



胜利油田胜利泵业有限责任公司
RODLESS PUMPS, INC.

中国·东营
DONGYING · CHINA



胜利泵业

Rodless Pumps, Inc.

——您



永远的合作伙伴

——Your Partner Forever!



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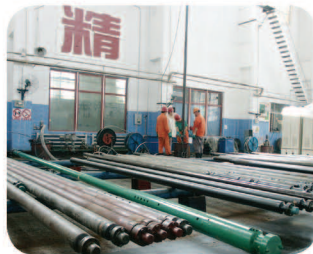


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公司简介

Introduction

胜利油田胜利泵业有限责任公司（原胜利石油管理局无杆采油泵公司）组建于1983年，是中国规模最大、技术工艺领先的潜油电泵和电缆制造公司，是中国石化集团公司唯一的潜油电泵研究、开发、制造和技术服务的专业化公司，是全国唯一的水力泵技术服务中心。

公司主要从事潜油电泵机组、电缆、成套电气设备、加工配件及水力泵的设计开发、制修及销售服务。

公司现有员工1021人，其中高级工程师以上的44人，技术干部261人，现场服务人员120人。

公司占地24万平方米，工厂面积12万平方米。拥有进口电缆生产线3条，数控机床、加工中心和专用设备200余台（套），检验器具2088台（套），大型检测设备40台（套）。

具备年制造修理潜油电泵机组5000套，水力泵2000套，制造潜油电缆3600千米，电力电缆5000千米，控制柜2000台的配套能力。

拥有国家专利40项，产品配套设计软件5项。

建立了ERP生产管理系统、PDM产品设计管理系统和满足国家标准及相关API推荐标准的产品测试试验台。

公司1995年11月通过ISO9001质量管理体系认证，2002年3月通过英国皇家UKAS认证证书，2005年元月通过ISO9001、ISO14001、OHSAS18001一体化管理体系认证。

“SLP”是胜利泵业的商标。SLP牌潜油电泵机组荣获“胜利油田十大名优产品”称号，被评为“山东名牌产品”，中国质量协会授予“石油工业用户满意产品”。

自1996年起公司连年保持着山东省守合同重信用单位、山东省设备管理一级企业、山东省花园式单位、清洁无害化矿区等省部级荣誉称号。

胜利泵业人以“发展泵业，争创一流”的企业精神为动力，本着“为用户、为社会创造最大价值”的经营宗旨，确立了“打造胜利电泵品牌，实现持续全面发展”的经营战略，牢固树立“以人为本，质量立业，创新发展，追求卓越”的经营理念。

胜利泵业愿与社会各界携手合作，竭诚为用户服务。

Rodless Pumps, Inc. founded in 1983, is one of the largest ESP manufacturing company in China, which produces electric submersible pump (ESP), cable and ESP surface equipment with the leading technology. Rodless Pumps, Inc. engages in ESP research, development, manufacture and technical service. It is the sole specialized ESP company under SINOPEC, and also has the only technical service center of hydraulic pump in China.

The main business includes design, research, manufacture and repair, sale and service of ESP units, cable, electric equipment, ESP spares and hydraulic pumps.

Rodless Pumps, Inc. has 1021 employees including 44 senior engineers, 261 technical personnel and 120 servicemen.

Rodless Pumps Inc. headquarter occupies 240,000m², including 120,000 m² of the manufacturing and repairing workshop. Rodless Pumps Inc. possesses 3 cable production lines, over 200 sets of CNC lathes, CNC machining centers and other special equipment, 2088 sets of inspection instruments and 40 sets of large test devices.

Rodless Pumps, Inc. has an annual capability of manufacturing and repairing 5000 sets of ESP units, 2000 sets of hydraulic pumps, 3600 km of ESP cables, 5000 km of electric cables and 2000 sets of control panel and VSD.

Rodless Pumps, Inc. has achieved 40 national patents and 5 design softwares related to ESP technology and products.

Rodless Pumps, Inc. has achieved has established ERP system for material or goods circulation management, PDM system for products designing management, ST System for product test in compliance with Chinese national standards and related API Recommended Practice.

Rodless Pumps, Inc. has achieved was qualified for ISO9001 Quality Management System certification at first time in November 1995, and later on passed the review of new version ISO9001:2000 and ISO9001:2000 UKAS in March 2002, and obtained the certificates of ISO9001, ISO14001 and OHSAS18001 in January 2005.

“SLP” is the registered trademark of Rodless Pumps, Inc.

In order to expand the SLP pump business and strive for building up the first class of international ESP manufacturer, It is committed to focus on the business management policy of producing great value for customers, society as well as the company, carry out the management tactic of creating powerful brand of SLP products and bringing about sustainable development, follow out the philosophy of people oriented, quality-centered, bringing forth new ideas for further development and striving for perfection.

Rodless Pumps, Inc. is looking forward to developing tight cooperation with customers around the world, and is ready to provides excellent service to satisfy the customers.

资质、荣誉

Certifications



公司1995年11月通过ISO9001质量管理体系认证

Achieved ISO9001 Quality Management System Certificate in November 1995

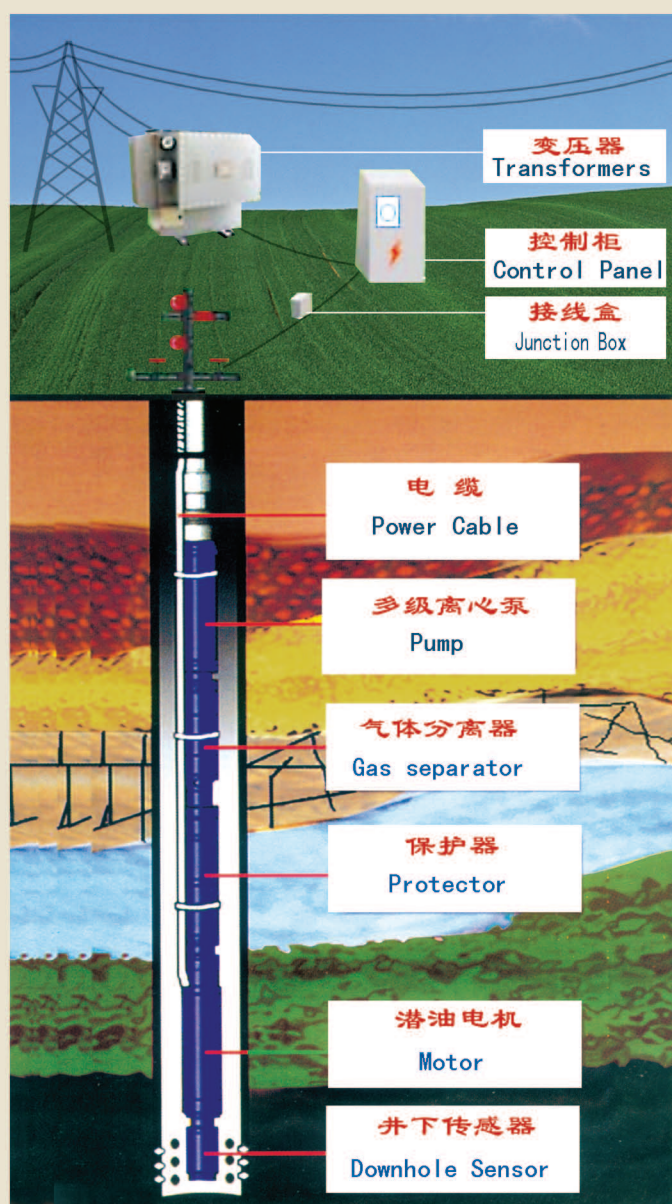
2002年3月通过英国皇家UKAS认证证书

Passed the reexamination of new version ISO9001:2000 and ISO9001:2000 UKAS in March 2002

2005年元月通过ISO9001、ISO14001、OHSAS18001一体化管理体系认证

Obtained the certificates of ISO9001, ISO14001 and OHSAS18001 in January 2005

潜油电泵系统由地面设备、电力传输和井下机组三大部分组成。地面设备包括变压器、控制柜（变频柜）、接线盒等。电力传输由动力电缆、引接电缆等组成。井下机组由潜油电机、保护器、分离器（或吸入口）和多级离心泵组成。



The electric submersible pumping system consists of surface equipment, electric transmission part and downhole equipment. The surface equipment includes transformer, control panel (or VSD), junction box, wellhead and surface cable. The electric transmission part includes power cable and motor lead extension (MLE). Downhole equipment is the main part of the system which includes multi-stage centrifugal pump, motor, protector and gas separator.

