.30 x 19.05	2.80	1.65	240.00	160.00
200A x 1	216.30 x 25.40	2.80	1.65	240.00	160.00

制造。/ Manufacture: ≤ 1" OD (25.40 mm) 无缝 seamless
≥ 1 1/2" OD (38.10 mm) 已焊接 welded

大小头 REDUCERS





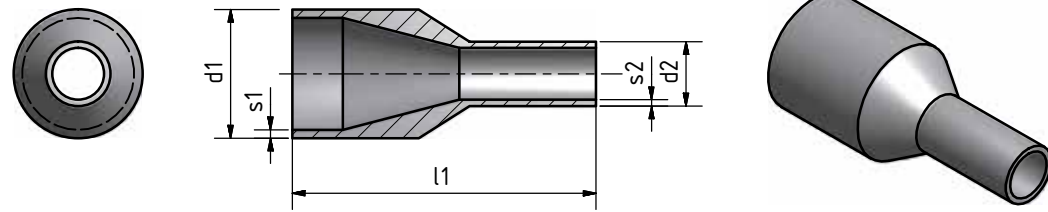
TCC lip	ultron lip	基础订货号 Basic Order Code		英寸 Imperial	d1	d2	s1	s2	l1
■	■			寸 / Inch	mm				
TCT	ULT	-	RK-6-4	3/8 x 1/4	9.53	6.35	0.89	0.89	40.90
TCT	ULT	-	RK-8-4	1/2 x 1/4	12.70	6.35	1.24	0.89	41.50
TCT	ULT	-	RK-8-6	1/2 x 3/8	12.70	9.53	1.24	0.89	51.50
TCT	ULT	-	RK-12-6	3/4 x 3/8	19.05	9.53	1.65	0.89	52.60
TCT	ULT	-	RK-12-8	3/4 x 1/2	19.05	12.70	1.65	1.24	52.10
TCT	ULT	-	RK-16-8	1 x 1/2	25.40	12.70	1.65	1.24	53.20
TCT	ULT	-	RK-16-12	1 x 3/4	25.40	19.05	1.65	1.65	52.10
TCT	ULT	-	RK-24-8	1 1/2 x 1/2	38.10	12.70	1.65	1.24	68.20
TCT	ULT	-	RK-24-12	1 1/2 x 3/4	38.10	19.05	1.65	1.65	67.10
TCT	ULT	-	RK-24-16	1 1/2 x 1	38.10	25.40	1.65	1.65	65.90
TCT	ULT	-	RK-32-16	2 x 1	50.80	25.40	1.65	1.65	68.20
TCT	ULT	-	RK-32-24	2 x 1 1/2	50.80	38.10	1.65	1.65	78.60
TCT	ULT	-	RK-40-16	2 1/2 x 1	63.50	25.4	1.65	1.65	100.00
TCT	ULT	-	RK-40-24	2 1/2 x 1 1/2	63.50	38.1	1.65	1.65	85.73
TCT	ULT	-	RK-40-32	2 1/2 x 2	63.50	50.8	1.65	1.65	63.50
TCT	ULT	-	RK-48-24	3 x 1 1/2	76.20	38.10	1.65	1.65	83.20
TCT	ULT	-	RK-48-32	3 x 2	76.20	50.80	1.65	1.65	80.90
TCT	ULT	-	RK-48-40	3 x 2 1/2	76.20	63.50	1.65	1.65	66.68
TCT	ULT	-	RK-64-32	4 x 2	101.60	50.80	2.11	1.65	94.60
TCT	ULT	-	RK-64-40	4 x 2 1/2	101.60	63.50	2.11	1.65	107.95
TCT	ULT	-	RK-64-48	4 x 3	101.60	76.20	2.11	1.65	80.90
TCT	ULT	-	RK-96-48	6 x 3	152.40	76.20	2.77	1.65	115.50
TCT	ULT	-	RK-96-64	6 x 4	152.40	101.60	2.77	2.11	98.20

TCC lip	ultron lip	基础订货号 Basic Order Code		JIS G 3459 5S / Imperial	d1	d2	s1	s2	l1
■	■			A-Size / Inch	mm				
TCT	ULT	-	RK-15A-4	15A x 1/4	21.70	6.35	1.65	0.89	100.00
TCT	ULT	-	RK-15A-6	15A x 3/8	21.70	9.53	1.65	0.89	100.00
TCT	ULT	-	RK-15A-8	15A x 1/2	21.70	12.70	1.65	1.24	100.00
TCT	ULT	-	RK-15A-12	15A x 3/4	21.70	19.05	1.65	1.65	100.00
TCT	ULT	-	RK-20A-4	20A x 1/4	27.20	6.35	1.65	0.89	105.00
TCT	ULT	-	RK-20A-6	20A x 3/8	27.20	9.53	1.65	0.89	105.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

TCC lip	ultron lip	基础订货号 Basic Order Code		JIS G 3459 5S / Imperial	d1	d2	s1	s2	l1
■	■			A-Size / Inch	mm				
TCT	ULT	-	RK-20A-8	20A x 1/2	27.20	12.70	1.65	1.24	105.00
TCT	ULT	-	RK-20A-12	20A x 3/4	27.20	19.05	1.65	1.65	105.00
TCT	ULT	-	RK-20A-16	20A x 1	27.20	25.40	1.65	1.65	105.00
TCT	ULT	-	RK-25A-4	25A x 1/4	34.00	6.35	1.65	0.89	45.30
TCT	ULT	-	RK-25A-6	25A x 3/8	34.00	9.530	1.65	0.89	120.00
TCT	ULT	-	RK-25A-8	25A x 1/2	34.00	12.70	1.65	1.24	65.40
TCT	ULT	-	RK-25A-12	25A x 3/4	34.00	19.05	1.65	1.65	64.20
TCT	ULT	-	RK-25A-16	25A x 1	34.00	25.40	1.65	1.65	120.00
TCT	ULT	-	RK-32A-6	32A x 3/8	42.70	9.53	1.65	0.89	69.60
TCT	ULT	-	RK-32A-8	32A x 1/2	42.70	12.70	1.65	1.24	77.00
TCT	ULT	-	RK-32A-12	32A x 3/4	42.70	19.05	1.65	1.65	75.80
TCT	ULT	-	RK-32A-16	32A x 1	42.70	25.40	1.65	1.65	125.00
TCT	ULT	-	RK-40A-6	40A x 3/8	48.60	9.53	1.65	0.89	130.00
TCT	ULT	-	RK-40A-8	40A x 1/2	48.60	12.70	1.65	1.24	78.00
TCT	ULT	-	RK-40A-12	40A x 3/4	48.60	19.05	1.65	1.65	76.90
TCT	ULT	-	RK-40A-16	40A x 1	48.60	25.40	1.65	1.65	130.00
TCT	ULT	-	RK-50A-6	50A x 3/8	60.50	9.53	1.65	0.89	140.00
TCT	ULT	-	RK-50A-8	50A x 1/2	60.50	12.70	1.65	1.24	140.00
TCT	ULT	-	RK-50A-12	50A x 3/4	60.50	19.05	1.65	1.65	140.00
TCT	ULT	-	RK-50A-16	50A x 1	60.50	25.40	1.65	1.65	140.00
TCT	ULT	-	RK-65A-6	65A x 3/8	76.30	9.53	2.10	0.89	165.00
TCT	ULT	-	RK-65A-8	65A x 1/2	76.30	12.70	2.10	1.24	165.00
TCT	ULT	-	RK-65A-12	65A x 3/4	76.30	19.05	2.10	1.65	165.00
TCT	ULT	-	RK-65A-16	65A x 1	76.30	25.40	2.10	1.65	165.00
TCT	ULT	-	RK-80A-6	80A x 3/8	89.10	9.53	2.10	0.89	170.00
TCT	ULT	-	RK-80A-8	80A x 1/2	89.10	12.70	2.10	1.24	170.00
TCT	ULT	-	RK-80A-12	80A x 3/4	89.10	19.05	2.10	1.65	170.00
TCT	ULT	-	RK-80A-16	80A x 1	89.10	25.40	2.10	1.65	170.00
TCT	ULT	-	RK-100A-8	100A x 1/2	114.30	12.70	2.10	1.24	180.00
TCT	ULT	-	RK-100A-12	100A x 3/4	114.30	19.05	2.10	1.65	180.00
TCT	ULT	-	RK-100A-16	100A x 1	114.30	25.40	2.10	1.65	180.00
TCT	ULT	-	RK-125A-8	125A x 1/2	139.80	12.70	2.80	1.24	250.00
TCT	ULT	-	RK-125A-12	125A x 3/4	139.80	19.05	2.80	1.65	250.00
TCT	ULT	-	RK-125A-16	125A x 1	139.80	25.40	2.80	1.65	250.00
TCT	ULT	-	RK-150A-8	150A x 1/2	165.20	12.70	2.80	1.24	260.00
TCT	ULT	-	RK-150A-12	150A x 3/4	165.20	19.05	2.80	1.65	260.00
TCT	ULT	-	RK-150A-16	150A x 1	165.20	25.40	2.80	1.65	260.00
TCT	ULT	-	RK-200A-12	200A x 3/4	216.30	19.05	2.80	1.65	280.00
TCT	ULT	-	RK-200A-16	200A x 1	216.30	25.40	2.80	1.65	280.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.



