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High quality leading to good faith

Well-deserved reputation creating worthy cause

采油作业工具及装备
TOOLS AND EQUIPMENT FOR
OIL PUMPING OPERATION

扬州市驰城石油机械有限公司
YANGZHOU SHI CHICHENG PETROLEUM MACHINERY CO., LTD

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YANGZHOU CHICHENG TO CREATE THE FUTURE

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公司简介

BRIEF INTRODUCTION

扬州市驰城石油机械有限公司地处历史悠久的文化名城扬州，位于瓜洲古渡扬州高新区建华工业园。

公司创建于2002年初，公司注册资金4500万元，建筑面积20000M²，是集生产制造、市场开发、新产品研发及技术服务为一体的综合性现代化企业。公司依据自身的技术优势与石油院校及科研单位联手合作，具有较强的技术开发实力和生产规模。现拥有国内先进的数控加工中心及先进的检测设备。公司获得“江苏省高新技术企业”、省级石油钻采机械工程技术研究中心。

公司主要从事石油机械及环保装备、钻采工具、井下作业工具及配件、A2级中低压容器、井口装置和采油树、节流压井管汇、泥浆循环系统及钻井液泥浆不落地处理装置生产制造和销售及新材料开发研制、井下作业工程及环保技术的服务，多种产品荣获国家专利和江苏省高新技术产品。公司已获得中国石油化工股份有限公司、中国海洋石油股份有限公司、中国石油股份有限公司一级网络供应商，产品配套销往美国、加拿大、厄瓜多尔、巴西、阿根廷、印度、也门、埃及、叙利亚、玻利维亚、泰国等用户市场，产品的质量赢得了市场用户的良好赞誉。公司通过与国际外贸公司的合作，驰城产品已进入国际市场，并获得广大客户的一致认可。2014年10月，公司顺利通过了世界500强企业壳牌石油公司的审核认证，和中海油、壳牌中国勘探与生产有限公司建立了战略合作联盟，为我公司发展海外市场拓展了道路。

公司已通过ISO9001质量管理体系和ISO14001、ISO18001及HSE健康安全环境体系认证，并获得美国石油学会API Spec 5DP；API Spec 7-1；API Spec 11D1；API Spec 7K；API Spec 16C；API Spec 6A等技术规范会标认证证书。连续多年被评为“AAA级重合同、守信用企业”和“AAA级资信等级”。公司获得江苏省研究生工作站、江苏省标准化编委委员、扬州大学产学研基地、华东石油技师学院实训基地等。

公司现有专业技术人员50名，其中引进博士生2名，硕士研究生6名。

公司以“质量开拓市场，服务创造未来”为宗旨，“秉承以人为本、科技发展、持续改进、铸就精品”为经营理念，紧密结合市场的需求，不断开发研制出科技含量高的新产品，做到客户的需求就是我们的追求。驰城公司以一流的管理，一流的设备，一流的服务，诚邀各界携手共谋发展，共创辉煌！

Yangzhou Chicheng Petroleum Machinery Co., Ltd. is located in the famous cultural city of Yangzhou with a long history, and specifically, in Jianhua Industrial Park, Yangzhou High-tech Industrial Development Zone and near Guazhou Ancient Ferry.

With the registered capital of ¥45 million and the building area of 20,000m², the company, which was established at the beginning of 2002, is a modern integrated enterprise engaged in manufacturing, market development, research and development of new products, and technical services. It has partnered with petroleum colleges and research institutes by virtue of its own technical advantages, and thus has a strong R&D strength and a large production scale. Now, it has an advanced numerically controlled processing center and a number of advanced testing instruments. It is recognized as a provincial-level high-tech enterprise with a provincial-level research center for oil drilling and production mechanical engineering.

Yangzhou Chicheng is mainly engaged in the manufacturing and sale of petroleum machinery, environmental protection devices, drilling and production tools, downhole operation tools and fittings, A2 medium- and low-pressure vessels, wellhead and Christmas tree, choke and kill manifolds, mud circulation system, and off-the-ground mud treatment system, the development of new materials, and the provision of technical services regarding downhole operations and environmental protection. Many of its products have been patented at home and are regarded as provincial-level high-tech products. Now, it is a first-tier supplier of Sinopec, CNOOC, and CNPC. Its products are sold to US, Canada, Ecuador, Brazil, Argentina, India, Yemen, Egypt, Syria, Bolivia, Thailand, etc., and have received high praise from its customers for high quality. Through cooperation with an international trade company, Chicheng's products have entered overseas markets and have received wide recognition. In October 2014, it was successfully awarded certification by Shell, a Fortune 500 company, and joined with CNOOC and Shell China Exploration and Production Company to form a strategic cooperation league, therefore giving us a channel for our developing overseas markets.

The company holds certifications in terms of ISO 90001 (quality management system), ISO 14001, ISO 18001, and HSE system as well as logo certificates of API's specs subcommittees such as API 5DP, API 7-1, API 11D1, API 7K, API 16C, and API 6A. It has been given the title of AAA Trustworthy Enterprise and the AAA credit rating for many years running. In addition, it plays the roles as follows: Jiangsu Provincial postgraduate workstation, Jiangsu Provincial Standard Preparation Committee member, production, teaching, and research base of Yangzhou University, training base of East China Institute of Petroleum Technicians, etc.

At present, it has 50 professional technicians including two ones holding the doctor's degree and six ones holding the master's degree.

Keeping in mind the tenet that market development depends on quality and shaping of future depends on service and the business philosophy consisting of human orientation, technological innovation, continual improvement, and fine quality and according to the market demand, the company has developed new high-tech products continuously. To meet customer needs is just our pursuit. With first-class management, equipment, and service, Yangzhou Chicheng invites friends from all walks of life in good faith to cooperate to shape a win-win future!





