Group enterprise:

DongGuan Changyuan Spraying Technology Co.,Ltd.

Hunan Changyuan Technology Co.,Ltd.

CYCO®





TANK WASHING NOZZLE

SAI GLOBA ISO 9001:2015

SAI GLOBA IATF 16949:2016

Company profile



Dongguan Changyuan Spraying Technology Limited Company, branding as CYCO, founded in 1999, is a professional manufacturer of spray nozzles and aftermarket sales. We are committed on research and design of industrial spray nozzles which includes full cone nozzles , hollow cone nozzles, spiral nozzles, air atomizing nozzles, tank washing nozzles and millions of different nozzles for over 22 years.

We are supplying many types of spray nozzles which are applied to marine scrubber for Exhaust Gas Cleaning System, such as spiral nozzle, short type full cone nozzle and large flowrate full cone nozzle which are made of plastic, silicone carbide, and stainless steel with various parameters.

Let us walk you through.



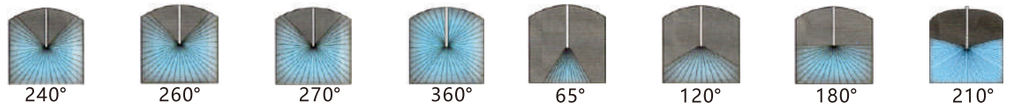
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Tank washing optimizing



It is a challenging subject that washing your tanks thoroughly by your best way and reduce the expensive chemicals ,water and labor at the meantime. You can maximize the cleaning equipment performance through many respects. We have selected several excellent cleaning solutions for you here which will help to optimize cleaning efficiency.

Covering area of spray



Are you still cleaning tanks manually?

You get the following benefits by applying the automation technology:

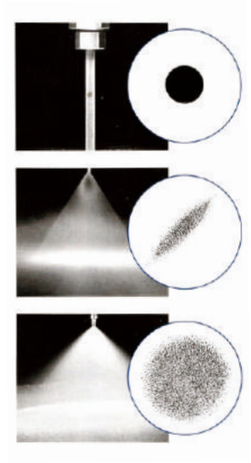
The cleaning effect will be more consistent and thoroughly; Avoid direct contact with dangerous chemicals,and workers are safer;

Faster cleaning, downtime minimization, tanks can be quickly restored to working state;

Usage of water and chemicals will be reduced drastically and lower the cost of wastewater disposal .

Extra labor freed from cleaning operations can create other benefits for the company.

Spraying pattern:



Liquid column spray with high impact force

Fan spray with medium impact force

Solid cone spray with low impact force

If you are currently using cleaning nozzles or tank washing machines, you can improve your cleaning efficiency greatly through a few simple changes or try to change the cleaning device .

If you want to optimize tank washing, you need to evaluate the proposed operation firstly.

- How many tanks need to be cleaned? Diameter, length and height of each tank.
- Are there any obstacles such as stirrer or mixer inside the tanks that your company using now?
- Compared with other areas, is there any specific area needs to be more careful cleaning, such as degreased line?
- What residues need to be removed? Are these residues sticky? Can residues be washed out easily?
- Whether need detergent, is the water sufficient? Whether need to heat the cleaning liquid?
- Is there any problem with the cleaning method you are currently applying ?
- With the clear answer to these questions, what you need to do next is to evaluate which cleaning product you are going to use.

Quick reference guide

Nozzle series		Cleaning diameter (m)	Pressure (bar)	Flow range (L/min)	Working principle drives form	General application
Fixed Spray Ball S360/Y360 serie		0.35-3.9	1.5-10	6-165	Solid static type	Light cleaning
Rotary cleaning ball ROT serie		0.8-3	2-7	6-165	Liquid driven turbine	Light cleaning
Telescopic cleaning nozzle CY-SS		0.6-1.5	2-7	30-50	Liquid driven telescopic	Light cleaning
Three dimensional rotary can washer CYCO-05		2-6.5	5-20	26-135	Liquid actuation Rotation of gear	high pressure cleaning
Large three-dimensional can washer 360A/B		13-45	5-20	105-260	Liquid actuation Rotation of gear	high pressure cleaning
Stationary type K4-6160\10250		1.5-3.0	1.5-3.5	35-230	Solid static type	high pressure cleaning
Stationary type K4-9800		0.6-2.5	4-10	20-43	Solid static type	Light cleaning
Rotary tank washer K4-28250		0.5-2.0	3-10	31-150	Liquid driven turbine	Light cleaning
Rotary tank washer K4-19250		0.4-2.5	1.5-12	31-150	Liquid driven turbine	Light cleaning
Large three-dimensional can washer Cs090		5-20	10-40	40-200	Liquid actuation Rotation of gear	high pressure cleaning

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Quick reference guide

Nozzle series		Cleaning diameter (m)	Pressure (bar)	Flow range (L/min)	Working principle drives form	General application
Rotate the ceramic cleaning nozzle M-50		0.35-3.9	1.5-3	20-132	Liquid driven turbine	Light cleaning
Teflon can washer 36300 36300R		0.6-1.2	0.7-3.5	31-295	Liquid actuation Sliding bearing	Light cleaning
Teflon can washer 36300 36300R		0.6-1.2	0.7-3.5	31-295	Liquid actuation Sliding bearing	Light cleaning
Teflon can washer 36500		0.5-1.8	0.7-3.5	16-49	Liquid actuation Sliding bearing	Light cleaning
Spiral can washing nozzle SPJT series		1.2-1.5	0.7-5	11-260	Solid static type	Light cleaning
Rotary bottle cleaner CYCO-08		Less than 8	4-14	35-65	The liquid drives the gear to rotate	high pressure cleaning
Rotary can washer CYCO-100		Less than 6	4-10	80-145	The liquid drives the gear to rotate.	high pressure cleaning
Universal bottle and can cleaner CYCO-10		Less than 8	3-10	400-750	Liquid drives the reaction force	high pressure cleaning
Bottle cleaner CYCO-15		Less than 12	5-22	CY15-4-6: 90-190 CY15-2-6: 50-140	The liquid drives the gear to rotate.	high pressure cleaning
High pressure tank cleaning system CY-08H		Within 10 meters	80-200	1.2:11.6-18.4 1.5:17.6-28.3 1.6:21.5-34.0 1.8:26.8-42.4	Rotation driven by stepper motor	high pressure cleaning

Six key specification guidelines

Spray distance

Spray distance is usually expressed as tank diameter. If you are using a tank with a diameter of 20 feet (6m) and a height of 40 feet (12m), you will need two spray tank washers with diameter of 20 feet (6m) or a tank washer with diameter of 40 feet (12m).

Impact force

You can increase the impact by increasing the flow or pressure. Relatively speaking, the way to increase the flow is particularly effective. If the flow rate is doubled, the impact force can also be increased by 100%, while if the pressure is doubled, the impact force can only be increased by 40%. In a word, to ensure the optimal cleaning efficiency, the best solution is still to choose tank cleaning products with sufficient impact force.

Flow rate	Pressure	Relative impact
13gpm(50 l/min)	45 psi(3 bar)	1.0
13gpm(50 l/min)	90 psi(6 bar)	1.4
26gpm(100 l/min)	45 psi(3 bar)	2.4

Flow rate

Operating at the lowest possible flow can significantly reduce operating costs. In this way, cleaning fluid, sewage treatment and energy consumption can be greatly reduced. In view of this, our basic guideline is to use flows between 0.2 gal/min/ft2(7 /min/m2) 2.0.4 gal/min/ft2(1.5 l/min/m2). This guideline usually applies to stationary nozzles where all surfaces of tanks can be flushed simultaneously. Rotating nozzles are usually in contact with tank parts at a certain time, allowing for lower flow rates.

Spray pattern

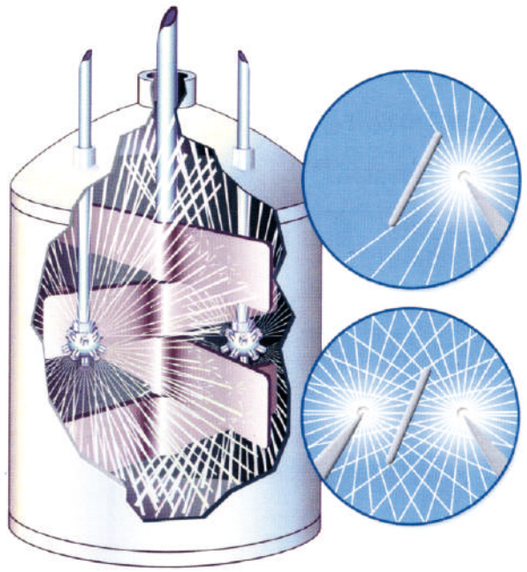
Solid stream sprays provide the greatest impact force, followed by fan and full cone sprays

Spray coverage

Spray coverage of tank washing nozzle varies from 65° to 360°. To reach all areas of the tank, you may need to use multiple nozzles, especially if there is a mixer in the tank.

Material

In view of the durability and high temperature resistance of stainless steel, most tank washing nozzles are made of stainless steel. Nozzles made of PTFE(teflon) or PVDF(polyvinylidene fluoride) are used for operations involving corrosion protection requirements. Make sure the material with the seal or o-ring device is compatible with the cleaning fluid.





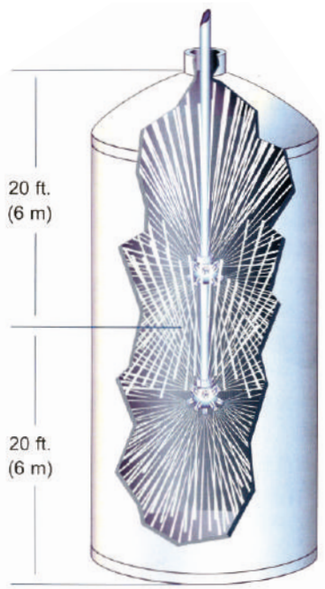
Free evaluation of tank washing:

After you have read this unit, you may consider taking advantage of our free on-site tank cleaning evaluation. Our company will send a tank cleaning expert to the site to conduct field inspection of related operations.

If you are using tank cleaning nozzle, our company's experts will check the nozzle and evaluate its model, layout and position.
Our company's experts will record the flow rate, operating pressure, cleaning fluid and residue to be removed. After the evaluation, our company will submit a written summary report on your previous operation and improvement of cleaning efficiency.

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Contents



Fixed Spray Ball S360/Y360
Rotary Cleaning Ball ROT Serie
CY-SS Telescopic Nozzle
CYCO-05 Rotary Tank Cleaning
360-Tank Cleaning Nozzle
K4 Tank Washing Nozzle(6160-10250)
K4 Tank Washing Nozzle(9800)
K4 Tank Washing Nozzle (36250-28250)
SPJT Bottle Cleaning Nozzle
M-50 Rotating Tank Washing Nozzle
36300-36500 Tank Washing Nozzle
36300/R Tank Washing Nozzle
K4 Tank Washing Nozzle(19250)
CYCO-08 Rotary bottle and jar cleaner
CYCO-100 rotary can washer
CYCO-10 universal bottle and jar cleaner
CYCO-15 bottle and jar cleaner
CY-08H high pressure tank cleaning system
Company strength
Certificate
Quality assurance



Cleaning of Pharmaceuticals Processing



TankCleaning of Chemical Processing

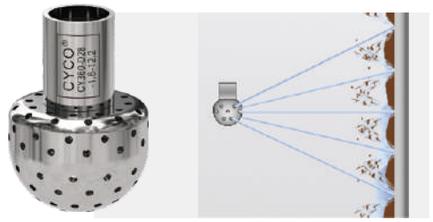


TankCleaning of Food Processing Tank

Fixed Spray Ball S360/Y360

Product Description

Sanitary fixed spray ball ball is a kind of cleaning equipment of can washer, its function is mainly used to clean the residual material inside the tank. It is a liquid or steam in the ball body pressurization, through the multi-point small hole spraying and achieve the cleaning effect, the spray hole can be customized according to the needs of different angles or range. Fixed spray ball links are mainly: clamp type, internal thread, welding, pin type.

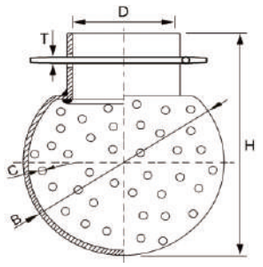


Product Description

1、Material of main body：SS304/316L
2、Nominal diameter: DN25-50
3、Driving pressure：≥0.4Mpa
4、Application scope: beverage, dairy products, beer, food, cosmetics, medicine, chemical industry, water treatment and so on.

Pin Spray Balls





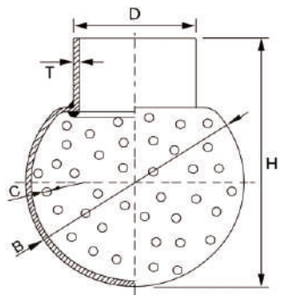
Linking method: pin

Dimensional data

D	B	C	T
12.9	28	1.5	2
19.3	38/45	2/2.5	2
25.6	45/53	2.5/3	2
32	53	3	2
38.3	53/63	3	2
51	76	3	2

Welding Spray Balls





Linking method: Welding type

Dimensional data

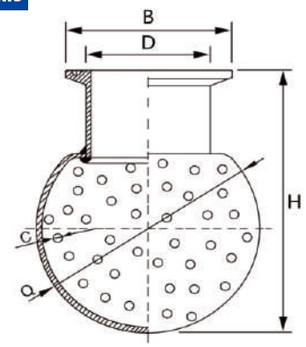
D	T	B	C
12.7	1.5	28	1.5
19.1	1.5	38	2
25.4	1.5	45/53	2.5/3
31.8	1.5	53	3
38.1	1.5	53/63	3
50.8	1.5	63/76	3

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Fixed Spray Ball S360/Y360

Quick Release Spray Balls





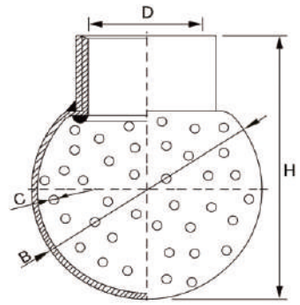
Linking method: clamp type

Dimensional data

D	B	Q	C
19.1	25.2	38	2
25.4	50.5	45	2.5
38.1	50.5	53	3
50.8	64	76	3
63.5	77.5	91	3

Inner filament spray ball



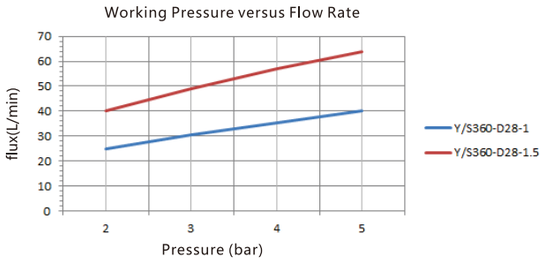


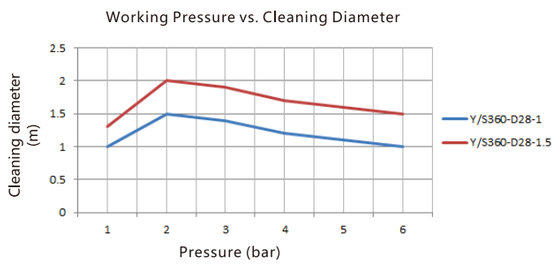
Linking method: female thread

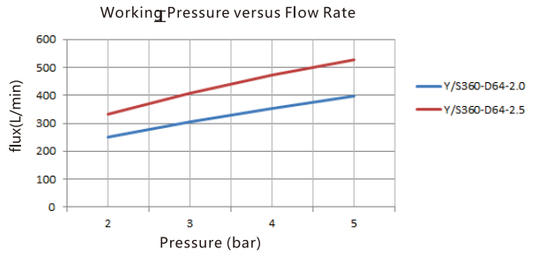
Dimensional data

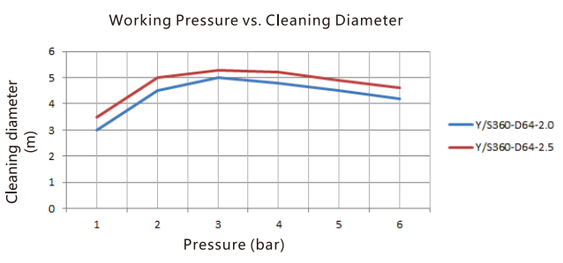
IN	D	B	C
1/4"	12.1	28	1.5
3/8"	15.1	32	2
1/2"	19.2	38/45/53	2/2.5/3
3/4"	24.4	45/53	2.5/3
1"	30.8	56/63	3
1-1/4"	39.2	63	3
1-1/2"	45.6	63/76	3