TCC ltp	ultron ltp	基础订货号 Basic Order Code	JIS G 3459 5S	d1	d2	s1	s2	l1
			A-Size	mm				
TCT	ULT	-	RK - 20A - 15A	20A x 15A	27.20 x 21.70	1.65	1.65	105.00
TCT	ULT	-	RK - 25A - 15A	25A x 15A	34.00 x 21.70	1.65	1.65	120.00
TCT	ULT	-	RK - 25A - 20A	25A x 20A	34.00 x 27.20	1.65	1.65	120.00
TCT	ULT	-	RK - 32A - 15A	32A x 15A	42.70 x 21.70	1.65	1.65	125.00
TCT	ULT	-	RK - 32A - 20A	32A x 20A	42.70 x 27.20	1.65	1.65	125.00
TCT	ULT	-	RK - 32A - 25A	32A x 25A	42.70 x 34.00	1.65	1.65	83.70
TCT	ULT	-	RK - 40A - 15A	40A x 15A	48.60 x 21.70	1.65	1.65	130.00
TCT	ULT	-	RK - 40A - 20A	40A x 20A	48.60 x 27.20	1.65	1.65	130.00
TCT	ULT	-	RK - 40A - 25A	40A x 25A	48.60 x 34.00	1.65	1.65	84.80
TCT	ULT	-	RK - 40A - 32A	40A x 32A	48.60 x 42.70	1.65	1.65	93.20
TCT	ULT	-	RK - 50A - 15A	50A x 15A	60.50 x 21.70	1.65	1.65	140.00
TCT	ULT	-	RK - 50A - 20A	50A x 20A	60.50 x 27.20	1.65	1.65	140.00
TCT	ULT	-	RK - 50A - 25A	50A x 25A	60.50 x 34.00	1.65	1.65	140.00
TCT	ULT	-	RK - 50A - 32A	50A x 32A	60.50 x 42.70	1.65	1.65	95.30
TCT	ULT	-	RK - 50A - 40A	50A x 40A	60.50 x 48.60	1.65	1.65	94.30
TCT	ULT	-	RK - 65A - 15A	65A x 15A	76.30 x 21.70	2.10	1.65	165.00
TCT	ULT	-	RK - 65A - 20A	65A x 20A	76.30 x 27.20	2.10	1.65	165.00
TCT	ULT	-	RK - 65A - 25A	65A x 25A	76.30 x 34.00	2.10	1.65	165.00
TCT	ULT	-	RK - 65A - 32A	65A x 32A	76.30 x 42.70	2.10	1.65	103.40
TCT	ULT	-	RK - 65A - 40A	65A x 40A	76.30 x 48.60	2.10	1.65	102.10
TCT	ULT	-	RK - 65A - 50A	65A x 50A	76.30 x 60.50	2.10	1.65	165.00
TCT	ULT	-	RK - 80A - 15A	80A x 15A	89.10 x 21.70	2.10	1.65	170.00
TCT	ULT	-	RK - 80A - 20A	80A x 20A	89.10 x 27.20	2.10	1.65	170.00
TCT	ULT	-	RK - 80A - 25A	80A x 25A	89.10 x 34.00	2.10	1.65	170.00
TCT	ULT	-	RK - 80A - 32A	80A x 32A	89.10 x 42.70	2.10	1.65	170.00
TCT	ULT	-	RK - 80A - 40A	80A x 40A	89.10 x 48.60	2.10	1.65	104.50
TCT	ULT	-	RK - 80A - 50A	80A x 50A	89.10 x 60.50	2.10	1.65	170.00
TCT	ULT	-	RK - 80A - 65A	80A x 65A	89.10 x 76.30	2.10	2.10	104.40
TCT	ULT	-	RK - 100A - 15A	100A x 15A	114.30 x 21.70	2.10	1.65	180.00
TCT	ULT	-	RK - 100A - 20A	100A x 20A	114.30 x 27.20	2.10	1.65	180.00
TCT	ULT	-	RK - 100A - 25A	100A x 25A	114.30 x 34.00	2.10	1.65	180.00
TCT	ULT	-	RK - 100A - 32A	100A x 32A	114.30 x 42.70	2.10	1.65	180.00
TCT	ULT	-	RK - 100A - 40A	100A x 40A	114.30 x 48.60	2.10	1.65	131.20
TCT	ULT	-	RK - 100A - 50A	100A x 50A	114.30 x 60.50	2.10	1.65	180.00
TCT	ULT	-	RK - 100A - 65A	100A x 65A	114.30 x 76.30	2.10	2.10	109.00
TCT	ULT	-	RK - 100A - 80A	100A x 80A	114.30 x 89.10	2.10	2.10	180.00
TCT	ULT	-	RK - 125A - 15A	125A x 15A	139.80 x 21.70	2.80	1.65	250.00
TCT	ULT	-	RK - 125A - 20A	125A x 20A	139.80 x 27.20	2.80	1.65	250.00

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

TCC ltp	ultron ltp	基础订货号 Basic Order Code	JIS G 3459 5S	d1	d2	s1	s2	l1
			A-Size	mm				
TCT	ULT	-	RK - 125A - 25A	125A x 25A	139.80 x 34.00	2.80	1.65	250.00
TCT	ULT	-	RK - 125A - 32A	125A x 32A	139.80 x 42.70	2.80	1.65	250.00
TCT	ULT	-	RK - 125A - 40A	125A x 40A	139.80 x 48.60	2.80	1.65	250.00
TCT	ULT	-	RK - 125A - 50A	125A x 50A	139.80 x 60.50	2.80	1.65	250.00
TCT	ULT	-	RK - 125A - 65A	125A x 65A	139.80 x 76.30	2.80	2.10	250.00
TCT	ULT	-	RK - 125A - 80A	125A x 80A	139.80 x 89.10	2.80	2.10	250.00
TCT	ULT	-	RK - 125A - 100A	125A x 100A	139.80 x 114.30	2.80	2.10	250.00
TCT	ULT	-	RK - 150A - 15A	150A x 15A	165.20 x 21.70	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 20A	150A x 20A	165.20 x 27.20	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 25A	150A x 25A	165.20 x 34.00	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 32A	150A x 32A	165.20 x 42.70	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 40A	150A x 40A	165.20 x 48.60	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 50A	150A x 50A	165.20 x 60.50	2.80	1.65	260.00
TCT	ULT	-	RK - 150A - 65A	150A x 65A	165.20 x 76.30	2.80	2.10	150.90
TCT	ULT	-	RK - 150A - 80A	150A x 80A	165.20 x 89.10	2.80	2.10	260.00
TCT	ULT	-	RK - 150A - 100A	150A x 100A	165.20 x 114.30	2.80	2.10	118.00
TCT	ULT	-	RK - 150A - 125A	150A x 125A	165.20 x 139.80	2.80	2.80	260.00
TCT	ULT	-	RK - 200A - 15A	200A x 15A	216.30 x 21.70	2.80	1.65	280.00
TCT	ULT	-	RK - 200A - 25A	200A x 25A	216.30 x 34.00	2.80	1.65	280.00
TCT	ULT	-	RK - 200A - 32A	200A x 32A	216.30 x 42.70	2.80	1.65	280.00
TCT	ULT	-	RK - 200A - 40A	200A x 40A	216.30 x 48.60	2.80	1.65	280.00
TCT	ULT	-	RK - 200A - 50A	200A x 50A	216.30 x 60.50	2.80	1.65	280.00
TCT	ULT	-	RK - 200A - 65A	200A x 65A	216.30 x 76.30	2.80	2.10	280.00
TCT	ULT	-	RK - 200A - 80A	200A x 80A	216.30 x 89.10	2.80	2.10	280.00
TCT	ULT	-	RK - 200A - 100A	200A x 100A	216.30 x 114.30	2.80	2.10	280.00
TCT	ULT	-	RK - 200A - 125A	200A x 125A	216.30 x 139.80	2.80	2.80	280.00
TCT	ULT	-	RK - 200A - 150A	200A x 150A	216.30 x 165.20	2.80	2.80	280.00
TCT	ULT	-	RK - 250A - 25A	250A x 25A	267.40 x 34.00	3.40	1.65	300.00
TCT	ULT	-	RK - 250A - 32A	250A x 32A	267.40 x 42.70	3.40	1.65	300.00
TCT	ULT	-	RK - 250A - 40A	250A x 40A	267.40 x 48.60	3.40	1.65	300.00
TCT	ULT	-	RK - 250A - 50A	250A x 50A	267.40 x 60.50	3.40	1.65	300.00
TCT	ULT	-	RK - 250A - 65A	250A x 65A	267.40 x 76.30	3.40	2.10	300.00
TCT	ULT	-	RK - 250A - 80A	250A x 80A	267.40 x 89.10	3.40	2.10	300.00
TCT	ULT	-	RK - 250A - 100A	250A x 100A	267.40 x 114.30	3.40	2.10	300.00
TCT	ULT	-	RK - 250A - 125A	250A x 125A	267.40 x 139.80	3.40	2.80	300.00
TCT	ULT	-	RK - 250A - 150A	250A x 150A	267.40 x 165.20	3.40	2.80	300.00
TCT	ULT	-	RK - 250A - 200A	250A x 200A	267.40 x 216.30	3.40	2.80	300.00
TCT	ULT	-	RK - 300A - 25A	300A x 25A	318.50 x 34.00	4.00	1.65	325.00
TCT	ULT	-	RK - 300A - 32A	300A x 32A	318.50 x 42.70	4.00	1.65	325.00
TCT	ULT	-	RK - 300A - 40A	300A x 40A	318.50 x 48.60	4.00	1.65	325.00
TCT	ULT	-	RK - 300A - 50A	300A x 50A	318.50 x 60.50	4.00	1.65	325.00
TCT	ULT	-	RK - 300A - 65A	300A x 65A	318.50 x 76.30	4.00	2.10	325.00
TCT	ULT	-	RK - 300A - 80A	300A x 80A	318.50 x 89.10	4.00	2.10	325.00
TCT	ULT	-	RK - 300A - 100A	300A x 100A	318.50 x 114.30	4.00	2.10	325.00
TCT	ULT	-	RK - 300A - 150A	300A x 150A	318.50 x 165.20	4.00	2.80	325.00
TCT	ULT	-	RK - 300A - 200A	300A x 200A	318.50 x 216.30	4.00	2.80	325.00
TCT	ULT	-	RK - 300A - 250A	300A x 250A	318.50 x 267.40	4.00	3.40	325.00

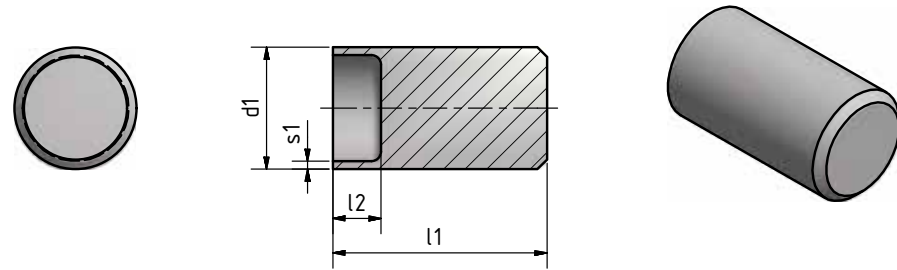
其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

端盖

可移除的焊接封头 (DOCKWEILER封头)

ENDCAPS
AND DOCKWEILER CAP





TCC ltp	ultron ltp		基础订货号 Basic Order Code
TCT	ULT	-	WC - 4
TCT	ULT	-	WC - 6
TCT	ULT	-	WC - 8
TCT	ULT	-	WC - 12
TCT	ULT	-	WC - 16
TCT	ULT	-	WC - 24
TCT	ULT	-	WC - 32
TCT	ULT	-	WC - 40
TCT	ULT	-	WC - 48
TCT	ULT	-	WC - 64
TCT	ULT	-	WC - 96

英寸 Imperial	d1	s1	l1
寸 / Inch	mm		
1/4	6.35	0.89	34.75
3/8	9.53	0.89	44.45
1/2	12.70	1.24	44.45
3/4	19.05	1.65	44.45
1	25.40	1.65	44.45
1 1/2	38.10	1.65	50.80
2	50.80	1.65	50.80
2 1/2	63.50	1.65	50.80
3	76.20	1.65	50.80
4	101.60	2.11	63.50
6	152.40	2.77	200.00

TCT	ULT		WC - 15A
TCT	ULT	-	WC - 20A
TCT	ULT	-	WC - 25A
TCT	ULT	-	WC - 32A
TCT	ULT	-	WC - 40A
TCT	ULT	-	WC - 50A
TCT	ULT	-	WC - 65A
TCT	ULT	-	WC - 80A
TCT	ULT	-	WC - 90A
TCT	ULT	-	WC - 100A
TCT	ULT	-	WC - 125A
TCT	ULT	-	WC - 150A

JIS G 3459 5S	d1	s1	l1
A-Size	mm		
15A	21.70	1.65	25.40
20A	27.20	1.65	25.40
25A	34.00	1.65	38.10
32A	42.70	1.65	38.10
40A	48.60	1.65	38.10
50A	60.50	1.65	38.10
65A	76.30	2.10	38.10
80A	89.10	2.10	50.80
90A	101.60	2.10	63.50
100A	114.30	2.10	63.50
125A	139.80	2.80	76.20
150A	165.20	2.80	88.90

TCT	ULT	
TCT	ULT	-
TCT	ULT	-
TCT	ULT	-
TCT	ULT	-

特殊尺寸 Special Sizes	d1	s1	l1
寸 / Inch	mm		
1/4	6.35	1.00	34.75
3/8	9.53	1.00	44.45
1/2	12.70	1.00	44.45
3/4	19.05	1.24	44.45

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

*脱颖而出的设计：焊接至管接头的未加工中凹热炼端部。
Differing design: not machined but dished boiled end welded to tube stub.