企业文化 CORPORATE CULTURE

企业用人文化：广纳贤才 重视人才 讲究品质 注重安全 遵章守纪

企业发展文化：科技创新 顺应时势 产业升级 做精做强

企业经营文化：真诚对人 信誉待客 共同发展

企业品牌文化：质量开拓市场 服务创造未来

企业质量文化：秉承精确 铸就精品 客户的需求和满意就是我们的追求

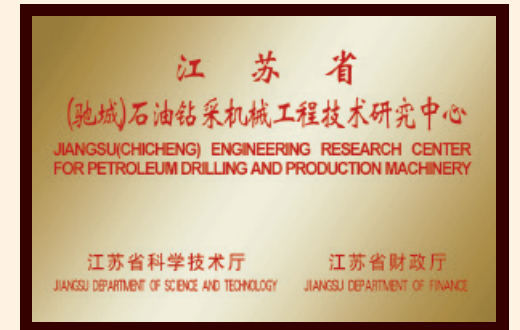
企业管理文化：目标管理 规范流程 质量至上 效益优先

- Employing culture:** Recruiting qualified talents, focusing on talents, paying attention to qualification, stressing security, observing regulations and discipline
- Development culture:** Making technological innovation, conforming to the trend, devoted to industrial upgrading, striving for better and stronger
- Operating culture:** Sincere and honest in dealing with others and seeking common development
- Brand culture:** Quality develops market and service creates future
- Quility culture:** Adhering to the preciseness requirement, producing quality goods, clients' demand is the Company's needs
- Manage culture::** Target management, standard process, quality first, profit uttermost

CHICHENG PETROLEUM MACHINERY
CORPORATE CULTURE

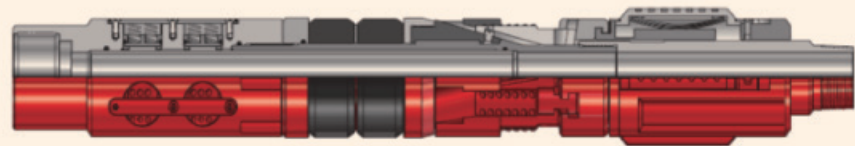


公司荣誉 COMPANY HONOR





RTTS 封隔器
RTTS Packer



一、概述
用于压裂、酸化、测试和挤水泥作业，卸掉水力锚改为测试接头可进行测试作业。

二、产品执行标准：API Spec 11D1

三、工作原理
下井时，摩擦块在弹簧作用下始终与套管内壁紧贴，凸耳在J形换位槽短槽的下端，胶筒处于自由状态；当封隔器下到预定位置时，先上提管柱，使凸耳到短槽的上部位置，右旋管柱1-3圈，在保持右旋扭矩的同时，下放管柱加压缩负荷。由于右旋管柱使凸耳从短槽到长槽内，加压时下心轴向下移动，卡瓦锥体下行把卡瓦张开，卡瓦上的合金块的棱角嵌入套管壁，尔后胶筒受压而膨胀，直到两个胶筒都紧贴在套管壁上，形成密封。如果进行挤注作业，封隔器胶筒以下压力大于封隔器胶筒以上静液柱压力时，下部压力将通过容积管传到水力锚，使水力锚卡瓦张开，卡瓦上的合金卡瓦牙方向朝上，从而使封隔器牢固的坐封在套管壁上。如果要起出封隔器，只需施加拉伸负荷，胶筒卸掉压力而恢复到原来自由状态，此时凸耳从长槽沿斜面自动回到短槽内，锥体上行，卡瓦随之收回，便可将封隔器起出井筒。

Overview
The product is used for fracturing, acidizing, testing, and cement squeezing operations. Without a hydraulic anchor, it can be used as a test sub for testing operations.

Prouduct standards: API Spec 11D1

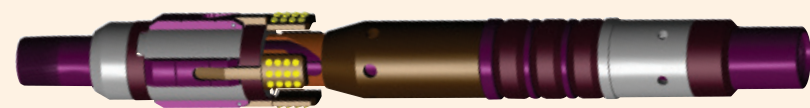
Working Principle
When it is run in, the friction block contacts the internal wall of the casing all the time, the lug is at the lower end of the J-shaped position exchange groove, and the rubber sleeves are in the free state. When the packer is lowered to the preset position, firstly pull up the string to make the lug reach the upper end of the short groove, and clockwise rotate the string one to three circles. While applying the clockwise torque, lower the string to increase the compression load. Because clockwise rotating the string makes the lug move out of the short groove into the long groove, the lower mandril moves downward during pressure increase, the slip cone moves downward to open the slip, and the edge of the alloy block on the slip is inserted into the casing wall. Then, the rubber sleeves expand due to pressure until both of them are in close contact with the casing wall to form the sealing.

During cement squeezing, if the pressure below the packer's rubber sleeve is higher than the hydrostatic column pressure above it, the lower pressure is transferred via the volume pipe to the hydraulic anchor to make it open, and the alloy slip teeth on the slip face upward to allow the packer to be firmly seated on the casing wall. In order to pull out the packer, just apply a tensile load to remove the pressures on the rubber sleeves and allow them to get back in the free state. Now, the lug automatically moves from within the long groove back into the short groove, the cone moves upward, and the slip retracts. Thus, the packer can be pulled out of the borehole.

四、技术参数及规格 Technical Parameters or Specifications

规格 Size	5"	5 1/2"	7"	9 5/8"	13 3/8
胶筒标号 Rubber sleeve No.	5" 15-18#	5 1/2" 13-20#	7" 17-38#	9 5/8" 29.3-53.5#	13 3/8" 68-72#
最小内径 Min. ID (mm)	45.7	48.3	61.0	101.6	95
胶筒直径 Rubber sleeve diameter (mm)	99.1	113.0	142.7-151.1	201.9-207.8	300
规环直径 Gauge ring diameter (mm)	103.1	115.6	143.5-152.4	209.6	303
隔环外径 Distance ring OD (mm)	93.5	101.6	137.2	198.1	
总长度 Overall length (mm)	1167.9	1178.1	1323.3	1973.8	2580
坐封负荷 Setting load (kN)	50	50	70	90	120
连接螺纹 Connection thread	2 7/8" EU母(female)	2 7/8" EU母(female)	2 7/8" EU母(female)	410X411	410X411
	2 7/8" EU公(male)	2 7/8" EU公(male)	2 7/8" EU公(male)		

CCPT封隔器
CCPT Packer



一、概述
适用于试油、地层测试及分层采油，可用于找窜封窜，可用于压裂、酸化。

二、产品执行标准：API Spec 11D1

三、特点
1、结构的设计改进采用了国外的先进技术
2、其结构简单先进、工作可靠、操作性能稳定；
3、旁通机构采用端面加滑阀双重密封，密封性能可靠；
4、坐封、解封换位灵活可靠、通径大、适用范围广。

专利号：ZL200920038335.7

Overview
The product can be used for well testing, formation testing, separate-layer recovery, channel identification and sealing, fracturing, and acidizing.

