



# **CONTACT US**

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现代化养猪场设备 SWINE BREEDER EQUIPMENT



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品质上乘

以正为本

海外技术

服务至诚

#### COMPANY OVERVIEW

# 公司简介



上海正诚机电制造有限公司成立于1994年,是泰国正大集团独资企业,专注于农牧食品业项目承揽和设备供应,上海正诚是集整厂方案设计、生产工艺设计、建筑结构设计、土建施工、钢结构制造与安装、设备制造安装与调试、售后服务为一体的整体解决方案的提供者。

为了推动中国饲料厂、养殖场、食品厂产品质量的提高和生产效率的提升,我们依托正大集团全球视野的优势,不断引进国际前沿的理念、技术、工艺和设备,在自动化、智能化、可视化、可追溯化、生产安全、食品安全方面的经验积累,能够在满足业主个性化需求的同时,为业主创造价值。

公司成立29年来,积累了丰富的农牧食品业项目的建设经验,建设了150多座饲料厂、300多座畜禽养殖场、数十座水产养殖场、1000万平米的钢结构厂房。

#### 主营范围

各类养殖场的成套设备 各类饲料厂的成套设备 肉类食品厂的成套设备 粮食仓储的成套设备 钢结构厂房和仓库 设备及建筑建构的设计制造、安装、施工的总承包



运用设计、采购、施工三位一体的管理体制,对工程质量、安全、工期、造价全面负责。

# COMPANY OVERVIEW 公司简介

# m

公司愿景

做集团农牧食品业设备保障平台 做世界农牧食品业设备整体解决方案

# m

公司使命

我们为饲料厂/养殖场/食品厂提供精良的成套装备和EPC交钥匙服务 我们的数智化装备和服务,能够帮助用户实现经营生产的高效益 我们致力于促进肉类食品行业向环境友好/资源节约方向快速良性发展

# m

六大核心价值观

三利原则(利国、利民、利企业) 快速优质 化繁为简 接受变革 不断创新 正直诚信







#### **DEVELOPMENT HISTORY**

# 发展历程

4月20日公司正式成立,主要业务 涵盖饲料厂整厂交钥匙工程及钢结 构工程

On April 20, the company was officially established, Themain business covers the whole feed plant Turnkey project and steel structure project.

2006

引进欧美先进技术,推广并承建 现代化养殖场、养鸡场、养虾场

Introduce European and American advanced technology, promote and undertake the construction of modern farms. chicken farms and shrimp farms.

2016

- · 获得上海市高新技术企业称号
- · 按照国际项目管理程序承建的第
- 一个EPC项目——江苏邳州 15000头养殖场顺利竣工
- · Won the title of Shanghai high tech enterprise.
- · The first EPC project undertaken in accordance with international project management procedures – 15000 head farms in Pizhou, Jiangsu Province, was successfully completed.

2018

- ·代表饲料厂4.0国际水平的内蒙 古36万吨饲料厂顺利竣工
- ·成立电控研发中心,助推饲料 厂、养殖场、食品厂提高自动化和 智能化水平
- The 360000 ton feed plant in Inner Mongolia, representing the international level of feed plant 4.0, was successfully completed.
- · Set up an electronic control R & D center to boost feed factories, farms and food factories to improve the level of automation and intelligence.

2020

投资建成慈溪正大谷瑞现代化 畜禽设备生产基地,实现工厂 数字化智能化转型

Invest and build Cixi CP GSImodern livestock and poultry equipment production base to realize the digital and intelligent transformation of the factory.

1996

公司引进美国技术,率先在中 国推广高层钢结构饲料厂厂 房,显著提高建设速度

The company introduced American technology and took the lead in promoting the high-rise steel structure feed plant in China, significantly improving the construction speed

2015

控股上海鑫百勤专用车辆有限公司 Holding Shanghai xinbaiqin Special Vehicle Co., Ltd

司, 获建筑工程三级总承包资质

2017

· 与美国500强企业AGCO-GSI 公司成立合资公司, 实现欧美先进 畜牧机械国产化

· 成立上海正诚牧正建筑工程分公

· Shanghai Zhengcheng muzheng construction engineering

agco-gsi, a top 500 enterprise in the United States, to realize the localization of advanced animal husbandry machinery in

2021

投资建成正大 中国智能研发中心

Invest to build CP(China) intelligent R & D Center

branch was established and obtained the three-level general contracting qualification of construction engineering.

· Establish a joint venture with Europe and the United States.

2019

- ·与日本FUKUDA公司合资成立上 海正福食品机械工程有限公司,进 军食品机械领域
- ·成立上海正诚江苏分公司,加强 产业链整合
- · Shanghai Zhengfu Food Machinery Engineering Co., Ltd. was jointly established with Japan Fukuda company to enter the field of food machinery
- · Establish Shanghai Zhengcheng Jiangsu branch and strengthen the integration of industrial chain.





#### **QUALIFICATION HONOR**

# 资质荣誉











高新技术企业



"专精特新"中小企业

中国畜牧业协会畜牧工程分会-理事单位 十大猪场环保模式高效践行品牌 上海市"松江区企业技术中心"认定 上海市金属结构行业协会-理事单位 上海市和谐劳动关系达标企业



十大猪场环保模式高效践行品牌



建筑业企业资质证书

饲料工业协会会员单位 上海市高新技术企业协会-副会长单位 上海市松江区"专精特新企业"称号 上海市金属结构行业诚信企业证书 重合同守信用单位

# TURN-KEY PROJECT OF SWINE FARM 养猪场成套工程



绵阳梓潼5000头种猪场



民权2X3000头种猪场



阜新王府镇12000头育肥一场

# 栏位系统P1-4 Penning system

分娩栏Nursery pens

定位栏Feed trough

保育栏Farrowing stalls

料槽设备Positioning pens

# 通风系统P5-11

Ventilation System

风机

水帘

Tunnel fans 卷帘

Rolling curtain

Cooling pad

吊顶进风口 Roof air inlet window **喂料系统**P12-32 Feeding System

塞盘料线Chain-disk feeding

绞龙料线Auger feeding

电子饲喂ESF for sow

塞盘转绞龙Screwdriver

供暖系统P34-36

Heating system

地暖

Floor heating

暖风机 Heater

保温灯

Heat preservation lamp

电加热板

Electric heating plate

■水线系统P33 Waterline system

水线前端Front of the waterline

DN40水线 DN25水线

DN40 waterline DN25 waterline

输水管Water pipe

PPR管

各类接头

PPR pipe

Various joints

饮水器Drinking fountain

猪水杯

水嘴 Faucet

Pig cup

水阀配水盆 Water valve distribution basin 排污系统P37-38 Removal system

虹吸Siphon

延长件

排气阀

Extension Exhaust valve Drain plug

重力式Gravity

排放塞

排放塞

Drain plugs

刮粪板Drinking fountain

刮粪车

Manure scraper Manure ditch

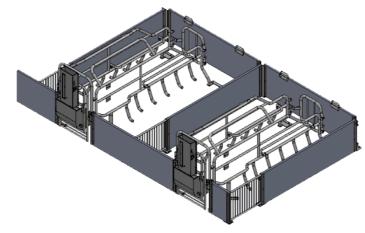
粪沟

电气系统<sub>P39-44</sub> Electrical System

# PENNING SYSTEM 栏位系统

# 定位栏 Positioning Bar





可调节 Not Adjustable

尺寸	2400*1800		
地板分区	400/600(母猪铸铁)/800		
母猪采食(两选一)	自由采食器		
马相木良 (两起 )	下料管+配量器		
小猪采食     开食盘			
小妆区供应	保温盖\保温灯+嵌入式加热板		
小猪区供暖	保温盖\保温灯+橡胶垫		
121 X44 PP - 17	不锈钢饮水碗		
母猪饮水	饮水盆-落地		

Size	2400*1800
Floor Partition	400/600 (Sow Cast Iron) /800
Sow Feeding	Free Feeder
(one of two)	Blanking Pipe + Gauge
Piglet Feeding	Open Plate
Dialet Dietriet Heating	Insulation Cover \ Insulation Lamp + Embedded Heating Plate
Piglet District Heating	Insulation Cover \ Insulation Lamp + Rubber Pad
Cow Drinking Water	Stainless Steel Drinking Bowl
Sow Drinking Water	Drinking Basin – Floor