潜油电泵系统可应用于5"、5½"、7"、8⅝"、9⅝"以上等生产套管。

排量：30—4000m³/d @ 50Hz

扬程：<4500m @ 50Hz

ESP system is applicable to the production casing of 5", 5½", 7", 8⅝", 9⅝" and above.

Capacity: 200-25160BPD @ 50Hz

Head: <14760ft @ 50Hz

潜油离心泵

Submersible Centrifugal Pump

潜油离心泵是多级离心泵，在装配形式上采用浮动式、压紧式或底部浮动式三种；在叶轮结构上分为径向流和混合流；有常规泵、耐砂蚀泵、防腐泵等系列产品，可分别用于不同的井况。

Submersible centrifugal pump is a kind of multistage centrifugal pump in three assembling types of float, compression and bottom float, with two stage structures, radial flow and mixed flow, and categorized as standard, abrasion resistant (AR), anti-corrosion pump etc., which can be applicable to different well conditions.



系列 (外径) Series (OD) mm (in)	泵型 Pump type	50 (Hz)				60 (Hz)			
		最大泵轴功率 Max BHP rating for pump shaft		排量 Capacity		最大泵轴功率 Max BHP rating for pump shaft		排量 Capacity	
		kW	HP	m ³ /d	BPD	kW	HP	m ³ /d	BPD
86 (3.38) 88 (3.46)	S50	58	78	30	190	69	94	36	225
	S100	58	78	100	630	69	94	120	755
	S150	58	78	150	940	69	94	180	1130
98 (3.86)	W30	77	104	30	190	92	123	36	225
	W50	77	104	50	310	92	123	60	380
	W60	77	104	60	380	92	123	72	450
	W80	77	104	80	500	92	123	96	600
	W100	157	213	100	630	188	256	120	755
	W150	157	213	150	940	188	256	180	1130
	W200	157	213	200	1260	188	256	240	1510
	W250	157	213	250	1570	188	256	300	1890
	W300	157	213	300	1890	188	256	360	2260
130 (5.13)	W400	157	213	400	2510	188	256	480	3020
	Q150	157	213	150	940	188	256	180	1130
	Q200	157	213	200	1260	188	256	240	1510
	Q250	157	213	250	1570	188	256	300	1890
	Q350	157	213	350	2200	188	256	420	2640
	Q450	157	213	450	2830	188	256	540	3400
	Q550	247	336	550	3460	296	403	660	4150
	Q700	247	336	700	4400	296	403	840	5280
	Q800	247	336	800	500	296	403	960	6040
	Q900	247	336	900	5660	296	403	1080	6790
172 (6.75)	Q1200	390	531	1200	7550	468	637	1440	9060
	Q1600	390	531	1600	10060	468	637	1920	12075
	J1000	390	531	1000	6290	468	637	1200	7550
	J1300	390	531	1300	8180	468	637	1560	9810
	J1700	390	531	1700	10690	468	637	2040	12830
	J2100	563	765	2100	13200	675	918	2520	15850
	J2800	563	765	2800	17610	675	918	3360	21130
	J4000	563	765	4000	25160	675	918	4800	30190

气体处理装置

Gas Handling Device

根据油井含气条件，可以配置吸入口、气体分离器和高效气体处理器，气体分离器在结构原理上分为沉降式分离器和旋转式分离器，在用途上分为常规型、耐磨蚀、耐腐蚀等。

The intake, gas separator and high efficiency gas handler is available for different gassy condition.

The gas separator has two types, gravity and rotary, and three categories, standard, abrasion resistant and anti-corrosion for different downhole conditions.

系列 Series mm (in)	型号 Model	说明 Description	长度 Length		重量 Weight	
			mm	in	kg	lb
86 (3.38) 88 (3.46)	QYX86(88)F-X	旋转式分离器 Rotary Separator	673	26.5	20.5	45.1
	QYX86(88)F-X/SJ	双级旋转式分离器 Double Section Rotary Separator	1358	53.5	42	92.4
	QYX86(88)K	吸入口 Intake	305	12	4.8	10.6
98 (3.86)	QYX98F-X	旋转式分离器 Rotary Separator	757	29.8	24	52.8
	QYX98F-X/SJ	双级旋转式分离器 Double Section Rotary Separator	1528	60.2	49	107.8
	QYX98K	吸入口 Intake	305	12	5.3	11.7
	QYX98Q	气体处理器 Gas Handling Device	1934	76.1	84	185
130 (5.13)	QYX130F-X	旋转式分离器 Rotary Separator	757	29.8	40	88
	QYX130F-X/SJ	双级旋转式分离器 Double Section Rotary Separator	1528	60.2	81	178.2
	QYX130K	吸入口 Intake	378	14.9	7.5	16.5
172 (6.75)	QYX172K	吸入口 Intake	382	15	16	35.2



保护器

Protector

保护器在结构上分为沉淀式、胶囊式和组合式，在用途上分为常规型、高承载、耐腐蚀等。

可根据使用条件和用户要求配置不同形式的保护器。

Protector type includes labyrinth chamber, rubber bag chamber and combined chamber, and the category includes standard, high load and anti-corrosion.

Protector can be configured as per the requirement of well condition and special request from customers.

系列 Series mm (in)	型号 Model	说明 Description	长度 Length		重量 Weight	
			mm	in	kg	lb
86 (3.38)	QYH86C	沉淀式 Labyrinth chamber	1600	63	50	110
88 (3.46)	QYH88J	胶囊式 Bag chamber	1769	69	46	101
98 (3.86)	QYH98C	沉淀式 Labyrinth chamber	1600	63	47	103
	QYH98J	胶囊式 Bag chamber	1869	73	53	117
	QYH98J—GZ	高承载胶囊式 High load bag chamber	1906	75	54	119
130 (5.13)	QYH130C	沉淀式 Labyrinth chamber	1639	64	51	112
	QYH130J	胶囊式 Bag chamber	1869	73	58	128
	QYH130J—GZ	高承载胶囊式 High load bag chamber	1913	75	59	130
172 (6.75)	QYH172J	胶囊式 Bag chamber	1820	71	74	165
	QYH 172C	沉淀式 Labyrinth chamber	1491	64	65	144



潜油电机 Motor

潜油电机适用于4½"，5"，5½"，7"，9⅝"及以上套管；
潜油电机的工作电压为140V—3600V，工作电流为14A—104A；
50Hz时两极电机的额定转速2850r/min（60Hz时的额定转速3420r/min）；
耐温等级有：90℃、120℃、150℃、180℃、210℃。

Motor is applicable to the casings of 4½", 5", 5½", 7", 9⅝" and above

Operating voltage: 140V—3600V

Operating current: 14A to 104A.

Rated RPM: 2850 r/min@50Hz(3420r/min@60Hz).

Temperature grade: 90℃, 120℃, 150℃, 180℃, 210℃.