适用行业

- 半导体行业
- 制药行业
- 生物科技行业
- 储罐与仪器设计制造

INDUSTRIES

- Semiconductor industry
- Pharmaceutical industry
- Biotechnology
- Tank and apparatus engineering

应用领域

- 适用于临时封盖管线
- 适用于配有轨道焊接接头的泄漏测试过滤器外壳、鼓泡器等
- 适用于配有焊接接头的阀门
- 适用于运输高纯度设备
(漏氨率 1×10^{-9} mbar l/s; 1×10^{-9} scc/sec)

FIELD OF APPLICATIONS

- For temporary capping of a line
- For leak testing filter housing, bubblers etc. with orbital weld connections
- On valves with weld connections
- During transportation of high purity equipment
(Helium-Leak-Rate 1×10^{-9} mbar l / s; 1×10^{-9} scc / sec)

优点

安全性更强

- 焊接质量极佳 - 与传统焊接端帽相比，吹扫气流得到保障
- 预处理效果极佳 - 管道端部已完成轨道焊接预处理
- 不会因为切割和覆面而造成颗粒污染

BENEFITS

More security

- Optimum weld quality – purge gas flow is guaranteed in contrast to conventional weld endcaps
- Optimum preparation – the tube end is ready for orbital welding
- No particle contamination caused by cutting and facing

灵活性更高

- 接续管线非常方便，即使在超纯生产区域也不会产生风险
- 提供适用于安装间歇且安全无污染的解决方案

More flexibility

- Continuing a line is easy and without risk even in ultra pure production areas
- The safe and contamination free solution for breaks during installation

更经济实惠

- 安装和卸载均方便快捷，节约宝贵时间
- 管帽和夹具可重复利用

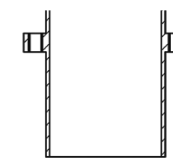
More economy

- Save time with easy and quick installation and deinstallation
- Re usable cap and clamp

应用 Application	Dockweiler管道系统 Dockweiler tube system	规格 Specifications
UHP	ultron ltp	材料: UNS S31603 (316L) Material: UNS S31603 (316L) 标准表面: $Ra \leq 0.25 \mu\text{m} / 10 \mu\text{in}$ Standard surface: $Ra \leq 0.25 \mu\text{m} / 10 \mu\text{in}$ 请参见ultron ltp规格 (第8页) See ultron ltp specification (page 8)
CFOS	TCC ltp	材料: UNS S31603 (316L) Material: UNS S31603 (316L) 标准表面: $Ra \leq 0.50 \mu\text{m} / 20 \mu\text{in}$ Standard surface: $Ra \leq 0.50 \mu\text{m} / 20 \mu\text{in}$ 请参见TCC ltp规格 (第6页) See TCC ltp specification (page 6)

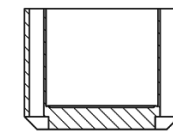
安装简单

Simple to install



管道焊接端
管道焊接端焊接到管道上，这也是安装流程的一部分

Tube weld end
The tube weld end is welded to the tube and remains part of the installation



管帽
垫圈放在管道焊接端上，并以螺栓定位

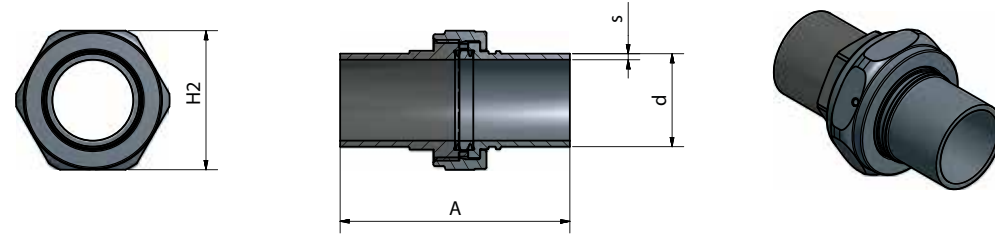
The cap
with the gasket is put over the tube weld end and bolted into position

ZEROCON连接组件

ZEROCON CONNECTION



完整组件
Complete Kit

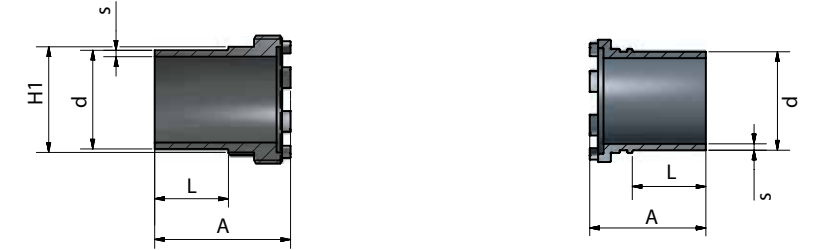


外形尺寸 / Dimensions

壓力 / Pressure

系统 System	英寸 Imperial		材料 Material	d [mm]	s [mm]	A [mm]	L [mm]	H1 [mm]	H2 [mm]	壓力 / Pressure	
	寸 Inch	材料 Material								[bar]	[psi]
201	1/4	316L	6.35	0.89	62.8	19	11	7/16	19	3/4	424 6149
402	3/8	316L	9.53	0.89	62.8	19	16	5/8	27	1 1/16	271 3930
603	1/2	316L	12.7	1.24	62.8	19	16	5/8	27	1 1/16	287 4162
503	1/2	316L	12.7	1.65	62.8	19	16	5/8	27	1 1/16	368 5337
1004	3/4	316L	19.05	1.24	62.8	19	22	7/8	32	1 1/4	186 2698
904	3/4	316L	19.05	1.65	62.8	19	22	7/8	32	1 1/4	251 3640
1305	1	316L	25.4	1.65	62.8	19	27	1 1/16	38	1 1/2	185 2683

零件
Parts



外形尺寸 / Dimensions

系统 System	英寸 Imperial		材料 Material	d [mm]	s [mm]	L [mm]	Screw joint		Pressure Joint	
	寸 Inch	材料 Material					A [mm]	H1 [mm]	A [mm]	
201	1/4	316L	6.35	0.89	19	35.0	11	7/16	30.0	
402	3/8	316L	9.53	0.89	19	35.0	16	5/8	30.0	
603	1/2	316L	12.7	1.24	19	35.0	16	5/8	30.0	
503	1/2	316L	12.7	1.65	19	35.0	16	5/8	30.0	
1004	3/4	316L	19.05	1.24	19	35.0	22	7/8	30.0	
904	3/4	316L	19.05	1.65	19	35.0	22	7/8	30.0	
1305	1	316L	25.4	1.65	19	35.0	27	1 1/16	30.0	

端帽、螺母和密封件
Endcaps, Nuts and Seals

端帽 / Endcap

系统 / System	H [mm]	材料 / Material
1	11,00	316L 1.4435
2	16,00	316L 1.4435
3	16,00	316L 1.4435
4	22,00	316L 1.4435
5	27,00	316L 1.4435

螺母 / Nut

系统 / System	Imperial	材料 / Material
1	6,35	316L 1.4435
2	9,53	316L 1.4435
3	12,70	316L 1.4435
4	19,05	316L 1.4435
5	25,40	316L 1.4435

密封 / Seal

系统 / System	(适用的管道尺寸 / for Tube Dimension)	d [mm]	材料 / Material
20	英寸 / Imperial 6.35 x 0.89	8.95	316L 1.4435
40	英寸 / Imperial 9.53 x 0.89	12.35	316L 1.4435
60	英寸 / Imperial 12.7 x 1.24	15.25	316L 1.4435
50	英寸 / Imperial 12.7 x 1.65	15.25	316L 1.4435
100	英寸 / Imperial 19.05 x 1.24	21.60	316L 1.4435
90	英寸 / Imperial 19.05 x 1.65	21.60	316L 1.4435
130	英寸 / Imperial 25.4 x 1.65	27.20	316L 1.4435

COAX双套管系列

COAX TUBES AND FITTINGS



COAX – 双套管系统

该双套管系统包括一根内部工艺管和一根外部安全管。这两根管子均已完成轨道焊接预处理，并以优质不锈钢AISI 316L或304L制造，具体依客户要求而定（管道亦可根据需要其他合金材料）。

工艺管位于衬垫中央，利用衬垫保护内外管之间的气流。如若工艺管发生泄漏，逸出的介质将流入安全空间，可中和并从系统中无害排放。双套管系统只需轨道焊接安装，简单方便，并且亦可集成到已有系统和设施中。

COAX – the coaxial tube system

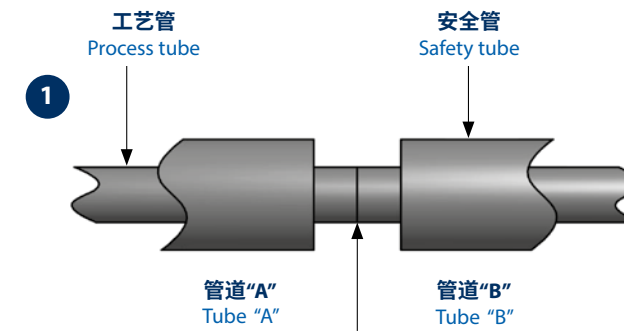
The special double-wall tube system consists of an inner process tube and an outer safety tube. Both are prepared for orbital welding and manufactured from high quality stainless steel AISI 316L or 304L – acc. to customer specification (the tube is also available in other alloys on demand).

Spacers center the process tube and safeguard the gas flow between the outer and the inner tube. In case of a leak in the process tube the escaping medium flows into the safety space and can be neutralized and harmlessly discharged from the system.

The coaxial tube system is easy to install by orbital welding and can also be integrated in existing systems and plants.