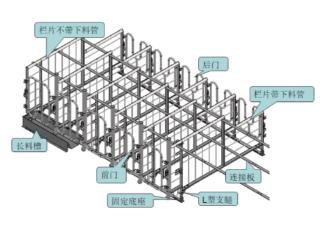
# PENNING SYSTEM 栏位系统



尺寸	2700*1800
地板分区	400/800 (母猪400+400铸铁+ 前后4块母猪塑料地板) /600
母猪采食	下料管+配量器
小猪采食	开食盘
小猪区供暖	保温盖\保温灯+橡胶垫
母猪饮水	不锈钢饮水嘴
小猪饮水	不锈钢饮水碗

Size	2700*1800
Floor Partition	400/800 (Sow 400+400 Cast Iron + Front and Rear 4 Sow Plastic Floors) /600
Sow Feeding	Blanking Pipe + Gauge
Piglet Feeding	Open Plate
Piglet District Heating	Insulation Cover \ Insulation Lamp + Rubber Pad
Sow Drinking Water	Stainless Steel Drinking Nozzle
Pigay Drinking Water	Stainless Steel Drinking Bowl

- ●定位栏有圆管(常用)和角钢两种;
- ●长度有2400mm/2300mm/2200mm/2000mm;
- ●宽度有700mm/650mm/600mm/560mm;
- ●前后门均为圆管式的,碰锁结构;后门U型开口朝向可根据 实际需要调整。
- ·There are two kinds of positioning bars: round tube (commonly used) and angle steel;
- ·Length: 2400mm/2300mm/2200mm/2000mm;
- ·The width is 700mm/650mm/600mm/560mm;
- ·The front and rear doors are of circular tube type with latch structure; The U-shaped opening direction of the rear door can be adjusted according to actual needs.



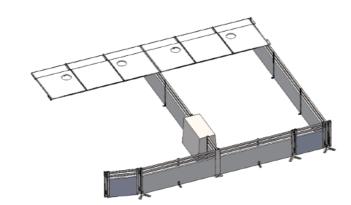
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### PENNING SYSTEM 栏位系统

# 保育栏

**Nursery Fence** 

- ●围栏为PVC板+方管结构、栏高700mm;
- ●栏门可双向打开;
- ●保温灯、保温盖和橡胶垫选配;
- ●料槽可选用双面料槽或干湿喂料器。



- ·The fence is of PVC plate + square pipe structure, with a height of 700mm;
- ·The gate can be opened in both directions;
- ·Selection of heat preservation lamp, heat preservation cover and rubber pad;
- ·The chute can be double-sided chute or dry and wet feeder.

# 保育育肥栏

Conservation and Fattening Column

- ●可分保育育肥一体栏和纯育肥栏,纯育肥栏用于饲养育成猪, 栏位上圆钢间距较保育育肥一体大;
- ●料槽可选不锈钢双面料槽或干湿喂料器;
- ●饮水可选水碗或水盆;
- ●保温灯、保温盖和橡胶垫选配。
- ·It can be divided into conservation and fattening integrated column and pure fattening column. The pure fattening column is used to raise adult swines. The spacing of round steel in the column is larger than that of conservation and fattening integrated column;
- The material trough can be stainless steel double-sided material trough or dry and wet feeder;
- ·Water bowls or basins are available for drinking;
- ·Selection of heat preservation lamp, heat preservation cover and rubber pad.



# 公猪定位栏

**Boar Positioning Bar** 

- ●规格: 2400x800, 栏片为角钢和圆钢焊接;
- ●前后门单开,碰锁设计,同时起隔栏作用,方便进猪和赶猪
- ●304加厚料槽,稳固;翻转清洗方便;
- ●底座为前后扁钢带交错安装;
- ●栏体上部三根连接管将整排栏体连接,加强栏位的稳固性。



- ·Specification: 2400x800, the fence is welded with angle steel and round steel;
- ·The front and rear doors are single open, with latch design. At the same time, they act as barriers to facilitate pig feeding and driving;
- ·304 thickened chute, stable; Easy to turn over and clean;
- ·The base is staggered with front and rear flat steel strips;
- ·Three connecting pipes at the upper part of the column connect the whole row of columns to strengthen the stability of the column.

### 公猪大栏

**Boar Stall** 

- ●栏片为圆管焊接,立柱安装;
- ●栏门双开:
- ●304加厚料槽(1.5mm), 稳固; 翻转清洗方便;
- ●配水碗, 水碗安装在侧栏上, 安装方便。



- ·The fence is welded by circular pipe, and the column is installed;
- · Double opening of barrier door;
- ·304 thickened material trough (1.5mm), stable; Easy to turn over and clean;
- ·The water bowl is installed on the side rail for easy installation.

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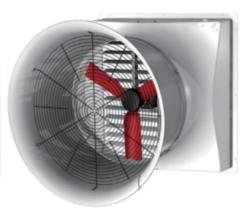
# 通风系统

# 进口玻璃钢风机

Imported FRP Fan







- ●进口玻璃钢风机分为: 54"、50"、36"、24"、18"五种型号;
- ●玻璃钢框架, 防锈耐腐蚀, 寿命长, 含拢风筒;
- ●PG材质扇叶, PVC材质百叶窗;
- ●54"、50"风机为皮带驱动,采用弹性张紧装置维持恒定皮带张力;
- ●36"、24"、18"风机为直连传动结构,高效节能。
- ·Imported FRP fans are divided into five types:54", 50", 36", 24", 18";
- ·FRP frame, rust proof and corrosion-resistant, long service life, including air duct;
- ·PG material fan leaf, PVC material shutter;
- ·54"and 50"fans are belt driven, and elastic tensioning device is used to maintain constant belt tension;
- ·36", 24"and 18"fans are of direct connection transmission structure, which is efficient and energy-saving.

		W45-		0Pa	12Pa	25Pa	37Pa	50Pa	62Pa	75Pa	87Pa	100Pa	
新代码	物料名称	设备尺寸 (mm)	预留洞口尺寸 (宽×高) (mm)	风量									
				(m³/h)									
W00077	54玻璃钢风机,未组装MULTIFAN 3叶PG1.35kW 玻璃钢框架,含塑料百叶,拢风筒,网罩380 整机	1610*1610	1625*1625	49500	46450	43300	38400	31800					
W00078	50玻璃钢风机,未组装MULTIFAN 3叶PG1.35kW 塑料百叶,玻璃钢框架,带拢风筒380V整机	1434*1434	1445*1445	47000	44100	41000	37500	30800	20200	10300			
W00075	36玻璃钢风机,未组装MULTIFAN 3叶PG0.78kW直 联玻璃钢框架,含拢风筒,塑料百叶,网罩220V整机	1148*1148	1160*1160	20700	19400	18000	16500	14800	12600	10400			
W00076	24玻璃钢风机,未组装5叶PG0.57kW直联玻璃钢框架, 含拢风筒,塑料百叶,网罩220V整机	781*781	790*790	12100	11400	10800	10200	9400	8300	5600			
W00814	18玻璃钢风机,未组装6叶PG0.27kW直联玻璃钢框架, 含拢风筒,塑料百叶,网罩220V整机	594*594	605*605	6900	6600	6300	5900	5500	4600	3500	2500		

### VENTILATION SYSTEM

# 通风系统

# 进口玻璃钢风机

Imported FRP Fan







- ●进口玻璃钢风机分为: 54"、50"、36"、24"、18"五种型号;
- ●玻璃钢框架, 防锈耐腐蚀, 寿命长, 含拢风筒;
- ●PG材质扇叶, PVC材质百叶窗;
- ●54"、50"风机为皮带驱动,采用弹性张紧装置维持恒定皮带张力;
- ●36"、24"、18"风机为直连传动结构,高效节能。
- ·Imported FRP fans are divided into five types: 54", 50", 36", 24", 18";
- ·FRP frame, rust proof and corrosion-resistant, long service life, including air duct;
- ·PG material fan leaf, PVC material shutter;
- · 54"and 50" fans are belt driven, and elastic tensioning device is used to maintain constant belt tension;
- ·36", 24" and 18" fans are of direct connection transmission structure, which is efficient and energy-saving.