Performance data





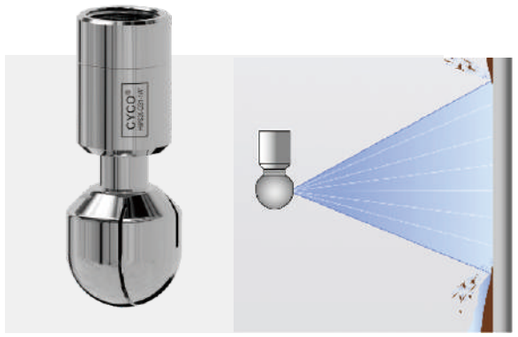


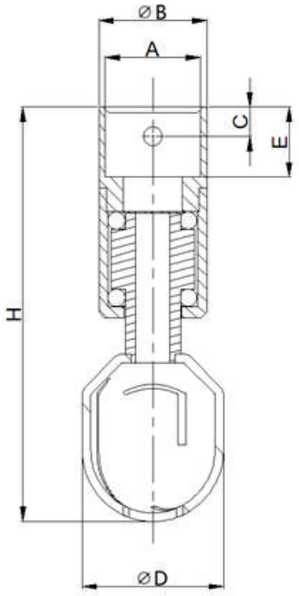


Rotary cleaning ball ROT series

Design Features

- High Standard Surface Treatment
- Suitable For High Temperature Environment
- High Corrosion Resistance (All 316L Stainless Steel)
- Comply With FDA&EG 1935/2004 Standard
- Available to provide AETX Certified Explosion-proof Version





1.Main Specification: Big improvement on Weld treatment, internal structure and surface polishing.

2.Machine casting 0.5um is the best proof of the polishing effect.

3.Solved the biggest problem in industry to through improvement on nozzle caliber and increased the upward water distribution,Riboflavin cleaning validation is the best proof.

4.ROT series products have a cleaning efficiency rating of 2 and is excellent for rinsing and removing light stains. It is mainly used for food and beverage industry, chemical and pharmaceutical industry and other similar cleaning situation.

5.ROT series products are made from AISI 316L stainless steel and can be used at temperatures up to 250℃ , **ensure to use different cleansers widely.**

Notices

Recommend to operate with compressed air within short period. If working pressures is higher than recommended,it will caused higher abrasion rates and smaller droplets. This may affect the final cleaning effect.





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Rotary cleaning ball ROT series

more models

Type	Model	Spray Angle	Connection way	connection size	connection Standard	Ball Outer Diameter	Connection Inner Diameter (mm)	Standard Flow (cubic/bar)
ROT	ROT-D24-0.8	360	threaded connection	3/8"	DIN11850	Φ24	3/8"	1.40m³/h,@2bar (23L/min)
	ROT-D24-0.8	360	Pin Connection	Inner DiameterΦ15.4	DIN11850		15.4	
	ROT-D31-1	360	threaded connection	1/2"	DIN11850	Φ31	1/2"	2.30m³/h,@2bar (38L/min)
	ROT-D31-1-	360	Slip-on connection	Inner DiameterΦ21.8	DIN11850		21.8	
	ROT-D38-1	360	threaded connection	1/2"	DIN11850	Φ38	1/2"	4.20m³/h,@2bar (69L/min)
	ROT-D38-1	360	Slip-on connection	Inner DiameterΦ25.4	DIN11850		25.4	
	ROT-D46-1.2	360	threaded connection	3/4"	DIN11850	Φ46	3/4"	5.60m³/h,@2bar (92L/min)
	ROT-D46-1.2	360	Slip-on connection	Inner DiameterΦ33	DIN11850		33	

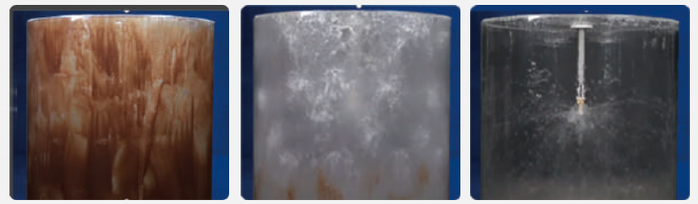
Application of automatic rotating cleaning ball

Automatic rotating cleaning ball is for full cleaning and jetting with cleaning fluid. It is specially designed for the innter five-gallon tank cleanning. After long time repeating test and researching,it prove that its unique design has a small flow rate,high efficiency and saves cleaning liquid . It is Suitable for lifting equipment. Specifically used for water barrel cleaning, mineral water barrel cleaning equipment, 3-gallon barrel cleaning and 5-gallon barrel cleaning.



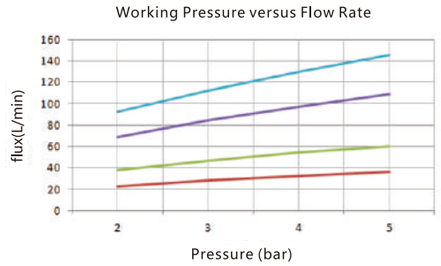
Spray effect

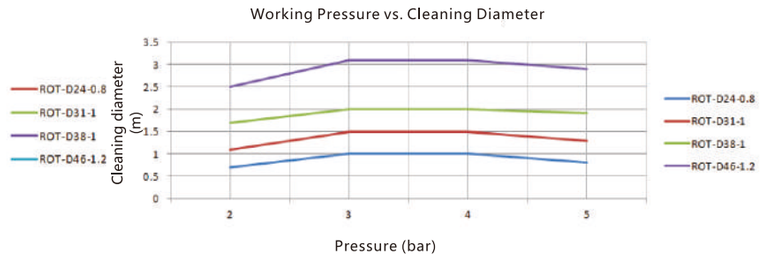




At beginning | After 10 mins | After cleaing

Performance data





CY-SS telescopic nozzle

DESIGN FEATURES:

- High-Impact Cleaning, Hygienic design
- Minimum cleaning fluid consumption
- Direct fluid drive
- Automatic lubrication
- 1.8m impact radius



type	model	Spray angle	Connection Method	Thread size	Connection standard	Ball Outer Diameter	Connection inner diameter (mm)	Standard Flow (cubic/bar)
telescopic	RT-D54-1/2	180	thread	1/2"	DIN11850	/	18.2	1.80m³/h, @2bar (30L/min)

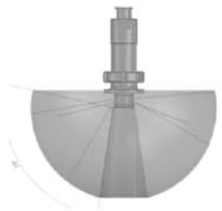


Telescopic CIP nozzle

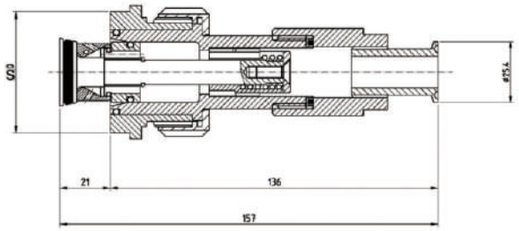
The nozzle head is flush with the equipment mouth when not in use (The equipments are spray drying chamber, cyclone, fluidized bed, storage tank, pipeline, etc.). During nozzle operation, water is pumped to the nozzle under pressure, which put the nozzle head into the correct position in the tank to clean the equipment. Once the water stops, the nozzle head automatically retracts to its original position and stops liquid residue in time.

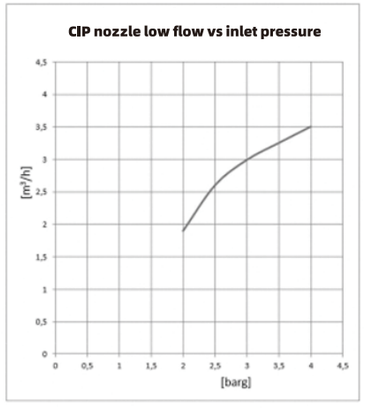
Specification

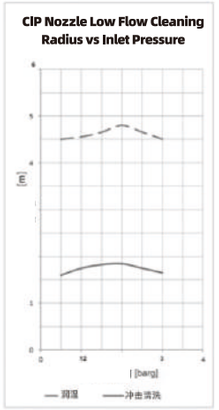
Wetting Radius: Up to 4.5m
Impact Cleaning Radius: Up to 1.8m
Spray Angle: 70-150°
Maximum Operating Temperature: 120°C
Maximum Ambient Temperature: 150°C
Supply Pressure: 1.8-4 bar
Recommended Pressure: 2 bar
Liquid Flow: 1.8 m3 /h @ 2 bar



cleaning impact radius blind spot less than 30°







CYCO-05 Rotary tank cleaning nozzle



Actual data form	
Pressure (bar)	Flow (L/m)
3	24
4	28
5	32
7	37
10	45
12	52
15	56

CYCO-5 Data Sheet

Model: CYCO-05	Type: Impeller Reducer Drive
Weight: 2.6kg	Working Pressure: 4-20bar
Recommended Pressure: 5-15bar	Cleaning Cycle:4-8mins
Material:316L	Cleaning Angle: 360°
Cleaning Diameter:5meter	Minimum Mounting Diameter: 105mm
Connection: 3/4 BSPP Female Thread (Customized connection optional)	

Theory: The Rotary tank washer nozzle drives the turbine to drive the internal deceleration mechanism through the cleaning fluid. The gear mechanism runs according to the set trajectory to achieve rotation, and realizes 360-degree cleaning thoroughly.

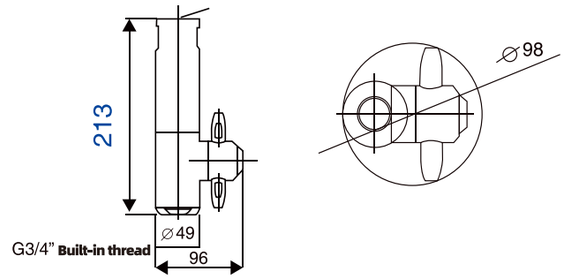
Application: It is suitable for three-dimensional cleaning of medium&small storage tanks, tanker truck and underground storage tanks, such as cleaning, beer, pharmaceutical, chemical, industrial fermentation tanks or other occasions which require high impact cleaning.

Features: Independent reduction gearbox mechanism, good sealing,strong impact water flow.
Order Information

OrderInfo

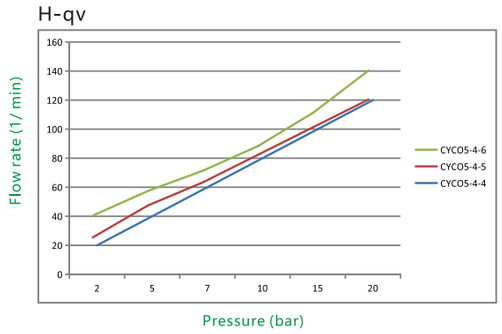
Model: CYCO-05	Orifice: 4	Nozzle quantity : 4
Angle:360°	Material: 316L SS	Connection: BSPP 3/4

Pictures





Technical Data



Property

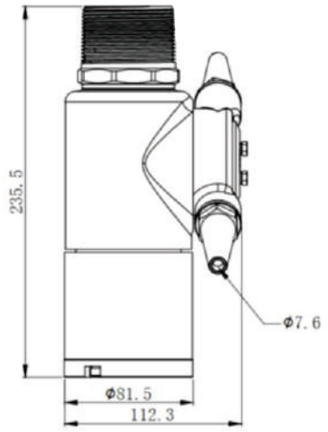
1.Perfect structure design, and been able to generate larger impact water flow.
2.Excellent sealing design, water leakage rate is only 3%, more economical cleaning solution
3.Independent gearbox design to prevent internal gear damage, and been able to work under conditions of poor water quality.

Technical highlights

Working temperature	30 60 90 120 150 180
Maximum tank value	5 10 15 20 25 30
Manufacturing	1 2 3 4 5 6
Materia	316L PEEK EPDM
Technical highlights	Self-lubricating, self-cleaning, independent gearbox design
Other parameters	2-6 minutes cleaning cycle , minimum opening 100mm, weight 2.6KG, connection 3 /4BSPT.

360-Tank cleaning nozzle

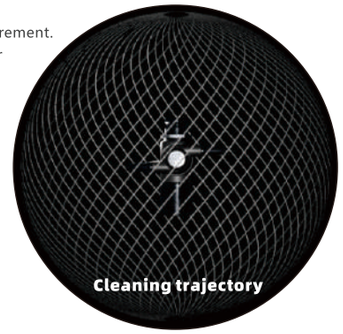




Product Description

Model 360 is a very durable and reliable tank cleaning machine, covering all the functions required to deal with the most serious tank cleaning problems.

- Model 360 with unique design,long service life and short cleaning time, its suitable for all kind of storage tank cleaning.
- Model 360 with 2 nozzles,it provides a powerful and thorough 360°cleaning mode every 60 revolutions.
- Optional thread size and thread connection way, predictable cleaning affects and short cleaning time.
- The structure of gear reducer and the combination of rotor and stator can meet most application requirement.
- Built-in filter can help to decrease the blockage and prolongs the using life, meanwhile,users can repair it by themselves and easy to maintain.



360-A

Clean Angle: 360°	Recommend Pressure: 3.4-20bar
Material: 316L、PTFE	Medium: Liquid
Male thread connection	Weight: 5.1KG
Max working temperature: 95°	Clean diameter: 15.3m
Working pressure: 3-15bar	Min cut size:: φ290mm

360-B

Clean Angle: 360°	Recommend Pressure: 3.4-20bar
Material: 316L、PTFE	Medium: Liquid
Female connection	Weight: 11.6KG
Max working temperature:93°	Clean diameter: 30.5m
Working pressure: 3-22bar	Min cut size:: φ320mm

Advantages and features

- Clean large tank from 8m to 25m
- With unique and precise rotating mechanism.
- The nozzle rotates 360° around the horizontal and vertical axes at the same time, and a dense mesh is made in the container to ensure that every corner of the container is thoroughly cleaned by the high-impact water flow.
- Pressure range: 3-15bar, suggest to run it under 4-13bar.
- Flow rate range: 6-15ton/h
- Cleaning time is from 5min to 35min.
- Connection size: 2" Male thread (BSPT,NPT)

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K4 Tank Washing Nozzle (6160-10250)

Design Features

The 6160 fixed tank washing nozzle assembly features a large flow capacity for cleaning tanks up to 3.1 meters in diameter .

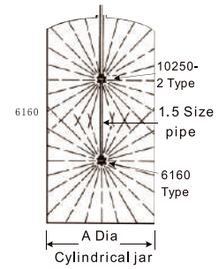
The flow rates can be changed by using the size of 1/4″ or 1/8″ full cone spray nozzle .The 6160 nozzle can pass throught tank mouth of 130mm of large in diameter .