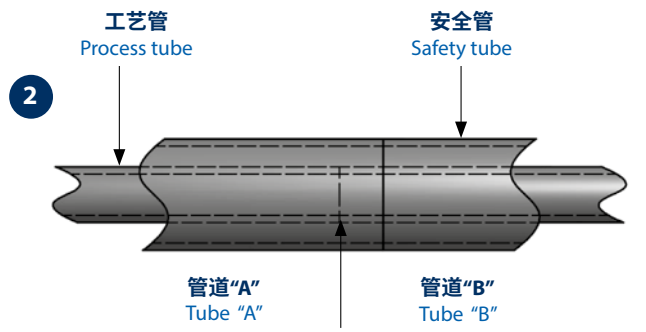


管道到管道或管道到管件



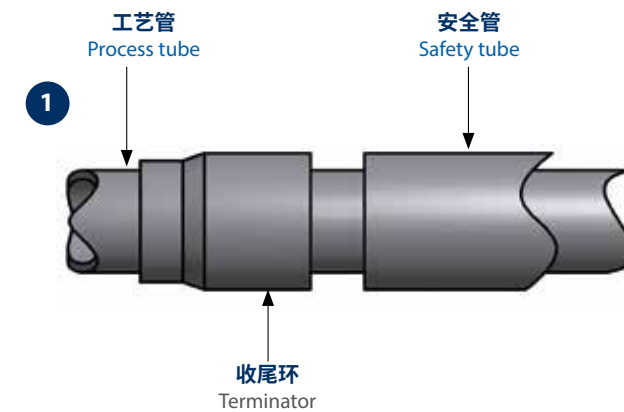
对外管进行轨道焊接，并组织氦气检漏试验
Orbital weld the process tube and helium leak test

Tube to tube or tube to fitting

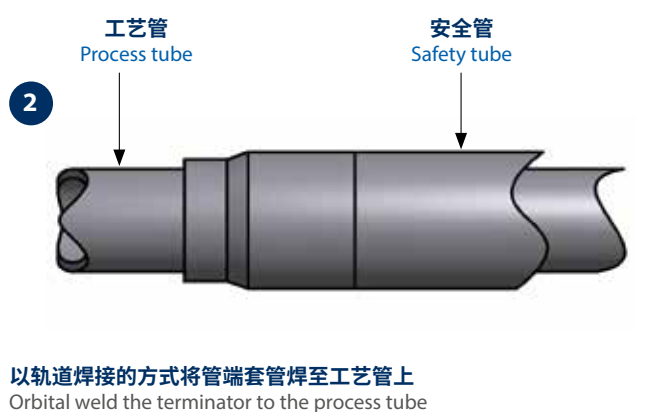


- 同时滑动所有安全管，盖住内部工艺管上的焊接点
- 对外管进行轨道焊接，并组织氦气检漏试验
- Slide the safety tubes together so that the weld on the inner process tube is covered
- Orbital weld the outer tube and helium leak test

封闭外部安全管

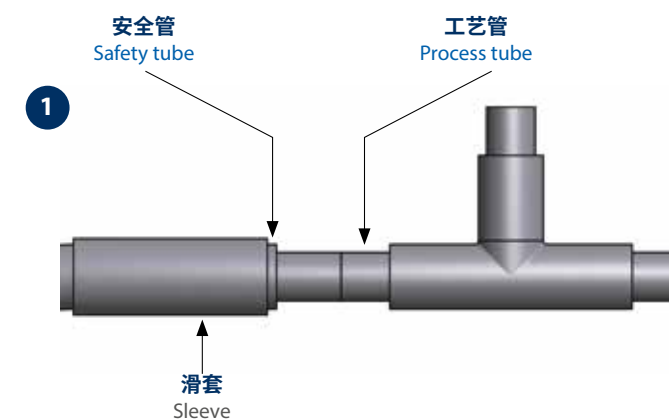


Closing the outer safety tube



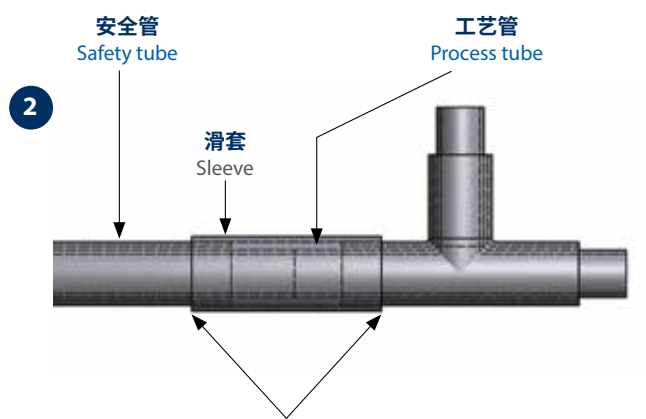
以轨道焊接的方式将管端套管焊至工艺管上
Orbital weld the terminator to the process tube

管件到管件

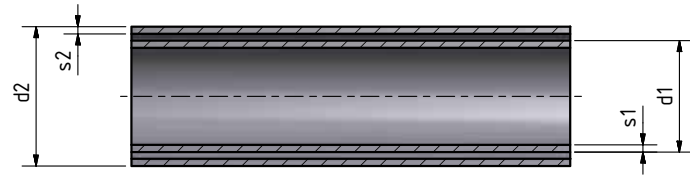


工艺管的轨道焊接
Orbital weld the process tube

Fitting to fitting

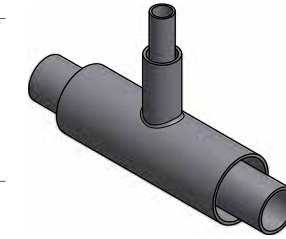
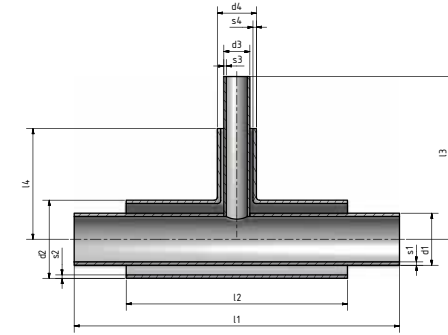
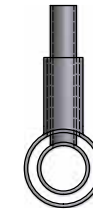


将滑套滑过安全管的两端，然后进行轨道焊接
A sleeve is slid over both ends of the safety tube and orbital welded



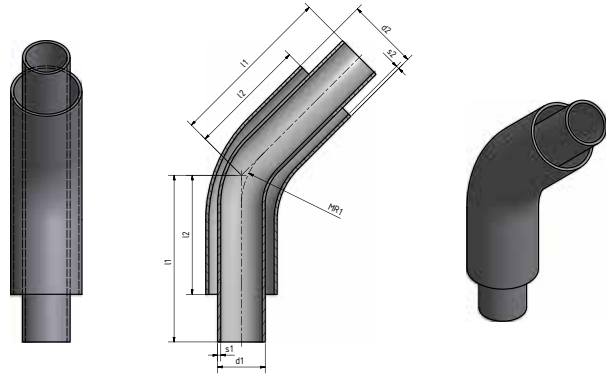
英寸 Imperial	内管 Inner Tube		外管 Outer Tube		重量 Weight
	d1	s1	d2	s2	
寸 / Inch	mm				kg/m
1/4	6.35	0.89	12.70	1.24	0.4752
3/8	9.53	0.89	15.88	1.24	0.6512
1/2	12.70	1.24	19.05	1.65	1.0709
3/4	19.05	1.65	25.40	1.65	1.7022
1	25.40	1.65	38.10	1.65	2.4901

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

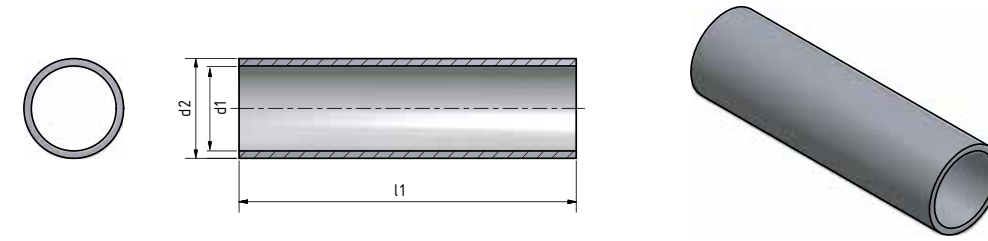


英寸 Imperial	内管 Inner Tube				外管 Outer Tube							
	主管 Main Tube		分支 Branch		主管 Main Tube		分支 Branch					
	d1	s1	d3	s3	d2	s2	d4	s4	l1	l2	l3	l4
寸 / Inch	mm											
1/4 x 1/4	6.35	0.89	6.35	0.89	12.70	1.24	12.70	1.24	127.00	88.90	63.50	44.45
3/8 x 1/4	9.53	0.89	6.35	0.89	15.88	1.24	12.70	1.24	127.00	88.90	63.50	44.45
3/8 x 3/8	9.53	0.89	9.53	0.89	15.88	1.24	15.88	1.24	127.00	88.90	63.50	44.45
1/2 x 1/4	12.70	1.24	6.35	0.89	19.05	1.65	12.70	1.24	133.35	95.25	66.68	47.63
1/2 x 3/8	12.70	1.24	9.53	0.89	19.05	1.65	15.88	1.24	133.35	95.25	66.68	47.63
1/2 x 1/2	12.70	1.24	12.70	1.24	19.05	1.65	19.05	1.65	133.35	95.25	66.68	47.63
3/4 x 1/4	19.05	1.65	6.35	0.89	25.40	1.65	12.70	1.24	133.35	95.25	66.68	47.63
3/4 x 3/8	19.05	1.65	9.53	0.89	25.40	1.65	15.88	1.24	133.35	95.25	66.68	47.63
3/4 x 1/2	19.05	1.65	12.70	1.24	25.40	1.65	19.05	1.65	133.35	95.25	66.68	47.63
3/4 x 3/4	19.05	1.65	19.05	1.65	25.40	1.65	25.40	1.65	133.35	95.25	66.68	47.63
1 x 1/4	25.40	1.65	6.35	0.89	38.10	1.65	12.70	1.24	158.75	107.95	79.38	53.98
1 x 3/8	25.40	1.65	9.53	0.89	38.10	1.65	15.88	1.24	158.75	107.95	79.38	53.98
1 x 1/2	25.40	1.65	12.70	1.24	38.10	1.65	19.05	1.65	158.75	107.95	79.38	53.98
1 x 3/4	25.40	1.65	19.05	1.65	38.10	1.65	25.40	1.65	158.75	107.95	79.38	53.98
1 x 1	25.40	1.65	25.40	1.65	38.10	1.65	38.10	1.65	158.75	107.95	79.38	53.98

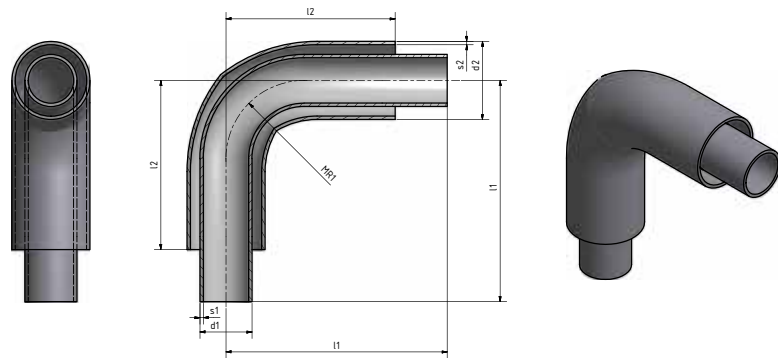
其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.