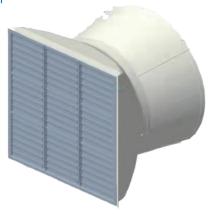
		71.60 D -+	75 60 X2 C C	0Pa	12Pa	25Pa	37Pa	50Pa	62Pa	75Pa	87Pa	100Pa
新代码	物料名称	设备尺寸 (mm)	预留洞口尺寸 (宽×高) (mm)	风量								
				(m³/h)								
W00079	54镀锌板风机,未组装MULTIFAN 3叶PG1.6kW 含圆形网罩,镀锌板拢风筒,镀锌板百叶380V整机	1480*1480	1495*1495	54000	51100	48500	45700	42600	38100	33000	25800	15000
W00081	50镀锌板风机,未组装MULTIFAN 3叶PG1.6kW皮带驱动含圆形网罩,镀锌板拢风筒,镀锌百叶380V整机	1382*1382	1395*1395	46100	44000	41500	38700	35500	31600	22200		
W00981	36镀锌板风机,未组装MULTIFAN 3叶PG 0.75kW 直联箱式含网罩,镀锌板百叶230V	1005*1005	1035*1025	20000	18900	17900	16900	15700	14550	13100	11350	
W00084	24镀锌板风机,未组装Multifan 5叶PG 0.63kW直联, 含网罩不含百叶230V	670*670	685*685	12300	11200	10400	8700	8100				

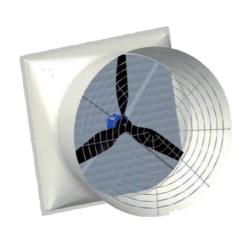
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# 通风系统

### 国产玻璃钢风机

Domestic FRP Far





- ●国产玻璃钢风机分为: 56"、54"、36"、24"、18"五种型号;
- ●玻璃钢框架, 防锈耐腐蚀, 寿命长, 含拢风筒、PVC材质百叶窗;
- ●56"风机叶片为尼龙+玻纤材质材质扇叶, 其它风机为304不锈钢扇叶;
- ●54"、50"风机为皮带驱动,采用弹性张紧装置维持恒定皮带张力;
- ●36"、24"、18"风机为直连传动结构,高效节能。
- Domestic FRP fans are divided into five types: 56", 54", 36", 24", 18";
- ·FRP frame, rust proof and corrosion-resistant, long service life, including air duct and PVC shutter;
- ·56"fan blades are made of Nylon + glass fiber, and other fans are made of 304 stainless steel;
- · 54"and 50"fans are belt driven, and elastic tensioning device is used to maintain constant belt tension;
- ·36", 24" and 18" fans are of direct connection transmission structure, which is efficient and energy-saving.

			<b>死</b> 即冯口口→	0Pa	12.5Pa	25Pa	37.5Pa	50Pa	62.5Pa	75Pa	100Pa	120Pa	134Pa
新代码	物料名称	(宽×高) 去除法兰边	预留洞口尺寸 (宽×高) (mm)	风量									
		尺寸 (mm)		(m³/h)									
W00077	54玻璃钢风机,未组装MULTIFAN 3叶PG1.35kW 玻璃钢框架,含塑料百叶,拢风筒,网罩380V整机	1541*1541	1556*1556	58700	55900	53200	50100	47200	43000	29900	15100	3800	
W00078	50玻璃钢风机,未组装MULTIFAN 3叶PG1.35kW 塑料百叶,玻璃钢框架,带拢风筒380V整机	1574*1634	1585*1645	63300	60300	57600	55100	52300	49800	45600	23400	10100	3400
W00075	36玻璃钢风机,未组装MULTIFAN 3叶PG0.78kW直 联玻璃钢框架,含拢风筒,塑料百叶,网罩220V整机	1473*1535	1480*1540	55200	52300	49200	46100	42500	36700	24000			
W00076	24玻璃钢风机,未组装5叶PG0.57kW直联玻璃钢框架, 含拢风筒,塑料百叶,网罩220V整机	1110*1110	1120*1120	22400	21000	19400	17500	11300	7600	4300			
W00814	18玻璃钢风机,未组装6叶PG0.27kW直联玻璃钢框架,含拢风筒,塑料百叶,网罩220V整机	843*843	855*855	12800	11800	11000	10300	8800	5300	4300			
W00814	18玻璃钢风机,未组装6叶PG0.27kW直联玻璃钢框架, 含拢风筒,塑料百叶,网罩220V整机	625*625	635*635	8800	8400	8100	7800	7500					

# VENTILATION SYSTEM

# 通风系统

# 国产玻璃钢风机

Domestic FRP Fan

- ●地沟风机有18"、24"两种型号:
- ●3.4mm厚304不锈钢叶轮毂, 1.2mm 厚304不锈钢叶片; PVC材质百叶窗;
- ●自带底座,无需地沟风机设备间,检修 维护简便。
- ·Trench fans are available in 18" and 24" models;
- · 3.4mm thick 304 stainless steel blade hub, 1.2mm thick 304 stainless steel blade; PVC shutter;
- ·With its own base, there is no need for trench fan equipment room, and the maintenance is simple.

# 电动式吊顶进风窗

Electric Ceiling Air Inlet Window





单开 Single Opening

双开 Double Opening

- ●吊顶进风窗有单开、双开两种形式;
- ●ABS面板, PVC侧板风叶, SUS304中心支架;
- ●温控电脑可实现自动调节通风量,中空保温,保温隔热性能优良;
- ●单开吊顶进风窗单侧吹风,多用于保育舍与暂存舍,躺卧区域保温,活动区域吹风交换新鲜空气;双开常用于较宽 猪舍.两侧吹风进行空气交换。
- ·The ceiling air inlet window has two forms: single opening and double opening;
- · ABS panel, PVC side plate blade, SUS304 center support;
- ·The temperature control computer can realize automatic adjustment of ventilation volume, hollow insulation, excellent thermal insulation performance;
- ·The single ceiling air inlet window is used for blowing air on one side, which is mostly used for nursery and temporary storage. The lying area is insulated, and the active area is blown to exchange fresh air; Double opening is usually used in wide pig houses, and both sides are blown for air exchange.

型号	外形尺寸	预留洞口	备注
YK1603A	730*560mm	670*480mm	双开
YK1603B	1240*560mm	1180*480mm	双开
YK1603C	860*350mm	800*270mm	单开

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# 通风系统

# 负压式吊顶进风窗

Negative Pressure Ceiling Air Inlet Window





- ●负压式吊顶进风窗,利用猪舍负压开启,手动关闭;
- ●造价相对低廉,常用于对环境要求不高的猪舍。
- · Negative pressure ceiling air inlet window, which is opened by negative pressure of pig house and closed manually;
- The cost is relatively low, and it is often used in pig houses with low environmental requirements.

型号	外形尺寸	预留洞口	备注
HK006A	790*790*150mm	680*680mm	四面打开

### 电动侧墙进风窗

Flectric Side Wall Air Inlet Window



- ●电动侧墙进风窗接入温控电脑,可实现自动调节通风量;
- ●PVC 型材+高透明PC抗 UV, 保温隔热性能优良。
- ·The electric side wall air inlet window is connected to the temperature control computer to automatically adjust the ventilation volume;
- ·PVC profile+high transparent PC anti UV, excellent thermal insulation performance.

型号	外形尺寸	预留洞口	备注
五层	1280*1050mm	1210*960mm	
六层	1080*1210mm	1010*1140mm	规格可定制
六层	1280*1210mm	1210*1140mm	

# VENTILATION SYSTEM

# 通风系统

# 负压式侧墙进风窗

Negative Pressure Side Wall Air Inlet Window







- ●负压式侧墙进风窗安装有配重,利用猪舍负压自行开启、关闭;
- ●PVC 型材+高透明PC抗 UV, 保温隔热性能优良。
- ·The negative pressure side wall air inlet window is equipped with a counterweight, which can be opened and closed automatically by using the negative pressure of the pigsty;
- ·PVC profile + high transparent PC anti UV, excellent thermal insulation performance.

型号	外形尺寸	预留洞口	备注
单层	1200*390mm	1100*300mm	
单层	1200*670mm	1100*580mm	物物可它物
四层	1100*900mm	1010*810mm	规格可定制
四层	1300*900mm	1210*810mm	

# 卷帘系统

Roller Shutter System

- ●重力式下落结构,上侧和左右两侧均含有封头,保证密封的同时,卷帘可上升和下降都比较顺畅;
- ●白色卷帘布, 180g/m², 抗紫外线及老化; 不锈钢304提升线;
- ●卷帘默认为手动控制,根据要求也可设计为电动控制;
- ●内外卷帘均配有外挡条,内卷帘均配有内挡条,当水帘内挂时 外卷帘也需配置内挡条。





- · Gravity falling structure, with heads on the upper and left and right sides, ensures that the roller shutter can rise and fall smoothly at the same time of sealing;
- ·White roller shutter cloth, 180g/m², anti ultraviolet and aging; Stainless steel 304 lifting wire;
- ·The roller shutter is manually controlled by default, and can also be designed as electric control according to requirements;
- ·Both the inner and outer rolling shutters are equipped with external blocking strips, and the inner rolling shutters are equipped with internal blocking strips. When the water curtain is hung inside, the outer rolling shutters also need to be equipped with internal blocking strips.

