



TAISEI GIKEN CATALOGUE



Merits of the Oil-Water Separator / Oil Cleaner for Vacuum Pumps
真空泵用油水分离器/油净化装置的优点

- 1
- Reduction of Oil Replacement / Water Draining
减少更换油, 除水工作
- 2
- Prevention of Vacuum Pump Troubles
真空泵故障防止
- 3
- Extension of Overhaul Cycle
保养周期延长
- 4
- Extension of Oil Life
油使用周期延长
- 5
- Stabilization of Vacuum Settle Time
到达真空时间稳定
- 6
- Labor Cost Saving and Cost Reduction
人工费减少, 降低成本

- Typical Uses
应用
- ① Process where water content mixes in
水分混入时
- ② Process where particles mix in
粉尘混入时
- ③ Process where acids mix in
酸性物质混入时

Introduction of TAISEI GIKEN's Filter Element
大成技研滤芯技术介绍

"We have developed a 3-dimensional moulded filter element using magnetic fibers. These fibers adsorb and aspirate fine dirt and liquid particles. Due to this function, even at low densities, this filter element is capable of high performance."

我公司开发了三次元成型的磁性纤维过滤器滤芯。这种纤维可以吸附细小粉尘与少量液体, 因为具有这种性能, 才研发出在低密度中发挥出高性能作用的过滤器滤芯。



Oil Cleaner
油净化装置



TRAPPACK
粉尘过滤器



Trap Filter TRAPPACK for Vacuum Pump
真空泵用粉尘过滤器「TRAPPACK」

TRAPPACK for removing particles 细小粉尘过滤器

Trap Filter to remove particles from vacuum exhaust gases
是从气体中过滤细小粉尘的过滤器

- Effect
效果
- ① Removal of fine particles by electrified adsorption through the magnetic fiber
利用磁性带电吸附功能捕捉细小粉尘
- ② Low density elements have little effect on conductances in low pressure loss.
低压损的低密度滤芯对真空箱影响少
- ③ Traps large amount of particles
大量捕捉细小粉尘

- Typical Uses
应用
- Process where hard particles and oxides are mixed in.
硬质粉尘&酸性物质混入时

Gases / Liquids Separator TRAPPACK 气体液体分离过滤器

Gases / Liquids Separator TRAPPACK is a trap filter that separates and removes liquids.
从气体中把液体分离出去的过滤器

- Effect
效果
- ① Traps fine liquid content by electrified adsorption
利用带电吸附功能扑集微量液体
- ② Filter element of low density and low pressure loss
低密度, 低压损滤芯
- ③ Capable to separate and collect liquid content continuously
可以连续分离, 回收液体

- Typical Uses
应用
- Brake Oil Injection Device
刹车液注入设备

Model Selection 机型选择	Oil-Water Separator type/ 油水分离器				Oil Cleaner type/ 油净化装置			
Connection Example 连接例								
Water content/ 水分	More/ 多				Less/ 少			
Particles/ 细小污染物	More/ 多		Less/ 少		More/ 多		Less/ 少	
Acids/ 酸	More/ 多	Less/ 少	More/ 多	Less/ 少	More/ 多	Less/ 少	More/ 多	Less/ 少
Recommended Model 推荐机型	SUN-3SPWE 	SUN-2SPWE 	SUN-3SPE 	SUN-2SPE 	SUN-230 	SUN-100B 	SUN-60BE 	SUN-50BE

Reference : If separated water is 200cc per month or more, we recommend the Oil-Water Separator. (Model Selection is just an aim to attain.)
参考 : 1个月内水分的产生量在200cc以上时, 建议使用油水分离器。机种选择时的标准。

Achievement 实际成果	Reference : If separated water is 200cc per month or more, we recommend the Oil-Water Separator. (Model Selection is just an aim to attain.) 参考 : 1个月内水分的产生量在200cc以上时, 建议使用油水分离器。机种选择时的标准。		
Uses 用途	Vacuum drying for Lithium ion battery 锂电池真空干燥 	Leak tester 泄漏试验样机 	Removal of bubbles from epoxy resin 环氧树脂真空脱泡
Oil Replacement Cycle/ 油交换周期	10 days → 6 months or more/10日→6个月	1 month → 1 year/1个月→1年	2 weeks → 4 months/2星期→4个月
Life of Vacuum Pump/ 真空泵寿命	2 months → 2 years or more/2个月→2年以上	1 year → 10 years or more/1年→10年以上	Half year → 3 years or more/半年→3年以上
Merit of Cost Reduction/ 降低成本优点	1/10	1/10	1/8