系列 Series	外径 OD mm (in)	极数 Number of poles	功率范围 Power Range kW@50 (Hz)	功率范围 Power Range HP@60 (Hz)	备注 Rem
95	95 (3.74)	2	4.5—75	7.2—120	
98	98 (3.86)	2	4.5—75	7.2—120	
107	107 (4.21)	2	5—135	8—216	
114	114 (4.49)	2	12—180	19—290	
116	116 (4.57)	2	6—180	10—290	
116	116 (4.57)	4	11—61.6	17.7—99	螺杆泵 (ESPCP)
138	138 (5.43)	2	18—247	29—390	
143	143 (5.63)	2	20—400	32—640	
143	143 (5.63)	4	10—75	16—120	螺杆泵 (ESPCP)
185	185 (7.28)	2	32—512	51—824	



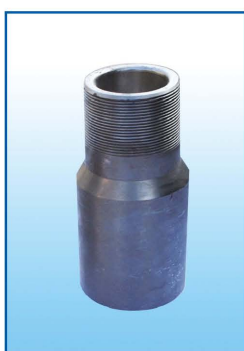
配件及附件

Parts & Accessories

可提供各系列规格潜油电泵配件和附件

All series of parts and accessories are available.

配套附件/Accessories



单流阀
Check Valve



泄油阀
Drain Valve



动力电缆保护器
Power Cable Protector



引接电缆保护器
MLE Cable Protector



硅钢片
Laminations



电磁线
Magnetic Wire



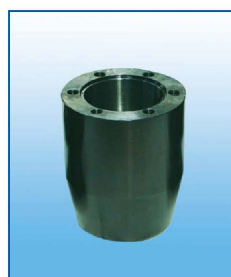
导叶轮
Stages



电机头
Motor Head



电泵壳体
Housing



星点座
Universal Base



引线连接底座
Lead Connecting Base

潜油泵地面控制柜

ESP Control Panel

潜油泵控制柜可对机组提供欠载、过载等八项保护，在电泵井停机时能把断电瞬间的三相电流、电压值和控制电压值保存起来，并可传输到计算机。

The control panel has 8 protection functions. It is capable to save the values of three-phase current and voltage and control voltage when the ESP well shutdown and transmit to computer.

QYRK系列潜油泵专用中压软启动控制柜主要技术参数

Specification of QYRK Series ESP Medium Voltage Soft-start Control Panel

输入电源电压频率 Input power voltage frequency	0.8kV~3kV 50Hz 60Hz			
适用电机电压(kV) Applicable electric motor voltage	0.8	1.5	2	3
额定工作电流(A) Rated working current	100	100	120	150



QYK2.0-100(E)

QYK系列潜油泵控制柜技术参数

Specifications of QYK Series Control Panels

型 号 Model	电压 Rated Voltage (V)	电流 Amp (A)	尺寸 Dimension 长×宽×高 L×W×H (mm×mm×mm)	重量 Weight (kg)
QYK2.0-100(E)	400~2000	0~100	500×600×1400	130
QYK3.0-100(C)	400~3000	0~100	630×760×1650	171
QYK3.6-150(C1)	400~3600	0~150	650×800×1700	180
QYK5.0-200(G)	400~5000	0~200	920×920×1600	220

QYBPK系列潜油泵专用中压变频控制柜主要技术参数

Specification of QYBPK Series ESP Medium Voltage Variable-speed Driver

额定输出 Rated output	过载能力Overload capability		额定电流的150%，运行1分钟(150% of rated current, run 1 minute)
	输出电压Output voltage		三相 0~1140V 或 0~2250V (Three-phase 0~1140V or 0~2250V)
输入Input	电压Voltage		690~1140V 或 1250~2300V (690~1140V or 1250~2300V)
	相数Phase number、频率Frequency		三相 50Hz (Three-phase 50Hz)
输出频率 Output frequency	设定 Setting	频率范围Frequency range	2~70Hz
		最高频率Max. frequency range	14~70Hz之间任意设定 (Setting between 14~70Hz)

潜油泵专用低压变频控制柜技术参数

Specification of ESP Low Voltage Variable Speed Driver(VSD)

Model	Rated voltage (V)	rated current (A)	overall dimension	Weight (kg)
QYBPK-0.4/90	0.4	163	1300 × 600 × 1800	150
QYBPK-0.4/110	0.4	202	1300 × 600 × 1800	170
QYBPK-0.4/132	0.4	240	1400 × 600 × 1800	200
QYBPK-0.4/160	0.4	340	1500 × 600 × 2000	250
QYBPK-0.4/200	0.4	370	1500 × 600 × 2000	300
QYBPK-0.4/250	0.4	477	1500 × 600 × 2000	420



潜油电泵变压器、接线盒

Transformer and Junction Box for ESP

QYSS 系列潜油电泵专用变压器为油浸自冷户外型，将电源提供的原边电压变换为潜油电泵所需要副边电压，可根据用户要求，提供带有低压绕组的变压器。

QYSS series transformer is specially designed for ESP system operation. The secondary winding with three-phase and output auxiliary output can be provided as per the request from customers.



QYZPS系列潜油电泵专用变压器主要技术参数表
QYZPS Series ESP Transformer Main Technical Parameters

型号 Type	额定容量 Rated capacity (KVA)	电压 Voltage (kV)		频率 Frequency (Hz)	外形尺寸 Dimension (mm)
		中压 Medium voltage	低压 Low voltage		
QYZPS —M	50 ~ 1000	0.8—3.3 30 档可调 30 Step adjustable	380 ~ 690	10 ~ 80	1690×1215×1560
					1726×1265×1612
					1766×1285×1646
		1816×1315×1710			
		1956×1345×1766			
		1986×1380×1866			

GJX系列接线盒技术参数
Specifications of GJX Series Junction Box

型号 Model	额定电压 Rated voltage (V)	额定电流 Amp (A)	尺寸 Dimension 长×宽×高 L×W×H		重量 Weight	
			(in × in × in)	(mm × mm × mm)	(lb)	(kg)
GJX3.0-100/2	3000	100	14×11×25	370×282×640	57	26
GJX3.0-100/H1	3000	100	23×10×30	600×260×760	68	31
GJX5.0-200/H2	5000	200	25×11×40	650×290×1010	77	35

潜油电泵井下测试系统

ESP Downhole Sensor

潜油电泵井下测试系统是具有高精度、高性能、智能化的数据采集、处理、显示功能的综合独立系统，本测试系统分为变频测试系统和工频测试系统两类，通过它可测试井下温度、压力最多7个参数。

ESP downhole monitoring system is an integrated independent test system with high-accuracy, high-performance and intelligent of data collecting, processing and display function. The system type includes variable speed and fixed speed. The sensor can test at most seven parameters which include downhole temperature, pressure, etc.

技术指标

- ◆ 压力测量：0~35Mpa
- ◆ 精度：1.0级
- ◆ 温度测量：0~120℃
- ◆ 精度：±2℃
- ◆ 重量：
 - 井下参数测量变送部分：≤10kg；
 - 井上二次仪表部分：≤10kg

Technical Specifications

- ◆ Pressure Measurement: 0~35Mpa
- ◆ Accuracy: Grade 1.0
- ◆ Temperature Measurement: 0~120℃
- ◆ accuracy: ±2℃
- ◆ weight:
 - Sensor: ≤10kg;
 - Readout: ≤10kg



动力电缆 ESP Cable

潜油动力电缆分为圆电缆和扁电缆两种，由导体、绝缘层、护套层、阻挡层和铠装层组成。根据潜油电机不同的功率要求及不同的油井条件，动力电缆有不同的规格型号。按其耐温性能分为90℃、120℃、150℃、180℃、204℃、232℃、250℃等温度等级；按电压等级分为3kV、6kV；按电缆耐腐蚀能力可采用镀锌钢带、不锈钢钢带或蒙乃尔钢带铠装。产品制造和检验执行GB/T16750、IEEE、API标准。

ESP cable is divided into round cable and flat cable. The cable consists of conductor, insulating layer, jacket and cable armor. According to the different requirements of power and different condition of oil well, there are different specifications of cable. There are 90℃, 120℃, 150℃, 180℃, 204℃, 232℃ and 250℃ according to temperature rating; there are 3kV and 6kV according to voltage rating. To prevent it from being damaged, we usually use galvanized steel armor, stainless steel armor or monel armor for corrosive medium. All of products are produced and tested complying with national standard GB/ T16750, IEEE or API Recommended Practice.