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# 通风系统

#### 水帘 Water Curtain



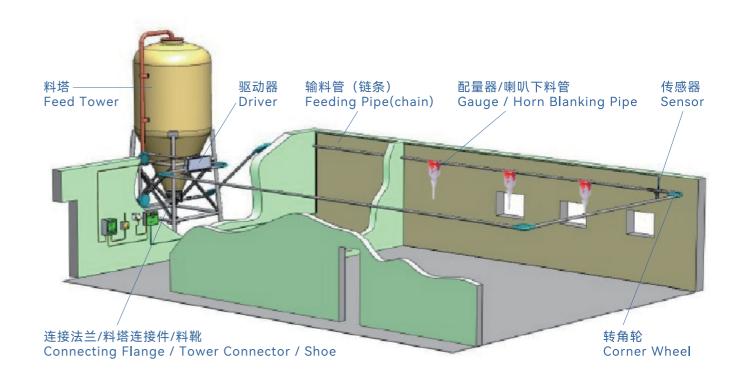


- ●PVC深水槽水帘相比于铝合金水帘来说成本较高,但却自带水箱减少了土建建设水帘水池的成本;
- ●特制的疏水帘能保水均匀的淋湿整个降温湿帘纸,从而保证与空气接触的湿帘表面湿透;
- ●水帘纸型号: 7060 (MT)、7090 (GLT) 两种型号,默认采用7060纸型,干重约40kg/m³,湿重约100kg/m³;
- ●水帘长度根据养殖舍规模可订制。
- ·The cost of PVC deep water curtain is higher than that of aluminum alloy water curtain, but its own water tank reduces the cost of civil construction of water curtain pool;
- ·The special hydrophobic curtain can keep the water evenly wet the whole cooling wet curtain paper, so as to ensure that the surface of the wet curtain in contact with the air is wet;
- ·Model of water curtain paper: 7060 (MT) and 7090 (GLT). By default, 7060 paper is used, and the dry weight is about 40kg/m<sup>3</sup>, Wet weight: about 100kg/m<sup>3</sup>;
- ·The length of the water curtain can be customized according to the scale of the breeding house.

# EEDING SYSTEM 喂料系统

### **塞盘料线系统**

Stopper Tray Line System



塞盘系统由料塔、驱动电机、输料管、链条、下料器和传感器等组成,其主要功能就是把料塔中的饲料输送到各个下料器中,并有料位传感器自动控制电机的开启关闭,达到自动送料的目的。

The stopper disk system is composed of a feeding tower, a drive motor, a feeding pipe, a chain, a feeder and a sensor. Its main function is to convey the feed in the feeding tower to each feeder, and a material level sensor automatically controls the opening and closing of the motor to achieve the pur pose of automatic feeding.

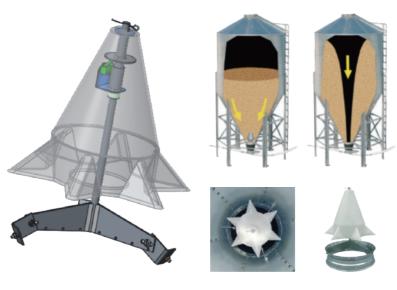
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#### FEEDING SYSTEM

# 喂料系统

# 低料位传感器/高料位开关

Low Level Sensor / High Level Switch



料塔疏导器 Tower Dredger



高料位开关 High Level Switch

●料塔疏导器: 引导饲料从漏斗流出, 防止饲料结块;

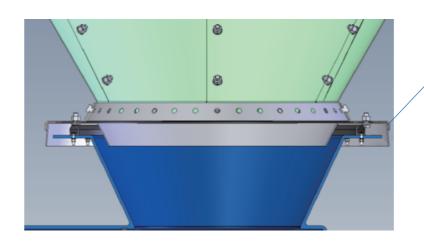
●高料位开关: 机械式结构, 可靠, 欧姆龙品牌传感器; 料满时报警提示给打料人员。

- ·Feed tower dredger:guide the feed to flow out of the funnel to prevent the feed from caking;
- · High level switch: mechanical structure, reliable, Omron brand sensor; When the material is full, give an alarm to the marking personnel.

### FEEDING SYSTEM

# 喂料系统

# 料塔连接件/缓冲适配器 Low Level Sensor / High Level Switch



料塔下法兰 Lower Flange of Feed Tower

缓冲适配器 **Buffer Adapter** 

橡胶密封条 **Rubber Sealing Strip** 

料塔连接件 **Tower Connection** 

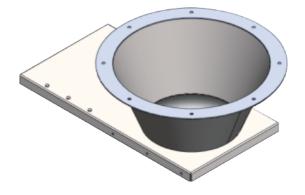
料塔与料塔连接件之间用缓冲适配器+橡胶条软性连接密封,称重更精确。

The buffer adapter + rubber strip is used for soft connection and sealing between the material tower and the material tower connector, so that the weighing is more accurate.

# 料塔连接件/缓冲适配器

Low Level Sensor / High Level Switch

- ●304不锈钢材质:
- ●含料量调节插片;
- ●可关闭/打开下料;
- ●上法兰直径根据料塔出料口可定制。
- · 304 stainless steel;
- · Material content adjusting insert;
- ·Blanking can be closed / opened;
- ·The diameter of the upper flange can be customized; according to the discharge port of the feed tower.



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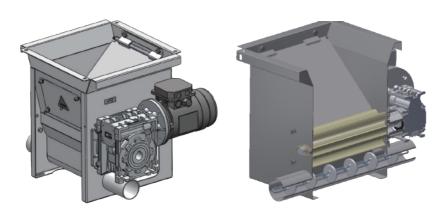
# 普通料靴/匀料料靴

Common Material Shoe / Uniform Material Shoe



单管料靴/双管料靴 Single Pipe Shoe / Double Pipe Shoe

- ●普通料靴: 304不锈钢材质,设置检修孔;有单管、双管,根据饲喂量选择。
- ·Common material shoe: 304 stainless steel with manhole; There are single tube and double tube, which are selected according to the feeding amount.



匀料料靴 Uniform Shoe

- ●饲料通过电机波轮匀速下到料管内,保证料管内饲料不过载,从而保证系统的稳定性,延长系统的整体使用寿命;
- ●转子可以分离结块的饲料,从而避免结块饲料造成料管堵塞。
- ·The feed is lowered into the feed pipe at a uniform speed through the motor wave wheel to ensure that the feed in the feed pipe is not overloaded, so as to ensure the stability of the system and extend the overall service life of the system;
- ·The rotor can separate the caked feed, so as to avoid the blockage of the feed pipe caused by the caked feed.

# EEDING SYSTEM 喂料系统

# φ60塞盘料线

φ 60 Plug Tray line



- ●201不锈钢外壳厚度2.5mm, 安装电机处5.5mm; 驱动箱尺寸: 1180\*420\*370;
- ●含安全保护装置、过载保护装置; 意大利诠世电机; 1.5kW/380V/50Hz/3PH;
- ●驱动轮、从动轮为铸钢材质;
- ●链条输送速度22m/min, 饲料输送量1000kg/h。
- $\cdot$ 201 stainless steel shell is 2.5mm thick, and 5.5mm is installed at the motor; Drive box size: 1180\*420\*370;
- ·Including safety protection device and overload protection device; Italian hermeneutic motor; 1.5kW/380V/50Hz/3PH;
- ·The driving wheel and driven wheel are made of cast steel;
- ·The chain conveying speed is 22m/min, and the feed conveying capacity is 1000kg/h.

# 链条/输料管

Chain / Feed Pipe



链条 Chain

- φ 5, 链条拉力大于30KN、链条材质为 20Mn2锰钢, 镀锌处理
- ●链饼材质为优质PA6, φ45, 间距70
- · φ 5. The chain tension is greater than 30KN. The chain is made of 20Mn2 man ganese steel and galvanized;
- •The chain cake is made of high-quality PA6,  $\phi$ 45, spacing 70.