Prouduct standards: API Spec 11D1

Features
1. Its structural design is based on an internationally advanced technology.
2. It features simple structure and reliable working performance.
3. Its double-seal bypass mechanism (end face plus slide valve) provides reliable sealing performance.
4. It has flexible and reliable setting/unsetting changeovers, with large drift diameter and wide scope of application.
Patent No.: ZL200920038335.7

四、技术参数及规格 Technical Parameters or Specifications

型号规格 Model	CCPT-116-P	CCPT-148-P
通径规外径 Drift diameter gauge	116mm	148、152mm
适用套管规格 Casing size	5 1/2"	7"
通径 Drift diameter	46mm	75mm
长度 Length	1146.56mm	1227mm
工作压力 Working pressure	35/70MPa	35 、≤70MPa
坐封负荷 Setting load	60-100KN	70-120kn
工作温度 Working temperature	-29℃-150℃	-29℃-150℃
连接螺纹 Connection thread	2 7/8NU	2 7/8EU
适用环境 Suitable environment	轻度防硫化氢 Slightly H ₂ S resistant	

风暴阀
Storm valve



一、概述
风暴阀与封隔器连接在一起，风暴来临时关闭风暴阀起到弃井作用。

Overview
Storm valve connected to the packer together, storm comes close valve abandonment.

二、技术参数及规格 Technical Parameters or Specifications

型号规格 Model	4 3/4"	6 1/8"
通径 Drift diameter	1 1/4"	3 3/4"
钢体最小内径 Steel body's min. ID (mm)	54	75
长 度 Length	1642.3	1472.4
抗内压 Psi	8000	14100
抗外压 Psi	12800	17000
连接油管螺纹 Connection thread	3 1/2" IF	4 1/2" IF



445封隔器（桥塞）
445 Packer (Bridge)



一、概述

适用于封窜、封堵水层；也用于选层采油、封层试油、分层压裂、酸化的作业。

二、产品执行标准：API Spec 11D1

三、特点

- 1、具有封隔器和桥塞的双重功能，口径大，适用范围广；
- 2、可双向锚定，能承受正向、反向的高压力；
- 3、压力采用了平衡设计，解封力小；
- 4、坐封及丢手方式灵活，可采用油管送进坐封又可采用电缆送进坐封，结构设计先进，成功率高。

专利号：ZL201110215699.X

Overview

The product is applicable for channel or water zone sealing as well as selective recovery, zone sealing and testing, and separate-layer fracturing or acidizing.

Product standards: API Spec 11D1

Features

1. Its structural design is based on an internationally advanced technology.
2. It features simple structure and reliable working performance.
3. Its double-seal bypass mechanism (end face plus slide valve) provides reliable sealing performance.
4. It has flexible and reliable setting/unsetting changeovers, with large drift diameter and wide scope of application.

Patent No.: ZL200920038335.7

四、技术参数及规格 Technical Parameters or Specifications

型号规格 Model	CC445-115-P	CC445-150-P
钢体最大外径 Steel body's max. OD (mm)	115	150
钢体最小内径 Steel body's min. ID (mm)	42	83
总长度 Overall length (mm)	745	820
工作压力（上、下） Working pressure difference (MPa)	35/70/105	35/70
工作温度 Working temperature (°C)	≤120	≤120
坐封压差 Setting pressure difference (MPa)	≤20	≤20
解封拉力 Unsetting tensile force (kN)	40	50
适用套管内径 Casing ID (mm)	118.56-124.26	155.9-159.6
连接螺纹 Connection thread	2 3/8EU	2 7/8EU
适用环境 Suitable environment	轻度防硫化氢 Slightly H ₂ S resistant	

CCGD泄油固定器
CCGD Oil Drainage Fixer



一、概述

用于机械采油管柱中锚定油管，防止油管上下窜动，减少油管伸缩所造成的冲程损失，提高泵的有效冲程；用于注水时，防止管柱蠕动造成封隔器失效。起钻时泄掉管柱内液体，防止管柱内液体喷出井口污染环境。

二、产品执行标准：Q/321001 EDB01-2012

三、特点

- 1、锚定机构结构先进，工作可靠，性能稳定，解除锚定力小，不会发生卡钻事故。
- 2、锚定坐卡压力小，不会损伤套管，且管柱弯曲变形小。
- 3、可多次重复使用，降低了采油成本低、效率高。
- 4、泄油机构设计合理科学，关闭、打开可靠，密封压力高，不会发生中途渗漏问题。
- 5、接于注水管柱中能防止注水封隔器失封，延长注水管柱使用寿命。

专利号：ZL200920049410.X

Overview

The product is used to anchor the tubing in mechanical production to prevent it from moving up and down, reduce the stroke losses induced by the tubing expansion and contraction, and increase the pump's effective stroke; when used for water injection, it can prevent the string creeping from resulting in packer failure. During POOH, it can be used to drain the fluid in the string so as to avoid the ejection of the fluid out of the wellhead, which may pollute the environment.

Product standards: Q/321001 EDB01-2012

Features

1. Its anchoring mechanism is structurally advanced and reliable in performance, with a low unlocking force requirement and no risk of sticking.
2. Due to low anchoring or setting pressure, the casing is intact, and in addition, the string's flexural deformation is small.
3. It can be repeatedly used to enable cost-effective oil production.
4. The oil drainage mechanism's design is scientific. Its opening and closing operations are reliable, and its sealing pressure is high; no halfway leakage is guaranteed.
5. If installed in a water injection string, it can prevent the water injection packers to fail and extend the water injection string's service life.