Model Selection 机型选择	TRAPPACK for removing particles/ 粉尘过滤器				TRAPPACK to separate gases and liquids / 分离气体与液体的过滤器		
Connection Example 连接例							
Particles/ 细小污染物	Yes/ 有				Yes/ 有		
Liquids/ 液体	Nil/ 无				Yes/ 有		
Recommended Model 推荐机型	TU-KN100 	TU-KN200 	TU-N500 	TU-N500W 	TU-KL100 	TU-KL200 	TU-KL500

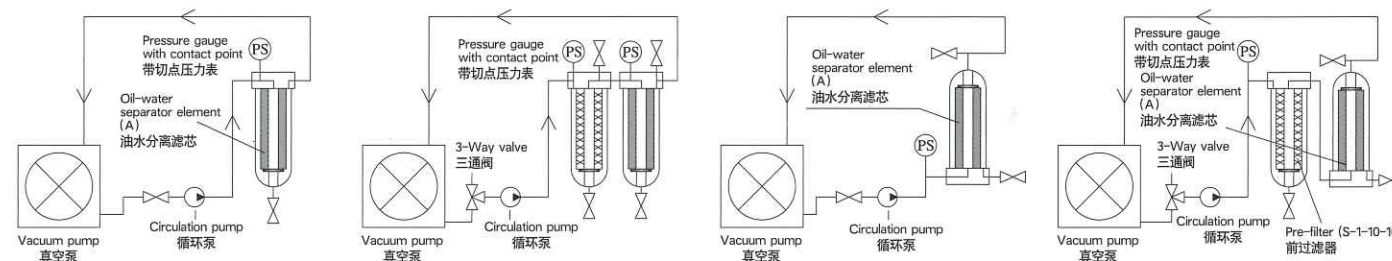
Achievement 实际成果	Reference : If separated water is 200cc per month or more, we recommend the Oil-Water Separator. (Model Selection is just an aim to attain.) 参考 : 1个月内水分的产生量在200cc以上时, 建议使用油水分离器。机种选择时的标准。		
Uses 用途	LSI Dry Etching Device (Which generates AlCl ₃) LSI 干燥刻蚀设备 	Ceramic Vacuum Baking Furnace (Mixed-in Ceramic Powder) 陶瓷真空加热炉 	LSI Ion Injection Device (Mixed-in Phosphorus / Arsenic Compounds) LSI 离子注入设备
Life of Filter Element/ 过滤器滤芯寿命	1 year/1年	1 year/1年	1 year ~ 1.5 years/1年 ~ 1.5年
Life of Vacuum Pump/ 真空泵寿命	3 months → 5 years or more/3个月→5年以上	Half year → 5 years or more	4 months → 4 years or more/4个月→4年以上
Merit of Cost Reduction/ 降低成本优点	1/10	1/5-1/10	1/10

Oil-Water Separator for Vacuum Pumps SUN SEPARATOR CLEANER

Oil-Water Separator Series/油水分离器系列



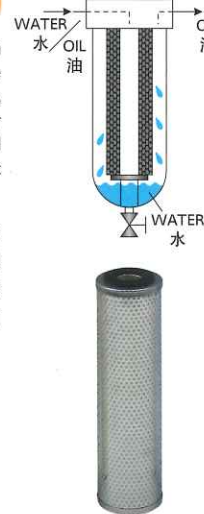
Flow Chart/运行图



SUN Separator Cleaner (Oil-Water Separator for Vacuum Pump) 真空泵用油水分离器

This Unit is the Oil-Water Separator for vacuum pumps. In vacuum pumps versatile contaminants can become mixed-in. Especially in the case of water becoming mixed with large amounts of dirt and acids, problems with vacuum pumps suddenly increase. Taisei's Oil-Water Separator group comprises in the latest technologies and our original expertise, which contribute to solve problems of mixed-in water content and dirt, water content and acids, or water content, dirt and acids.