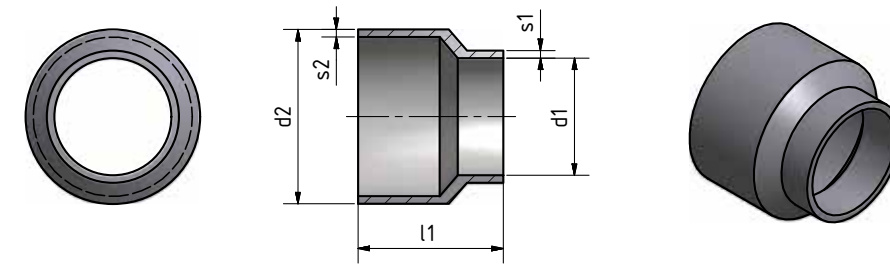
英寸 Imperial	内管 Inner Tube		外管 Outer Tube		外径尺寸 Dimensions			
	d1	s1	d2	s2	l1	l2	MR1	
寸 / Inch	mm							
1/4	6.35	0.89	12.70	1.24	98.45	79.40	38.10	弯曲 / bent
3/8	9.53	0.89	15.88	1.24	98.45	79.40	57.00	弯曲 / bent
1/2	12.70	1.24	19.05	1.65	109.26	90.21	85.00	弯曲 / bent
3/4	19.05	1.65	25.40	1.65	135.61	110.21	85.00	弯曲 / bent
1	25.40	1.65	38.10	1.65	88.90	63.50	38.10	焊接 / welded



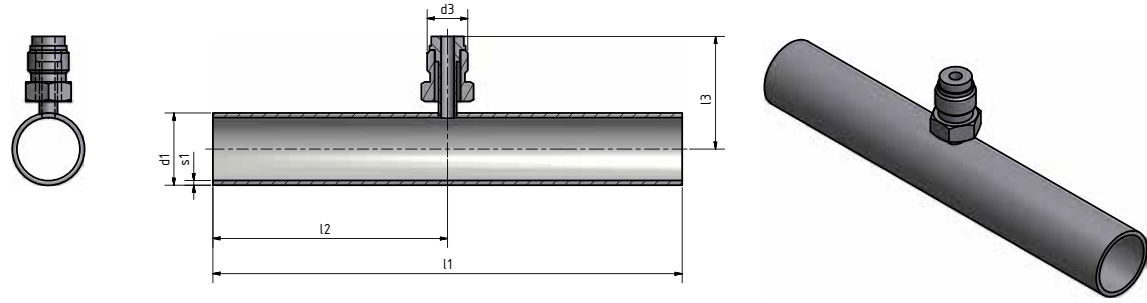
英寸 Imperial	内管 Inner Tube	外管 Outer Tube	套管 Sleeve		
	d	d	d1	d2	l1
寸 / Inch	mm				
1/4	6.35	12.70	12.90	15.88	101.60
3/8	9.53	15.88	16.11	19.05	101.60
1/2	12.70	19.05	19.30	22.23	101.60
3/4	19.05	25.40	25.60	30.00	101.60
1	25.40	38.10	38.40	42.40	101.60



英寸 Imperial	内管 Inner Tube		外管 Outer Tube		外径尺寸 Dimensions			
	d1	s1	d2	s2	l1	l2	MR1	
寸 / Inch	mm							
1/4	6.35	0.89	12.70	1.24	120.70	101.65	38.10	弯曲 / bent
3/8	9.53	0.89	15.88	1.24	130.70	111.65	57.00	弯曲 / bent
1/2	12.70	1.24	19.05	1.65	184.40	165.35	85.00	弯曲 / bent
3/4	19.05	1.65	25.40	1.65	190.75	165.35	85.00	弯曲 / bent
1	25.40	1.65	38.10	1.65	107.97	82.57	38.10	焊接 / welded



英寸 Imperial	外径尺寸 Dimensions		
	d1	d2	l1
寸 / Inch	mm		
1/4	6.35	12.70	25.40
3/8	9.53	15.88	25.40
1/2	12.70	19.05	25.40
3/4	19.05	25.40	31.75
1	25.40	38.10	31.75

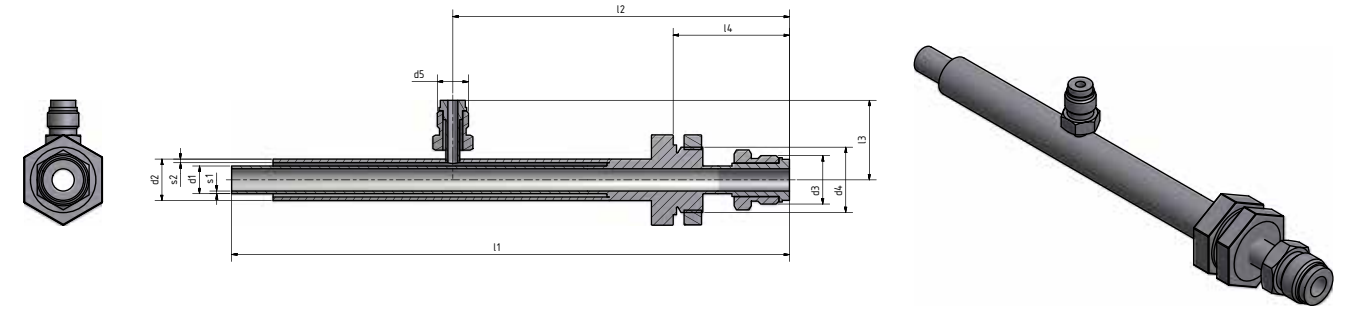


英寸 Imperial	内管 Inner Tube*		外管 Outer Tube			VCR**		
寸 / Inch	d1	s1	l1	l2	l3	d3		
	mm							
1/4	6.35	0.89	12.70	1.24	146.00	73.00	33.30	1/4
3/8	9.53	0.89	15.88	1.24	152.40	76.20	34.80	1/4
1/2	12.70	1.24	19.05	1.65	152.40	76.20	36.40	1/4
3/4	19.05	1.65	25.40	1.65	165.10	82.55	39.60	1/4
1	25.40	1.65	38.10	1.65	165.10	82.55	45.85	1/4

* 内管不在交付范围内。
* The inner tube is not part of the scope of delivery.

** 商标 / Trademark

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

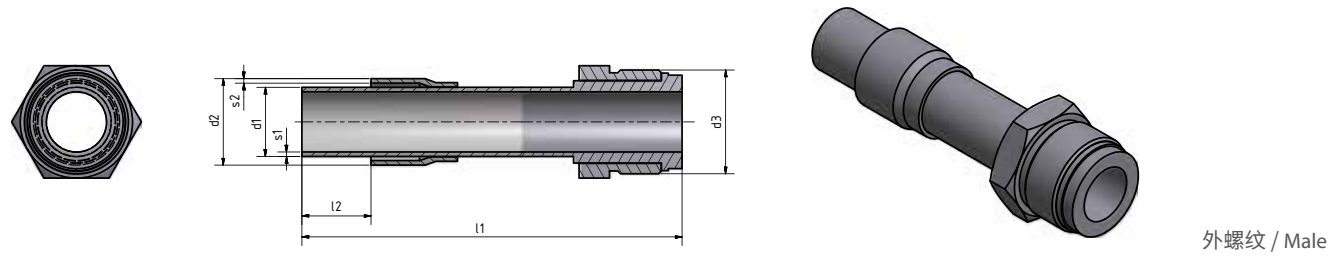


英寸 Imperial	主管 Main Tube				分支 Branch		直螺纹规格 Straight thread size					
寸 / Inch	d1	s1	d2	s2	l1	l2	l3	l4	VCR规格 VCR* Size	VCR管道规格 VCR* tube size	VCR规格 VCR* Size	d4
	mm								d3	寸 / Inch		d5
1/4	6.35	0.89	12.70	1.24	242.90	144.50	33.15	55.00	1/4	1/4	1/4	M20 x 1,5
3/8	9.53	0.89	15.88	1.24	256.20	154.60	34.80	53.40	1/2	1/4	1/4	M30 x 2
1/2	12.70	1.24	19.05	1.65	256.20	154.60	36.40	53.40	1/2	1/4	1/4	M30 x 2

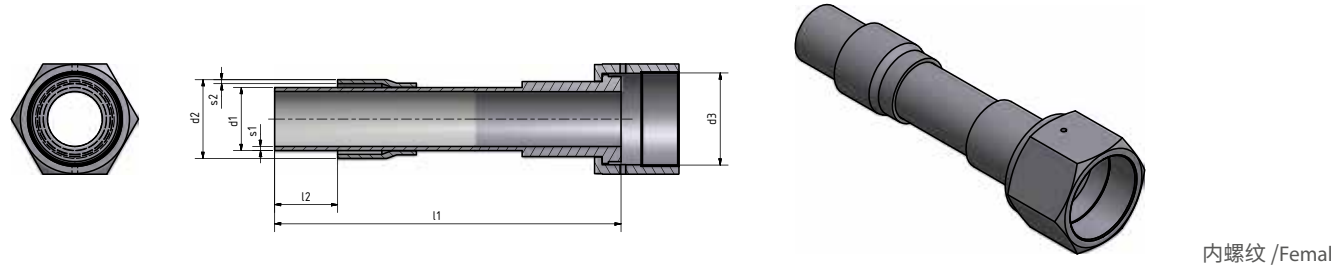
* 商标 / Trademark

(壁孔 /
Wall aperture)

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.



外螺纹 / Male



内螺纹 / Female

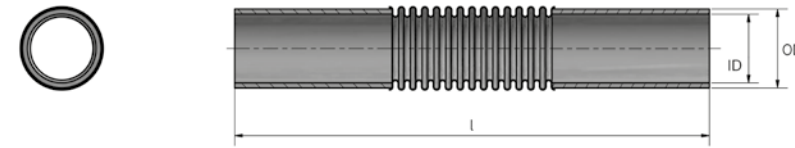
英寸 Imperial	外径尺寸 Dimensions						VCR规格 VCR* Size
寸 / Inch	d1	s1	d2	s2	l1	l2	d3
	mm						寸 / Inch
1/4	6.35	0.89	12.70	1.24	88.90	19.05	1/4
3/8	9.53	0.89	15.88	1.24	88.90	19.05	1/2
1/2	12.70	1.24	19.05	1.65	88.90	19.05	1/2
3/4	19.05	1.65	25.40	1.65	139.70	25.40	3/4
1	25.40	1.65	38.10	1.65	139.70	25.40	1

* 商标注册 / Trademark

其他尺寸请咨询。保留更改权利。
Further dimensions on request. Subject to alteration.

FLETRON不锈钢波纹管 FLETRON HOSES





不锈钢波纹管

Dockweiler已进行电抛光, 在洁净室内清洁, 波纹管的质量达到Ultron级别。
Flextron旨在满足客户对于高纯度气体系统的最高需求。

长度与接头

Flextron具备以下标准长度: 6"、12"、24"与36"。可根据需求定制其他长度。
Flextron通常使用VCR或轨道焊接端部。可根据需求定制其他连接选项。

Corrugated hoses in stainless steel

Dockweiler Flextron are electropolished, clean room cleaned corrugated hoses in ultron quality.
Flextron has been developed for the highest demands in the supply of high purity gas systems.