输料管/接头 Feeding Pipe / Joint

- ●厚度1.5mm\*φ60镀锌钢管, 6000mm一根 一端扩口:
- ●接头201不锈钢, 厚度2.5mm。
- ·Thickness 1.5mm\*φ60 galvanized steel pipe, 6000mm, one end flared;
- · Joint 201 stainless steel, 2.5mm thick.

### 转角轮 Corner Wheel





- ●尼龙PA66外壳,铸铁转角轮;
- ●轴承:哈轴;304不锈钢紧固件;
- ●橡胶圈密封, 防水等级IP55。
- ·Common material shoe:304 stainless steel with manhole; There are single tube and double tube, which are selected according to the feeding amount.





- ●高强尼龙外壳,201不锈钢紧固件;
- ●内转角为铸钢材质、强度高、避免其在长期运行过程中变形;
- ●中轴为201不锈钢材质,轴承为哈轴;转角轮尺寸:350\*350mm。
- ·High strength nylon shell, 201 stainless steel fasteners;
- $\cdot$ The inner corner is made of cast steel with high strength to avoid deformation during long-term operation;
- ·The middle shaft is made of 201 stainless steel, and the bearing is Harbin shaft; Dimension of corner wheel: 350\*350mm.

# FEEDING SYSTEM 喂料系统

# 透明观察管/料位传感器

Transparent Observation Tube / Material Level Sensor

- ●透明观察管: PC, 聚碳材料, 设置在料塔出料端, 便于查看输料情况:
- ●料线传感器:交流 220V, 三芯电容; 组装于透明观察管上设置在最末端下料器后端, 当最末端下料器打满料后, 饲料运行至传感器时, 传感器发出信号驱动器关闭料线停止。



配量器/三通下料口 Gauge / Tee Blanking Port

- ·Transparent observation tube: PC, a polycar bonate material, is set at the discharge end of the feeding tower to facilitate viewing the feeding situation:
- · Material line sensor: AC 220V, three core capacitance; It is assembled on the transparent observation tube and set at the rear end of the end most feeder. When the end most feeder is full of material and the feed runs to the sensor, the sensor sends a signal to the driver to close the feed line and stop.



料线传感器 Material Line Sensor

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# 配量器/三通下料口

Gauge / Tee Blanking Port



配量器 Gauge





拨片式/拉绳式三通下料口 Paddle Type / Pull Rope Type Tee Blanking Port



伸缩式下料管 Telescopic Blanking Pipe

- ●配量器: PP, 容积为8L, 通过两侧旋钮调节插板高低, 来设置料量大小; 配套喇叭下料口与栏位相连, 适用于定位栏、分娩栏、公猪栏;
- ●三通下料口: PP, 分为拨片式与拉绳式; 配套伸缩式下料管与料槽、干湿喂料器相连;
- ●伸缩式下料管: PVC材质。
- · Dosing device: PP, with a volume of 8L. Adjust the height of the plug plate through the knobs on both sides to set the material volume; The feeding opening of the supporting horn is connected with the field, which is applicable to the positioning column, delivery column and boar column;
- ·Tee blanking port: PP, divided into paddle type and pull rope type; The supporting telescopic blanking pipe is connected with the material trough and the dry and wet feeder;
- ·Telescopic blanking pipe: PVC material.

# EEDING SYSTEM 喂料系统

### 料线安装方式

Material Line Installation Mode



支架+U型卡 Bracket+U-Card



转角轮安装 Installation of Corner Wheel



挂钩+镀锌链条+S型钩 Hook+Galvanized Chain+S-Hook

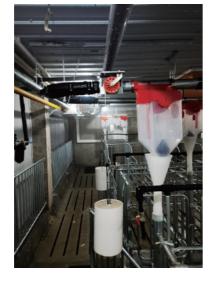
- ●支架+U型卡: 硬支架安装, 稳定性更高, 造价相对柔性安装较高;
- ●挂钩+镀锌链条+S型钩:链条吊挂柔性连接,成本更经济;
- ●转角轮安装:硬支架或链条吊挂安装,转角轮处均设有硬支架加强固定,保证料线整体稳定性。
- ·Bracket+u-shaped card: hard bracket installation, higher stability, higher cost than flexible installation;
- ·Hook+galvanized chain+s-hook: flexible connection for chain hanging, more economical;
- ·Corner wheel installation: hard support or chain hanging installation. Hard support is set at the corner wheel to strengthen the fixation and ensure the overall stability of the material line.

### 料线提升装置

Material Line Lifting Device







配重 Counterweight

- ●绞盘:最大拉力1200磅,手柄可折叠;
- ●配重: 304不锈钢钢丝绳, 保证钢丝绳拉线平行于料管;

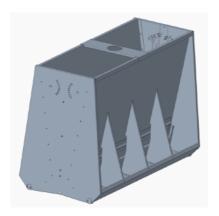
配量器空置时料球处于最低端封闭出料口,量杯根据需求量储存饲料,需要落料时转动绞盘提升料球,饲料从出料口下落。

- ·Winch: the maximum pulling force is 1200 pounds, and the handle can be folded;
- · Counterweight: 304 stainless steel wire rope to ensure that the wire rope is parallel to the material pipe; When the dosing device is empty, the feed ball is at the lowest end and the discharge port is closed. The measuring cup stores the feed according to the demand. When it is necessary to drop the feed, the winch is turned to lift the feed ball, and the feed falls from the discharge port.

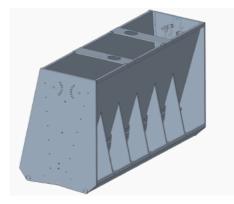
# FEEDING SYSTEM 喂料系统

### 不锈钢双面料槽

Stainless Steel Double-Sided Chute



双面8位不锈钢双面料槽 Double Sided 8-Bit Stainless Steel Double-Sided Chute



双面12位不锈钢双面料槽 Double Sided 12 Position Stainless Steel Double Sided Chute

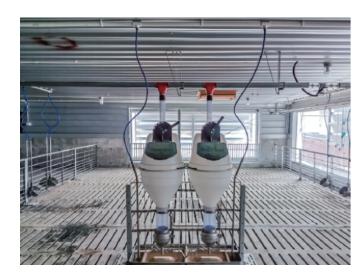


- ●1.3mm不锈钢304制作;
- ●下料调节装置采用弹簧自锁装置,同时料槽下沿口内卷设计,避免猪在采食时候对饲料的浪费;
- ●现场拼装式螺栓连接,设计施工灵活,降低运输成本和模块化生产;
- ●每个料位320mm, 可饲喂6-7头猪吃料。
- ·1.3mm stainless steel 304;
- ·The feeding adjusting device adopts a spring self-locking device, and the lower edge of the feeding trough is designed to roll in the mouth, so as to avoid the waste of feed by pigs during feeding;
- ·Field assembled bolt connection, flexible design and construction, reducing transportation cost and modular production;
- ·Each feed level is 320mm, which can feed 6-7 pigs.

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# 干湿喂料器

Wet and Dry Feeder



双盘干湿喂料器 Double Disc Dry and Wet Feeder



单盘干湿喂料器 Single Disc Dry and Wet Feeder

- ●底盘304不锈钢, 经久耐用; 侧栏高度1米; 容积100L;
- ●桶盖配有预留孔, 搭配自动上料系统使用, 可通过桶身手柄设置料槽出料量大小;
- ●适合保育猪与育成猪,单盘30-50头猪,双盘40-80头猪。
- ·304 stainless steel chassis, durable; Side rail height: 1m; Volume: 100L;
- ·The barrel cover is equipped with a reserved hole, which is used with an automatic feeding system. The discharge volume of the chute can be set through the barrel handle;
- ·It is suitable for nursing pigs and growing pigs. There are 30-50 pigs in a single plate and 40-80 pigs in a double plate.