此机型专为真空泵用的油水分离器。真空泵会有多种污染物侵入。特别是水分产生很多的污染物或者是混合的酸性物质,使真空泵发生故障。使用最新技术及我公司固有的经验生产的油水分离器可以对应多种设备的需求。为解决水分和污染物、水分和酸性物质、水分、污染物与酸性物质所引起的真空泵故障贡献力量。



Oil-Water Separator Element (Water-film type separation filter) 油水分离滤芯(水分膜式分离过滤器)

This filter element is our original water-film type Oil-Water Separator Filter. It passes oil through the element. However, water content is trapped, and brought down by gravity. It serves for a long time continuously separating oil and water.

此过滤芯是本公司开发的水分膜式油水分离滤芯。油可以直接通过,水分因比重差被水分膜吸收。能长期连续的实现油水分离。

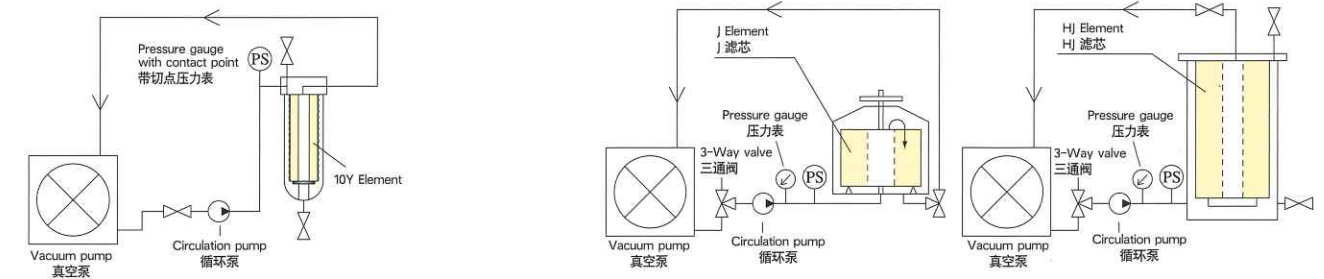
Features 特性

1. Pressure loss is small and economic
压损小经济型
2. Long life
长寿命
3. Oil-Water separation performance is superior
油水分离性能出色
4. Oil is kept always clean
长期保持油的洁净

Specifications 仕样 Model 機種	Uses 用途	Filter Element 滤芯过滤器		Housing Capacity 缸体容量		Specifications/规格							
		Pre-filter 前过滤器	Oil-Water Separation 油水分离	Pre-filter 前过滤器	Oil-Water Separation 油水分离	Bore Size IN 入口	Bore Size OUT 出口	Flow (l / mm) 50 / 60 Hz 流量	Pressure Alarm (MPa) 压力警报	Weight (kg) 重量	Power Source 电源	Electric Power 电力	Measurements (H x D x H mm) 尺寸
SUN-2SPE	Standard specifications Water content only 标准仕样 水分	—	A Type	—	1.5 l	1/4	1/2	1.2/1.4	0.3	8.3	100V 220V	25W	180 x 215 x 490
SUN-2SPWE	Standard specifications Water content + dirt 标准仕样 水分+污染物	S-1-10-10	A Type	1.5 l	1.5 l	1/4	1/2	1.2/1.4	0.3	14.0	100V 220V	25W	260 x 220 x 490
SUN-3SPE	Chemical specifications Water content + acids 化学仕样 水分+酸	—	A Type	—	1.5 l	1/4	1/4	1.2/1.4	0.3	10.8	100V 220V	25W	215 x 200 x 485
SUN-3SPWE	Chemical specifications Water content + acids + dirt 化学仕样 水分+酸+污染物	S-1-10-10	A Type	1.5 l	1.5 l	1/4	1/4	1.2/1.4	0.3	15.7	100V 220V	25W	280 x 200 x 485

Oil Cleaner for Vacuum Pumps SUN OIL CLEANER

Oil Cleaner Series/油净化装置系列



SUN Oil Cleaner (Oil Cleaner for Vacuum Pumps) 真空泵用油净化装置

This unit is the Oil Cleaner for vacuum pumps. It removes dirt, acids and water simultaneously. As the SUN Element has its own adsorptive functions, it adsorbs and removes fine dirt (particles). Further it has neutralization functions to remove acids, as well as water adsorptive functions to remove water content. Thus it is an innovative multi functional purifying filter element.