Lengths and connections

Flextron is available in the following standard lengths: 6", 12", 24" and 36". Others are available on request.
Flextron is generally available with VCR or orbital weld ends. Other connection options are available on request.

ultron [®] vlmvar [*]	英寸	型号	OD / AD	ID	最小静态弯曲半径 ¹	动态弯曲半径 ¹	重量
	Imperial	Type			Minimum Bending radius static ¹	Bending radius dynamic ¹	Weight
	寸 / Inch				mm		kg/m
•	1/4"	非编制 / not braided	10.2	6.2	25	140	0.12
		编制 / braided	11.6	6.2	25	140	0.23
•	3/8"	非编制 / not braided	10.2	6.2	25	140	0.12
		编制 / braided	11.6	6.2	25	140	0.23
•	1/2"	非编制 / not braided	14.3	10.2	38	190	0.11
		编制 / braided	15.7	10.2	38	190	0.23
•	3/4"	非编制 / not braided	26.7	20.2	70	285	0.27
		编制 / braided	28.3	20.2	70	285	0.49
•	1"	非编制 / not braided	26.7	20.2	70	285	0.27
		编制 / braided	28.3	20.2	70	285	0.49

* 焊接末端由316L V+V材质制作而成。
金属波纹管则由316L材质加工成型。

* The welding ends are made of UNS S31603 (316L) VIMVAR double melted material.
The corrugated hoses are made of UNS S31603 (316L).

概要

GENERAL INFORMATION



1 材质 / MATERIAL

产品编号 P/N	规范 Specification	描述 Description
UV	ultron vimvar	316L VimVar EP
ULT	ultron ltp	SUS 316LTP EP
TCT	TCC ltp	SUS 316LTP BA
CO_UL_T4 ³	Coaxial	外部: T4 / 内部: ULT Outer: T4 / Inner: ULT
CO_UL_TCT	Coaxial	外部: TCT / 内部: ULT Outer: TCT / Inner: ULT
FX	Flextron	316L EP

2 管子尺寸 / TUBE SIZE

产品编号 P/N	尺寸 Size	概要 General Notes	壁厚 Wall Thickness
02	1/8"		0.56
2 x 0.028	1/8"		0.71
04	1/4"	²⁾	0.89
06	3/8"	²⁾	0.89
08	1/2"	²⁾	1.24
10	5/8"	¹⁾	1.24
12	3/4"	²⁾	1.65
16	1"	²⁾	1.65
24	1 1/2"	²⁾	1.65
32	2"		1.65
40	2 1/2"		1.65
48	3"		1.65
64	4"		2.11
96	6"		2.77
<hr/>			
NPS128	8"		3.76
NPS160	10"		4.19
NPS192	12"	Sch10S Pipe Schedule 10S	4.57
NPS224	14"	其他应要求 others on request	4.80
NPS256	16"	其他应要求 others on request	4.80
NPS288	18"	其他应要求 others on request	4.80
NPS320	20"	其他应要求 others on request	5.54
<hr/>			
6A	6A		1.00
8A	8A		1.20
10A	10A		1.20
15A	15A		1.65
20A	20A		1.65
25A	25A		1.65
32A	32A		1.65
40A	40A	Sch5S Pipe Schedule 5S	1.65
50A	50A	Sch5S Pipe Schedule 5S	1.65
65A	65A	其他应要求 others on request	2.10
80A	80A	其他应要求 others on request	2.10
90A	90A	其他应要求 others on request	2.10
100A	100A	其他应要求 others on request	2.10
125A	125A	其他应要求 others on request	2.80
150A	150A	其他应要求 others on request	2.80
200A	200A	其他应要求 others on request	2.80
250A	250A	其他应要求 others on request	3.40
300A	300A	其他应要求 others on request	4.00

2 管件 / FITTING

产品编号 P/N	描述 Description
4L	45°弯头 45° Elbow
9L	90°弯头 90° Elbow
TE	等径三通 Tee Equal
RT	变径三通 Reducing Tee
CR	同心大小头 Concentric Reducer
RWC	可移除的焊接封头 (Dockweiler封头) Removable Weld Cap (Dockweiler Cap)
WC	焊接封头 Weld Cap
CTE	COAX双套三通 Coaxial Tee
C4L	COAX 45°双套弯头 Coaxial 45° Elbow
C9L	COAX 90°双套弯头 Coaxial 90° Elbow
CWS	COAX 焊接滑套 (长度: 4 inch) Coaxial Weld Sleeve (Length: 4 inch)
CWS3	COAX 焊接滑套 (长度: 3 inch) Coaxial Weld Sleeve (Length: 3 inch)
CTM	COAX 收尾环 Coaxial Terminator
CPT	COAX 吹扫三通 Coaxial Purge Tee
CPTM	COAX 吹扫三通 (VCR端接) Coaxial Purge Tee with VCR
CBP	COAX 穿板吹扫三通 Coaxial Bulkhead Purge Tee
CFG	COAX VCR内螺纹接头 Coaxial VCR Female Gland
CMG	COAX VCR外螺纹接头 Coaxial VCR Male Gland
CRT	COAX 变径三通 Coaxial Reducing Tee
CCR	COAX 同心大小头 Coaxial Concentric Reducer

3+4 管件尺寸 / FITTING SIZE

产品编号 P/N	尺寸 Size	概要 General Notes	壁厚 Wall Thickness
02	1/8"		0.56
04	1/4"	²⁾	0.71
06	3/8"	²⁾	0.89
08	1/2"	²⁾	0.89
10	5/8"	¹⁾	1.24
12	3/4"	²⁾	1.24
16	1"	²⁾	1.65
24	1 1/2"	²⁾	1.65
32	2"	²⁾	1.65
40	2 1/2"	²⁾	1.65
48	3"		1.65
64	4"		1.65
96	6"		2.11
<hr/>			
NPS128	8"		3.76
NPS160	10"		4.19
NPS192	12"	Sch10S Pipe Schedule 10S	4.57
NPS224	14"	其他应要求 others on request	4.80
NPS256	16"	其他应要求 others on request	4.80
NPS288	18"	其他应要求 others on request	4.80
NPS320	20"	其他应要求 others on request	5.54
<hr/>			
6A	6A		1.00
8A	8A		1.20
10A	10A		1.20
15A	15A		1.65
20A	20A		1.65
25A	25A		1.65
32A	32A		1.65
40A	40A	Sch5S Pipe Schedule 5S	1.65
50A	50A	Sch5S Pipe Schedule 5S	1.65
65A	65A	其他应要求 others on request	2.10
80A	80A	其他应要求 others on request	2.10
90A	90A	其他应要求 others on request	2.10
100A	100A	其他应要求 others on request	2.10
125A	125A	其他应要求 others on request	2.80
150A	150A	其他应要求 others on request	2.80
200A	200A	其他应要求 others on request	2.80
250A	250A	其他应要求 others on request	3.40
300A	300A	其他应要求 others on request	4.00

1 - 2
ULT - 16
= ULTRON LTP

管材产品编号示例
Sample Product Number for Tubes

注释:
Ultron LTP > 1": 焊接
TCC LTP > 1": 焊接
¹⁾ 应要求, 仅适用外部COAX管材
²⁾ 使用内部管材尺寸表示COAX管材
标准为内部管材UL、外部管材TC或UL TCT。
应要求可提供更高质量管材。
³⁾ T4: 管材 TCC BA, 材质: 304L

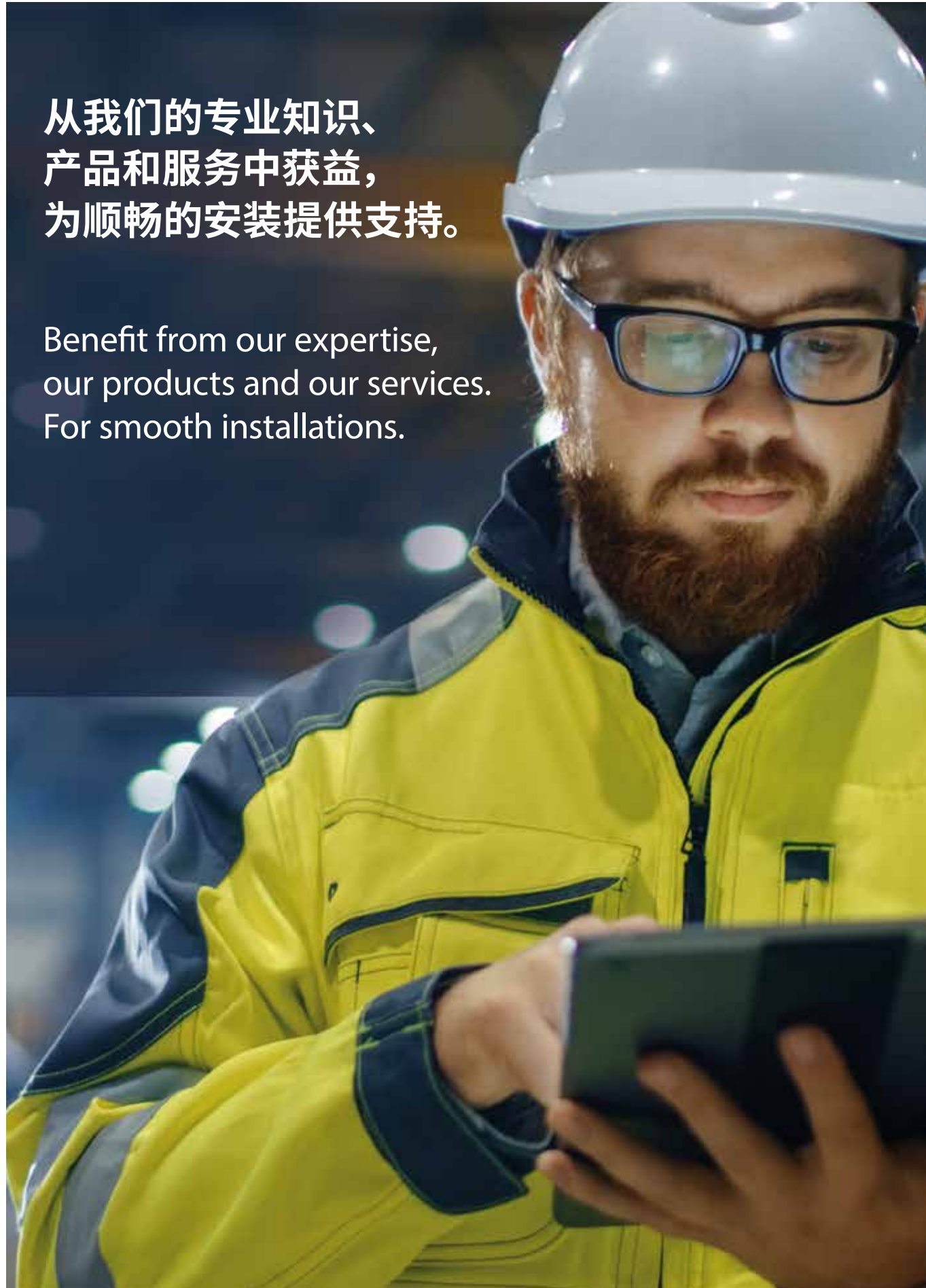
1 - 2 - 3 - 4
TCT - RT - 16 - 08
= TCC LTP Reducing Tee 1" x 1/2"

管件产品编号示例
Sample Product Number for Fitting

GENERAL NOTES:
ultron LTP > 1": welded
TCC LTP > 1": welded
¹⁾ On request, only for outer COAX tubing
²⁾ Coaxial tube represented using inner tube dimensions.
Standard is inner tube UL, outer tube TC or UL TCT.
Further qualities on request.
³⁾ T4: Tube TCC (Thermocouple cleaned) BA, Material: 304L

从我们的专业知识、
产品和服务中获益，
为顺畅的安装提供支持。

Benefit from our expertise,
our products and our services.
For smooth installations.