Patent No.: ZL200920049410.X

四、技术参数及规格 Technical Parameters or Specifications

型号规格 Model	长度 Length	最大外径 Max. OD	最小外径 Min. OD	工作压力 Working pressure	工作温度 Working temperature	适用套管 范围 Casing size	坐封负荷 Setting load	解压拉力 Unsetting tensile force	连接螺纹 Connection thread
CCGD-111	1272mm	114mm	58mm	35 70	120℃	118.62-127.3	≤20KN	20KN	2 7/8NU
CCGD-140	1300mm	140mm	75mm	35 70	120℃	154.8-166.1	≤20KN	30KN	3 1/2NU



剪销封隔器
Shear-pin Packer



一、概述

剪销封隔器用于分层测试，和PT-N封隔器组成跨隔测试管柱。其由旁通机构、密封装置和剪销机构等组成，使用中可独立操作，按需座封，能对待测地层段实现准确、可靠的间隔密封，为实现对同一口井具两个以上待测地层段进行跨隔测试提供了可靠的技术手段，既可提高工作效率，又可大大降低成本，其经济效益十分显著。

二、产品执行标准：API Spec 11D1

Overview

The product can be used for zonal testing. It, together with a PT-N packer, can constitute a straddle testing string. It consists of bypass mechanism, sealing device, and shear pin. It can be independently used for setting as required. Featuring the accurate and reliable isolation of the intervals to be tested, it provides a reliable technical means for straddle testing of two or more layers in a well. The product has proven to provide very remarkable economic benefits by increasing the working efficiency and dramatically reducing the cost.

Prouduct standards: API Spec 11D1

三、技术参数及规格 Technical Parameters or Specifications

规格 Model	最大外径mm Max. OD (mm)	内径 ID (mm)	长度 Length (mm)	扣型 Thread	工作压力 Working presssure (MPa)
5"	100-106	38	925	2 7/8REG母×公 (female × male)	70
5 1/2"	114-118	40	1060	2 7/8NU母×公 (female × male)	70
7"	143.5-157.6	62	1236	3 1/2FH母×公 (female × male)	50
9 5/8"	211.2-219	76	1100	3 1/2FH母×公 (female × male)	50

捞砂泵
Sand Pump



一、概述

捞砂泵用修井机吊着油管上下移动，即可将砂子吸入油管中，具有施工操作简单，配套设备少，施工准备时间短，冲砂效率高，不存在地面水进入井中或排出地面而造成的油藏和环境污染问题，施工安全可靠。

二、产品执行标准：GB/T18607-2008

Overview

Just using the service rig to move the hanged tubing up and down, the sand pump can suck the sands into the tubing. It features simple, reliable, and safe operation, less devices, short preparation time, high sand washing efficiency, and no reservoir or environmental pollution induced by surface water invasion into the well or sand discharge onto the ground.

Prouduct standards: GB/T18607-2008

三、技术参数及规格 Technical Parameters or Specifications

捞砂泵柱塞直径 Sand pump plunger diameter	Φ70mm
砂泵行程（冲程） Pump travel (stroke)	4.5m
上下部管柱规格 Specifications of upper and lower strings	2 7/8NU油管(tubing)



防砂装置总成
Sand Control Assembly



一、概述

1、防砂磨、防砂卡、防砂埋

在生产过程中，能有效地防止砂粒进入柱塞与泵筒之间的密封间隙，减少泵筒及柱塞的磨损。在停抽时，由于有一段柱塞外露泵筒之上，可防止砂卡抽油泵现象的发生。

2、寿命长

在含砂油井上使用的常规泵，因砂粒磨损，造成阀座或柱塞与泵筒之间漏失严重，防砂装置总成能减轻砂粒磨损，柱塞及泵筒的表面强化层不易被破坏，减轻腐蚀，有效地延长了泵的使用寿命。

3、减轻杆管偏磨

该泵上出现油阀始终暴露于泵筒之上，出油阻力较常规泵大为减少，特别适用于稠油出砂井，下行时杆柱不易弯曲，杆管磨损现象得到缓解。

4、使用维修方便

该泵使用过程中无特殊要求，所以阀及阀罩均采用标准件，拆装方便。

二、产品执行标准：GB/T18607-2008

Overview

1. Resistance to Sand Grinding, Sticking, and Burial

In production, the product can effectively prevent sands from entering into the space between the plunger and pump barrel and thus reduce their wear. When the pump is idle, there is a portion of the plunger outside the pump barrel, and thus, no sand-based pump sticking occurs.

2. Long Service Life

A conventional pump used in a sand-producing oil well tends to undergo serious loss between the valve seat or plunger and pump barrel due to sand abrasion. In this case, the sand control device can always ease sand abrasion. If it is used, the reinforced surface layers of the plunger and pump barrel are difficult to damage and corrode, and the pump's service life can be effectively extended.

3. Alleviated Rod-tubing Eccentric Wear

The pump's oil valve is always exposed above its barrel, so the oil flow resistance is much lower than that in case of using a conventional pump. Therefore, the device is especially suitable for a heavy oil well with sand production. If the device is used, the sucker rod string is difficult to bend, and the wear of the rod and tubing can be alleviated.

4. Ease of Use and Maintenance

There are no special requirements for the pump to operate, and all its valves and valve bonnets are standard parts that can be easily installed and removed.

Prouduct standards: GB/T18607-2008

三、技术参数及规格 Technical Parameters or Specifications

1、公称直径：Φ38mm、Φ44mm、Φ57mm

2、冲程：2.1-5m

3、间隙代号：1、2级

1. Nominal diameters: Φ38mm, Φ44mm, and Φ57mm.

2. Stroke: 2.1-5m

3. Gap code: 1 or 2.

四防深井抽油泵
Multifunction Deep-well Pump



一、概述

1.防脏、防垢、防卡、防砂。

在下泵及抽油过程中，能有效地防止管柱内污物、管壁上的垢、铁屑以及抽油杆扶正器磨坏的碎块、地层出的砂等污物进入固定凡尔及泵筒内造成的卡固定凡尔或堵死固定凡尔或卡泵；防止砂粒进入柱塞与泵筒之间的密封间隙，减少对泵筒及柱塞的磨损。

2.寿命长。

在抽油过程中，能有效防止砂粒进入柱塞与泵筒之间的密封间隙，减少对泵筒及柱塞的磨损，延长泵的使用寿命。

3.减轻杆管偏磨。

由于该泵上出油阀始终暴露于泵筒之上，故出油阻力较常规泵大为减少，特别适用于稠油出砂井。同时，下行时杆柱不易弯曲，杆管磨现象得到缓解。

4.使用维修方便。

该泵使用过程中无特殊要求，所有阀及阀罩均采用标准件，拆装方便。

专利号：ZL201020202928.5

二、产品执行标准：GB/T18607-2008

Overview

1. Resistance to Dirt, Scale, Sticking, and Sand

During running in or oil pumping, the pump can effectively prevent the impurities, such as the filth in the string, the scale and iron fragments on the tubing wall, pieces coming off from the centralizers of the sucker rod and sands from the formation, from entering into the fixed valve or pump barrel and thus sticking them. In addition, it can prevent sands from entering the space between the plunger and barrel and thus reduce their wear.