型 号 Model	工作温度 Working Temperature (!)		额定电压 Rated Voltage (kV)	导体截面积 Conductor Cross Section (mm ²)	线规 (AWG)
	最低 The lowest	最高 The highest			
QYPEF	-40	90	3 6	42 33 20 16 13 10	1# 2# 4# 5# 6# 7#
QYPN	-30	90			
QYPF	-30	90			
QYPEN	-40	120			
QYEN	-40	150			
QYEQ	-40	120 ~ 232			
QYF2F	-40	250			
QYPNY	-30	90			
QYENY	-40	120			
QYEEY	-40	150 ~ 232			
QYEQNY	-40	120			
QYEQEY	-40	150 ~ 232			



QYPN



QYEQ



QYEQNY



QYEQ



QYPNY



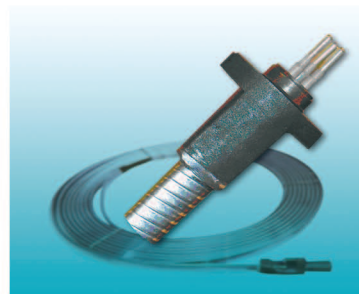
QYENY

引接电缆

Motor Lead Extension (MLE)

引接电缆用于井下潜油电泵机组与潜油动力电缆的过渡连接。按照电缆耐温性能可分为120℃、204℃、232℃、250℃；按照电缆耐腐蚀能力可分为镀锌钢带、不锈钢钢带或蒙乃尔钢带铠装。

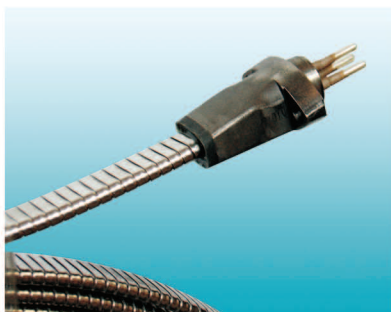
引接电缆头是潜油电机与潜油动力电缆连接的重要部件。电缆头可与各种系列电机配套使用，分为114、116、138，并可于Reda375、456、540、562及森垂系列电机电缆头兼容。



The motor lead extension is used to link the power cable and the motor. There are different temperature grade, for example 120℃, 204℃, 232℃, 250℃. We provide galvanized steel armor, stainless steel armor or monel armor for corrosive medium.

The MLE pothead is a key part to connect the motor with the power cable. The pothead types include 114, 116, 138, and are compatible with Reda 375, 456, 540, 562 and Centrillift series, etc.

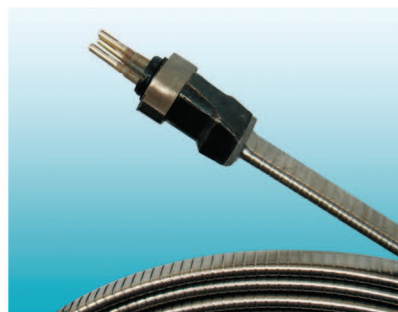
型 号 Model	线规 (AWG)	导体截面积 Conductor Cross Section (mm ²)	导体根数/直径 Number / Diameter n/D	耐温等级 Temperature (℃)	额定电压 Rated Voltage (kV)
QYJYEQ	4#	20	1/5.19	120 204 232 250	3 6
	5#	16	1/4.62		
	6#	13	1/4.12		
	7#	10	1/3.6		
QYJYF2F	4#	20	1/5.19		
	5#	16	1/4.62		
	6#	13	1/4.12		
	7#	10	1/3.6		



114电缆头pothead



116电缆头pothead



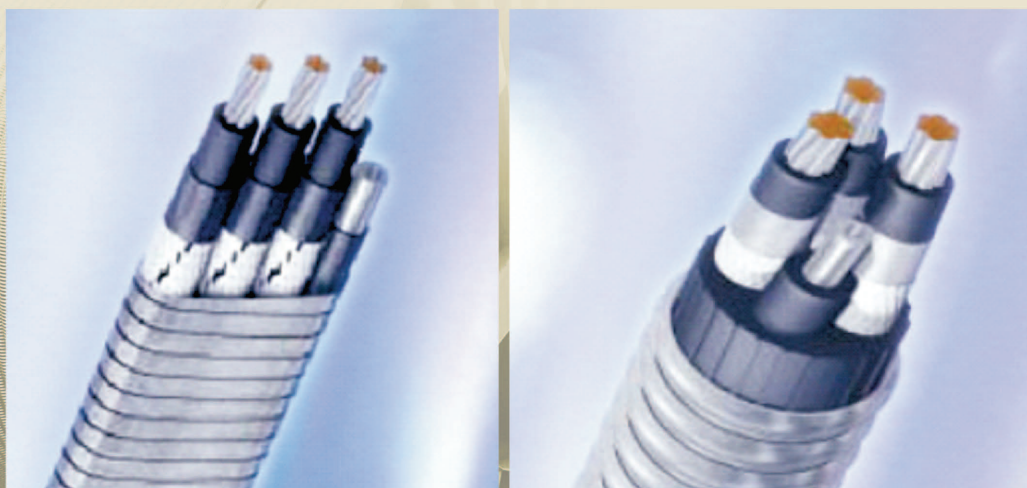
138电缆头pothead

注剂电缆 Capillary Cable

注剂电缆是由潜油动力电缆和一根连续的金属管组合而成。此根金属管线主要用于给油气井注入化学药剂。

Capillary cable consists of three phase power lines and a continuous string of metal pipe which are integrated armored. Chemical additives can be injected into downhole through the metal pipe.

序号 Item	规格 Specification
1	$\Phi 1/8'' \times 0.035''$
2	$\Phi 1/4'' \times 0.035''$
	$\Phi 1/4'' \times 0.049''$
3	$\Phi 3/8'' \times 0.035''$
	$\Phi 3/8'' \times 0.049''$
4	$\Phi 1/2'' \times 0.035''$
	$\Phi 1/2'' \times 0.049''$

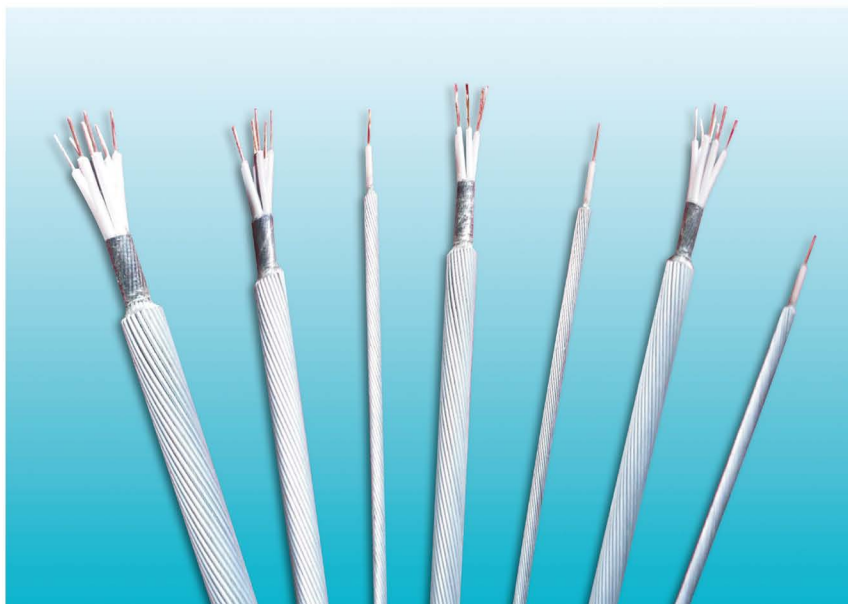


石油测井电缆 Logging Cable

主要用于各种油气井的测井、射孔、取芯作业，也可用于海洋调查和河流、港湾、水利水文测量，以及煤田地质勘探、低热测井等方面，具有抗干扰性能。

It is applicable to the logging, perforation, coring of various oil wells, marine investigation, surveying of river, harbor and irrigation works and coalfield geological exploration etc.