# FEEDING SYSTEM 喂料系统

# φ102塞盘系统 φ102 Plug Disk System

序号	配件
01	驱动单元
02	料管
03	料管接头
04	塞链链条
05	不锈钢转角
06	102型下料三通带控制阀
07	102型料塔连接件
08	料线传感器
09	102mm变形斗
10	102塞链搭接总成
11	102型料塔连接法兰总成
12	透明观察料管
13	108mm软管
14	防雨罩
15	单支撑
16	双支撑
17	检修平台
18	塞链控制器
19	饲料引导器带低料位传感器
20	高料位开关组



φ102塞盘系统4000kg/h φ 102 plug disk system 4000kg/h

-23--24-

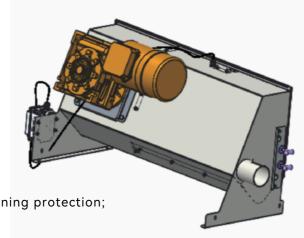
### FEEDING SYSTEM

# 喂料系统

# 驱动器/匀料料靴

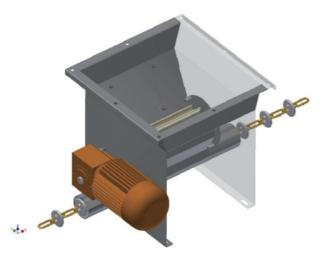
Driver / Leveling Shoe

- ●304不锈钢;
- ●具有断链保护功能和开盖保护;
- ●4kW斜齿轮电机,转速46RPM;
- ●输出扭力为812 N/M;
- ●L1440\*W515\*H710MM。
- · 304 stainless steel;
- ·With chain breaking protection function and cover opening protection;
- ·4kW helical gear motor, rotating speed 46RPM;
- ·The output torque is 812n/m;
- ·L1440\*W515\*H710MM.



驱动器 Driver

- ●304不锈钢:
- ●轴承座:哈轴;
- ●减速电机驱动, 0.37kw, 70RPM,380V, 防水等级IP55;
- ●控制下料速度及关闭/打开下料。
- · 304 stainless steel;
- ·Bearing pedestal: Harbin shaft;
- ·Reducer motor drive, 0.37kw, 70rpm, 380V, waterproof grade IP55;
- ·Control the cutting speed and close / open the cutting.



匀料料靴 Uniform Shoe

### FEEDING SYSTEM 喂料系统

### 镀锌输料管/链条

Galvanized Feed Pipe / Chain

- ●料管: φ 102\*T2.0\*L6000MM; 镀275g/M2;
- ●接头: 201不锈钢, L200mm\*T2.5mm;
- ●增加防水密封圈。
- ·Material pipe:φ102\*T2.0\*L6000MM; Plating 275g/m2;
- ·Joint: 201 stainless steel, I200m\*t2.5mm;
- · Add waterproof sealing ring.



镀锌输料管/接头 Galvanized Feed Pipe / Joint

- ●链条规格7\*46\*9(线径\*内长\*内宽);最小破断拉力6t; 塞盘材质PA6;直径75,间距92;塞盘位移力不小于 10KN, 塞盘破坏拉力不小于14KN;
- ●C形开口环, 材料65Mn, 2t不变形。
- ·Chain specification 7\*46\*9 (wire diameter\*inner length\* inner width); Minimum breaking force 6T; Plug plate material PA6; Diameter 75, spacing 92; The displacement force of the plug plate shall not be less than 10kN, and the breaking force of the plug plate shall not be less than 14KN;

·C-shaped split ring, material 65Mn, 2T, no deformation.



Chains / Connections

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# 转角轮 Angle Wheel

- ●304不锈钢;
- ●具有断链保护功能和开盖保护;
- ●4kw斜齿轮电机,转速46RPM;
- ●输出扭力为812 N/M;
- ●L1440\*W515\*H710MM。



- ·With chain breaking protection function and cover opening protection;
- · 4kw helical gear motor, rotating speed 46RPM;
- ·The output torque is 812 n/m;
- ·L1440\*W515\*H710MM.

# 塞链搭接总成/料塔连接法兰总成/透明观察料管

Plug Chain Lap Assembly / Tower Connecting Flange Assembly / Transparent Observation Tube







料塔连接法兰总成 Tower Connecting Flange Assembly



透明观察料管 Transparent Observation Tube

●塞链搭接总成: 热镀锌40-60um, 防水等级IP67;可以90度或者180度搭接;

●料塔连接法兰总成:镀锌板Q235BZ275,防水等级IP55;进口管外径108mm;

●透明观察料管:材质PC/亚克力,壁厚10mm。

- ·Plug chain lap assembly: hot galvanized 40-60UM, waterproof grade IP67; It can be overlapped at 90 degrees or 180 degrees;
- · Material tower connecting flange assembly: galvanized sheet q235bz275, waterproof grade IP55; Outer diameter of inlet pipe 108mm;
- ·Transparent observation tube: Material: pc/ acrylic, wall thickness: 10mm.

# EEDING SYSTEM 喂料系统

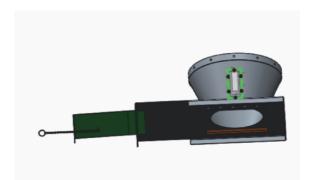
### 料线传感器/料塔连接件

Material Line Sensor / Material Tower Connector



传感器 Material Line Sensor

- ●IFM接近传感器;
- ●防水等级IP67。
- ·IFM proximity sensor;
- ·Waterproof grade IP67.



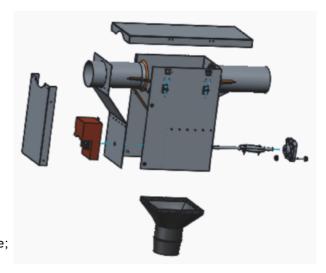
料塔连接件 Material Tower Connector

- ●镀锌板Q235BZ275, 带观察窗, 防水等级IP55;
- ●带料量调节插片, 能关闭/打开下料。
- · Galvanized sheet q235bz275, with observation window, waterproof grade IP55;
- ·The strip quantity adjustment insert can close / open the blanking.

# 三通下料阀

Three-Way Blanking Valve

- ●SS304外壳;
- ●220v风门阀,可以调节开启行程;
- ●落料斗为PP材质。
- ·SS304 shell;
- ·220V air valve, which can adjust the opening stroke;
- ·The dropping hopper is made of PP.



#### FEEDING SYSTEM

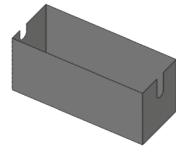
# 喂料系统

### 108mm软管/防雨罩

108mm Hose / Rain Cover



φ108mm软管 φ108mm Hose

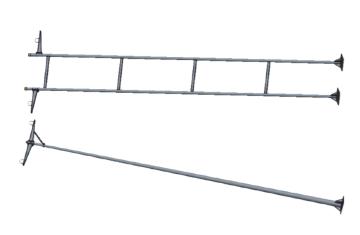


驱动器防雨罩 Drive Rain Cover

- ●软管:内径108-110mm,壁厚3-4mm,抗UV、老化;
- ●驱动器防雨罩:镀锌板Q235BZ275,T0.5MM。
- · Hose: inner diameter 108-110mm, wall thickness 3-4mm, UV resistance and aging resistance;
- ·Rain cover of driver: galvanized sheet q235bz275, t0.5mm.

### 料线支撑架/检修平台

Material Line Support Frame / Maintenance Platform





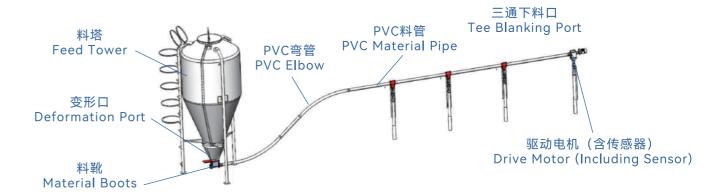
- ●支架: Q235, 镀锌Z275; 高度为8.5m; 高度可调节; 支撑杆上部直径的60mm下部φ150mm, 壁厚2.8mm;
- ●检修平台:镀锌Z275,壁厚2.8mm,可调节高度,带护栏及爬梯。
- ·Support frame:Q235, galvanized z275; The height is 8.5m; Height adjustable; 60mm lower part of upper diameter of support rod \$\phi\$150mm, wall thickness 2.8mm;
- ·Maintenance platform:galvanized z275, wall thickness 2.8mm, height adjustable, with guardrail and ladder.

#### FEEDING SYSTEM n田 业り マ 4六

# 喂料系统

# 108mm软管/防雨罩

108mm Hose / Rain Cover



绞龙输送系统由料塔、驱动电机(含传感器)、PVC料管、PVC弯管、绞龙、下料器等组成,其主要功能就是把料塔中的饲料输送到各个下料器中;利用驱动电机带动螺旋状的绞龙叶片旋转,绞龙推动饲料沿着料管的方向向前移动,直至运送到每个下料口,从而实现饲料输送的目的;当各个下料口饲料投放完毕,最末端的驱动电机传感器发出信号电机关闭绞龙停止。

The auger conveying system is composed of feeding tower, driving motor (including sensor), PVC feeding pipe, PVC elbow, auger, feeder, etc. its main function is to convey the feed in the feeding tower to each feeder; The driving motor is used to drive the spiral auger blade to rotate, and the auger pushes the feed forward along the direction of the feed pipe until it is transported to each feeding port, so as to achieve the purpose of feed conveying; When the feed at each feeding port is finished, the sensor of the drive motor at the end sends a signal that the motor closes and the auger stops.