本机是专用于真空泵的油净化装置。能同时去除混入真空泵里的垃圾、酸素、水分。因为SUN牌滤芯的纤维有吸附作用,能过滤细小的污染物(粉尘),还能中和酸性物质及过滤水分。是有着多项净化功能的滤芯过滤器。



SUN Element (Multi-purifying filter) SUN牌滤芯(多功能净化过滤器)

This filter element is based on ion exchange fibers. It has two types, a bobbin type and a moulded type. It has the power to cope with circumstances of complex chemical contamination and damage.

SUN牌滤芯是由特殊离子交换纤维为基础制作的过滤滤芯。有缠绕型与成型压铸型2种。对有复合环境污染与化学反应的工位提供解决能力。

Features 特性

1. Remove dirt and sludge ······ Electrified adsorption
过滤污染物 ······ 带电吸附作用
2. Remove acids ······ Neutralization
过滤酸性物质 ······ 中和作用
3. Remove water content ······ Water adsorption
过滤水分 ······ 吸水作用
4. Oil is kept always clean
长期保持油的洁净

Specifications 仕样 Model 機種	Uses 用途	Specifications											
		Filter Element 滤芯过滤器	Housing Capacity 缸体容量	Bore Size IN 入口	Bore Size OUT 出口	Flow (l / mm) 50 / 60 Hz 流量	Pressure Alarm (MPa) 压力警报	Weight (kg) 重量	Power Source 电源	Electric Power 电力	Measurements (H x D x H mm) 尺寸		
SUN-50BE	Standard specifications Dirt only 标准仕样 污染物	10Y	1.5 l	1/4	1/2	1.2/1.4	0.3	8.2	100V 220V	25W	180 x 215 x 490		
SUN-60BE	Chemical specifications Acids + dirt 化学仕样 酸+污染物	10Y	1.5 l	1/4	3/4	1.2/1.4	0.3	10.5	100V 220V	25W	170 x 220 x 490		
SUN-100B	Standard specifications Power of 2.4 times 50BE 50BE的2.4倍能力	J	3.5 l	3/8	3/8	1.2/1.4	0.3	18	100V 220V	40W	260 x 310 x 420		
SUN-230	Standard specifications Power of 4.8 times 50BE 50BE的4.8倍能力	HJ	14 l	3/8	3/8	2.2/2.7	0.3	55	100V 220V	120W	365 x 440 x 850		

Particulate Removal from Vacuum Exhaust Gas TRAPPACK「TU-KN Series」

TRAPPACK Filter to Remove Particles/粉尘过滤器滤芯

Liquid Removal from Vacuum Exhaust Gas TRAPPACK「TU-KL Series」

TRAPPACK to separate gases and liquids/气体液体分离过滤器滤芯



TU-KN100



TU-KN200



TU-KN500



TU-KN500W



TU-KL100



TU-KL200



TU-KL500

TRAPPACK Filter to Remove Particles 粉尘过滤器滤芯

TRAPPACK Filter Element comprises of ion exchange fibers having positive and negative polarities, which is formed by the 3-dimensional low density element. Its electrified adsorption enables particles to be trapped at the fiber surfaces. By coarsely meshed low pressure loss, fine particles are trapped sufficiently.

粉尘过滤器滤芯是由正负离子交换纤维,三次元低密度成型制作而成。像磁铁用自身携带的带电吸附作用扑集细小粉尘,保证在低压损的情况下过滤细小粉尘。

Example of Use/使用例



Features of TRAPPACK Filter Element 粉尘过滤器滤芯的特性

1. Electrified adsorption by magnetic fiber
离子纤维的带电吸附性
2. Low density, low pressure loss
低密度·低压
3. It removes fine particles of sub-micron
细小粉体过滤
4. It adsorbs and separates fine liquids
微量液体吸附分离过滤
5. It attains long life and time between maintenance
实现长寿命长期自由保养

Installation Site/安装位置

Site 位置	Vacuum pump fore line 真空泵前(真空线)	Vacuum pump post line 真空泵后(排气线)
Effect 效果	Protection of vacuum pump 真空泵的保护	Prevents blocks in Exhaust line 排气管路阻塞防止

TRAPPACK Filter separates gases and liquids 气体液体分离过滤器滤芯

TRAPPACK Filter Element comprises of electrified adsorptive fibers formed in low density. By the flowing of gas, fibers show strong adsorptive functions. Fine liquids are adsorbed into the fiber surface, assimilated and grow into grit. The grit liquid is collected at the bottom of the housing.