2. Long Service Life

In production, the pump can effectively prevent sands from entering into the space between the plunger and barrel and thus reduce their wear and extend the pump's service life.

3. Alleviated Rod-tubing Eccentric Wear

The pump's oil valve is always exposed above its barrel, so the oil flow resistance is much lower than that in case of using a conventional pump. Therefore, the device is especially suitable for a heavy oil well with sand production. If the device is used, the sucker rod string is difficult to bend, and the wear of the rod and tubing can be alleviated.

4. Ease of Use and Maintenance

There are no special requirements for the pump to operate, and all its valves and valve bonnets are standard parts that can be easily installed and removed.

Patent No.: ZL201020202928.5

Prouduct standards: GB/T18607-2008

三、技术参数 Technical Parameters

1.公称直径：Φ38mm Φ44mm Φ57mm

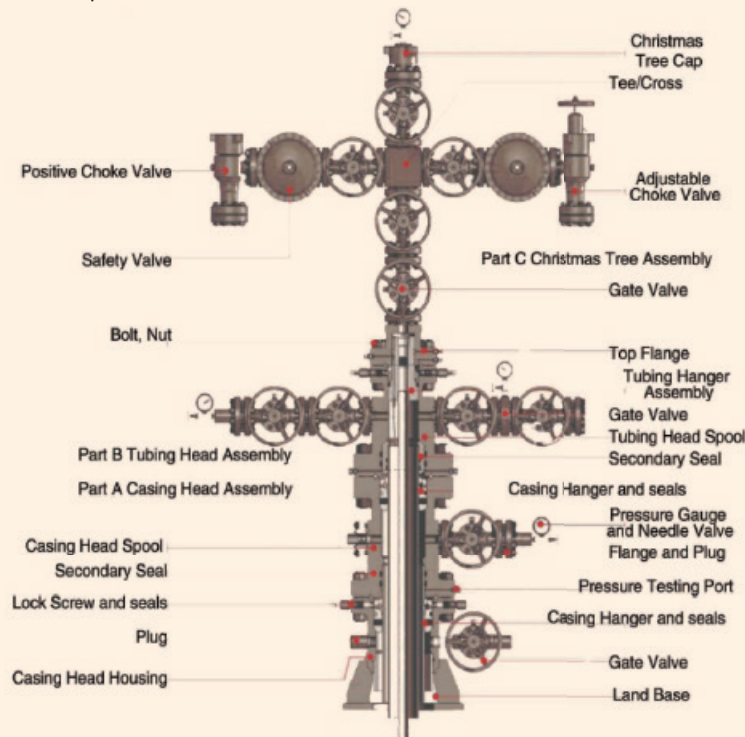
2.冲程：2.1 ~ 5m 3.间隙代号：1、2级

1. Nominal diameters: Φ38mm, Φ44mm, and Φ57mm;

2. Stroke: 2.1-5m; 3. Gap code: 1 or 2.

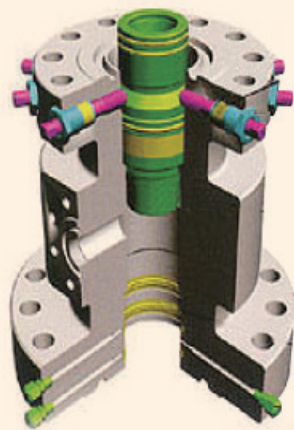
采气（油）树
Christmas Tree

一、产品执行标准：API Spec 6A
Prouduct standards: API Spec 6A

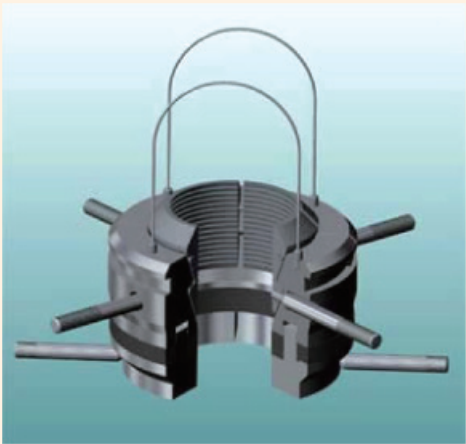


二、技术参数及规格 Technical Parameters or Specifications

参数 Parameters		型号 Model			
		65/21	65/35 50–65/35	65/70 78–65/70	65/105 78–65/105
额定压力 Rated pressure		3000ps(21MPa)	5000ps(35MPa)	10000ps(70MPa)	15000ps(105MPa)
公称通径 Nominal diameter	主通径 Main diameter	9/16in. (65mm)	9/16in.3 1/8in (65mm)	9/16in. 3 1/16in (65mm)	2 9/16in. 3 1/16in(65mm)
	旁通径 Side diameter	9/16in. 965(mm)	2 9/16in. (65mm)	2 9/16in (65mm)	2 9/16in. (65mm)
工作温度 Operating temperature		PU(–29–121℃)	PU(–29–121℃)	PU(–29–121℃)	PU(–29–121℃)
适用介质 Applicable medium		原油、天然气 Crude oil, natural gas			
规范级别 Specification level		PSL1–3	PSL1–3	PSL1–3	PSL1–3
材料级别 Material grade		AA–FF	AA–FF	AA–FF	AA–FF
性能级别 Performance level		PR1–2	PR1–2	PR1–2	PR1–2
连接形式 Type of connecting		卡箍或法兰 Clamp or flange		法兰 Flange	