#### 变形口 Deformation Port













180度变形口 180°Deformation Port

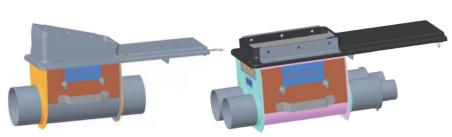
30度变形口 30°Deformation Port

双出口变形口 Double Outlet Deformation Port

- ●变形口为PVC材质,用于连接料塔与料靴;
- ●180度变形口常用于多个料塔串联的情况,单个料塔常用30度变形口;
- ●双出口变形口用于一个料塔多根绞龙。
- · The deformation port is made of PVC, which is used to connect the material tower and the material shoe;
- ·180 degree deformation port is often used in the case of multiple material towers in series, and 30 degree deformation port is commonly used for a single material tower;
- $\cdot \text{The double outlet deformation port is used for multiple augers in one feed tower.} \\$

# 绞龙料靴

Auger Material Boots



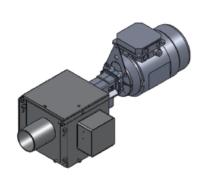


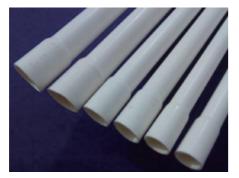
単绞 返料 靴 Single Auger Material Boots

双绞龙料靴 Twisted Pair Dragon Boots

- ●料靴为镀锌板材质,与PVC管用U型卡连接;
- ●单管绞龙料靴对应1个驱动电机,输送量为1300kg/h;
- ●双管绞龙料靴对应2个驱动电机,输送量为2600kg/h。
- ·The material shoe is made of galvanized sheet and connected with PVC pipe with U-shaped clamp;
- The single pipe auger shoe corresponds to a drive motor with a conveying capacity of 1300kg/h;
- ·The double pipe auger shoe corresponds to two drive motors, and the conveying capacity is 2600kg/h.

# **绞龙料靴**Auger Material Boots







驱动器 Driver

PVC料管 PVC Material Pipe

单绞龙料靴 Auger Dragon

- ●驱动器, 0.75kW-295RPM, 诠世电机; 输送量可达1.3吨/小时;
- ●料管: 高强度PVC料管, φ75\*3.6\*4000mm一端扩口;
- ●绞龙: 进口绞龙, OD=60.5 ID=36.5 PITCH=40。
- ·Driver, 0.75kW-295rpm, hermeneutic motor; The conveying capacity can reach 1.3 tons / hour;
- ·Material pipe: high strength PVC material pipe,  $\phi$  75\*3.6\*4000mm flared at one end;
- ·Winch: imported winch, od=60.5, id=36.5, pitch=40.

# EEDING SYSTEM 喂料系统

# 电子饲喂

Electronic Feeding



电子饲喂站 Electronic Feeding Station



母猪分离器 Sow Separator

- ●电子饲喂站对母猪进行精确饲喂,不仅节约饲料,而且能够更好的对母猪进行管理;
- ●母猪分离器与电子饲喂站配合使用,能够自动分离出异常母猪。
- ·The electronic feeding station accurately feeds sows, which not only saves feed, but also can better manage sows;

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·The sow separator is used together with the electronic feeding station to automatically separate abnormal sows.

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### WATERLINE SYSTEM 水线系统

# 水线前端

Waterline Front End



- ●水线前端拥有DN40与DN25两种型号,根据猪舍的用水量来选型;
- ●水线管道一般采用PE材质:
- ●电子水表需要根据客服的要求来确定是否配置。
- The front end of the water line has Dn40 and DN25 models, which are selected according to the water consumption of the pig house;
- ·Water pipeline is generally made of PE;
- The electronic water meter needs to be configured according to the requirements of customer service.

# 饮水器

Water Dispenser







自动水阀 Automatic Water Valve



水嘴 Water Faucet



水盘 Basin

- ●水碗型号有: φ200(适用母猪)、φ162(适用育肥猪)、φ140(适用断奶猪)、φ118(适用仔猪);
- ●自动水阀: 节水环保, 需要与长料槽或水盆配合适用, 可根据猪只数量选择对应的水盆型号;
- ●水嘴:不锈钢,1/2寸。
- ·Water bowl models are:  $\phi$ 200 (for sows)  $\phi$ 162 (for fattening pigs)  $\phi$ 140 (applicable to weaned pigs)  $\phi$ 118 (applicable to piglets);
- · Automatic water valve: it is water-saving and environment-friendly. It needs to be matched with the long feed tank or basin. The corresponding basin model can be selected according to the number of pigs;
- · Nozzle: stainless steel, 1/2 inch.

### HEATING SYSTEM 供暖系统

#### 暖风机 Air Heater



型号	最大输入/小时 (千瓦)	备注
AW060	17.6	天然气/液化气
AW100	29.3	天然气/液化气
AW250	73.3	天然气/液化气



型号	材质	最大输入/小时 (千瓦)	备注
225	镀锌板	65.9	天然气/液化气
	不锈钢	03.7	
250	镀锌板	73.3	天然气/液化气
	不锈钢	73.3	

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### HEATING SYSTEM 供暖系统

### 保温灯、橡胶垫、电加热板

Heat Preservation Lamp, Rubber Pad, Electric Heating Plate



保温灯 Heat Preservation Lamp



橡胶垫 Rubber Pad



电加热板 Electric Heating Plate

- ●保温灯由保温灯泡与保温灯罩组成,灯泡有175W与250W选择;
- ●橡胶垫厚度通常7mm-8mm, 长宽可定制;
- ●嵌入式电加热板,通常配套产床;
- ●常规可选择橡胶垫+保温灯或电加热板+保温灯。
- •The heat preservation lamp is composed of heat preservation bulb and heat preservation lamp shade, and the bulb can be selected from 175W and 250W;
- ·The thickness of rubber pad is usually 7mm-8mm, and the length and width can be customized;
- $\cdot \text{Embedded electric heating plate, usually equipped with a production bed;} \\$
- ·In general, you can choose rubber pad + heat preservation lamp or electric heating plate + heat preservation lamp.

### HEATING SYSTEM 供暖系统

# 电地暖

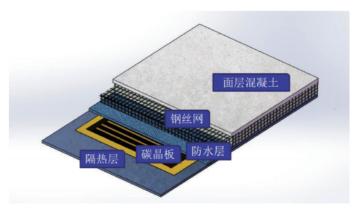
Electric floor heating



温控器 Thermostat



碳晶板 Heat Preservation Lamp



方案 Programme

- ●在交变电流作用下产生交变电场,碳晶中的碳分子与碳分子团在交变电场的引发激励下,在热组件中产生"布朗运动",相互撞击、摩擦产生热能,以远红外线的方式均匀地辐射出来;
- ●优异的电能转化热能技术,以波长8-14微米的远红外线均匀地向外辐射,总转化率达到99.8%以上;
- ●PLC系统全面控制,有效管控区域内空间温度。
- ·The alternating electric field is generated under the action of alternating current, and the carbon molecules and carbon molecular clusters in the carbon crystal generate "Brownian motion" in the thermal components under the excitation of the alternating electric field. They collide and rub with each other to generate heat energy, which is evenly radiated in the form of far-infrared ray;
- Excellent electric energy to thermal energy technology, with the wavelength of 8–14 microns of far infrared radiation, the total conversion rate reaches more than 99.8%;
- ·The PLC system is fully controlled to effectively control the space temperature in the area.