粉尘过滤器滤芯由有着带电吸附功能的纤维低密度制作而成。伴随气体流动的磁性本身有着很强的吸附性,不断的少量液体被吸附成大量液体并积存在缸体底部。

Example of Use/使用例



Uses/用途

1. Brake Oil Injection Device
刹车液注入设备
2. Drying of detergent liquids
清洗液的混入真空设备
3. Vacuum Device with mixed-in
Acids Cleaning Function
各种酸性物质的混入真空设备

Installation Site/安装位置

Site 位置	Vacuum pump fore line 真空泵前(真空线)	Vacuum pump post line 真空泵后(排气线)
Effect 效果	Collects and separates liquids Protects Vacuum pump 液体的回收分离,对真空泵的保护	Trapping of oil mist function 油雾过滤器功能

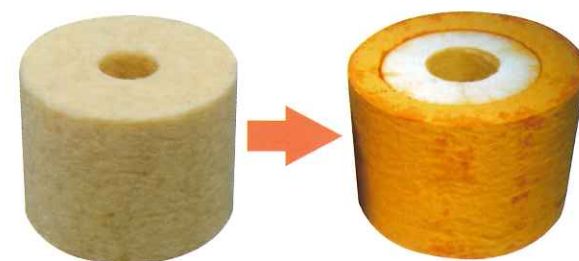
Element for particulate removal/粉尘过滤器滤芯

TU-KN100	TU-KN200	TU-N500	TU-N500W

Achievement/使用效果

Before use/使用前

After use/使用后



Element for separating gases and liquids/气体液体分离过滤器滤芯

TU-KL100	TU-KL200	TU-KL500

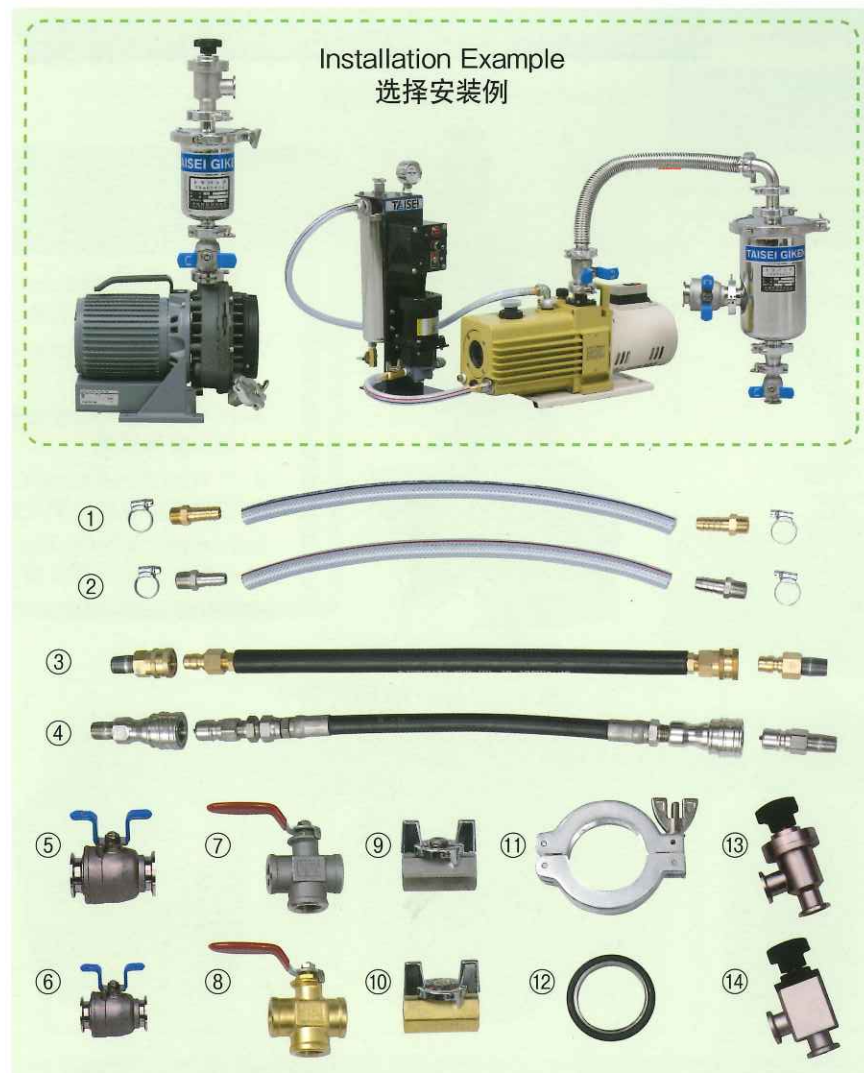
Specifications Model 机种	Joint bore 连接口	Element 滤芯	Materials 材质	Capacity (ℓ) 容量	Max. Pressure 极限压力	Applicable V/P 对应真空泵	Weight (kg) 重量	Measurements (m/m) 尺寸
TU-KN100	NW25	DLL	SUS304	0.9	0.1Mpa	200ℓ/min or less	1.9	∅90 × H195
TU-KN200	NW40	ELL	SUS304	2.2	0.1Mpa	400ℓ/min or less	4.6	∅140 × H210
TU-N500	NW40	GLL	SUS304	5.5	0.1Mpa	800ℓ/min or less	4.9	∅210 × H260
TU-N500W	NW40	HLL	SUS304	10.6	0.1Mpa	1500ℓ/min or less	6.8	∅210 × H390