序号 Item	绝缘材料 Insulating material	使用温度 Operating temperature
1	改性聚丙烯 (PP) PP insulation	-30℃ ~ 150℃
2	氟塑料 (F ₄₆)	-50℃ ~ 250℃



防盗电缆 Special Cable

防盗电缆是针对野外油井地面电缆易被盗这一特殊情况而开发研制的新型电缆。其能够承受较强机械外力，从而大大增强了对盗割电缆的防范作用。主要用于油井地面输电线路连接，即：电源、控制柜和变压、变频设备之间的线路连接。

The new type is capable to stand strong outside mechanical force. It is applicable to the surface power connection, i.e. power source, control panel, transformer and VSD.



海底电缆

Marine Cable

海底电缆主要敷设于海底、湖底或其它水域下，用于两岸、岛屿、水上平台或其它电力设备之间传输电能。它主要分乙丙橡胶（EPDM）绝缘和交联聚乙烯绝缘（XLPE）两大类，结构有三芯、四芯海底电缆及多芯复合海底电缆。

Submarine cable is applicable to transmit power source among islands, offshore platforms and other electric equipments by laying at submarine, lake and other water areas. It has two types of insulation: EPDM and XLPE, structures three-core, four-core and multi-core composited submarine cables.



产品规格及生产能力
Specifications and Production Capacity

规格 Gauge	电压 Voltage (kV)	直径 Diameter (mm)	规格 Spec.	电压 Voltage (kV)	直径 Diameter (mm)
3×70	8.7/10	71	3×70	6/6	66
3×95	8.7/10	74	3×95	6/6	70
3×120	8.7/10	77	3×120	6/6	73
3×150	8.7/10	81	3×150	6/6	76
3×185	8.7/10	84	3×185	6/6	80
3×300	8.7/10	94	3×300	6/6	89

电力电缆 Electricity Cable



电缆型号、规格、名称
Specifications

型号 Type	名称 Description	芯数、规格 Core wire number and gauge	电压 Voltage	适用环境 Environment of application
YJV YJLV	交联聚乙烯绝缘，聚氯乙烯护套电力电缆 XLPE insulated,PVC sheathed power cable	1-5芯 1.5-240mm ²	0.6/1 1.8/3 3.6/6 6/10 8.7/15	适用于室内、隧道、电缆沟及管道中，也可埋在松散的土壤中，不能承受外部机械力，可承受一定的拉力。 Can be used in interior, cable trench and lay in loose soil, can not stand the funtion of mechanical outside force and definite tension.
YJY YJLY	交联聚乙烯绝缘，聚乙烯护套电力电缆 XLPE insulated,PE sheathed power cable			适用于室内、隧道、电缆沟及地下直埋敷设，能承受机械外力作用和一定的拉力。 Can be used in interior, cable trench and lay directly, can stand the funtion of mechanical outside force and definite tension
YJV22 YJLV22	交联聚乙烯绝缘，钢带铠装，聚氯乙烯护套电力电缆 XLPE insulated, steel tapes armoured , PVC sheathed power cable			
YJV23 YJLV23	交联聚乙烯绝缘，钢带铠装，聚乙烯护套电力电缆 XLPE insulated, steel tapes armoured , PE sheathed power cable			
YJV32 YJV32	交联聚乙烯绝缘，细钢丝铠装，聚氯乙烯护套电力电缆 XLPE insulated,thin steel strings armoured ,PVC or PE sheathed power cable			
YJV33 YJLV33	交联聚乙烯绝缘，细钢丝铠装，聚乙烯护套电力电缆 XLPE insulated, thin steel strings armoured , PE sheathed power cable			
YJV42 YJLV42	交联聚乙烯绝缘，粗钢丝铠装，聚氯乙烯护套电力电缆 XLPE insulated, thick steel strings armoured , PVC sheathed power cable			
YJV43 YJLV43	交联聚乙烯绝缘，粗钢丝铠装，聚乙烯护套电力电缆 XLPE insulated, thick steel strings armoured , PE sheathed power cable			

电力电缆

Electricity Cable

型号 Type		名称 Description	电压等级 Voltage rank (kV)	芯数 Core No.	标称截面 Nominal cross section (mm ²)
铜芯 Copper	铝芯 Aluminium				
VV VY	VLV VLY	聚氯乙烯绝缘, 聚氯乙烯或聚乙烯护套电力电缆 PVC insulated, PVC or PE sheathed power cable	0.6/1 1.8/3	1.5	1.5—240
ZR-VV ZR-VY	ZR-VLV ZR-VLY	聚氯乙烯绝缘, 聚氯乙烯或聚乙烯护套阻燃电力电缆 PVC insulated, PVC or PE sheathed anti-burns power cable			
VV22 VV23	VLV22 VLV23	聚氯乙烯绝缘, 钢带铠装, 聚氯乙烯或聚乙烯护套电力电缆 PVC insulated, steel tapes armoured, PVC or PE sheathed power cable			
ZR-VV22 ZR-VV23	ZR-VLV 22 ZR-VLV23	聚氯乙烯绝缘, 钢带铠装, 聚氯乙烯或聚乙烯护套阻燃电力电缆 PVC insulated, steel tapes armoured, PVC or PE sheathed resistance burning power cable			
VV32 VV33	NH-VLV32 NH-VLV33	聚氯乙烯绝缘, 钢丝铠装, 聚氯乙烯或聚乙烯护套电力电缆 PVC insulated, steel strings armoured, PVC or PE sheathed power cable			
ZR-VV32 ZR-VV33	ZR-VLV32 ZR-VLV33	聚氯乙烯绝缘, 钢丝铠装, 聚氯乙烯或聚乙烯护套阻燃电力电缆 PVC insulated, steel strings armoured, PVC or PE sheathed resistance burning power cable			

水力泵包括水力活塞泵和水力喷射泵，属液压传动装置。系统包括地面动力泵和井下机组两大部分。地面动力泵可多台集中安装，同时为多井提供动力液。也可以单台撬装，为单井提供动力源。井下机组包括沉没泵和工作筒两部分。沉没泵可液力起下，维修方便。

Hydraulic pump includes hydraulic piston pump and hydraulic jet pump which are drove by power fluid with high pressure. Hydraulic pumping system includes surface power pump and downhole pump equipment. The surface pump can be station-installed or solo skid-mounted, to supply power fluid for single downhole pump or multiple downhole pumps. The downhole pump unit includes free pump and mandrel. The free pump can be easily pulled and run by power fluid for replacement.

水力活塞泵

Hydraulic Piston Pump

水力活塞泵由往复运动的双作用液马达和双作用泵组成。通过不同直径的活塞组合，可适应排量和扬程的不同要求。水力活塞泵对于深井、斜井、高凝固点、高粘度原油井的生产有很好的适应性。也可用于油井产能测试。

Hydraulic piston pump consists of a double acting hydraulic pump and a double acting hydraulic engine. It can meet the different requirement of capacity and head depending on the different sizes of pistons. Hydraulic piston pump is applicable to deep well, slant well, high solidifying point and high viscosity crude oil well etc. Also, it can be used for well testing.