For cleaning large tanks where extra-large flow capacity is use to clean the tank which diameter reaches 6.7 meter. It uses size of1/2", 3/4 "or 1" full cone to change the flow rates

The 10250-1 nozzle assembly can pass throught tank mouth of 230mm in diameter .For deep tanks the 10250-1 version is available with a 1.5 inch bottom outlet connection for use with a pipe extension and a 6160 nozzle assembly.

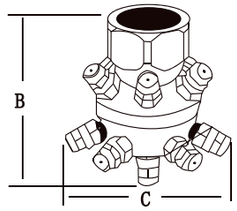
6160 Type





10250 Type





On Application

Washbox defoaming Stock tank cleaning

Performancedata

Pipe Size NPT or BSPT (Female)	Nozzle in the first order number	Flow rate (l/min.) at diferent pressures & Aprox. Max. Tank Dia								Tank dia A (m)	Size	
		1.5 Bar		2 Bar		3 Bar		3.5 Bar				
		l/min	diameter jar A (m)	l/min	diameter jar A (m)	l/min	diameter jar A (m)	l/min.	diameter jar A (m)		Height B (mm)	Dia C (mm)
3 Inch	10250-1-1/2	280	3.0	320	3.5	390	3.5	415	4.5		166	191
	10250-1-3/4	580	3.5	660	4.0	800	4.5	860	5.0		174	210
	10250-1-1	1000	4.0	1130	5.0	1370	6.0	1470	6.5		183	229
1 ½ Inch	6160-1/4GG5	35		40		48		52		1.2	114	114
	6160-1/4GG10	70		80		97		104		2.1	114	114
	6160-1/4GG22	155		177		215		230		3.0	121	127

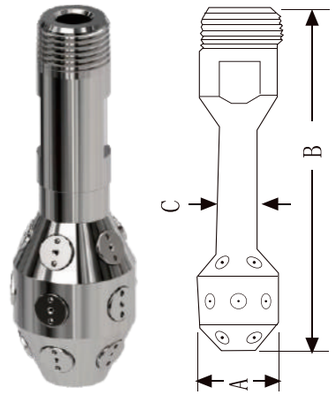
K4 Tank Washing Nozzle(9800)

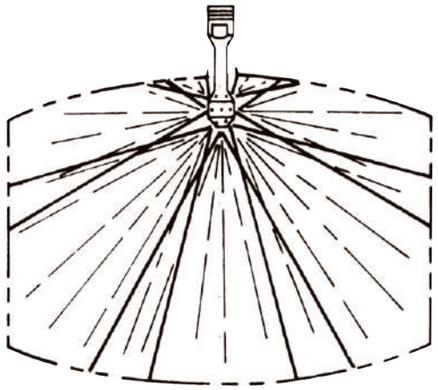
Design features

The 9800 washing nozzle is designed for effective cleaning of small containers .

The nozzles is available in a choice of 15 or 21 full cone spray tips that can provide complete coverage of the interior surface of the small containers at pressure up to 10 bar.

The 9800 nozzle fit throught a standard drum mouth .It can be installed on a self driven drum washer .The biggest diameter of the spray tip is 35mm with a 16mm reduced neck design .Constructed of SS,this nozzle is an ideal application when max. corrosion resistance is required.





Performance data

Nozzle order number	Capacity (l /min.)								
	1Bar	2Bar	3Bar	4Bar	5Bar	6Bar	7Bar	10Bar	10Bar
9800-15-SS	–	–	–	20	23	25	26	31	31
9800-21-SS	–	–	–	28	31	34	36	43	43

Diamensions and weight

Based on largest /heaviest version of each type

Nozzle serial number	9800-			
Pipe joints NPT or BSPT (male)	1 Inch	Pipe joints NPT or BSPT (male)	1 Inch	Net Weight (Kg)
A(mm)	35	C (mm)	16	0.51
B(mm)	156			0.51

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K4 Tank Washing Nozzle(36250-28250)

Design Features

Feature of 36250/28250 Compact Nozzle:

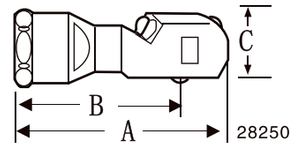
There are three high-pressure flat fan spray nozzles at the rotary spray head. The spray tip should be precisely oriented, in order to well wash all inner surface.

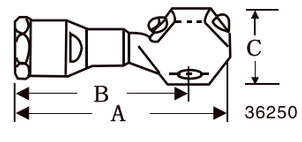
Therefore, there two models ofnozzle can be used to effectively wash inner of small bottle, jarand barrel.

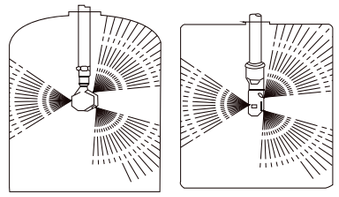
36250 Nozzle body is made of anticorrosive plastic, and bearing spring is made of hard stainless steel for max. wearable life and high pressure washing with max. Pressure of 5 bar.

28250 Impact Nozzle can pass inlet with diameter of 42 mm. The sector spray head with low flux has good effect to wash small container. The spray body is made of 316 stainless steel for max. wearable life and high pressure washing with max. pressure of 7 bar.









Performance data

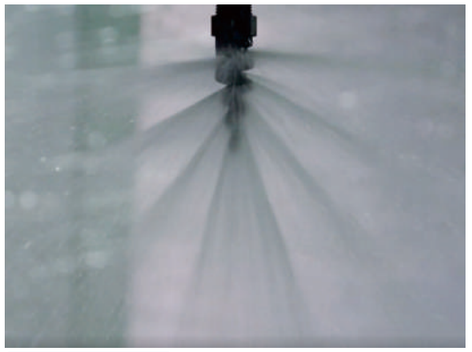
Nozzle Order Number	Capacity (l/min.)					
	1Bar	1.5Bar	2Bar	2.5Bar	3Bar	4Bar
36250-STCN16-PP	49	59	68	76	84	94
36250-STCN18-PP	101	121	140	159	179	201
36250-STCN27-316SS	22	27	32	38	43	49
36250-STCN29-316SS	40	48	55	62	70	79

Size and weight

Nozzle Model	Joint NPT or BSPT (Female)	A (mm)	B (mm)	C (mm)	C (mm)	Hexagon (mm)	Net Weight (KG)
36250-	3/4 inch	145	115	85	85	75	0.55
28250-	3/4 inch	122	100	56	56	44.5	0.68

SPJT bottle cleaning nozzle





Tank Washing

DESIGN FEATURES
- Clog-resistant spiral design
- Energy efficient
- Compact design; fits small openings

SPRAY CHARACTERISTICS
- Easy to maintain
- Unique patterns that spray in opposing directions

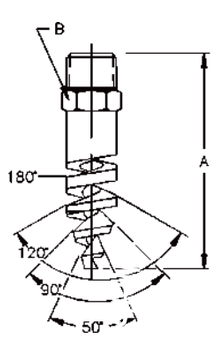
Flow rates: 11.4 to 260 l/min

Tank Washing SPJT Flow Rates and Dimensions
SPJT 180° and 270°, 3/8", 1/2, and 1" Pipe Sizes

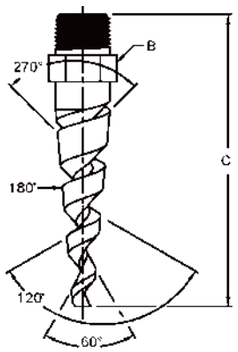
Male Pipe Size	Number	Available Angles	K Factor	LITERS PER MINUTE 0.7 bar	1 bar	2 bar	3 bar	4 bar	5 bar	Approx. (mm) Orifce Dia	Free Pass. Dia.	Metal Only Dim.(mm) A	B	C	Weight (g) Metal
3/8	38SPJT-20-180	180°, 270°	13.7	11.4	13.7	19.3	**23.7**	27.3	30.6	4.83	3.30	73.0	17.5	92.1	49.6
	38SPJT-21-180	180°, 270°	18.5	15.4	18.5	26.1	**32.0**	36.9	41.3	5.59	3.30				
	38SPJT-22-180	180°, 270°	24.2	20.2	24.2	34.2	**41.8**	48.3	54.0	6.35	3.30				
	38SPJT-23-180	180°, 270°	37.6	31.5	37.6	53.2	**65.1**	75.2	84.1	7.87	3.30				
1/2	38SPJT-20-270	270°	54.9	46.0	54.9	77.7	**95.1**	110	123	10.4	4.32		22.2	108.0	181
1	1SPJT-1-270	270°	116	97.2	116	164	**201**	232	260	14.2	5.08		28.7	146.1	298

Flow Rate ($^{l}/_{min}$) $= K\sqrt{bar}$

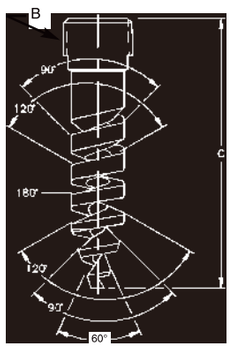
标准材料：黄铜、316不锈钢



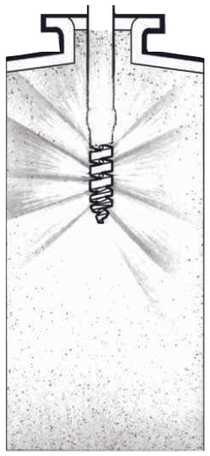
38SPJT-20-180



38SPJT-20-270



1SPJT-1-270



Tank Washing SPJT Coverage Chart
When spraying at 2-3 bar

Pipe Size	Nozzle Number	Scrubbing Diameter (mm)	Rinsing Diameter (mm)
3/8	38SPJT-20-180	380	760
	38SPJT-21-180	460	1200
	38SPJT-22-180	610	1500
	38SPJT-23-180	910	2100
1/2	38SPJT-20-270	1200	2700
1	1SPJT-1-270	2400	6100

M-50Rotating Tank Washing Nozzle

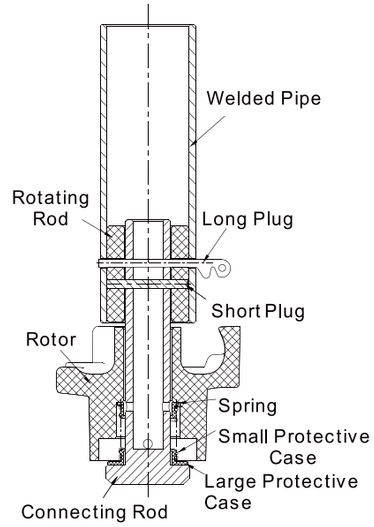
Design features
- Compact design fits through small openings. O.D.: M50-49mm
- Superior cleaning at low pressures and low flow rates for greater economy
- Self cleaning
- No ball bearing to corrode

Spray Characteristics
- High impact scrubbing action
- Slow rotation speed provides better cleaning
- Wide coverage
- Flow rate: 76 to 132 l/min.

M-50 Nozzle Components

M-50 consists of the welded pipe of 304SS, long plug, short plug, spring, small protective case of Teflon, big protective case of Teflon, rotating rod of POM, rotor and connecting rod of 316SS





Schematic

Technical Datas

Technical Datas	Flow Rates(l/m.) US	GPM	Spray Radius (m/ft)
1.4/20	76	20	1.8/6
2.1/30	95	25	2.1/7
2.8/40	110	29	2.1/7
3.4/50	125	33	1.8/6
4.1/60	132	35	1.5/5

36300-36500 Tank Washing Nozzle

Design Features

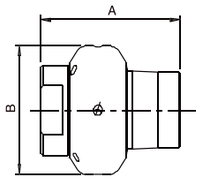
The maximum diameter is about 7.6meter
It is suitable for CIP(cleaning in place) system
The reaction force of the cleaning liquid turns the nozzle, no need power to drive it
It can be cleaned and rinsed under low pressure
Teflon material has a long service life
Jet Angle range between 180 ° to 360 °

Main Feature

Flow Rate Range: 15-1490l/min.
Highest Temperature： 95℃
Spraying Angle： 180°， 270°，360°
Pressure Range： 0.7-3.5bar
Tank Opening Size： 50-180mm

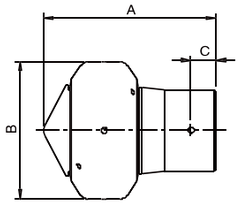


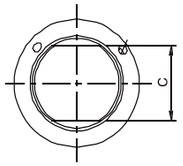
36300





36500





Spraying Angle

180°Spraying Up	180° Spraying Down	270 Spraying Up	270° Spraying Down	360°
				
A 6 Holes	B 6 Holes	C 7 Holes	D 7 Holes	E 8 Holes

Size(mm)

Model No.	A	B	C	
1/2	60.3	49.2	28.6	
3/4	66.6	57.2	33.3	
1	76.2	69.8	45.3	
2	111	123.8	69.8	
3	149.2	174.6	98.4	

Performance Data

Model No	Orifice diameter (mm)	Capacity (l/min.)					Max. Cleaning Diameter
		0.7bar	1.5bar	2bar	3bar	3.5bar	
1/2-8	2.4	15.3	22	26	32	34	3.0
3/4-18	2.4	34	50	58	71	77	4.3
3/4-32	4.0	61	89	103	126	136	4.3
3/4-46	6.0	88	130	148	182	196	4.3
1”-50	4.0	95	140	161	197	215	5.5
1”-70	5.6	133	195	225	275	300	5.5
1”-90	7.5	172	250	290	355	385	5.5
2”-100	6.0	191	280	320	395	425	6.0
2”-125	6.7	240	350	400	495	530	6.0
2”-150	7.9	285	420	480	590	640	6.0
2”-175	9.5	335	490	560	690	745	6.0
2”-200	10.7	380	560	645	790	850	6.0
3”-250	9.9	475	700	805	985	1056	7.6
3”-300	10.7	570	840	965	1180	1280	7.6
3”-350	12.3	665	975	1130	1380	1490	7.6

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36300/R Tank Washing Nozzle

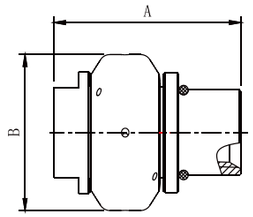
Design Features

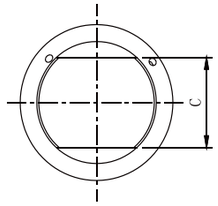
The maximum diameter is about 5.5 meter
No thread, the tapered design facilitates drainage, prevent the formation of nozzle hydrops, better advantage in sanitation application
316SS bolt design, safer and more reliable
Teflon material is suitable for corrosive chemical cleaning agent
Removable design, it can be easily removed during inspection and maintenance
Jet Angle range between 180 ° to 360 °

Main Feature

Flow Rate Range: 34-295l/min.
Highest Temperature： 95℃
Spraying Angle： 180°， 270°，360°
Pressure Range： 0.7-3.5bar
Tank Opening Size： 64-102mm
36300R Bolt Type







Spraying Angle

180°Spraying Up	180° Spraying Down	270°Spraying Up	270° Spraying Down	360°
				
A 6 Holes	B 6 Holes	C 7 Holes	D 7 Holes	E 8 Holes

Size(mm)

Model No.	A	B	C	
1/2	60.3	49.2	28.6	
3/4	66.6	57.2	33.3	
1	76.2	69.8	45.3	
2	111	123.8	69.8	

Performance Data

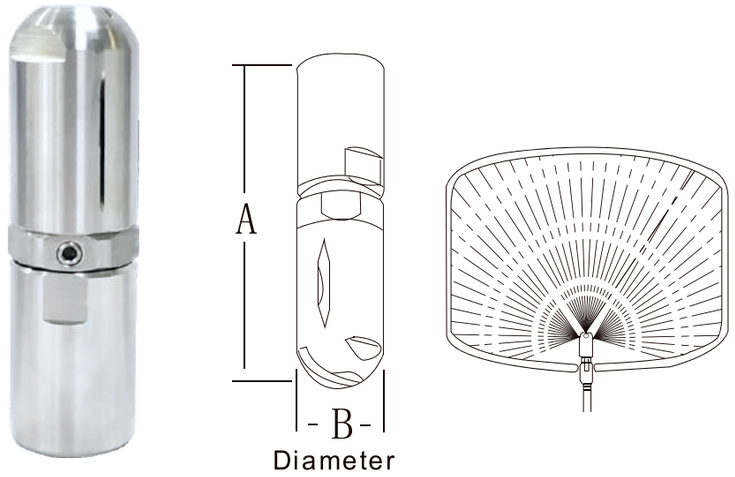
Model No	Orifice diameter (mm)	Capacity (l/min.)					Max. Cleaning Diameter
		0.7bar	1.5bar	2bar	3bar	3.5bar	
3/4-18	2.4	34	50	58	71	77	4.3
3/4-32	4.0	61	89	103	126	136	4.3
3/4-46	6.0	88	130	148	182	196	4.3
1”-50	4.0	95	140	161	197	215	5.5
1”-70	5.6	133	195	225	275	300	5.5
1”-1/2”-53	5.1	101	148	171	209	226	5.5
1”-1/2”-70	6.8	132	185	231	265	295	5.5

K4 Tank Washing Nozzle(19250)

Design features

19250 Compact Nozzle can generate self-rotary drive for side spraying by two flat fan spray tip with 25 mm hole. The top hatch makes a whole global spraying available.