油管头和油管挂
Tubing head and tubing hanger



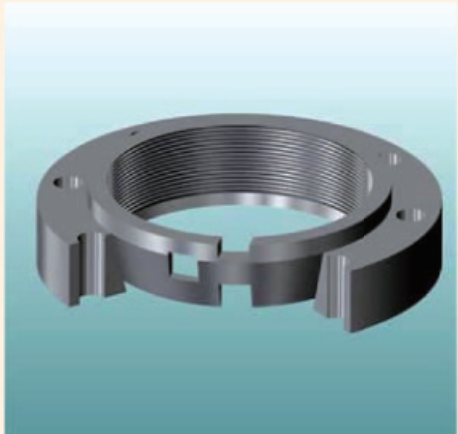
W型卡套管悬挂器
Type W slip-type casing hanger



WE型卡套管悬挂器
Type WE slip-type casing hanger



G型卡套管悬挂器
Type G slip-type casing hanger



WD型卡套管悬挂器
Type WD slip-type casing hanger



智能回注水撬装装置
Smart Skid-mounted Water Reinjection Unit



一、用途及特点

- 1、回注水撬装装置由注水装置和水处理装置组成。适用于采油清水回注过程中使用的配套设备。
- 2、智能回注水撬装装置设计采用自动化远程监控系统，实现了设备运行无人操作中的数据收集和传输。
- 3、经过过滤处理后的水，达到回注的标准要求。
- 4、设计采用撬装设备，移动方便，满足井场重复使用，节约投资成本。

专利号：201520022730.1

Function and Features

1. The skid-mounted water reinjection unit consists of water injection facility and water treatment facility. It is an auxiliary unit used for clean water reinjection during oil production.
2. The smart skid-mounted water reinjection unit is designed to be based on an automatic remote monitoring system that enables it to perform data collection and transmission without needing any person to operate.
3. The filtered water can reach the specified reinjection standard.
4. It is designed to be skid-mounted to provide convenience for movement, thus enabling repeated field use and lower CAPEX.

Patent No.: 201520022730.1

三相分离器
Three-phase Separator

一、概述 Overview

三相分离器适用于油气生产过程中除去油气中悬浮的固、液相杂质。三相分离器配有完整的管汇系统，包括：旁通管线及液、气互连管汇、冲刷系统，易于操作，保证管道与设备安全可靠运行。所有管汇的入口、出口均使用3"FIG602由壬连接。整套系统安装在一个防撞撬体上，便于周转及运输。三相分离器采用直接载荷弹簧式安全阀和爆破片装置的双安全保护装置，如出现异常情况，首先开启安全阀泄压，在此阀失效的情况下爆破片破裂泄压。

The three-phase separator is used to remove the suspended solid and liquid impurities in the hydrocarbon during oil/gas production. It is provided with a complete piping system including bypass pipelines, liquid/gas interlinks, and washing system. It is easy to operate. Its pipelines and devices work in the safe and reliable way. The inlets and outlets of all its pipelines are based on 3"FIG602 union.

The entire system is mounted on an anticollision skid for easy move or transportation.

It is provided with two safety devices: direct-loaded spring safety valve plus rupture disk. If the pressure is higher than the predetermined level, the safety valve opens in the first place, and the rupture disk blows out to release the pressure in case that the safety valve fails.

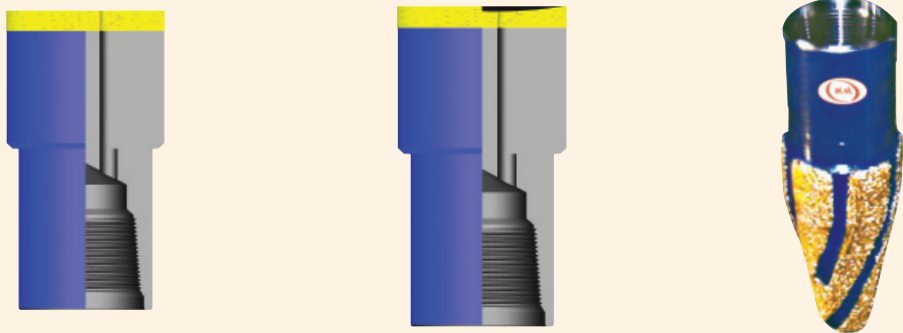


二、技术参数及规格 Technical Parameters or Specifications

容器尺寸 Vessel dimensions	Φ1000 × 3500
工作介质 Suitable media	原油、水、天然气 Crude oil, water, and natural gas
设计压力 Design pressure	9.8MPa
工作压力 Working pressure	8.4MPa
设计温度 Design temperature	-19℃-90℃
工作温度 Working temperature	-19℃-80℃
容积 Capacity	3.05m ³
外形尺寸 Outside dimensions	6700 × 2400 × 2800
处理量 Treatment capacity	气(Gas): 100 × 104Nm ³ /d 液体(liquid): 1000m ³ /d



磨鞋
Milling Shoe



一、概述

磨鞋用于磨削井下小件落物以及其它不稳定落物。
平底磨鞋、凹底磨鞋、梨形磨鞋技术参数。

二、产品执行标准：SY/T6072-2009

Overview

Milling shoe is a device used to grind small junks or other unstable junks.
Technical Parameters of Flat-bottom Milling Shoe, Concave-bottom Milling Shoe, and Pear-shaped Milling Shoe.
Proudunct standards: SY/T6072-2009

三、技术参数及规格 Technical Parameters or Specifications

公称外径 Nominal OD (mm)	接头螺纹 Joint thread ^a	适用井眼直径 Hole diameter (mm)
89	NC26, 2 3/8 REG	95.2-101.6
97		107.9-114.3
110	NC31, 2 7/8 REG, 3 1/2 REG	117.5-127.0
121		130.0-139.7
130		142.9-152.4
140	NC38, 3 1/2 REG, 4 1/2 REG	155.6-165.1
156		168.0-187.3
178		190.5-209.5
200	NC50, 4 1/2 REG	212.7-241.3
232		244.5-269.9
257	6 5/8 REG	273.0-295.3
279		298.5-317.5
295		320.6-346.1
330		349.3-406.4
381		406.4-444.5
406	7 5/8 REG	431.8-508
432		457.2-533.4
534		558.8-660
686		711.2-863.6