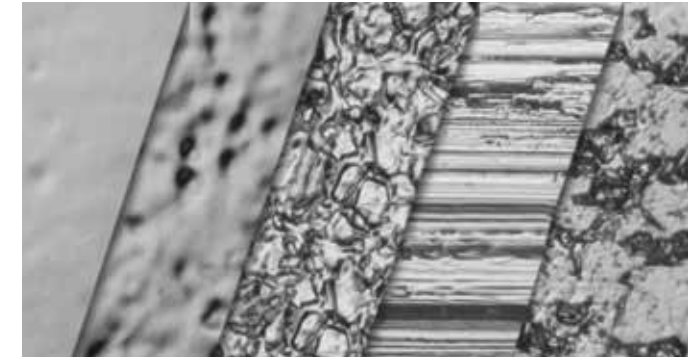


交付可靠性极高，
库存充足

Large stock for
high delivery reliability

采用独特内表面，
安装安全无虞

Specific inner surfaces
for safe installations



表面光洁，
Ra最高可达0.13 μm

Highest purity up to Ra 0,13 μm

焊缝完美，质量极佳

Weld seams in perfection
and ultimate quality



零部件经过精心设计，
为高效而生的组件

Engineered components
for enhanced efficiency





Dockweiler品质卓越，
始终如一
Dockweiler quality no matter what

遵循严苛的检验流程：
每个零部件最多经过50次测试

Outstanding inspection:
up to 50 tests per component



文档的完整性及可追溯性
End-to-end documentation
and traceability



3.1证书
(含所有重要信息)

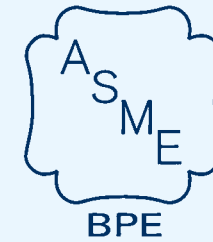
Consistent 3.1 certificates
with all important information



简便易行的文档管理
Easy document management:
online with WebCert



从原材料到交付, 始终保持最高水准
Highest quality from raw material to delivery.



DIN EN ISO 14001
DIN EN ISO 9001



AD 2000 HPO
DGRL 2014/68/EU and
AD 2000 WO

一应证书见Dockweiler网站:
All certificates are available on our website:

www.dockweiler.com

英寸 Imperial		壁厚 Wall Thickness ^{a)}		管道公差标准 / Standard for tube tolerances- ^{b)} ASTM A 269 / A 270 ^{c)} / A 632 / ASME BPE 最大容许工作压力 /Max. allowable working pressure			
				100°F (38°C)	200°F (93°C)	300°F (149°C)	400°F (204°C)
[inch]	[mm]	[inch]	[mm]	[psi]	[psi]	[psi]	[psi]
1/8	3.18	0.022	0.56	4716	4716	4716	4434
1/4	6.35	0.035	0.89	3678	3678	3678	3458
3/8	9.53	0.035	0.89	2378	2378	2378	2236
1/2	12.70	0.049	1.24	2508	2508	2508	2358
1/2	12.70	0.065	1.65	3203	3203	3203	3011
5/8	15.88	0.049	1.24	1981	1981	1981	1862
3/4	19.05	0.049	1.24	1637	1637	1637	1539
3/4	19.05	0.065	1.65	2207	2207	2207	2075
1	25.40	0.065	1.65	1631	1631	1631	1533
1 1/4	31.75	0.065	1.65	1293	1293	1293	1216
1 1/2	38.10	0.065	1.65	1069	1069	1069	1005
2	50.80	0.065	1.65	797	797	797	749
2 1/2	63.50	0.065	1.65	634	634	634	596
3	76.20	0.065	1.65	527	527	527	495
4	101.60	0.083	2.11	504	504	504	474
6	152.40	0.109	2.77	440	440	440	414

所列额定值适用于符合ASME SA213标准的UNS S31603无缝管道、符合ASME SA249标准的UNS S31603焊接管道以及符合ASTM A 312标准的UNS 31603无缝焊接管道。焊接点强度缩减系数W=1, 导管与管道纵向焊接点的基本质量系数Ej=0.8, 规定腐蚀裕度为零。

^{a)} 计算最大容许设计压力时,应以[英寸]为单位的数据为基础,以[mm]为单位的数据仅供参考。

^{b)} 应符合所参照标准的全部相关规定

^{c)} ASTM A 270, S2. 制药级管道

如需获取更多额定压力相关信息,请访问我们的网站: www.dockweiler.com/downloads

The listed ratings apply to seamless tube UNS S31603 acc. to ASME SA213, welded tube UNS S31603 acc. to ASME SA249, and seamless and welded pipe UNS 31603 acc. to ASTM A 312, Weld Joint Strength Reduction Factor W = 1, Basic Quality Factor for Longitudinal Weld Joints in Pipes and Tubes Ej = 0.8 A zero corrosion allowance is specified.

^{a)} Calculation of maximum permissible design pressure is based on the data given in [inch], data given in [mm] are for information only.

^{b)} All referenced standards shall be met

^{c)} ASTM A 270, S2. Pharmaceutical Quality Tubing

Further pressure ratings are available on our website: www.dockweiler.com/downloads

不锈钢元件

钢是最常用的合金之一，主要由铁组成。通常，碳含量小于2%。它还包含其他组分，这些组分可能会由于制造过程而出现，或者是为了获得某些特性而添加的。根据EN 10020标准，不锈钢是具有特殊纯度水平的合金和非合金钢，例如硫和磷含量不超过0.025%的钢（所谓的铁伴生物）。不锈钢的特征是其铬含量超过10.5%。由于高铬含量，铬氧化物形成一层保护性和致密的钝化层，覆盖在材料表面上。因此，“不锈钢”这个术语是具有误导性的，因为材料在任何应用领域都不能做到无锈。选择合适的材料对其应用至关重要。已经开发了各种钢和合金来抵抗不同行业部门可能出现的腐蚀形式。适当制造仍然是使用耐腐蚀材料的要求。关于应用，除了材料外，了解和评估过程参数（如介质，浓度，时间和温度）也很重要。



Elements in stainless steels

Steel is one of the most commonly used alloys and consists mainly of iron. In general the carbon content is less than 2%. It contains also other components that may emerge due to the manufacturing process or are added to obtain certain characteristics.

Stainless steels according to EN 10020 are alloyed and unalloyed steels with a special purity level like for example steels with a sulphur and phosphorous content (a so-called iron companion) that is not higher than 0.025%.

Stainless steels are characterized by an amount of chromium of more than 10.5%. Due to that high chromium content a protective and dense passive layer of chromium oxide establishes on the material surface. The term “stainless steel” is therefore misleading since materials cannot be stainless in any field of application.

The right choice of the convenient material is crucial for its application. A variety of steels and alloys have been developed to counteract against the possible forms of corrosion in the different industry branches. The requirement for a suitable, corrosion-resistant use of a material is still the appropriate manufacturing.

Regarding the application it is important to know and to assess besides the material also the process parameter like medium, concentration, time and temperature.

类型 Type	AISI	JIS G 3459	简称 Short name	UNS	C	Mn	P	S	SI	Cr	Ni	Mo	W	V	Co	Ti	Cu	N	PREN
奥氏体 Austenite	304		X5CrNi18-10	S30400	0.08	2	0.045	0.03	1	17.5-19.5	8.0-10.5	-	-	-	-	-	-	-	19
	304L		X2CrNi19-11	S30403	0.03	2	0.045	0.015	1	18.0-20.0	10.0-13.0	-	-	-	-	-	-	-	20
	304L		X2CrNi18-9	S30403	0.03	2	0.045	0.015	1	17.5-19.5	8.0-10.5	-	-	-	-	-	-	-	19
	316L		X2CrNiMo17-12-2	S31603	0.03	2	0.045	0.015	1	16.5-18.5	10.0-14.5	2.00-2.50	-	-	-	-	-	-	23
	316L		X2CrNiMo18-14-3	S31603	0.03	2	0.045	0.015	1	17.0-19.0	12.5-15.0	2.50-3.00	-	-	-	-	-	-	26
		316LTP	X2CrNiMo18-14-3	S31603	0.03	1	0.045	0.003-0.010	1	16.0-18.0	12.0-14.0	2.00-3.00	-	-	-	0.02	-	-	26
	316Ti		X6CrNiMoTi17-12-2	S31635	0.08	2	0.045	0.015	1	16.5-18.5	10.0-13.5	2.00-2.50	-	-	-	0.5	-	-	23
超级奥氏体 Super Austenitic	317L		X2CrNiMoN-18-15-4	S31703	0.03	2	0.045	0.03	1	17.5-19.5	13.0-17.0	3.0-4.0	-	-	-	-	-	0.11	29
	904L		X1NiCrMoCu25-20-5	N08904	0.02	2	0.03	0.01	0.7	19.0-21.0	24.0-26.0	4.0-5.0	-	-	-	-	1.2-2.0	0.15	36
	6Mo		X2NiCrMoCuN20-18-6	S31254	0.02	1	0.03	-	1	19.5-20.5	17.5-18.5	6.0-7.0	-	-	-	-	0.50-1.00	0.18-0.25	42
			AL-6XN	N08367	0.03	2	0.03	0.01	0.5	19.0-20.0	24.0-26.0	6.0-7.0	-	-	-	-	-	0.18	42
双相 Duplex	318LN		X2CrNiMoN22-5-3	S31803	0.03	2	-	-	1	21.0-23.0	4.5-6.5	2.50-3.5	-	-	-	-	-	0.10-0.22	31
	F53		X2CrNiMoN 25-7-4	S32750	0.02	2	0.035	0.015	1	25	7	4	-	-	-	-	-	0.27	43
	S31254		254 SMO	S31254	0.01	1	0.03	0.01	1	20	18	6.1	-	-	-	-	-	0.2	42
镍基合金 Nickel based alloy	C22		Hastelloy C-22	N06022	0.01	0.5	-	-	0.08	22	56	13	3	0.35	2.5	0	0	0	46
	C276		Hastelloy C-276	N10276	0.01	1	0.025	0.01	0.08	14.5	57	15	3	0.35	2.5	0	0	0	45

抗点蚀当量数 (PREN)