The main material is 316 stainless steel, while axletree and axletree circle are made of rigid stainless steel for longest wearability life.
The max. pressure is 13 bar and max temperature is 180 centigrade.



Performance data

Nozzle Order Number	Capacity (l/min.)							
	1.5Bar	3Bar	4Bar	5Bar	6Bar	8Bar	10Bar	12Bar
19250-STCN5-316SS	49	19.7	23	25	28	32	36	39
19250-STCN6-316SS	15.9	22	26	29	32	37	41	45
19250-STCN7-316SS	19.5	28	32	36	39	45	50	55
19250-STCN8-316SS	22	32	36	41	45	52	58	63
19250-STCN9-316SS	28	39	46	51	56	64	72	79

Size and weight

Nozzle Number	19250	A(mm)	89	B(mm)	25.4	Net Weight(KG)	0.23

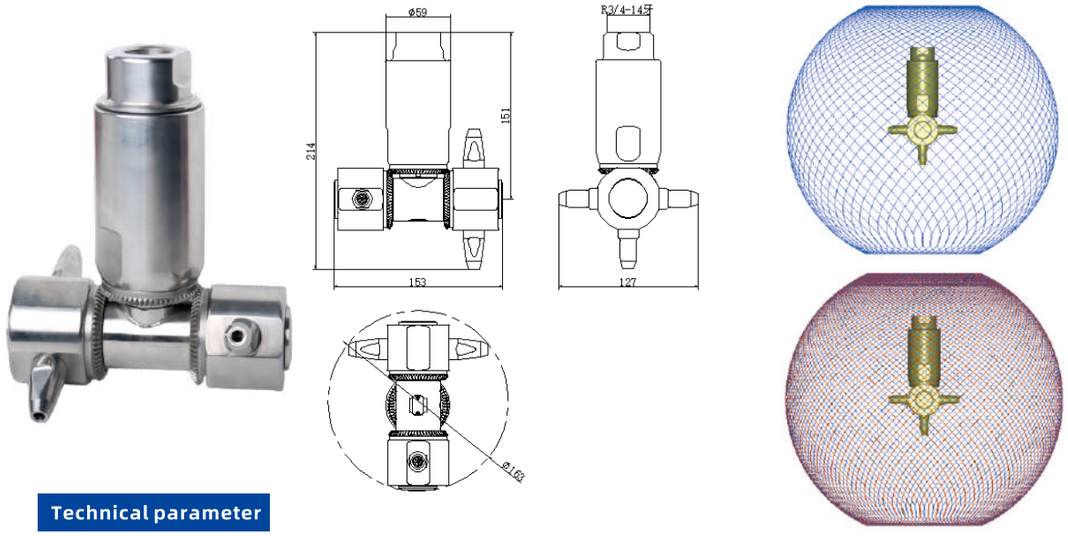
CYCO-08 Rotary bottle and jar cleaner

Product characteristics

360 ° cleaning without dead angle: when the cleaner is working, first confirm that the four nozzles are in the direction of 90 degrees, and rotate axially and radially at the same time according to the set track. When the two nozzles on one side clean one cycle, the two nozzles on the other side encrypt and supplement the cleaning cycle to realize 360 ° cleaning without dead angle.

Tightness: The leakage point adopts dynamic seal to reduce the leakage and save the cleaning liquid. At the same time, it produces greater impact force of water flow.

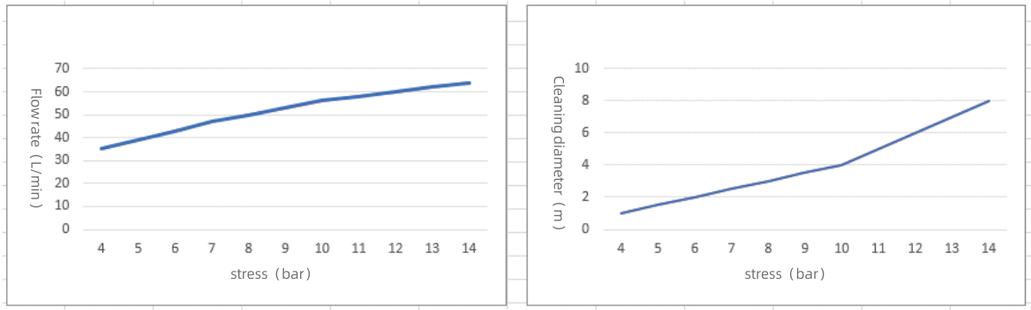
High impact force: The nozzle adopts a unique steady flow design, which can make the jet flow more concentrated, the impact force



Technical parameter

1. Manufacturing material: 316 L stainless steel,PPS, Rulon Special Engineering Materials
2. Working pressure: 3-15bar
3. Recommended pressure: 4-14bar
4. Maximum working temperature: 95°C
5. Maximum ambient temperature: 140 ° C
6. Cleaning angle: 360 °
7. Cleaning diameter: Less than 8m
8. Opening of storage tank: ≥Φ170mm
9. Interface specification: G3/4 internal thread
10.cleaning cycle: 5-35 minutes
11.Weight: 3.8 kg
12. Cleaning medium: water, weak acid solution, weak alkali solution

Performance data

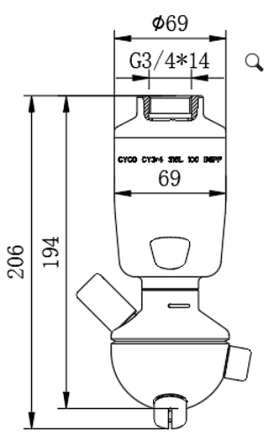


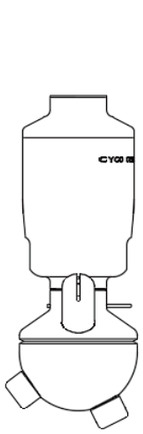
CYCO-100 rotary can washer

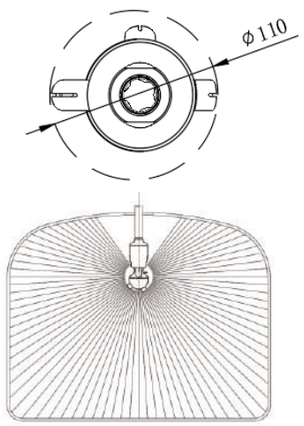
Product characteristics

The CYC0-100 rotary cleaner uses the cleaning fluid to drive the impeller to rotate for 360-degree cleaning. It has a built-in sealed deceleration mechanism with a constant speed and a higher impact force. Compared with the traditional rotary cleaning ball, the CYC0-100 rotary cleaner has a greater impact force and consumes less cleaning fluid, which greatly shortens the cleaning cycle and improves the cleaning efficiency.





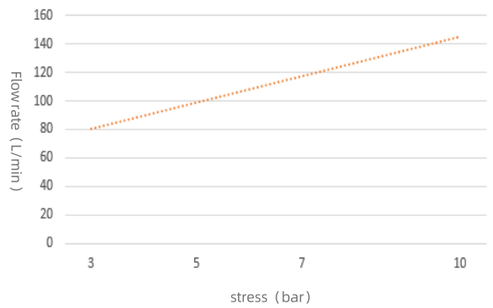


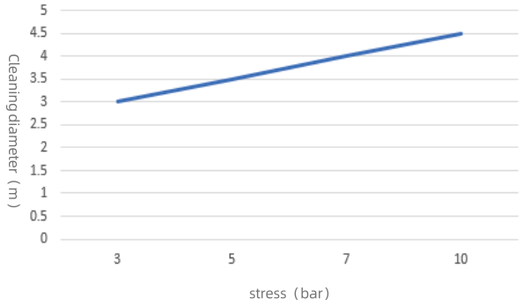


Technical parameter

1. Manufacturing materials: 316L stainless steel, PPS, PEEK special engineering materials
2. Working pressure: 3-15bar
3. Recommended pressure: 4-14bar
4. Maximum working temperature: 95℃
5. Maximum ambient temperature: 140 ° C
6.Opening of storage tank: ≥Φ110mm
7. Cleaning angle: 360 °
8. Cleaning diameter: Less than 6m
9.cleaning cycle: 5-35 minutes
10.Interface specification: G3/4 internal thread
11.Weight: 2.5 kg
12. Cleaning medium: water, weak acid solution, weak alkali solution

Performance data



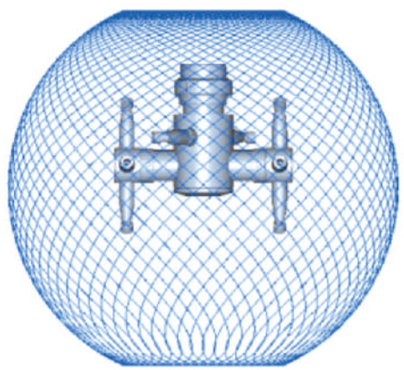


CYCO-10 Universal bottle and jar cleaner

Product characteristics

360 ° cleaning without dead angle: when the cleaner is working, first confirm the direction and position of the four corner driving nozzles as shown in the figure, and rotate axially and radially at the same time according to the set track. While one side of the nozzle cleans one cycle, the other side of the nozzle encrypts and supplements the cleaning cycle to realize 360 ° cleaning without dead angle in all directions.

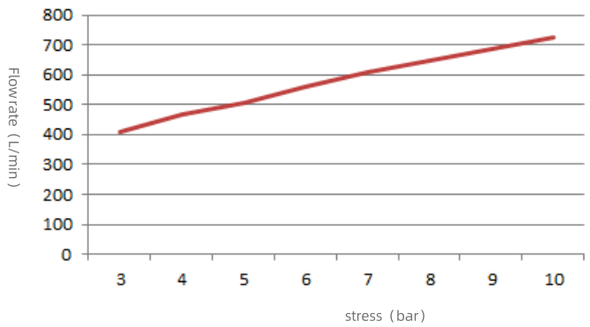




Technical parameter

1.Manufacturing materials: SU5304, PTEF and other special engineering materials
2. Working pressure: 3-10bar
3. Maximum working temperature: 100 °C
4. Cleaning angle: 360 °
5. Cleaning diameter: Less than 8m
6. Opening of storage tank: ≥Φ280mm
7. Interface specification: G2 external thread
8. cleaning cycle: 5-35 minutes
9. Weight: 3.5 kg
10.Pump: 35-50T/H
11.Water volume: 12T/H
12. Cleaning medium: water, weak acid solution, weak alkali solution

Performance data



Installation method

This product is externally threaded (G2 screw as standard) and is usually connected to a flanged spray rod. During installation, the external thread of the washer is connected with the internal thread on the spray rod, the washer is placed in the best cleaning position, and the flange of the spray rod is installed.

CYCO-15 bottle and jar cleaner

Product characteristics

360° no dead Angle cleaning: When the cleaner works, the axial and radial rotation according to the set trajectory at the same time, to achieve an all-round 360° no dead Angle cleaning

Sealing: The leakage point adopts dynamic sealing to reduce leakage and save cleaning fluid. At the same time, more water impact

Higher impact force: The nozzle adopts a unique steady flow design, which can make the jet water more concentrated, greater impact force, and more thorough cleaning





First cycle

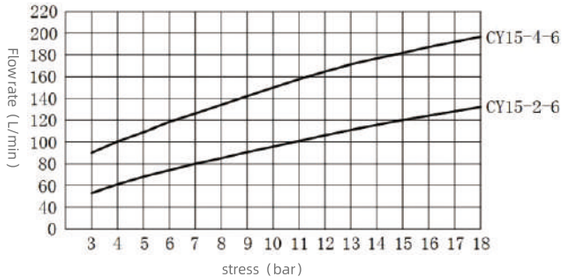


All tracks

Technical parameter

1. manufacturing materials: 316 L stainless steel, PEEK special engineering materials
2. Working pressure: 4-25bar
3. Recommended pressure: 5-22bar
4. Maximum working temperature: 95°C
5. Maximum ambient temperature: 120°C
6.Cleaning angle: 360°
7. Cleaning diameter: Less than 12m
8. Tank opening: ≥ϕ110mm
9. Interface specification: 1-1/2 "BSPP internal thread
10. Cleaning cycle: 4-10 minutes
11.Weight: 4.1 kg
12. Cleaning medium: water, weak acid solution, weak alkali solution

Performance data



Pressure and flow relationship



Relationship between pressure and cleaning diameter

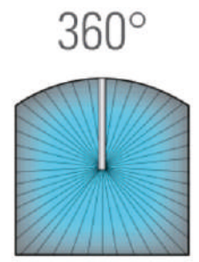
CY-08H high pressure tank cleaning system

Product overview

CY-08H electric high pressure tank cleaning system is mainly used for light cleaning inside the main machine of 5-7m tank, medium cleaning inside the main machine of 3-5m tank, and heavy cleaning inside the main machine of 1.5-3m tank; Can flexibly use a manual or automatic control operation system to realize the cleaning of chemical reaction sticks, food and drug processing tanks and other types of tanks with strong impact force, and is an ideal equipment for automatically cleaning stubborn stains.

Product characteristics

- Reliable and durable, the waterproof and explosion-proof motor drive provides stable, high-impact output and effectively removes stubborn stains;
- Pneumatic or electric motor drive can be provided according to customer needs, to adapt to various use environments, cleaning power, cleaning speed is flexible and adjustable;
- The equipment is lightweight and can be installed permanently with the equipment or easily moved between storage tanks for cleaning;
- The equipment components are made of durable corrosion-resistant materials, and the drive device is located outside the tank, away from corrosion sources, and has a long service life;
- Equipment components and configurations allow for easy customization to meet a wide range of customer operational needs;
- The high pressure version is suitable for high impact cleaning with working pressure up to 200bar and full coverage of 360 degrees;
- The installation method can be selected according to the size of the opening of the tank flange, ASME convex surface or sanitary loose joint;
- The washer is connected with a flexible structure, and the expansion range can be customized according to customer needs (100mm-3m).