领眼磨鞋
Pilot Mill

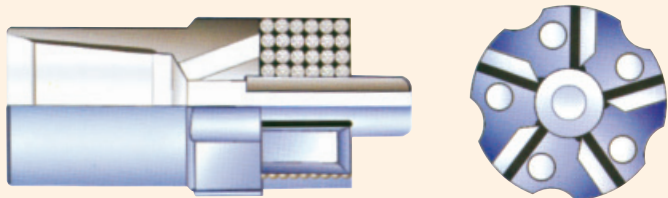
一、概述

铣削式领眼磨鞋可用于磨削有内孔，且在井下处于不定而晃动的落物，如钻杆、钻铤、油管等。

二、产品执行标准：SY/T6072-2009

Overview

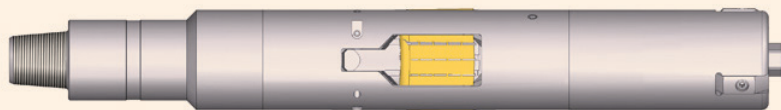
The pilot mill is used to grind junks that have an internal hole and sway in the borehole, such as a drill pipe, a drill collar, or a tubing.
Proudunct standards: SY/T6072-2009



二、技术参数及规格 Technical Parameters or Specifications

型号 Model	外形尺寸 Outside dimensions (mm)	接头螺纹 Joint thread	下入套管尺寸 Casing size
XLX114	Φ114×40×580	NC31	5 1/2"
XLX154	Φ154×50×610	NC38	7"

TDX型套管段铣器
TDX Casing Section Mill



一、概述

TDX型套管段铣器是套管开窗作业必备工具之一，是将井下套管切割磨铣掉一节进行开窗侧钻。套管段铣器侧钻是在套管内侧钻水平井和定向井常用的一种工艺。

Overview

TDX casing section mill is one of the tools required for sidetracking by cutting a section of casing in the borehole. The casing section mill-based sidetracking is a technology often used for drilling a horizontal or directional well.

二、技术参数及规格 Technical Parameters or Specifications

型号 Model	接头外径 Joint OD (mm)	套管段铣器外径 TDX Casing Section Mill OD (mm)	适用套管 Casing	刀体部件结构 Blade body structure	喷嘴内孔尺寸 Nozzle ID (mm)	接头螺纹 Joint thread
TDX140	114	114	5 1/2"	3翼3刀	16	NC31
TDX178	121	150	7"	3翼3刀	16	NC38
TDX245	178	210	9 5/8"	3翼3刀	19	4 1/2REG
TDX340	229	298	13 3/8"	4翼3刀	22	6 5/8REG



XZ型铣锥
XZ Milling Taper

一、概述

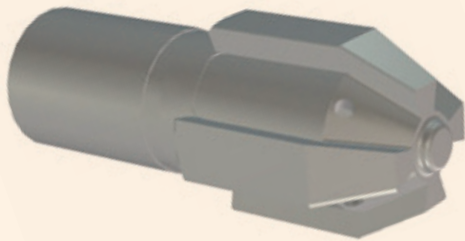
XZ 铣锥可用来铣削回接筒的倒角，铣削套管较小的局部变形，修整在下钻过程中各种工具将接箍处套管造成的卷边及射孔时引起的毛刺飞边，清整滞留在井壁上的矿物结晶及其它坚硬的杂物等，以便恢复通径尺寸。

二、产品执行标准：SY/T6072-2009

Overview

XZ milling taper can be used to mill a tie back sleeve's bevel edge or a local deformation of the casing, trim any casing coupler turn-ups incurred by a run-in tool or any burs induced during perforation, or clean off the mineral crystals or other hard impurities on the borehole wall, so as to restore the bore size.

Prouduct standards: SY/T6072-2009



三、技术参数及规格 Technical Parameters or Specifications

型号 Model	刀刃最大直径 Blade max. diameter	锥角 Taper angle	长度 Length	连接螺纹 Connection thread
XZ132	132	600	410	NC38
XZ139	139			NC38
XZ170	170			NC50
XZ178	178			NC38
XZ187	187			NC50
XZ195	195			6 5/8REG
XZ205	205			NC50

套铣管
Washover Pipe

一、概述

套铣管是清除落鱼外部障碍物以利于打捞井下落鱼的专用工具。

二、产品执行标准：SY/T6072-2009

Overview

Washover pipe is a special tool used to remove the obstructions outside the fish so as to retrieve the fish.

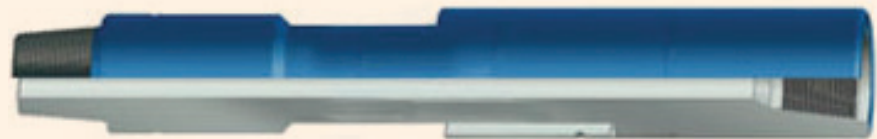
Prouduct standards: SY/T6072-2009



三、技术参数及规格 Technical Parameters or Specifications

型号 Model	适用井眼直径 Hole diametermm	最大套铣尺寸 Max. washover size mm	型号 Model	适用井眼直径 Hole diametermm	最大套铣尺寸 Max. washover size mm
TXG114.3-8.56	120.65	80.9	TXG206.38-9.4	215.9	177.8
TXG127-9.19	146.05	101.6	TXG219.07-11.43	244.48	187.33
TXG139.7-9.17	152.4	117.48	TXG219.07-12.7	244.48	184.15
TXG146.5-7.92	161.93	127	TXG228.6-10.8	250.83	200.03
TXG146.05-9	161.93	120.65	TXG244.48-11.9	266.7	212.73
TXG168.28-8.94	187.33	142.88	TXG244.48-13.84	266.7	206.37
TXG177.8-9.19	200.03	152.4	TXG273.05-11.43	290.45	238.13
TXG193.68-9.53	212.73	168.28	TXG273.05-12.57	298.45	234.95
TXG193.68-10.92	212.73	165.1	TXG298.44-12.42	323.85	263.53
TXG193.68-12.7	212.73	161.93	TXG399.72-13.06	365.13	301.62
TXG200-10.92	215.9	170	TXG406.4-16.66	444.5	355.6
TXG203.2-9.53	215.9	177			

随钻打捞杯
Fishing Cup



一、概述

随钻打捞杯用来捞取井下作业过程中正常的泥浆循环无法带出井眼的钻屑或金属碎屑等。对于保持井底干净，提高钻头的使用寿命，减少和防止钻头意外损坏具有重要作用。

二、产品执行标准：SY/T6072-2009

Overview

The fishing cup is used to fish the drilling cuttings or metal debris that cannot be brought by the circulating mud out of the hole during drilling. It plays an important role in keeping the bottom hole clean, improving the bit's service life, and reducing or preventing the bit's accidental damage.