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#### **BLOWDOWN SYSTEM**

# 排污系统

### 虹吸/重力式

Siphon / Gravity



排放塞 Drain Plug



延长件 Extension Piece



排气阀 Vent Valve

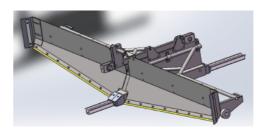
- ●弗高排污系统:排气阀+延长件+排放塞依靠重力、负压、连通器原理进行排污。整个管道系统必须为封闭系统,管道末端采用排气阀保证管道内压力比管道外压力小,在管道内气体压力过大时将压力卸出,可排放粘稠的液体;
- ●美式排污系统:延长件+排放塞依靠重力进行排污,排放时需要额外冲水将粪污稀释一倍;
- ●排放塞与延长件有φ200-φ250-φ315三种规格,对应不同的排污面积。
- · Fugao blowdown system: exhaust valve + extension piece + discharge plug blowdown is based on the principle of gravity, negative pressure and connector. The whole pipeline system must be a closed system. The exhaust valve is used at the end of the pipeline to ensure that the pressure in the pipeline is smaller than that outside the pipeline. When the gas pressure in the pipeline is too high, the pressure can be discharged to discharge viscous liquid;
- · American sewage system: the extension piece + discharge plug shall discharge sewage by gravity, and additional flushing is required to dilute the fecal sewage by twice;
- · Drain plug and extension have  $\phi 200-\phi 250-\phi 315$  three specifications, corresponding to different sewage discharge areas.

# BLOWDOWN SYSTEM

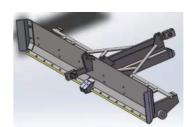
# 排污系统

# 刮粪板

**Excrement Scraping Board** 



轨道式V型刮粪板 Track Type V-shaped Excrement Scraper

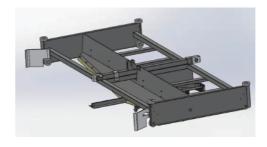


轨道式平刮粪板 Track Type Flat Scraper

规格
1000
1200
1500
2100
2200
2800
2100
2200
2800

轨道式刮粪板粪沟中间设置有轨道,可避免刮粪板走斜问题;最长130米,负载1800Kg-2000Kg。

A track is set in the middle of the track type fecal scraping plate fecal ditch, which can avoid the deviation of the fecal scraping plate; Maximum length: 130m, load: 1800kg-2000kg.



刮粪板	规格
	2100
导尿管式V型刮粪板	2200
	2800

导尿管式V型刮粪板 Catheter Type V-shaped Excrement Scraping Board

V型刮粪板+导尿管、V型粪沟底部装有导尿管粪尿前期分离,减少后期固体粪污处理量。

V-shaped fecal scraping plate + urinary catheter. The bottom of the V-shaped fecal ditch is equipped with a urinary catheter to separate feces and urine in the early stage, so as to reduce the amount of solid fecal sewage treatment in the later stage.

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#### ELECTRICAL EQUIPMENT

# 电气设备

#### 电控箱

**Electric Control Panel** 





- ●碳钢喷塑箱体,双开门,箱体厚度1.5mm,门板厚度2.0mm,安装板厚度1.5mm,色标RAL7035;
- ●带电控箱铭牌,铆钉打孔固定,内容如右图;
- ●带智能电表, 元器件统一使用施耐德元器件, 每组回路均配置马达保护器;
- ●每个回路均可进行手/自动控制、报警可连接到声光报警回路;
- ·Carbon steel spray molded box, double door, box thickness 1.5mm, door panel thickness 2.0mm, installation plate thickness 1.5mm, color code RAL7035;
- •The nameplate of the electrified control box is fixed with rivets punched, as shown in the right figure;
- ·With smart meter, Schneider components are used uniformly, and motor protectors are configured for each group of circuits;
- · Each circuit can be manually/automatically controlled, and the alarm can be connected to the sound and light alarm circuit;

# 电气设备

# Ai6000中央报警器

Ai6000 Central Alarm



- ●支持100台环境控制器报警信息收集;
- ●220V供电 (内置电池, 可断电报警);
- ●可接一路报警喇叭输出 (可输出12V);
- ●支持报警内容语音输出;
- ●支持报警内容自由选择;
- ●支持短信和电话报警;
- ●支持报警统计及报警日志查询;
- ●快捷按键 (音量"+-""报警复位");
- ●支持4G全网通、WIFI及有线网络;
- ●支持RS485通讯扩展功能。
- ·Support the collection of alarm information for 100 environmental controllers;
- · 220V power supply (built-in battery, capable of power-off alarm);
- ·Can be connected to one alarm horn output (capable of outputting 12V);
- ·Support voice output of alarm content;
- ·Support free selection of alarm content;
- ·Support SMS and phone alarm;
- ·Support alarm statistics and alarm log queries;
- ·Shortcut buttons (volume "+-" and "alarm reset").
- ·Support 4G all network connectivity, WIFI, and wired networks;
- Support RS485 communication extension function;

#### **ELECTRICAL EQUIPMENT**

# 电气设备

#### 环控器

**Environmental Controller** 



- ●具有体感体温控制算法、畜禽应激反映保护算法、动态通风调整 算法等特点:具备多级档位、PID无级变速控制通风量:
- ●支持温度、湿度,二氧化碳、压力等传感器接入参与控制;可扩展连接料塔称重,视频监控,用电量、饮水量等;
- ●数据记录本地备份存储不少于30天的容量; 电压: 230V, 50Hz; CE认证, 8个模拟输入, 2个模拟输出, 12个继电器输出;
- · Having characteristics such as body temperature control algorithm, animal stress response protection algorithm, and dynamic ventilation adjustment algorithm; Equipped with multi-level gears and PID continuously variable speed control for ventilation volume;
- ·Support the integration and control of temperature, humidity, carbon dioxide, pressure and other sensors; Expandable connection for tower weighing, video monitoring, electricity consumption, drinking water volume, etc;
- •The capacity for local backup storage of data records shall not be less than 30 days; Voltage: 230V, 50Hz; CE certified, with 8 analog inputs, 2 analog outputs, and 12 relay outputs;

# 电气设备

### IEC环控器功能特点

Functional Characteristics of IEC Environmental Controller

- ·电话短信报警
- ·应急通风
- 事件溯源
- ·持续优化
- ·远程设置和诊断
- ·数据采集
- ·实时监控
- ·数据报表



- ·Telephone SMS alarm
- · Emergency ventilation
- · Event tracing
- · Continuous optimization
- · Remote settings and diagnostics
- · Data collection
- · Real time monitoring
- · Data report

- ●双系统设计,控制系统和人机交互独立设计,更安全;
- ●双电源供电设计, 提供安全保障;
- ●电力级别的电磁兼容设计, 抗干扰能力强, 稳定性高;
- ●继电器功能自由设置,满足各种动力设备配置组合方案需求;
- ●自适应通风算法, 舍内通风平滑, 避免应激;
- ●风机轮换算法,有效延长风机寿命;
- ●风冷效应算法, 畜禽体感温度舒适;
- ●远程诊断,能及时解决问题,保证系统的最优运行状态;
- ●远程升级, 新功能及时更新;
- ●扩展性强, 满足用户接入各种非标传感器和设备;
- ●支持控制器参数批量导入和导出;
- ●图示化界面,操作简便,直观;
- ●历史数据精确到每分钟、 精确查看设备运行效果:

- ·Dual system design, with independent control system and human-machine interaction design for greater security;
- Dual power supply design, providing safety assurance;
- · Power level electromagnetic compatibility design, strong anti-interference ability, and high stability;
- ·The relay function can be freely set to meet the requirements of various power equipment configuration combinations;
- ·Adaptive ventilation algorithm, smooth ventilation inside the building to avoid stress;
- ·Fan rotation algorithm, effectively extending the lifespan of the fan;
- · Air cooling effect algorithm, comfortable apparent temperature of livestock and poultry;
- ·Remote diagnosis can solve problems in a timely manner and ensure the optimal operating state of the system;
- ·Remote upgrade and timely update of new functions;
- ·Strong scalability, meeting the needs of users to access various non-standard sensors and devices;
- ·Support batch import and export of controller parameters;
- · Graphical interface, easy to operate and intuitive;
- ·Historical data is accurate to every minute, allowing for accurate viewing of equipment performance;

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# 电气设备

# IEC 环境控制器物联网平台

IEC Environmental Controller IoT Platform





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环控PC端平台软件

环控小程序软件

- ●集成化管理程序,可查看修改参数,支持报警信息查看、管理报表输出,支持视频监控查看(需对接协议);
- ●模块化设计,可连接电脑、微信小程序进行数据查询,实现4G全网通登录,自设置管理等级及管理权限;
- ·Integrated management program that can view and modify parameters, support alarm information viewing, manage report output, and support video surveillance viewing (requires protocol connection);
- Modular design, capable of connecting computers and WeChat mini programs for data query, achieving 4G full network login, self setting management level and permissions;

# 电气设备

# IEC环境控制器界面

IEC Environmental Controller Interface









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