Specifications Model 机种	Joint bore 连接口	Element 滤芯	Materials 材质	Capacity (ℓ) 容量	Max. Pressure 极限压力	Applicable V/P 对应真空泵	Weight (kg) 重量	Measurements (m/m) 尺寸
TU-KL100	NW25	DL	SUS304	1.0	0.1Mpa	300ℓ/min or less	2.3	∅90 × H240
TU-KL200	NW40	EL	SUS304	3.5	0.1Mpa	600ℓ/min or less	5.2	∅140 × H290
TU-KL500	NW40	GL	SUS304	7.8	0.1Mpa	1000ℓ/min or less	9.6	∅210 × H295

List of Filters Elements/滤芯一览表

Item/種類		Oil-Water Separation/油水分离器系列			SUN Oil Cleaner/油净化装置系列		
Model/機種		SUN-2SPE/3SPE	SUN-2SPWE/3SPWE		SUN-50BE/60BE	SUN-100B	SUN-230
Elements 滤芯外观			First 	Second 			
		A	S-1-10-10	A	10Y	J	HJ
Object 规格	Water content 水分	Continuous separation 连续分离	—	Continuous separation 连续分离	0.5 ℓ	1.2ℓ	2.4ℓ
	Acids 酸	Acids are water soluble. 酸性物质会在水中溶解	—	Acids are water soluble. 酸性物质会在水中溶解	0.6 mol	1.5 mol	3.0 mol
	Particles 细小污染物	—	10 μm	—	0.1 μm	0.1 μm	0.1 μm

Optional/选择



List of Optional Parts/选购产品一览表

No.	Type/Model name 型式 / 产品名称	Specifications 办法
①	"BS PVC Hose Set M12 x BS" BS 氯乙烯软管组件	"BS PT 1/4 Nipple joint, Band" 接头 · 胶带
②	"SUS PVC Hose Set M12 x SUS" SUS 氯乙烯软管组件	"SUS PT 1/4 Nipple joint, Band" 接头 · 胶带
③	"BS Black Hose Set M12 x BS" BS 黑胶软管组件	"BS 3/8 x PT 3/8 Coupler joint" 快速接头
④	"SUS Black Hose Set M12 x SUS" SUS 黑胶软管组件	"SUS 3/8 x PT 3/8 Coupler joint" 快速接头
⑤	"Flat Ball Valve FB-40" 真空排气球阀	"SUS 316L NW40 Ball valve" 球阀
⑥	"Flat Ball Valve FB-25" 真空排气球阀	"SUS 316L NW25 Ball valve" 球阀
⑦	"3-Way Valve SUS 3/8 or 1/4" 三通阀	Ball valve 球阀
⑧	"3-Way Valve BS 3/8 or 1/4" 三通阀	Ball valve 球阀
⑨	"Stop Valve SUS 3/8 or 1/4" 关闭阀	Ball valve 球阀
⑩	"Stop Valve BS 3/8 or 1/4" 关闭阀	Ball valve 球阀
⑪	"Coupling NW25 OR NW40" 紧固件	AL 铝
⑫	"Center Ring NW25 OR NW40" 肩环	Byton 氟橡胶
⑬	"Angle Valve NW25 OR NW40" 角型阀	SUS 不锈钢
⑭	"Angle Valve NW25 OR NW40" 角型阀	AL 铝

T/ISEI

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