水力活塞泵技术参数

Specifications of Hydraulic Piston Pump

序号 Serial No.	(1)	(2)	(3)	(4)	(5)	(6)
泵型 Model	SHB 2.5×20/20	SHB 2.5×30/20	SHB 2.5×10/20	SHB 2.5×6/20	SHB 2.5×5/25	SHB 2.5×4/30
项目 Item						
动力液系统 Power fluid system	开式 OPF	开式 OPF	开式 OPF	开式 OPF	开式 OPF	开式 OPF
油管内径 Tubing I.D (mm)	62	62	62	62	62	62
井下安装 Downhole installations	单管柱 single plunger	单管柱 single plunger	单管柱 single plunger	单管柱 single plunger	单管柱 single plunger	单管柱 single plunger
最大额定速度 Max. rated speed (SPM)	58	53	58	58	58	53
最大扬程 Max. head (m)	2000	2000	2000	2500	3000	3500
额定排量 rated capacity (m ³ /d)	199.1	300.9	99.6	60.2	50.4	40.5
动力液耗量 Rated consuming volume of power fluid (m ³ /d)	172	260	136.3	205.2	133	122.6
面积比 P/E Ratio	1.166	1.166	0.734	0.734	0.706	0.59
泵的最大外径 Free pump Max. O. D (mm)	59	59	59	59	59	59
泵的长度 Pump Length (mm)	3415	4395	3415	4395	3415	3415
井下工作筒尺寸 Mandrel dimension (mm)	最大外径 Max. O. D	114	114	114	114	114
	最小内径 Min. I. D	50	50	50	50	50
	长度 Length	3965	4945	3965	4945	3965
套管最小内径 Casing Min. I. D (mm)	124	124	124	124	124	124

水力喷射泵

Hydraulic Jet Pump

水力喷射泵采用负压原理抽吸井液，由于无运动件，井下机组有较长的工作寿命。水力喷射泵对于偏磨井、定向井、水平井和海上丛式井的应用有良好的适应性。利用动力液的热力及化学特性水力喷射泵适合高凝油井、稠油井、高含蜡井的开采。也可用于油井产能测试和油井排砂。

Hydraulic jet pump is designed on Venturi Principle to pump well fluid. It has a long run life as no moving parts in downhole equipment. Hydraulic jet pump is applicable to deflective grinding well, directional well, horizontal well and offshore cluster well. By using the heat and chemical characteristics of power fluid it is also applicable to high solidifying oil, heavy crude oil and high wax wells. Also, hydraulic jet pump can be used to test well and pump the well fluid with high sand content.



水力喷射泵技术参数

Specifications of Hydraulic Jet Pump

规格型号 Model	SPB2.5-I	SPB2.5-II
项 目 Item		
沉没泵外型尺寸 Submersible pump size (mm×mm)	Φ62×3415	Φ62×1274
沉没泵质量 Submersible pump weight (kg)	42.5	17.9
工作筒外型尺寸 Mandrel size (mm×mm)	Φ114×3965	Φ114×1500
工作筒最小通径 Min. I.D of mandrel (mm)	Φ50	Φ50
工作筒质量 Bottom hole wellbore weight (kg)	105	75
喷嘴直径 Nozzle dia. (mm)	Φ1.9~6.0	Φ1.9~Φ6.0
喉管直径 Throat dia. (mm)	Φ4.5~Φ11.0	Φ4.3~Φ11.0
扬程范围 Head range (m)	取决于地面动力压力	
排量范围 Capacity range (m ³ /d)	0~250	0~250
适用油管内径 Tubing I.D (mm)	Φ62	Φ62
适用套管内径 Casing I.D (mm)	≥Φ127	大于或等于 4.5" 套管
适用温度 Temperature (°C)	≤120	≤120

序号 No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
名称 Items														
喷嘴直径 Nozzle dimension (mm)	2.4	2.5	2.6	2.7	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.5	4.8	5.0
喉管直径 Throat dimension (mm)	4.0	4.2	4.4	4.5	4.8	5.0	5.3	5.8	6.0	6.4	6.8	7.2	7.8	9.8

潜油电动螺杆泵

Electric Submersible Progressive Cavity Pump

潜油电动螺杆泵从根本上排除了有杆螺杆泵在原油开采中的抽油杆断脱和在深井、斜井中使用受到限制的问题。潜油电动螺杆泵没有阀体和复杂流道，水力损失少，介质连续吸入和排出，不易砂卡，也不易产生气锁，因此泵传送液体的种类范围较宽，包括高粘度、高含蜡油、含砂、含气原油。

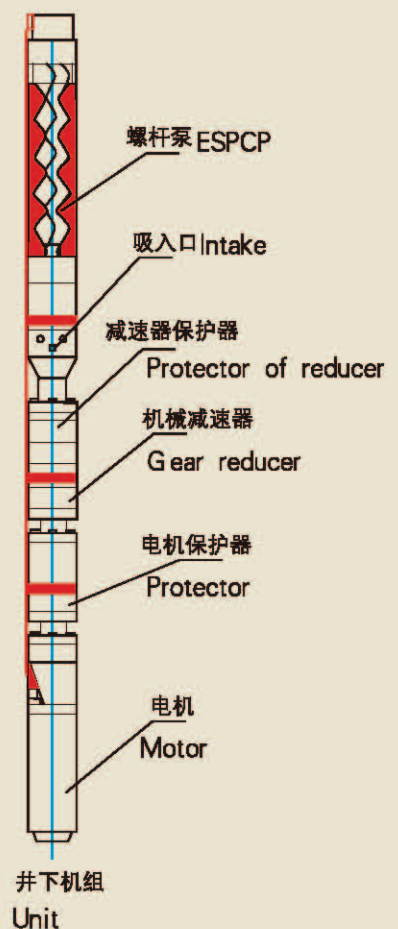
ESPCP fundamentally eliminates the problem of rod screw pump such as: the rod broke and limited by the deep and deviated wells. it also overcome the problem that the pump efficiency is low when the pump transports viscosity crude. For ESPCP has no valve body and complex runner, little hydraulic loss, sucks and exhausts medium continually, uneasy to be blocked by sand and gas lock, so the fluid transported by pump has wide range which includes high viscosity, high wax content oil, sand or gas content oil.

特点

- ◆ 适合于开采粘度高、含固相的流体
- ◆ 不易发生气锁，具有破乳作用
- ◆ 抽汲连续平稳
- ◆ 适用于直井、斜井、水平井，尤其适用于杆管偏磨井
- ◆ 无抽油杆，消除了因杆管磨损带来的损失
- ◆ 节能降耗

Features

- ◆ Suitable for pumping high viscosity fluid and solids fluid
- ◆ Anti-gaslocking and demulsifying
- ◆ The pumping process is continuous and stable
- ◆ Suitable for vertical, deviating, horizontal well, specially suitable for the well which has the sucker rod scrubbed the tube
- ◆ No sucker rod, to eliminate the loss caused by the rod wear
- ◆ Save energy compared with the sucker rod pump



性能参数

排量: 10~150 m³/d

扬程: 小于 1800m

工作温度: ≤150℃

Technical Parameters

Capacity: 10~150m³/d

Head: Max 1800 m

Operating temperature: ≤150℃

电动潜油螺杆泵性能参数表

Specifications of ESPCP

型 号 Type	扬 程 Head (m)	排 量 Capacity (m ³ /d)				最大外径 Max. OD (mm)
		158rpm	285rpm	335rpm	356rpm	
QYLB28-27	1000	6.4	11.5	13.5	14.4	89.5
QYLB28-40	1500	6.4	11.5	13.5	14.4	89.5
QYLB40-20	800	9.1	16.4	19.3	20.5	89.5
QYLB40-42	1600	9.1	16.4	19.3	20.5	89.5
QYLB65-35	1300	14.8	26.2	31.3	33.3	102
QYLB75-16	550	17.1	30.7	36.2	38.4	107
QYLB75-27	1000	17.1	30.7	36.2	38.4	89.5
QYLB75-40	1500	17.1	30.7	36.2	38.4	107
QYLB75-47	1800	17.1	30.8	36.2	38.5	108
QYLB80-33	1200	18.2	32.8	38.6	41	102
QYLB90-25	1000	20.5	37	43.5	46.2	108
QYLB100-55	1800	22.8	41	48.2	51.3	108
QYLB120-14	500	27.3	50	57.9	61.5	107
QYLB120-27	1000	27.3	50	57.9	61.5	107
QYLB120-36	1300	27.3	50	57.9	61.5	108
QYLB140-30	1200	31.9	57.5	67.5	71.8	114
QYLB190-33	1200	43.3	78	91.7	97.4	107
QYLB200-27	1000	45.8	82	96.5	103	114