Prouduct standards: SY/T6072-2009

三、技术参数及规格 Technical Parameters or Specifications

型号 Model	井眼直径 Hole diameter (mm)	螺纹 Thread	内径 ID (mm)	外径 OD (mm)
LB94	108-117.5	2 3/8REG	19	94
LB102	117.5-124	2 7/8REG	32	102
LB114	130-149	3 1/2REG	38	114
LB127	152.4--162	3 1/2REG	38	127
LB140	165-190.5	3 1/2REG	38	140
LB168	190.5-216	4 1/2REG	57	168
LB178	219-244.5	4 1/2REG	57	178
LB190	229-273	4 1/2REG	57	190
LB197	235-279.5	4 1/2REG	70	197
LB219	244-295	6 5/8REG	76	219
LB229	254-305	6 5/8REG	76	229
LB245	292-330	6 5/8REG	76	245
LB280	330-375	7 5/8REG	76	280
LB311	327-375	7 5/8REG	76	311
LB327	375-444.5	7 5/8REG	76	327
LB340	386-456	7 5/8REG	76	340

卡瓦打捞筒
Fishing Socket

一、概述

卡瓦打捞筒时从落鱼外壁进行打捞的不可退式工具。卡瓦打捞筒不仅可以打捞各种油管、钻杆、加重杆、长铅锤等，还可对遇卡管柱施加扭矩进行倒扣。

二、产品执行标准：SY/T5068-2009

Overview

Fishing socket is an irretrieveable tool used to fish the junk by grasping the external wall of the junk. It can fish various tubings, drill pipes, weight pipes, long plumbs, etc. and apply a torque on the stuck string to back off.

Prouduct standards: SY/T5068-2009

二、技术参数及规格 Technical Parameters or Specifications

型号 Model	外形尺寸 Outside dimensions (mm)	螺纹 Thread	打捞尺寸 Fish size (mm)	许用拉力 Allowed pulling force (kN)
DLT-95	Φ95 × 610	NC26	Φ32-Φ60	400
DLT-108	Φ108 × 610	NC31	Φ45-Φ65	650
DLT-114	Φ114 × 660	NC31	Φ48-Φ73	950
DLT-130	Φ130 × 780	NC31	Φ70-Φ90	1100
DLT-150	Φ150 × 970	NC38	Φ90-Φ114	1300
DLT-160	Φ160 × 970	NC50	Φ100-Φ121	1400



多用打捞筒
Multi-purpose Fishing Socket



一、产品执行标准：SY/T5068-2009

Prouduct standards: SY/T5068-2009

多用打捞筒是一种在套管内打捞各种尺寸的抽油杆及抽油杆接箍的组合式打捞工具。

技术参数

- 最大外径：90mm；
- 接头螺纹：2 7/8NU；
- 打捞范围：16mm-25mm抽油杆本体及加厚台肩。

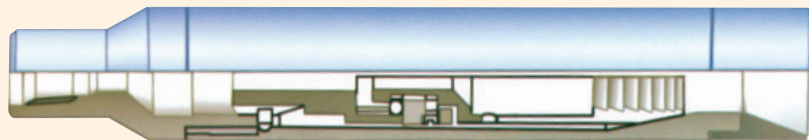
The multi-purpose fishing socket is a hybrid fishing tool used to fish sucker rods and their collars of various sizes in the casing.

Technical Parameters:

- Maximum outside diameter: 90mm.
- Thread: 2 7/8NU.
- Fishing objects: 16mm-25mm sucker rods and thickened shoulders.



活页式打捞筒
Flap-type Fishing Socket



一、概述

活页式打捞筒也称为活门式打捞筒，使用在大的环形空间里，打捞鱼顶为台肩或接箍的小直径杆类落物，如完整的抽油杆，带台肩和带凸缘的井下仪器等。

二、产品执行标准：SY/T5068-2009

Overview

Flap-type fishing socket is also called valve-type fishing socket. It is used in a large annular space to fish small-diameter rod junks whose tops are shoulders or collars, such as a complete sucker rod or a flanged downhole instrument.

Prouduct standards: SY/T5068-2009

三、技术参数及规格 Technical Parameters or Specifications

型号 Model	最大外径 Max. OD (mm)	接头螺纹 Joint thread	接箍外径 Collar OD (mm)	抽油杆外径 Sucker rod OD (in)	下入套管/油管 Casing/tubing size (in)
HYLT-16	95	NC26	38	5/8"	4 1/2"油管(tubing)
HYLT-19	105	NC31	42	3/4"	5"套管(casing)
HYLT-22	114	NC31	46	7/8"	5 1/2"套管(casing)
HYLT-25	140	NC31	55	1"	6 5/8"套管(casing)
HYLT-25	148	NC31	55	1"	7"套管(casing)

反循环打捞篮
Reverse Circulation Junk Basket



一、概述 Overview

反循环打捞篮时打捞井底重量较轻、碎散落物的工具，如钻头牙轮、牙齿、手工工具等。

二、产品执行标准：SY/T5084-2012

Overview

Reverse circulation junk basket is a tool used to fish loose lightweight junks in the bottom hole, such as bit cones, teeth, and manual tools.

Prouduct standards: SY/T5084-2009

三、技术参数及规格 Technical Parameters or Specifications

型号 Model	最大外径 Max. OD (mm)	接头螺纹 Joint thread	使用范围 Scope of application
FLL91	91	NC26	4 1/2"套管内打捞最大外径Φ52 Fish max. OD in 4 1/2" casing: Φ52
FLL103	103	NC26	5"套管内打捞最大外径Φ64 Fish max. OD in 5" casing: Φ64
FLL115	115	NC31	5 1/2"套管内打捞最大外径Φ74 Fish max. OD in 5 1/2" casing: Φ74
FLL138	138	NC38	6 5/8"套管内打捞最大外径Φ99 Fish max. OD in 6 5/8" casing: Φ99
FLL143	143	NC38	7"套管内打捞最大外径Φ104 Fish max. OD in 7" casing: Φ104



市场区域图 MARKET REGIONAL MAP