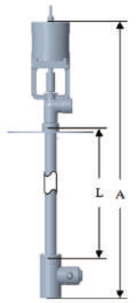
Technical parameter

1、Rotary cleaning nozzle: 200bar, (adjustable)
2、Cleaning tank diameter: within 10m
3、Nozzle: 2
4、Cleaning cycle: 5-7 min
5、Nozzle speed 1-60 rpm (adjustable)
6、Cleaning mode: 360 degree automatic cleaning
7、Interface mode: G3/4 internal thread (pipe length ≤10m) Or G1/2 internal thread (pipe length ≤10m)
8、Installation method: the opening size of the host cover is ϕ120, and the flange and the opening of the tank are fixed by clamping or flange

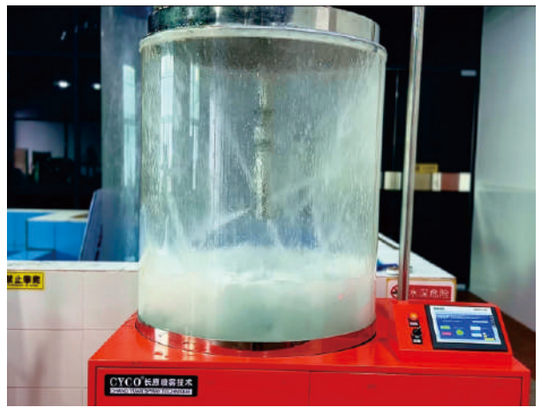
Flow rate

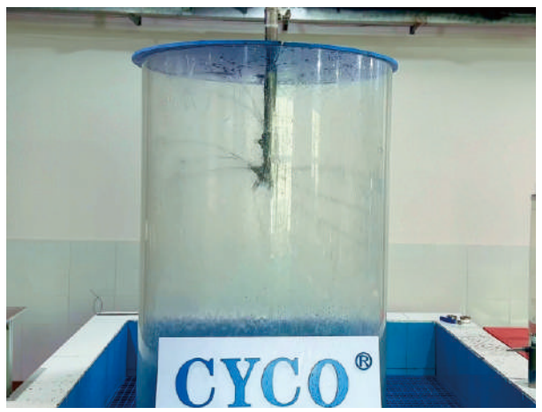
Model	80Bar (L/min)	100Bar (L/min)	120Bar (L/min)	150Bar (L/min)	200Bar (L/min)
CY-08H-300-1.2	11.6	13	14.2	15.9	18.4
CY-08H-300-1.5	17.6	20	21.9	24.5	28.3
CY-08H-300-1.6	21.5	24	26.3	29.4	34.0
CY-08H-300-1.8	26.8	30	32.9	36.7	42.4

Adjust length and weight

Washer illustration	Cleaner name	Adjust the lever length L	Overall length A	Cleaner weight KG
	CY-08H-300-1.2	300	645	7
	CY-08H-600-1.2	600	945	8
	CY-08H-900-1.2	900	1245	8.8
	CY-08H-1200-1.2	1200	1545	9.7
	CY-08H-1500-1.2	1500	1845	10.6
	CY-08H-1800-1.2	1800	2145	11.5
	CY-08H-2100-1.2	2100	2445	12.4
	CY-08H-2400-1.2	2400	2745	13.3
	CY-08H-2700-1.2	2700	3045	14.2
	CY-08H-3000-1.2	3000	3345	15

Company strength













Spray production two



Development Division 1



American particle size detector



Material testing laboratory

CYCO® DongGuan Changyuan Spraying Technology Co.,Ltd.

Company strength



Enterprise strength



Precision machining equipment



Patent wall



Wall of Fame



Large nozzle flow test bench

Partial partners

TESLA · SANY · ZOOMLION · BYD · 中国交建 · 中国一汽 FAW GROUP

步步高 · Midea · Haier · 雨润集团 YURUN GROUP · KEOE 科德环保 · CLEAN MARINE

中顺洁柔 · LONGKING 龙净环保 · 大疆农业 · WEICHAI 潍柴 · 華潤 · 中核集团 CNNC

纺纺 · H · CHANGHONG 长虹 · 中盛企业 · YUTONG · Ford

Vinda · GHY 金红叶纸业 GOLD HONGYE PAPER · TRANLIN · BJCX · 上海纺织 SHANGTEX · FOXCONN

Certificate


证书

DEKRA

ISO 9001:2015

DEKRA Certification GmbH 兹证明下述组织：

东莞市长原喷雾技术有限公司

统一社会信用代码（组织机构代码）：91441900664274491F

中国广东省东莞市长安镇厦边路段 4 号 102 室，邮编 523875

就下述范围：

五金件的制造

已按照上述标准建立并保持了质量管理体系，符合性证据记录在编号为 No. G2525-9022 的认证审核报告中。

证书登记号	90321152
原证书有效期：	2023-03-09
证书有效期至：	2026-03-08

本证书信息可在国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）上查询。

本证书由获得认可的认证机构按照认证认可相关规定颁发，并仅在该机构维持有效认可资格期间有效。

IAF DAkkS

Dr. Rolf Kickuth

初审批准日，日期 2023-03-09

德国 DEKRA 认证集团

德凯质量认证（上海）有限公司 | 杭州德凯认证有限公司

DEKRA Certification GmbH | Handwerkstraße 15 | D-70565 Stuttgart | www.dekra-certification.de

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GUARDIAN INDEPENDENT CERTIFICATION

CERTIFICATE OF REGISTRATION

The Medical Devices Quality Management Systems of

Hunan Changyuan Technology Co.,Ltd

Unified Social Credit Code:91430181MA4L3BRQ216

Environmental Science & Technology Industrial Zone, Liuyang City, Hunan, China

has been assessed by GIC and complying with

YY/T0287-2017/ISO13485:2016

For the following activities

Design and Production of Disposable Medical Face Masks (Non-sterile) and Surgical Face Masks (Non-sterile)

Date of Issue: 15 October 2020 Date of Expiry: 14 October 2023

Date of Initial Certification: 15 October 2020

Certificate No.: G20Q2GZ0475R0S

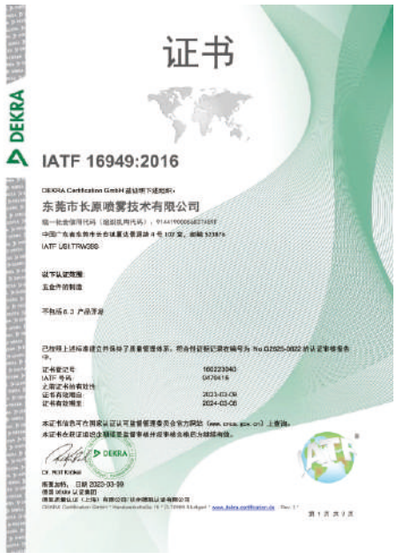
The granting of this certificate does not mean that the certificate holder can avoid any legal obligation; if the products or activities covered in the scope of certification require administrative licenses, the certificate shall be only valid within the scope of administrative licensing. The registered organization shall be subject to regular annual supervision by GIC, and the continual validity of the certificate is base upon conformity of audit. Please scan two-dimensional code at #5 to find the certificate information. This certificate can be queried at Certification and Accreditation Administration of the People's Republic of China official website www.cnca.gov.cn & GIC website (www.gic.org.cn)

Signature:

Guardian Independant Certification (Beijing) Co., Ltd.

1-6D,6F, 1st Building, 2nd Courtyard, Dijiaozhuang Middle Street, Chaoyang District, Beijing City

Post Code: 100124


证书

DEKRA

IATF 16949:2016

DEKRA Certification GmbH 兹证明下述组织：

东莞市长原喷雾技术有限公司

统一社会信用代码（组织机构代码）：91441900664274491F

中国广东省东莞市长安镇厦边路段 4 号 102 室，邮编 523875

IATF: 0017RW089

就下述范围：

五金件的制造

不包括 8.3 产品开发

已按照上述标准建立并保持了质量管理体系，符合性证据记录在编号为 No. G2525-9022 的认证审核报告中。

证书登记号	160223043
IATF 号码	0470418
上期证书有效期至	
证书有效期自：	2023-03-09
证书有效期至：	2026-03-08

本证书信息可在国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）上查询。

本证书由获得认可的认证机构按照认证认可相关规定颁发，并仅在该机构维持有效认可资格期间有效。

DEKRA

Dr. Rolf Kickuth

初审批准日，日期 2020-03-09

德凯 IATF 认证集团

德凯质量认证（上海）有限公司 | 杭州德凯认证有限公司

DEKRA Certification GmbH | Handwerkstraße 15 | D-70565 Stuttgart | www.dekra-certification.de

第 1 页 共 1 页


医疗器械生产许可证

许可证编号：湘食药监械生产许20202036号

企业名称：湖南长原环境科技有限公司　　生产地址：浏阳市环保科技示范园

法定代表人：何锦

企业负责人：何锦

住　　所：浏阳市环保科技示范园　　生产范围：口罩（Ⅰ-14 医护人员防护用品：Ⅰ-14-1 手术室、急救和治疗用品；Ⅰ-14-2 医用防护服装）。

发证部门：湖南省药品监督管理局

有效期限：至 2025 年 07 月 23 日　　发证日期：2021 年 07 月 02 日

国家药品监督管理局制

Quality certification



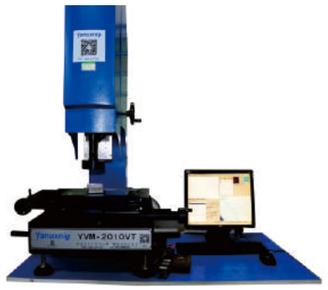
Salt spray tester

For testing the corrosion performance of raw materials



Material analysis

For each batch of raw materials, we perform material spectral analysis



Two-dimensional measuring instrument

It is used for precision dimensional inspection such as small holes



Three-dimensional image measuring instrument

Ensure the dimensional accuracy, positioning accuracy, geometric accuracy and contour accuracy of the product

01 Material testing

02 Process control

03 Finished product inspection

04 Shipment detection

DongGuan Changyuan Spraying Technology Co.,Ltd

Dongguan Factory: Xiabian Industrial Zone, Chang 'an Town,
Dongguan City, Guangdong Province, China

Liuyang Factory: China Liuyang City, Hunan Province environmental
Science and Technology Demonstration Park

Tel:+0769-81558007
Email:dgcy629@ecyco.cn
URL:www.penzuicn.com/www.spraycyco.com

CYCO®



CLEANING SYSTEM

SAI GLOBA ISO 9001:2015

SAI GLOBA IATF 16949:2016

Company Profile

Dongguan Changyuan Spray Technology Co., Ltd. is located in Changan Town, Dongguan City, Dongguan City, from its inception in 2000, has been more than 20 years of history, the company has more than 200 employees, technical developers accounted for more than 10%, the company for 12 consecutive years have been assessed as a national high-tech enterprises, the company is strictly in accordance with the requirements of the IATF16949 certification system to establish the relevant management system and process to meet the needs of High-end customer delivery quality and cycle, the company has invested more than 60 million over the past ten years to introduce the world's high-end nozzle manufacturing and testing equipment, most of the company's nozzle processing equipment imported from Japan and Germany, and established a very advanced granularity and flow test system, the company has accumulated a wealth of experience in the ship desulfurization industry, chemical tank cleaning industry, iron and steel smelting industry, the spray disinfection industry, the dust suppression industry, and has a very rich experience, and has a very high quality of dry spray industry. The company has accumulated rich experience in the ship desulfurization industry, chemical tank cleaning industry, steel smelting industry, spray disinfection industry, dry mist dust suppression industry, and has Wärtsilä, Alfa Laval, Tesla, 711 Research Institute, Shanghai Electric Power Construction, Sany, Zoomlion, DJI drones and other world-famous customers, Changyuan CYCO nozzle trademark has been enjoying a very high reputation in the field of international industrial nozzles. In 2022, the company established a wholly-owned subsidiary Hunan Changyuan Spray Technology Co., Ltd. in Hunan Liuyang Environmental Protection Industry Demonstration Park, and set up an advanced production and testing line in Hunan Changyuan factory, focusing on providing customers with precision spraying systems, tank cleaning systems, automotive cleaning systems, etc., the company will be configured with advanced equipment and production and R & D personnel to provide customers with quality service, to create more than the expected value. Value.







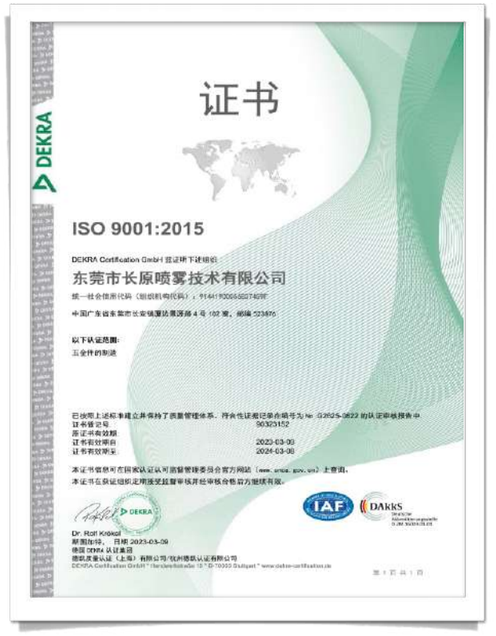


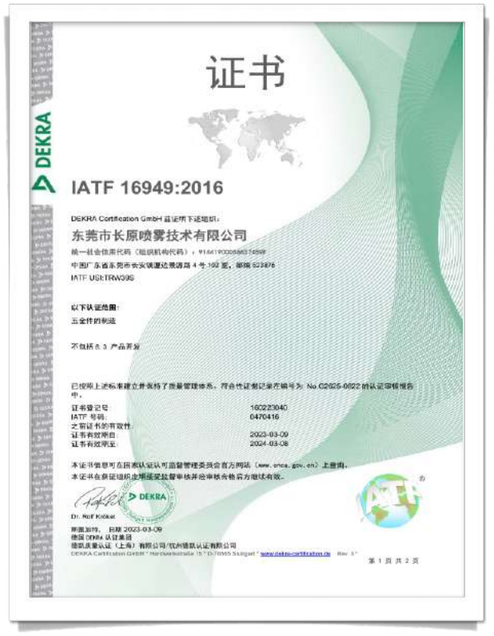




CYCO® DongGuan Changyuan Spraying Technology Co.,Ltd.

corporate strength





ENTERPRISE STRENGTH



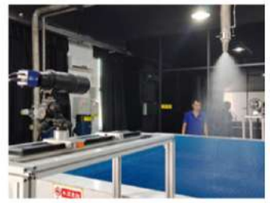
Precision machining equipment



Patent Wall



Tesla Processing Equipment



U.S. Granularity Tester

SOME OF OUR PARTNERS

Medium-pressure cleaning system

Equipment Overview

This mobile bottle and can cleaning equipment is an integrated cleaning device featuring a high-efficiency power system, intelligent control system, and safety monitoring module. It boasts characteristics such as flexible mobility, adjustable pressure, and convenient operation. The equipment utilizes a multi-stage centrifugal pump as the core power source, combined with functions like variable frequency pressure adjustment, real-time pressure monitoring, and electromagnetic control, enabling efficient and thorough cleaning for containers of various materials and capacities. It is widely applicable in mobile bottle and can cleaning scenarios across industries such as chemical, food, pharmaceutical, and warehousing. The equipment can be flexibly paired with various nozzle models, including the CYCO-05, CYCO-02, and ROT-038 from the Changyuan brand, to meet the cleaning requirements of different bottle and can internal structures.