注水电泵机组

Water Injection ESP Unit

注水电泵机组主要解决在开发一些低、小、难、偏的区块和油层中遇到的一个关键问题——注水。以满足对边缘井、低渗透井的增注需要。解决同井不同层位间的采水、注水问题。也可以用在海上平台上的注水。注水电泵机组可实现分层注水（采上注下或采下注上）、同井采注、排水采气等功能。

注水电泵机组从上至下依次为电机、保护器、泵的顺序连接。泵下部直接与底部油管相连接。

Water Injection ESP unit resolves injection problem on producing low, small, difficult and remote formation and reservoir to meet boost the injection in margin well and low permeability well, the water production and injection problem at different formations in same well. It is applicable to inject water on offshore platform, and functions to inject water at different formation, produce and inject water, exhaust water and produce gas in the same well.

The unit contains (from top to bottom) motor, protector and pump. The lower end of pump connects to bottom tubing.

主要技术指标

潜油电泵注水量: 30~500 m³/d

增注压力: 5~28 MPa

电机功率: 5~110 kW

适用套管类型: 5"、5½"、7"

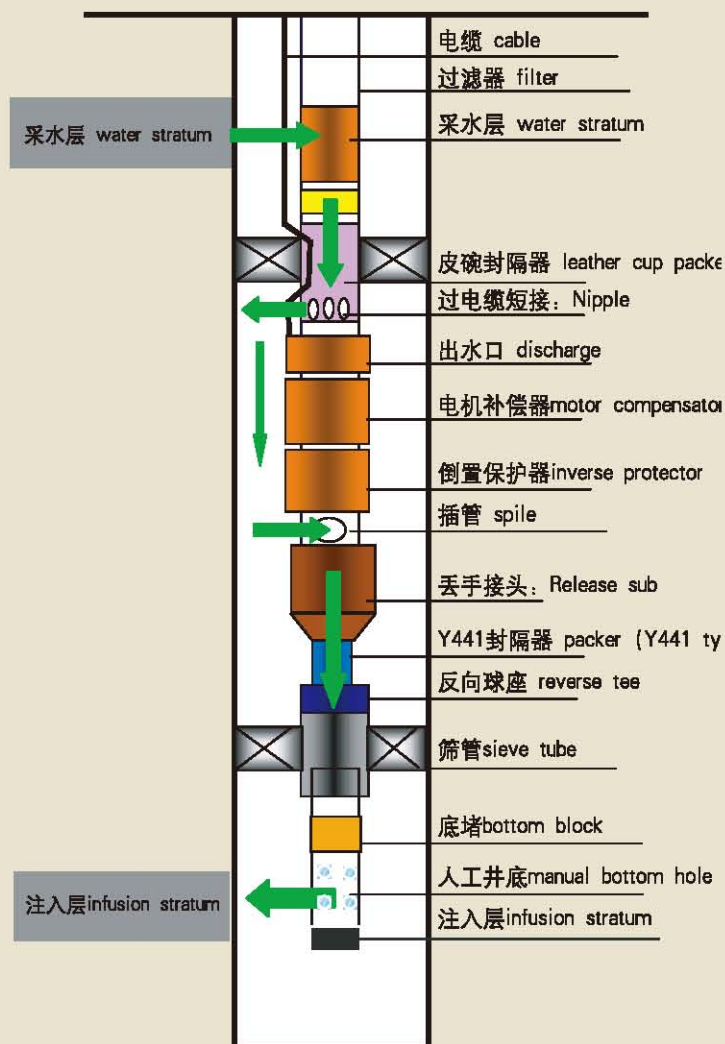
Parameters

ESP Injection Volume: 30~500m³/d

Boosting Injection Pressure: 5~28 MPa

Motor Power: 5~110kW

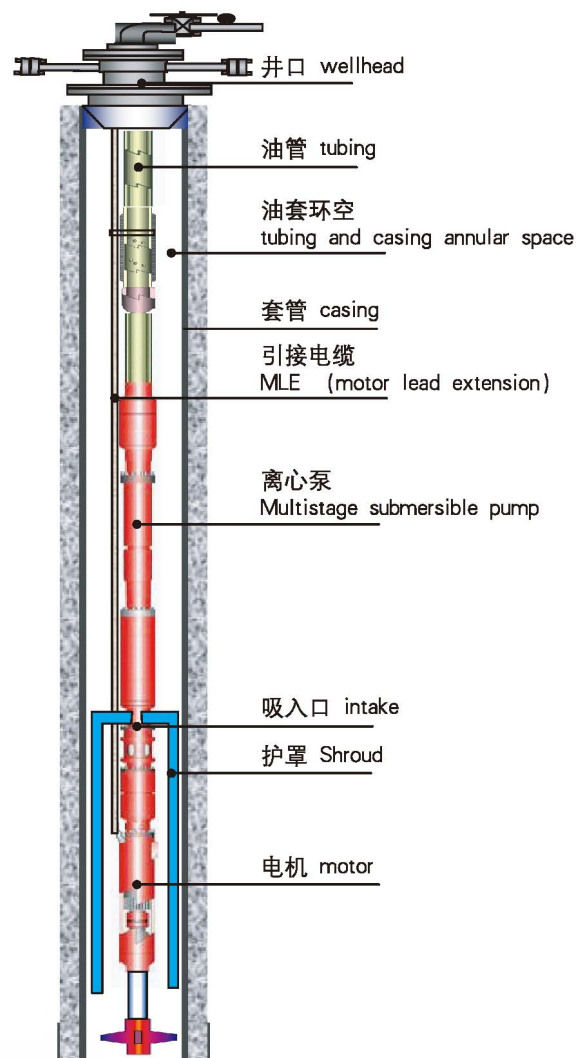
Casing Size: 5", 5½", 7"



带护罩潜油电泵机组 Shrouded ESP Units

护罩是电潜泵应用工艺中保护潜油电机正常运转的一种装置。就是将离心泵吸入口、潜油电机及其保护器置于一金属罩内，迫使井液和井口注入液从护罩下端流经潜油电机进入离心泵吸入口。

Shrouded ESP unit is equipped to protect the motor from running abnormally. Shrouded ESP unit puts intake, motor and seal into a metal shroud, forcing well fluid and wellhead injection fluid to flow from the bottom of shroud into the pump intake via motor.



主要性能

加大流经潜油电机井液的流速，有利于冷却潜油电机和延长机组的运转寿命；

减少了进入离心泵内的气体，达到防止气锁，保证潜油电泵机组正常运转的目的；

在单套管底部密封的口袋井中安装带护罩潜油电泵机组，可对低压来水实施无泄漏增压注水。

Features

Speed up the flow velocity of well fluid passing the motor to cool the motor, and prolong the runlife of the whole units

Decrease gas volume entering into the pump to prevent gas lock and ensure the whole unit run normally.

Boost low pressure water to inject without leakage when installed in pocket well with single casing bottom seal .