钢 PREN = %Cr + 3.3 x %Mo + 16 x %N
镍基合金 PREN = %Cr + 1.5 x (%Mo + %W + Nb)
耐海水性 PREN ≥ 40

*并非所有材料均有库存

Pitting Resistance Equivalent (PREN)

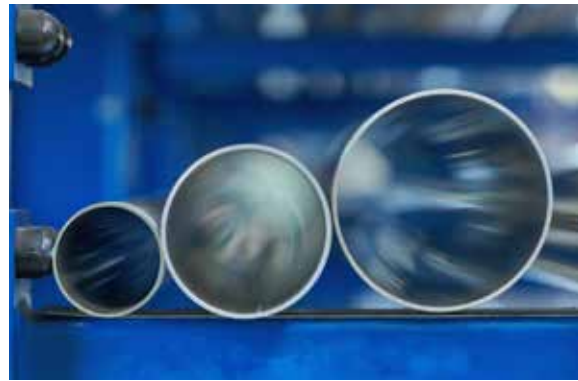
Steel PREN = %Cr + 3,3 x %Mo + 16 x %N
Nickel based Alloy PREN = %Cr + 1,5 x (%Mo + %W + Nb)
Seawater resistance PREN ≥ 40

* Not all materials available from stock

焊接管与无缝管

焊接管只是壁厚与外径的比值较小的管子，钢板经过机械成型弯曲成管状，在接口处进行焊接。

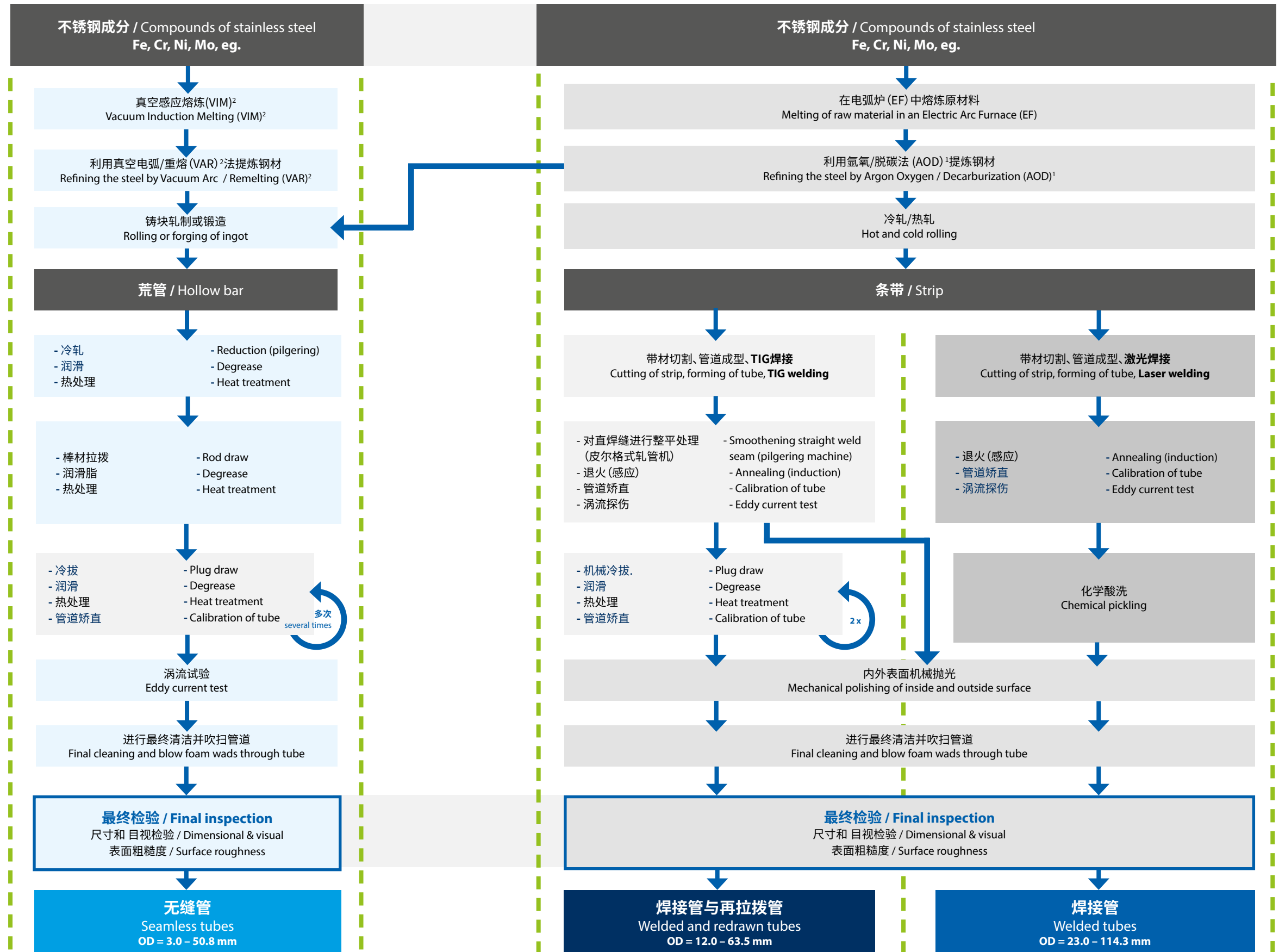
无缝管的直径约为200 mm，为实现无缝制造，管壁通常较厚。在连铸工艺中，先进行有色金属管道成型，然后立即通过滚动逐渐缩减直径。我们还可以利用塑料成型工艺来生产无缝管。



Welded and seamless tubes

Welded tubes are tubes that have a wall thickness that is small in relation to their outside diameter. Steel is bent into a tube by mechanical forming and welded at the joints.

Seamless tubes with diameters of about 200 mm with large wall thicknesses are usually produced seamlessly. In the continuous casting process, a non-ferrous tube is formed and immediately reduced in diameter by rolling. Seamless tubes can also be produced by plastic forming.



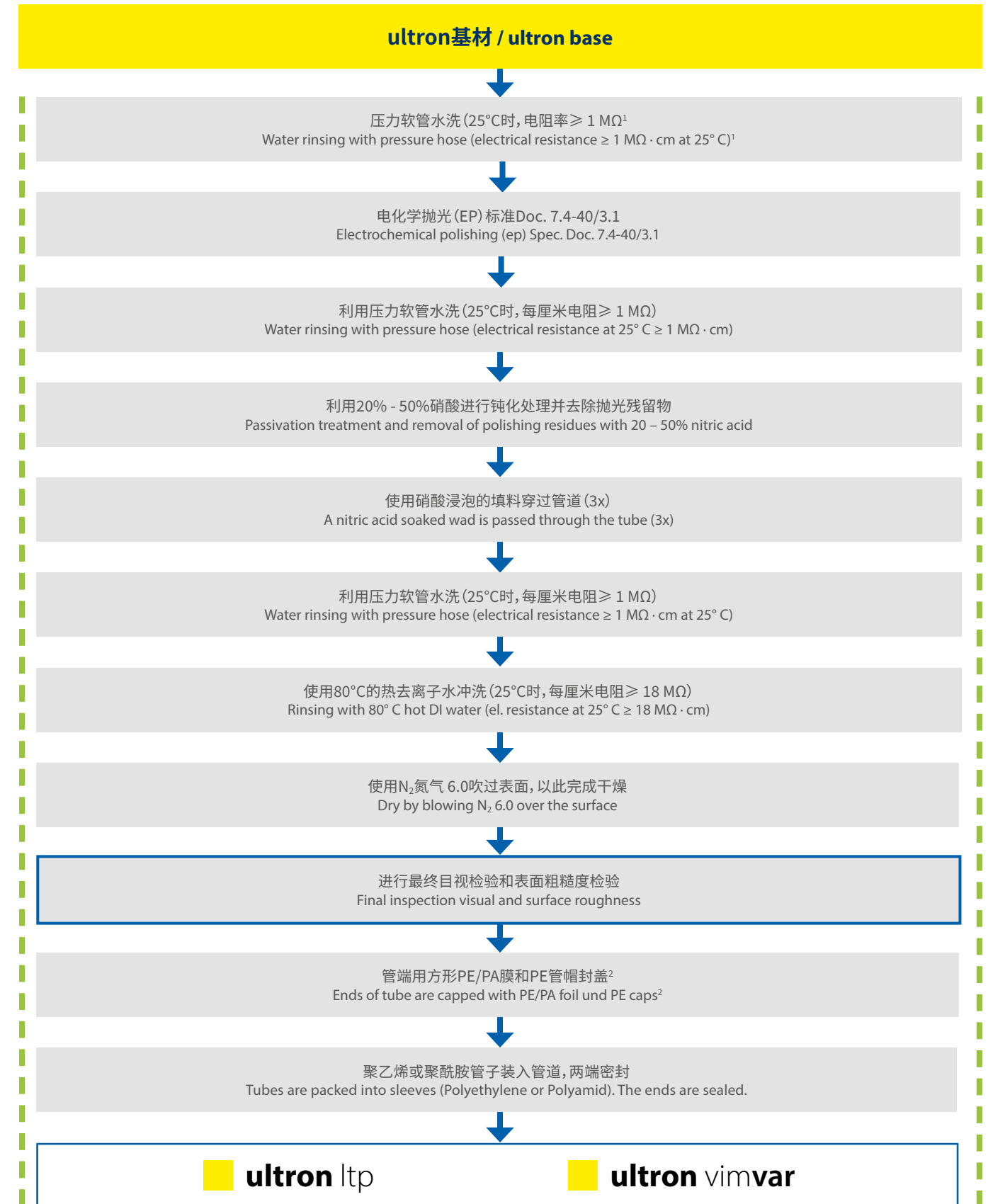


清洁工艺： 适用于众多行业应用

不同行业和应用领域对介质接触表面的清洁度要求不一。因此，Dockweiler也提供了许多不同的清洁工艺，从按照ASTM A632 S3清洁内表面或进行干式清洁，甚至提供最先进的超纯和专用真空清洁工艺并在之后展开残余气体分析。通过我们的清洁工艺确保高度复杂的几何结构和毛细结构的清洁度。

Cleaning Processes: For various industrial applications

Different industries and application areas have different requirements for the cleanliness of media contact surfaces. Thus Dockweiler offers a variety of different cleaning processes. From cleaning internal surfaces in accordance to ASTM A632, S3 or dry cleaning processes. Up to the most high-tech ultra pure and proprietary vacuum cleaning process with subsequent residual gas analysis. With our cleaning processes we ensure the cleaning of highly complex geometries and even capillary structures.



¹ 如果管子在机械处理(如抛光)后被污垢、灰尘或油污染,则在进一步处理前,应使用碱性或酸性清洁剂进行清洁。

² 如果经过频繁清洁后,标记变的难以辨认,则在管子上重新标记。

¹ If tubes are contaminated with dirt, dust or oil after mechanical treatment, e.g. honing, they are cleaned with an alkaline or acid detergent before any further treatment.

² If the marking is hardly legible after the frequent cleaning steps, tubes will be marked again.

**Dockweiler Tube System
(Suzhou) Co., Ltd.**

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