Parameter performance

Specifications \ model	CYQ-1880-JZ	CYQ-18160-JZ
Overall dimensions	895*695*1570	
Weight (KG)		
Power supply (POWER)	three-phase 380V	three-phase 380V
Motor power (KW)	4	7.5
Pump body specifications	multistage centrifugal pump	multistage centrifugal pump
Pressure (Bar)	9-20	12-22
Flow rate (m3/H)	8.5-2.5	14-5
Filtering accuracy (μ m)	80	80
Water source pressure detection	nothing	nothing
Pump outlet water pressure detection	Pressure transmitter	Pressure transmitter
Water pressure control	frequency converter	frequency converter
Built in water tank	nothing	nothing
Water outlet valve control	solenoid valve control	solenoid valve control
Control method	Microcomputer IC, integrated control board	Microcomputer IC, integrated control board
control panel	HMI， Fusion touch screen	HMI， Fusion touch screen
Inlet interface	DN32 flange interface, hole spacing of 100, four holes	Dn40 flange interface, hole spacing 110, four holes
Built in scroll	D900，Diameter DN25, hose length 15m, interface with 1.2-inch internal teeth	

CYCO® DongGuan Changyuan Spraying Technology Co.,Ltd.

Electric rotary high-pressure cleaning system

Equipment Overview

The high-pressure cleaning system utilizes high-pressure water equipment to generate pressurized water, which is then directed through a three-dimensional rotating mixing tank to convert the pressure into highly concentrated water jet kinetic energy, enabling various processing techniques such as cleaning, cutting, and crushing. Any area directly impacted by the water jet—whether it be the inner and outer walls of pipelines, containers, tank bottoms, building surfaces, or hard scale deposits and dense blockages—can be instantly shattered, peeled off, detached from the bonded substrate, and thoroughly cleaned



Applicable scenarios

Suitable for cleaning concrete mixers and fixed installations that require medium to high pressure cleaning. The nozzle is driven by a motor, with adjustable rotation speed and is not affected by water pressure.

Parameter performance

System technical parameters

project	specification	Functional Overview
Overall dimensions	1510*775*1285	1. Using a high-pressure plunger pump, the working pressure reaches 120-150 bar 2. Programmable control, with built-in touch screen. Electric switching water outlet 3. Comes with a 250L storage tank to solve temporary water shortage problems. The tank is equipped with an automatic water replenishment valve and a low water level shutdown protection function 4. Mobile design, easy to use 5. Randomly carry a handheld spray gun for easy use in special scenarios 6. Adopting electrically driven rotating nozzle, 360 degree cleaning, adjustable speed
power supply	three-phase 380V	
motor	Power: 15KW	
outlet pressure	Up to 150Bar	
	Pressure regulation (optional)	
water flow rate	50L/min	
Water tank capacity	250L	
Water outlet diameter	G1/2， two groups	
inlet diameter	G1-1/2	
Nozzle motor	DC 24V，30W， Adjustable speed 0-12r/min	

Nozzle pressure and flow parameters

model	80Bar (L/min)	100Bar (L/min)	120Bar (L/min)	150Bar (L/min)	200Bar (L/min)
CY-08H-300-1.2	11.6	13.0	14.2	15.9	18.4
CY-08H-300-1.5	17.9	20.0	21.9	24.5	28.3
CY-08H-300-1.6	21.5	24.0	26.3	29.4	34.0
CY-08H-300-1.8	26.8	30.0	32.9	36.7	42.4



Mobile bucket cleaning system

Applicable scenarios

Suitable for mobile cleaning scenarios such as ton drums and reaction vessels, the nozzle is driven by water power to achieve 360 degree no dead angle cleaning



Parameter performance

project	specification	Functional Overview
Overall dimensions	1200*700*1468	1. Adopting a multi-stage centrifugal pump with a working pressure of up to 17 bar 2. Programmable control, with built-in touch screen 3. Comes with a 250L storage tank to solve temporary water shortage problems. The tank is equipped with an automatic water replenishment valve and a low water level shutdown protection function 4. Mobile design, easy to use
power supply	three-phase 380V	
motor	Power: 4KW	
outlet pressure	Up to 17 Bar	
	Pressure regulation (optional)	
water flow rate	60L/min	
Water tank capacity	250L	
Water outlet diameter	G3/4	
inlet diameter	G1-1/4	

Nozzle pressure and flow parameters

model	CYCO-05	type	Impeller gearbox drive	weight	2.6kg
work pressure	4~20bar	Recommended pressure	5~15bar	cleaning time	4~8min
material	316L、PEEK EPDM	Cleaning angle	360°	Cleaning diameter	5m
Minimum installation diameter	105mm	connection method	3/4 "BSPP internal thread (can be customized for other connection methods)		



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Glass reaction kettle cleaning system

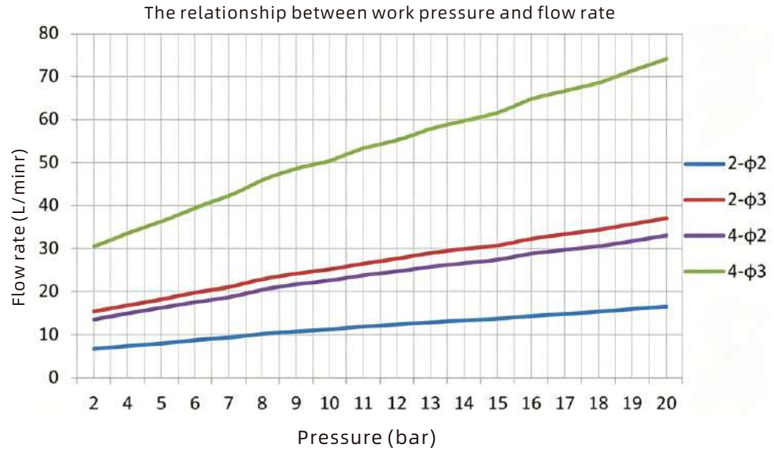


Parameter performance

project	specification	Functional Overview
Overall dimensions	1100*650*1460	1. Adopting a dual phase steel plunger pump with a working pressure of 50 bar 2. Programmable control, with built-in touch screen 3. Comes with a 250L storage tank to solve temporary water shortage problems. The tank is equipped with an automatic water replenishment valve and a low water level shutdown protection function 4. Mobile design, easy to use
power supply	three-phase 380V	
motor	Power: 5.5KW	
outlet pressure	Up to 50Bar	
	Pressure regulation (optional)	
water flow rate	50L/min	
Water tank capacity	250L	
Water outlet diameter	G1/2	
inlet diameter	G1	

Applicable scenarios

Suitable for cleaning scenarios such as glass reaction vessels, 200L oil drums, 50 pure water drums, etc. The nozzle is driven by water power, achieving 360 degree no dead angle cleaning. Suitable for use with cleaning media such as weak acid alkaline, ultrapure water, etc



Special cleaning device for ton barrels



Parameter performance

project	specification	Functional Overview
power supply	three-phase 380V	1. Using a high-pressure plunger pump, the working pressure reaches 120-150 bar 2. Programmable control, with built-in touch screen. Electric switching water outlet 3. Comes with a 250L storage tank to solve temporary water shortage problems. The tank is equipped with an automatic water replenishment valve and a low water level shutdown protection function 4. Mobile design, easy to use
motor	Power: 15KW	
outlet pressure	Up to 150Bar	
water flow rate	50L/min	
Water tank capacity	250L	

Nozzle data parameters

pressure	traffic	interface	Applicable Temperature
15Mpa	20-50L/min	1/2	90 ℃ or below



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Special cleaning device for ton barrels

Applicable scenarios

1. Specialized equipment for ton bucket cleaning, using organic solvent as the cleaning medium, with a pungent odor and toxicity. The overcurrent material is 316L/PTFE, which is corrosion-resistant and achieves 360 degree no dead angle cleaning.
2. Pneumatic lifting and lowering, adjustable speed, pneumatic tilting ton bucket feeding function
3. PLC/HMI control, frequency conversion to adjust pressure



Parameter performance

project	specification	Functional Overview
power supply	three-phase 380V	1. Using high-pressure plunger pump and dual phase steel material, the working pressure can reach 50-70 bar 2. Programmable control, with built-in touch screen 3. Comes with a 250L storage tank to solve temporary water shortage problems. The tank is equipped with an automatic water replenishment valve and a low water level shutdown protection function 4. Mobile design, easy to use
motor	Power:5.5KW	
outlet pressure	Up to 70Bar	
water flow rate	50L/min	
Water tank capacity	250L	

喷嘴数据参数

pressure	traffic	interface	Applicable Temperature
4-15Mpa	20-50L/min	1/2	90 ℃ or below



Medium and large tank cleaning system



project	parameter
Product dimensions	1300mm*800mm*1680mm
power supply	Three phase 380V, 50Hz
motor power	7.5KW
Motor speed	2960rpm
maximum pressure	20bar
maximum flow	160L/min
Cleaning bottle diameter	2-5m
Mainly using nozzles	cy15、cy05、360A
outlet	G1¼
entrance	G2½
Control method	PLC

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200L oil drum cleaning device

Applicable scenarios

This device is designed specifically for cleaning the interior of 200L oil drums and has two functions: cleaning and dryingUsing a multi-stage centrifugal pump, the stains inside the bucket are sprayed and cleaned through a rotating 360 degree nozzleCompressed air is used to blow the water droplets inside the bucket, and the cylinder is horizontally moved to switch the work. The cylinder is raised and lowered to sprayThe showerhead and air nozzle are equipped with PLC/HMI program control when inserted into the bucket, with adjustable cleaning pressure and cleaning duration



operating procedure

Manually place the cleaning bucket into the cleaning platform, which is equipped with positioning fixtures and error prevention design; Start the cleaning device, the nozzle rises into the bucket and starts spraying when it is in place. When the spraying time is up, stop spraying; After the nozzle descends to the designated position, the workstation switches horizontally to the blowing station. The nozzle rises and starts blowing when it reaches the designated position. When the time is up, the blowing stops and the nozzle descends, and the horizontal movement mechanism returns to its initial position. Complete cleaning and manually remove the iron drum.

CIP specialized cleaning system for reaction kettle



Applicable scenarios

1. For the CIP cleaning equipment of the reaction kettle, the cleaning medium is water, and one system is responsible for cleaning four sets of reaction kettles in sequence. The overcurrent material is 304SS.
2. Fixed installation, achieving 360 degree no dead angle cleaning, adjustable pressure
3. PLC/HMI control, frequency conversion to adjust pressure
4. Pressure of 20 bar, flow rate of 8m3/H

Fermentation tank dedicated cleaning machine

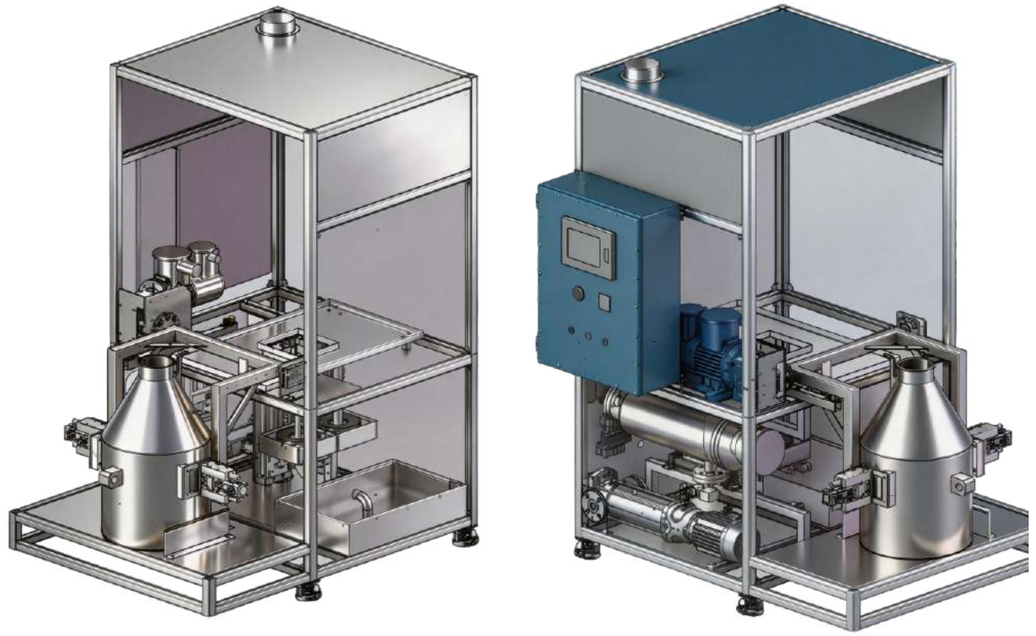


Parameter performance

project	specification	Functional Overview
Overall dimensions	3000*1060*3460（mm）	1. Adopting multi-stage centrifugal pumps with a working pressure of 15-18 bar; Low pressure protection sensor is installed at the inlet; The outlet is equipped with a pressure transmitter and uses variable frequency constant pressure water supply. 2. Programmable control, with built-in touch screen. 3. Adopting a servo feeding system and an automatic pipe winding device, the pipe winding operation is stable and reliable. 4. Removable design, equipped with trackless battery electric flatbed at the bottom, easy to move. 5. Adopting a three-level lifting gantry, the overall height of the machine is smaller and convenient for transportation; The maximum instantaneous height of the whole machine during operation is 4200mm. 6. Using a three-dimensional rotating nozzle, 360 degree cleaning ensures no dead corners during cleaning.
power supply	Three phase 380V, 50HZ	
total power	12KW	
water pump motor	7.5KW	
outlet pressure	Up to 18Bar	
water flow rate	5m³/h	
inlet diameter	G1-1/2	
oil pump motor	0.75KW	
Pipe feeding motor	0.75KW	
Cleaning rod rotating motor	0.75KW	
Cleaning rod swing angle motor	2.3KW	
Maximum diameter of cleaning tank	8M	
Maximum height of cleaning tank	9M	
Effective diameter for nozzle cleaning	6-8M	

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100L drying tower dedicated cleaning machine



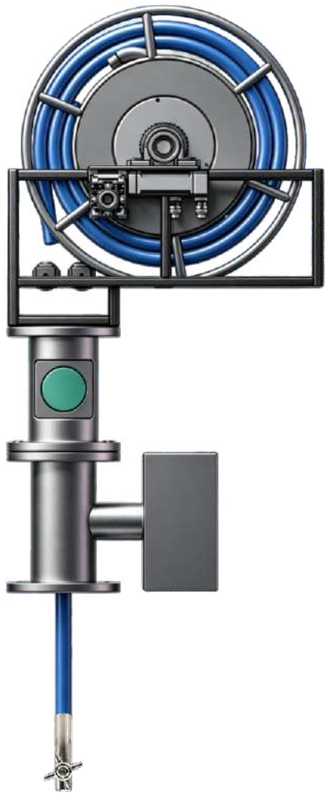
Applicable scenarios

This device is designed specifically for cleaning the interior of a 100L small drying tower, with two functions: cleaning and drying. It uses a multi-stage centrifugal pump and a rotating 360 degree nozzle to spray and clean the stains inside the bucket; Drying the bucket with heated nitrogen gas; By horizontally moving the cylinder for work switching, the cylinder lifts and lowers to extend the spray head and air nozzle into the barrel; Equipped with PLC/HMI program control, adjustable cleaning pressure and cleaning duration

operating procedure

Manually place the cleaning bucket into the cleaning platform, which is equipped with positioning fixtures; Activate the cleaning device, clamp the bucket with the clamping mechanism, and flip it 180 degrees; After reaching the designated position, the nozzle rises and extends into the barrel, then begins spraying. When the spraying time is up, stop spraying; After the nozzle descends to the designated position, the workstation switches horizontally to the blowing station. The nozzle rises and starts blowing when it reaches the designated position. When the time is up, the blowing stops and the nozzle descends, and the horizontal movement mechanism returns to its initial position. Complete cleaning and manually remove the iron drum