定向井用潜油电泵机组

ESP Units for Directional Well

采用特殊设计，机组适用于油井最大造斜率不大于 $9^{\circ}/30\text{m}$ ，工作段最大井斜 75° 。

It is specially designed for the wells with Max. dog leg not more than $9^{\circ}/30\text{m}$, Max. hole deviation 75° of active section.

水平注水泵

Horizontal Water Injection Pump

水平注水泵是将地面电机、密封装置、多级离心泵等部件水平撬装，主要用于注水、原油输送、为井下水力泵提供动力液等。

水平注水泵具有初始安装成本低，现场可以快速安装，由于没有皮带或齿轮减速，采用机械密封作为主要的密封形式，具有使用寿命长、维修费用低、现场维护方便等优点。

Horizontal pump system, consisting of surface motor, seal section and multistaged centrifugal pump, is horizontally skid mounted for water injection, oil transport and providing the power fluid for downhole hydraulic pump. The system has the advantages of low initial installation cost, quick field installation as well as long life, lower repair and maintenance cost.

服务范围

Scope of Service

- ◆根据用户要求提出合理的选井选泵方案
 - ◆承担陆地、海洋各种油井电泵施工任务
 - ◆提供高含气、高温、大斜度等电泵故障井技术咨询与解决方案
 - ◆根据用户需求提供专门技术服务
 - ◆为用户提供技术培训服务
-
- ◆Provide reasonable well analysis and pump selection proposal as per customer's request
 - ◆Carry out ESP operation on-shore and off-shore
 - ◆Work out technical consultation and solution on ESP faults in high gas content, high temperature and large deviated wells
 - ◆Provide special technical service based on users' demands
 - ◆Make technical training

服务形式

Cooperation Method

- ◆售后服务——协助用户选井选泵、电泵施工、开机投产、故障处理、巡回指导、技术培训、信息反馈
 - ◆合作开发——单井区块承包、实现风险共担、利益共享
 - ◆设备租赁——为用户提供设备租赁服务
-
- ◆ After-sale service——Assist the user for pump sizing, installation, commissioning, troubleshooting, training and information feedback.
 - ◆ Cooperation and development——Contract for block, share the risk and benefit.
 - ◆ Equipment lease service——provide ESP lease service



服务能力

Service Ability

- ◆取得ISO9001等质量体系认证和各种专业认证，具有在国际市场技术服务资质
- ◆拥有一支由高中级专业人员组成的技术服务队伍
- ◆拥有为10余个国家电泵用户成功提供技术合作与服务的经验
- ◆拥有满足各种场合需求的服务设施和工具

◆ISO 9001 Quality System Certificate and other specialized certificates; To provide technical service for international market

◆Professional service team

◆Rich experience to provide technical service to ESP users of more than 10 countries

◆The complete service facilities and devices available to different well conditions



承诺

Guarantee

- ◆ 产品性能、检测及应用满足中国国家标准及相关的API推荐标准
 - ◆ 技术服务遵守用户及本公司的QHSE管理体系
 - ◆ 根据合同及时提供产品及服务
 - ◆ 按照用户要求，最大限度地维护用户的利益
-
- ◆ The product performance, inspection and application meet national standards and API recommendation practices
 - ◆ The technical service comply with QHSE management system of RPI and customers
 - ◆ The product and service strictly comply with the contract
 - ◆ The customer's satisfaction and benefit are priority

服务保障

Service

- ◆ 建立信息反馈网络
 - ◆ 提供初期安装技术服务
 - ◆ 设立售后服务办事处
 - ◆ 建立维修基地
 - ◆ 进行专家技术交流
-
- ◆ Establish service feed-back information network
 - ◆ Provide initial installation and technology service
 - ◆ Set up sales office
 - ◆ Establish servicing base or workshop as per the contract
 - ◆ Technical communication between both sides



The background of the entire image is a vibrant, high-contrast photograph of a sunset or sunrise. The sky is a deep orange and yellow, with wispy clouds catching the low light. The horizon line is dark, showing the silhouette of the ocean. A small, distant boat is visible on the horizon. The text is centered in the upper half of the image.

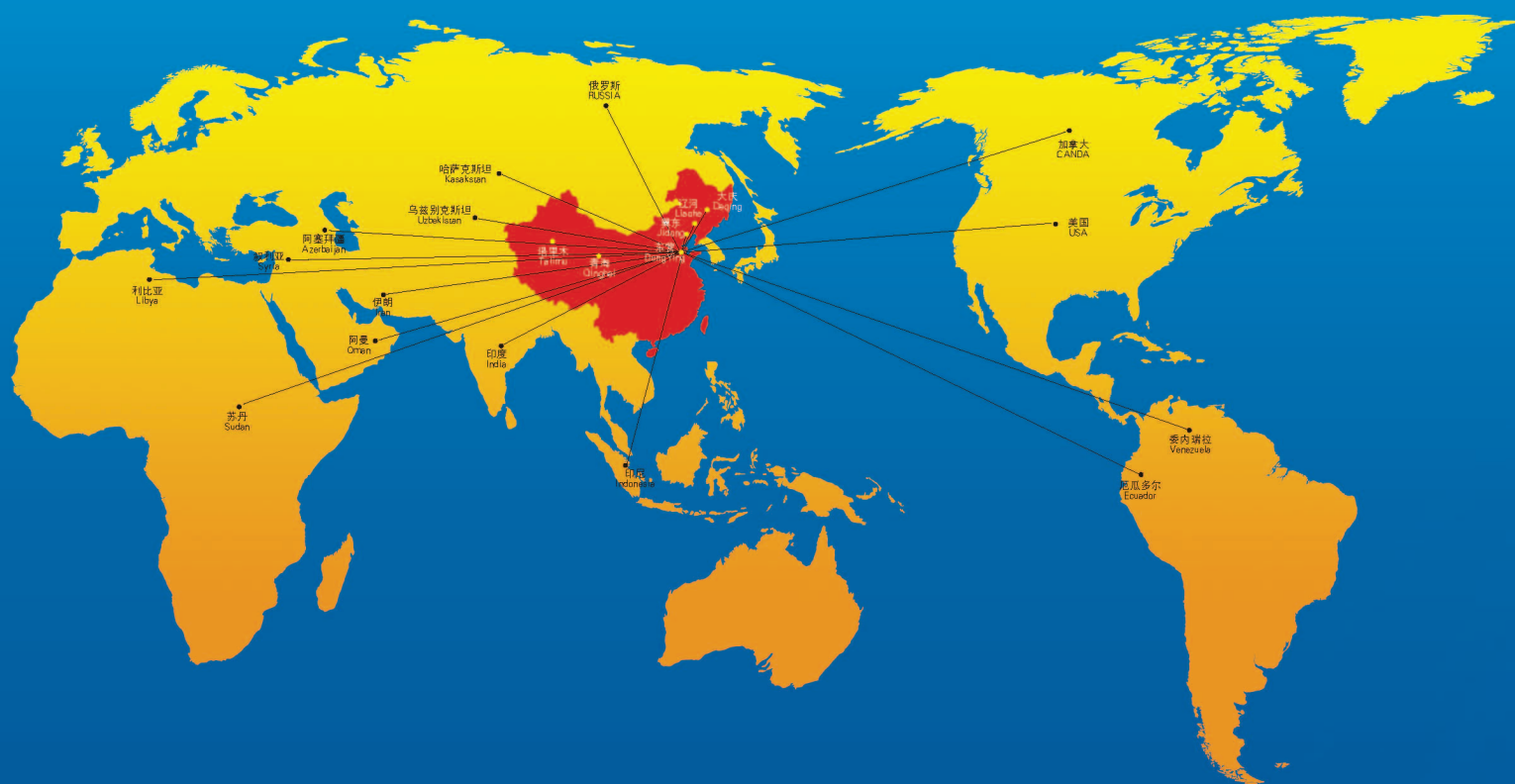
走 创 新 之 路

Create a Century Enterprise

铸百年泵业

with Technology Innovation





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