High pressure cleaning device for reel



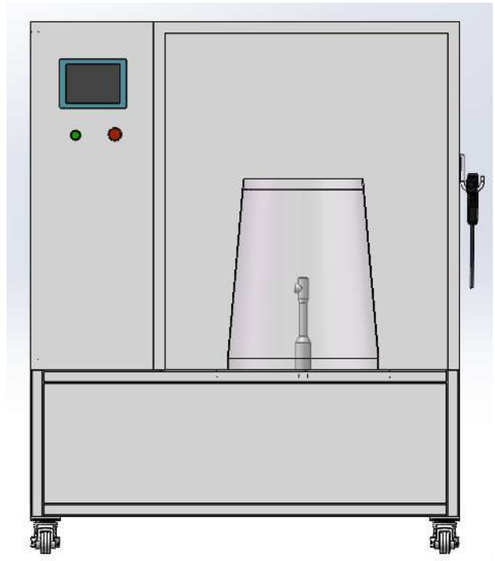
project	specification
rack	304SS
reel	304SS
Axial water pipe	DN20,304SS
rotation axis	304SS
bearing housing	carbon steel
Guide wheel assembly	PA66,304SS
servo motor	Explosion proof Bt5
speed reducer	1： 60
Chain wheel chain assembly	06B
sight glass flange	DN150
Pneumatic Ball Valve	DN150， PN10
high-pressure hose	DN20,65Mpa,8m
high-pressure nozzle	100L/min,50Mpa
rotary joint	304SS, G1 internal teeth

Applicable scenarios

1. After the start button, the pneumatic ball valve automatically opens
2. After the signal for opening the electric ball valve is set, the spool begins to rotate and send the pipe into the tank, and the servo motor records the length;
3. After reaching the predetermined depth, start the pump body spray cleaning according to the preset program (time, position, etc.)
4. After completing the cleaning procedure, stop spraying and slowly raise the nozzle
5. Stop when the nozzle returns to its initial position (sensor)
6. Close the ball valve

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Plastic bucket cleaning machine





Applicable scenarios

This equipment is designed specifically for cleaning open plastic buckets and uses manual loading and unloading methods. The operator places the bucket upside down on the cleaning table, presses the start button, and the fixture positions and clamps the bucket. Then, automatic spray cleaning begins, and stops after the predetermined time is reached. The bucket is manually removed to complete the cleaning. Set up a sewage recovery tank below the equipment and connect it to the on-site sewage outlet. The pressure detection at the inlet of the equipment cannot be turned on when the pressure is not met. The spray end of the equipment is equipped with a pressure detection device, which can be adjusted by frequency conversion through PLC and HMI program control. Parameters such as pressure and cleaning duration can be adjusted, and a handheld cleaning gun is equipped for convenient manual cleaning.

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Drying tower cleaning system

Applicable scenarios

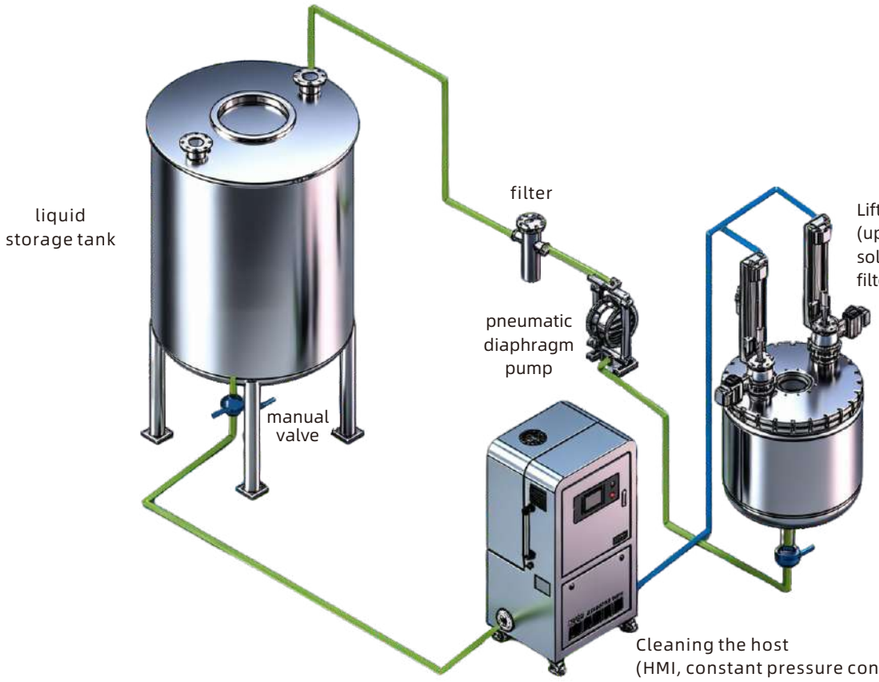
1. A dedicated cleaning device for the drying tower, with water as the cleaning medium and 304SS as the overcurrent material.
2. Fixed installation, achieving 360 degree no dead angle cleaning, adjustable pressure
3. PLC/HMI control, frequency conversion to adjust pressure
4. Pressure 20 bar, flow rate 4 m3/H



Special cleaning rod



Small reaction kettle double telescopic rod automatic cleaning machine



Ton bucket external cleaning system



Parameter performance

project	specification	Functional Overview
host power	7.5KW	1. Configure ton bucket positioning function 2. Power transmission, enclosed cleaning room, incoming and outgoing material detection function 3. Seamless connection with external conveyor lines
outlet pressure	Up to 188Bar	
water flow rate	130m³/h	
inlet diameter	G1	

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200L oil drum automatic cleaning machine



Parameter performance

project	specification	Functional Overview
Overall dimensions	1350*1725*2250（mm）	1. Adopting multi-stage centrifugal pumps with a working pressure of 15-18 bar; Low pressure protection sensor is installed at the inlet; The outlet is equipped with a pressure transmitter and uses variable frequency constant pressure water supply. 2. Programmable control, with built-in touch screen. 3. Process: Manually push the bucket to the cleaning area, align it with the cursor, press start, clamp the bucket, start flipping to the cleaning position, start spraying and cleaning when it is in place, stop spraying when the time is up, start flipping back after draining, release the fixture when it is in place, retrieve the bucket, and complete cleaning 4. Adjustable cleaning pressure and cleaning duration
power supply	Three phase 380V, 50HZ	
total power	6KW	
water pump motor	3KW	
outlet pressure	Up to 18Bar	
water flow rate	4m³/h	
inlet diameter	DN32	
Cleaning rod rotating motor	1.1KW	

Drying tower cleaning device (CY40 nozzle)



project	specification	Functional Overview
Overall dimensions	1200*1060*1700（mm）	1. Configure wiring mechanism 2. Upper and lower limit sensing 3. Quick installation waterproof bucket
motor power	0.75	
outlet pressure	Up to 8Bar	
water flow rate	24m³/h	
inlet diameter	G2	

Drying tower cleaning system (CY15 nozzle)



project	specification	Functional Overview
host power	15KW	1. Configure pressure constant function 2. Switching valves for cleaning in four different tanks
outlet pressure	Up to 20Bar	
water flow rate	12m³/h	
inlet diameter	DN40	

Longmen dual station cleaning machine



Parameter performance

project	specification	Functional Overview
Overall dimensions	3900*1240*3300（mm）	1. Configure automatic pressure switching function 2. Adapt to two different pressure scenarios
host power	15KW	
outlet pressure	Up to 200Bar	
water flow rate	41m³/h	
inlet diameter	G1/2	

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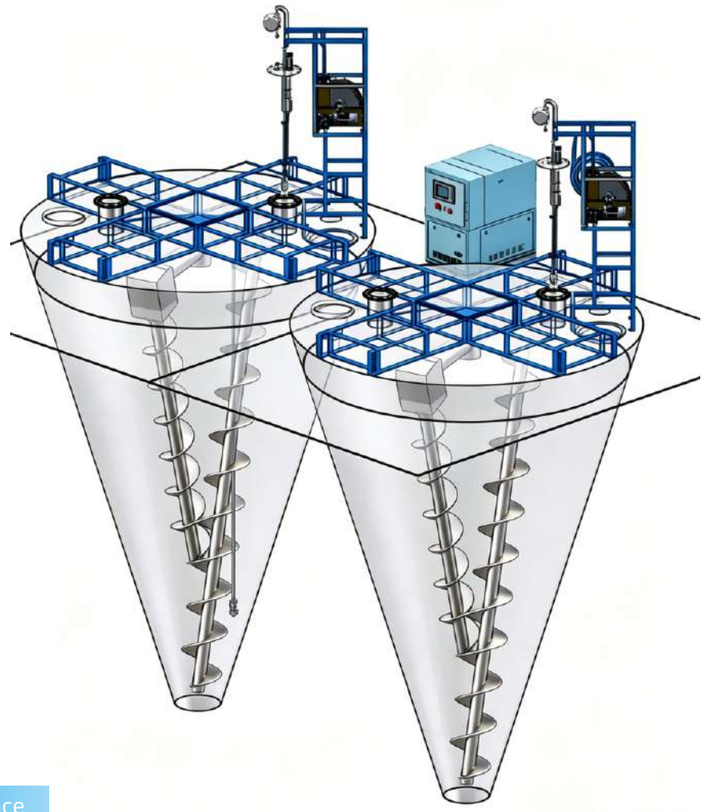
Dump bucket cleaning machine



Parameter performance

project	specification	Functional Overview
Overall dimensions	3900*1240*3300（mm）	1. Configure lifting function 2. Equipped with tilted water pouring function
host power	15KW	
outlet pressure	Up to 200Bar	
water flow rate	41m³/h	
inlet diameter	G1/2	

Spiral mixer cleaning system



Parameter performance

project	specification	Functional Overview
host power	7.5KW	1. Configure the tilt angle function 2. Electric unwinding function
outlet pressure	Up to 70Bar	
water flow rate	50m³/h	
inlet diameter	G1/2	

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Simple bucket cleaning machine



Parameter performance

project	specification	Functional Overview
host power	1.1KW	1. Pressure regulation function 2. Lightweight, suitable for various cleaning scenarios
outlet pressure	Up to 7 Bar	
water flow rate	100m³/h	
inlet diameter	G1	

DongGuan Changyuan Spraying Technology Co.,Ltd

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CYCO®



AUTOMATIC CHEMICAL TANK CLEANING SYSTEM

SAI GLOBA ISO 9001:2015

SAI GLOBA IATF 16949:2016

公司简介
company profile



Hunan Plant



Guangdong factory

Dongguan Changyuan Spraying Technology Co., Ltd. was founded in 1997 and specializes in the development and manufacturing of various industrial spray products, spray systems, and precision parts. It was the first enterprise in China to focus on the development and production of nozzle spray products. With over 20 years of experience, it has become a leading company in domestic industrial nozzle production and research.

The company has the world’s advanced nozzle processing equipment and precision testing instruments, with over 200 sets of CNC processing and testing equipment. With strong R&D and manufacturing capabilities, the company has developed over 10,000 specifications of atomizing nozzle products. These products are widely utilized in various industries such as steel, aviation, automotive, marine building, electronics, medical, chemical, paper, textile, machinery, agriculture, environmental protection, and energy, both domestically and internationally.

The company has passed IS09001 quality management system and IATF16949 quality management certification, and has been awarded "Dongguan Private Technology Enterprise", "Guangdong Private Technology Enterprise", and "National High-tech Enterprise" consecutively. It is one of the few high-tech companies in the domestic nozzle field. It has been rated as a national high-tech enterprise for 12 consecutive years and has more than 50 patents. The company has introduced the world's high-end nozzle manufacturing and testing equipment. Most of the company's nozzle processing equipment is imported from Japan and Germany, and has established a very advanced particle size control system. and flow testing systems. The company has accumulated rich experience in manufacturing nozzles for the ship desulfurization industry, chemical tank cleaning industry, steel smelting industry, spray disinfection industry, and dry mist dust suppression industry. It also owns Wärtsilä, Alfa Laval, Customers of world-renowned companies such as Tesla, 711 Research Institute, Shanghai Electric Power Construction, Three China Alliance, DJI UAV, etc., the CYCO nozzle trademark has enjoyed a very high reputation in the field of international industrial nozzles.

In 2022, the company established a wholly-owned subsidiary, Hunan Changyuan Spraying Technology Co., Ltd., in Liuyang, Hunan Environmental Protection Industry Demonstration Park, and established advanced production and testing lines at the Changyuan factory in Hunan, focusing on providing customers with precision spray systems , tank cleaning system, car cleaning system, etc. The company will equip advanced equipment and production and R&D personnel to provide customers with high-quality services and create value beyond expectations.



Enterprise Strength



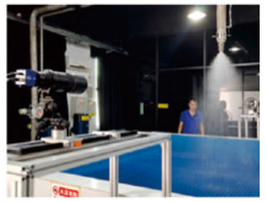
精密加工设备



专利墙

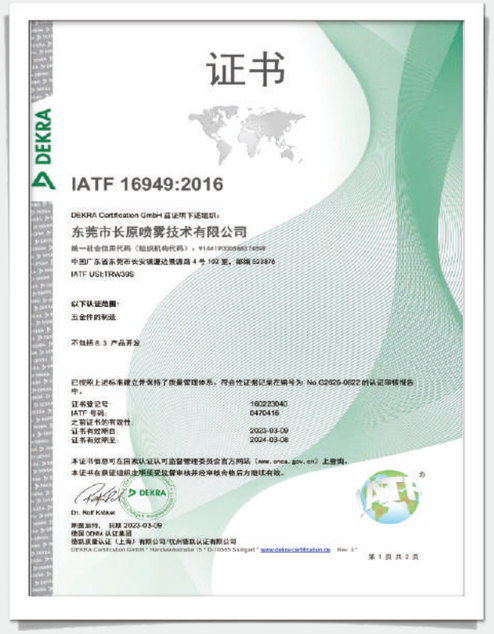


荣誉墙

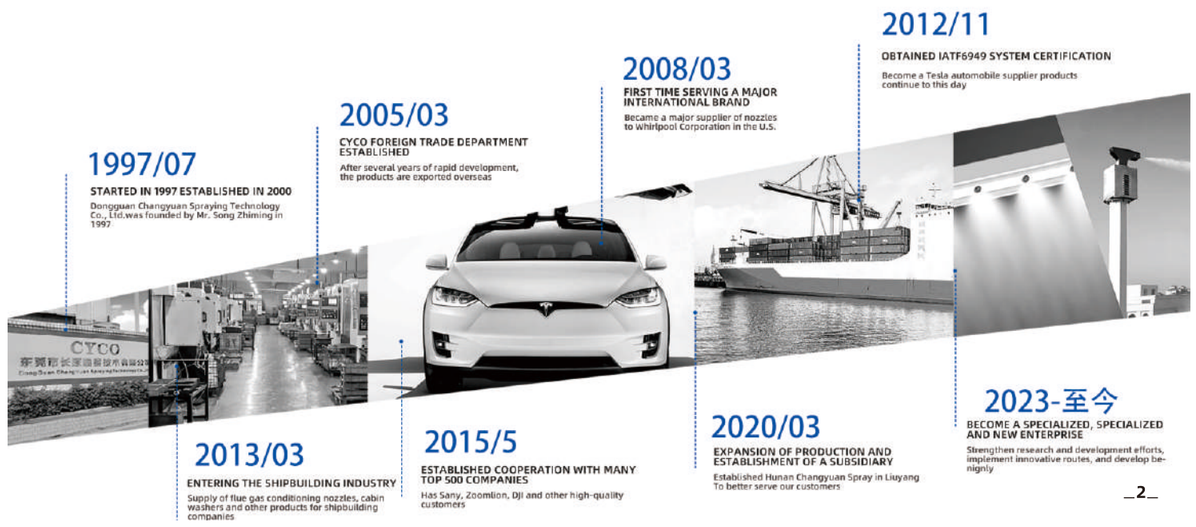


美国颗粒度检测仪

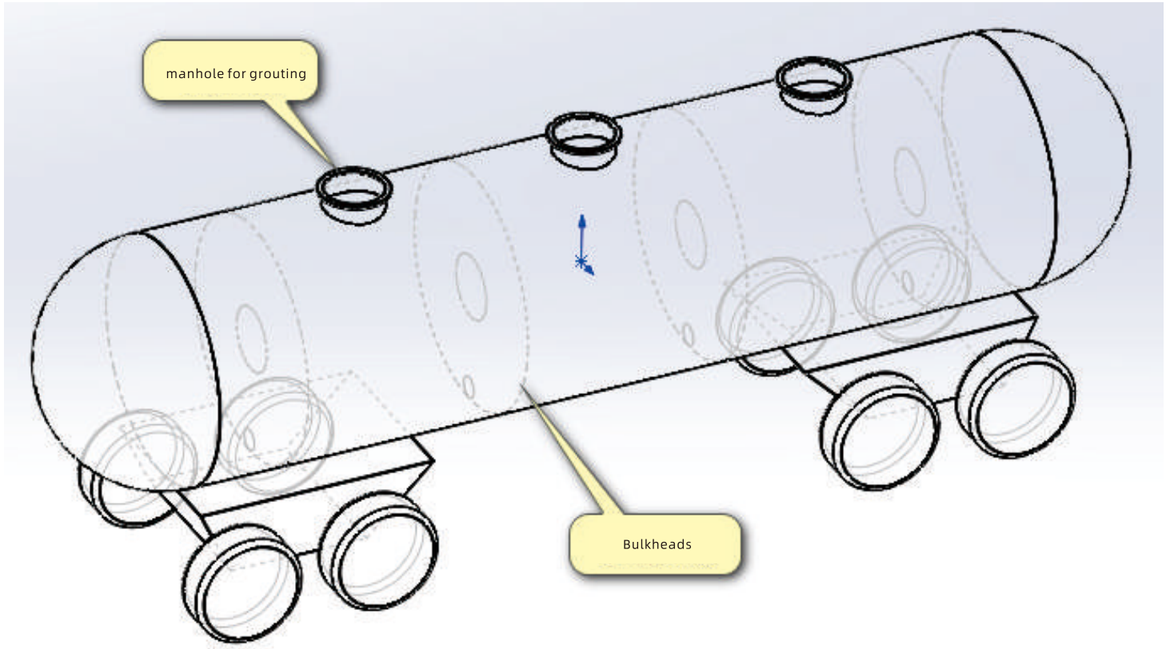




Has established cooperation with a number of top 500 companies



Introduction to Tanker Trucks

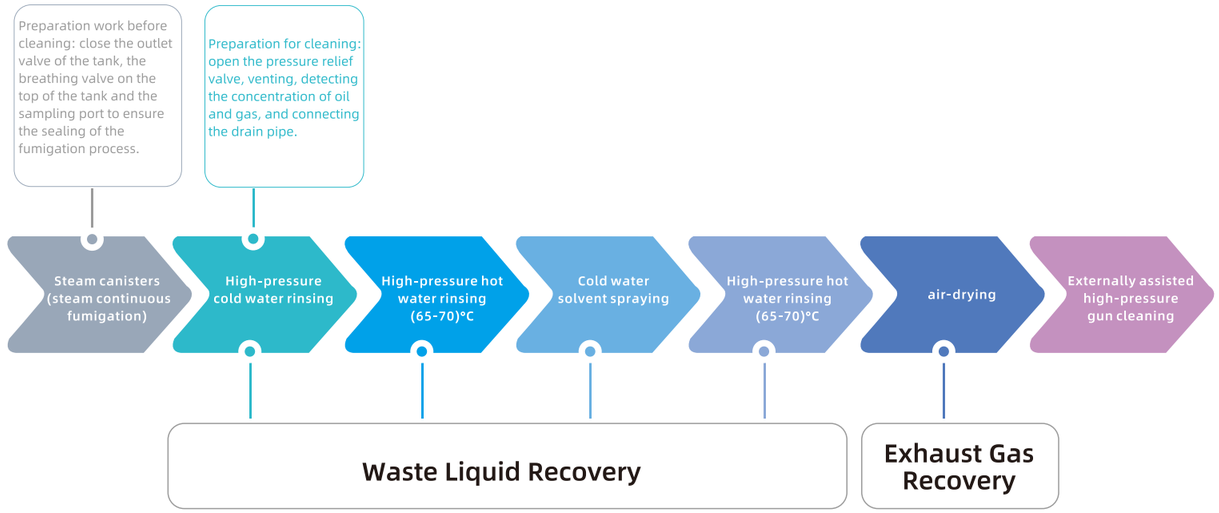


Tanker trucks have multiple bulkheads set up inside the tank to divide the tank into multiple compartments. These partitions not only separate the liquid, but also play a role in enhancing the structural strength of the tank, can effectively disperse the liquid pressure, so that the tank is more durable. At the same time, it reduces the amplitude of liquid shaking, so as to maintain the balance and safety of the vehicle.

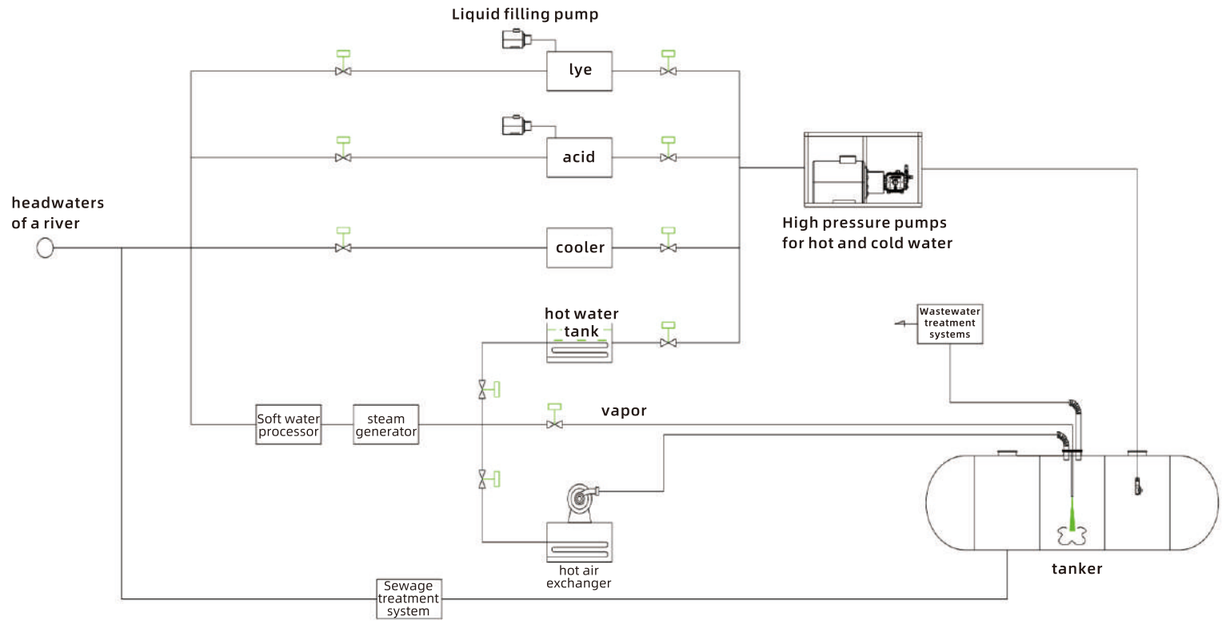
Passing Tank Cleaning: Operators need to go down into the tank and endure high temperatures, irritating odors, noise, etc., and long-term physical contact with hazardous chemicals, exhaust gases and sewage.

Tank Diameter	Tank length	capacity	quality of material
2.4m	9m	32^3	carbon steel

Tank cleaning process



System piping schematic



Steam fumigation system ----- steam canister





preparatory phase:

Close the tank's outlet valve, tank top breather valve and sampling port to ensure that the tank is sealed.

Steamer process:

At the inlet to the steam, air pressure to ensure that the 2-3kg, and continuous steaming cans 1-2 hours. Steam cans in the process, we must pay attention to the temperature change outside the tank does not exceed 50 ℃, feel slightly hot by hand. After steaming the can, open the manhole and the top of the can, and release the water. In the entire cleaning process, to ensure personal safety is the first task, so you need to do a good job of safety measures and materials, tools, equipment, inspection and preparation work. For the cleaning of dangerous goods liquid transportation vehicle tanks, steam cans can not only discharge the residue inside the tank, but also remove the odor inside the tank, keep the tank clean, thus improving the qualified rate of goods transported!

Steam generator: (with soft water processor)

power (output)	evaporation T/H	vapor pressure	temp
216KW	0.3T	0.8MPa (Adjustable below)	175℃ (Adjustable below)



High-pressure cleaning system - main unit/nozzle

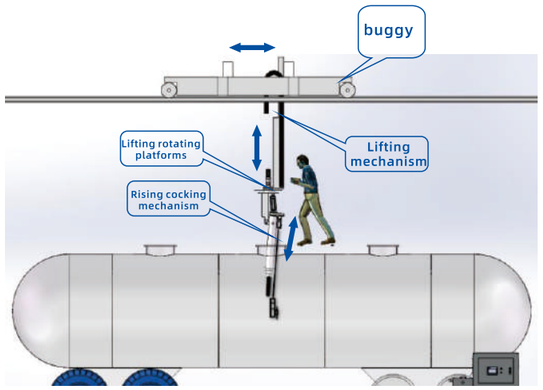


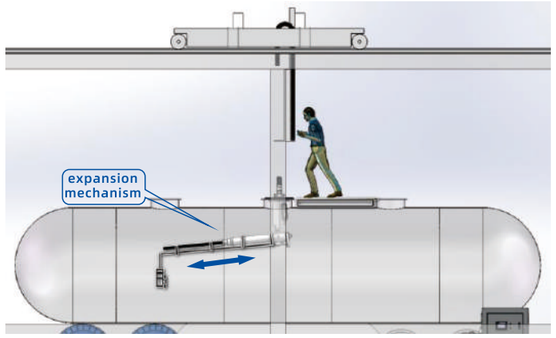
sports event	norm	Functions in brief
Overall dimensions (LWH)	1510*775*1285	1、Using high pressure piston pump, working pressure up to 120-150bar 2、PLC\HMI can be programmed control 3、Mobile design, easy to use
power supply	Three-phase 380V	
electrical machinery	Power: 15KW	
stresses	Up to 150 Bar (adjustable)	
flux	50L/min	



stresses	flux	connector	Applicable temperature
15Mpa	20-50L/min	1/2	90°C or below

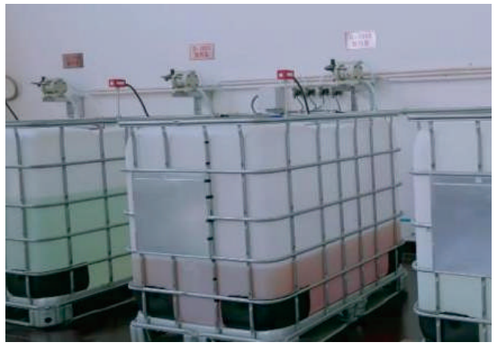
Flexible Mechanical Systems ---- Multi-axis Robotic Arms





Multi-axis robotic arm linkage to achieve no dead angle cleaning in the compartment: PLC programmed control, servo motor driven image system assistance, visualization of fixed-point cleaning

Dispensing systems - flushing systems



Automatic dosing pump system, consisting of liquid storage tanks, metering pumps, concentration meters, thermometers, etc., according to the customer's formula requirements for the necessary control of dosage and concentration

Drying and processing systems



steam generator



steam heat exchanger



air blower

Automatic dosing pump system, consisting of liquid storage tanks, metering pumps, concentration meters, thermometers, etc., according to the customer's formula requirements for the necessary control of dosage and concentration

Exhaust gas treatment system





The exhaust gas treatment system consists of an exhaust gas collection unit, piping, a purification unit, a fan and a chimney. The exhaust gas collection device is installed on the manhole method; the pipeline is responsible for transporting the exhaust gas from the collection device to the purification device; the purification device is the core part of the exhaust gas treatment system, and its main function is to purify the exhaust gas; the fan is the power source of the exhaust gas treatment system, and it is responsible for providing the purification device with sufficient air flow and pressure; the chimney is to discharge the purified exhaust gas into the atmosphere in a safe manner.

Cleaning residual sewage extraction



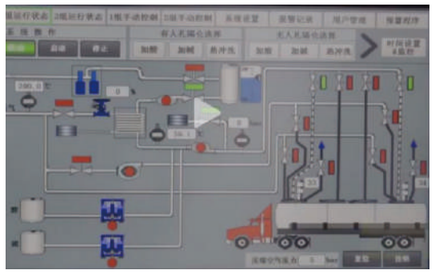
Caliber DN25, flow rate 8 cubic meters per hour head 15 meters, motor power 1.5KW, self-absorption height 5 meters, 304 stainless steel material explosion-proof motor

Water treatment systems

Tank cleaning wastewater treatment:
Sedimentation and Separation: first, the wastewater is put through a static sedimentation or physical sedimentation tank for initial treatment. In this process, the suspended solids in the wastewater settle to the bottom to form a sludge layer, while light grease and floating pollutants float to the surface. By means of physical separation, the suspended solids and oil and grease content of the effluent can be reduced to a greater extent.
Biological treatment: The initially separated wastewater is sent to a biological treatment tank for secondary treatment. The degradation and decomposition of organic matter is accelerated by providing the wastewater with suitable temperature, oxygen and microbial flora. During the biological reaction, the organic substances in the wastewater are degraded by microorganisms into water and carbon dioxide, thus realizing the removal of organic substances.
Activated carbon adsorption: In the biological treatment process, organic matter, oil and grease and other pollutants that are difficult to degrade may still exist in the wastewater. At this time, the wastewater can be adsorbed by activated carbon, and the residual organic pollutants in the wastewater can be removed through the adsorption effect of activated carbon to improve the purification effect of wastewater. After activated carbon adsorption, the dissolved organic matter and color of the wastewater will also be significantly improved.
Membrane separation technology: After the above process, there may still be trace pollutants in the wastewater, such as heavy metal ions. The use of membrane separation technology, such as reverse osmosis, nanofiltration, etc., can further remove trace pollutants in the wastewater. Membrane separation technology relies on the microporous or pore size of the membrane, so that when the wastewater passes through the membrane, the trace pollutants are retained on the membrane surface, and ultimately clearer water is obtained.
Sterilization and disinfection: Wastewater treated by the above process may still contain some bacteria and other microorganisms. In order to ensure the safe discharge of wastewater, it needs to be sterilized and disinfected. Commonly used disinfection methods include UV disinfection, ozone disinfection, etc. to ensure that the microorganisms in the wastewater are completely killed.



Automatic cleaning control system



- Highly integrated automatic control system
- Dynamic screen display working status
- Various cleaning parameters and indicators
- Permission management of production parameter setting
- Various alarm information prompts
- Process-oriented operation interface