



### 立林工业园

#### Lilin Industrial Park

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### 立林集团

国际石油石化装备工具生产商和服务商.....

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## Lilin Company 关于立林

天津立林机械集团有限公司是生产石油、石化机械设备和工具的科技型企业，下辖天津立林石油机械有限公司、天津立林螺杆机械有限公司、天津立林钻头有限公司三个子公司。公司主要产品包括螺杆钻具、牙轮钻头、地面驱动地下抽油泵以及液压拆装工具、马达试验台等维修检测设备。

天津立林机械集团有限公司地处国家重要战略开发基地——滨海新区南部，比邻丹拉、津晋高速。东距天津港18公里，北距天津滨海国际机场22公里，拥有便利的运输和对外合作条件。

立林集团占地面积100万平方米。现有员工近2000人，其中工程技术人员百余名。公司拥有当代先进水平的机加工中心和各类辅助、检测、试验仪器。集团公司现已形成研发、生产、质检一整套完善的环节并实施项目化管理，公司现已发展成为石油机械制造行业的科技型规模企业。

天津立林机械集团有限公司拥有完善的质量保证体系，率先通过了ISO 9001:2000质量体系认证，并取得API spec 7-1会标使用权。

公司愿与国内外朋友真诚合作，共同发展，为全球的能源开发做出卓越的贡献。

Tianjin Lilin Machinery Group Co., Ltd. is a technological company producing petroleum, petro-chemical machinery equipments and tools. It consists of Lilin Petroleum Machinery Co., Ltd., Lilin Screw Machinery Co., Ltd. and Lilin Bit Co., Ltd. Products of the company include: downhole motors, tricone bits, downhole pump, hydraulic breakout unit, power section and complete motor test system etc.

Tianjin Lilin Machinery Group Co., Ltd. locates in the important national strategic development base—South of the Binhai New Area, adjacent to Dan La Highway and Jinjin Highway. It is 18 kilometers eastern away from the Tianjin Port, 22 kilometers northern away from Tianjin Binhai International Airport, which leads to its convenient transportation advantage and opportunities on cooperating with foreign countries.

Tianjin Lilin Machinery Group Co., Ltd. occupies an area of 1 million square meter (m<sup>2</sup>), with alsomst 2000 employees, including nearly one hundred engineers. LILIN<sup>®</sup> owns advanced machinery equipments and auxiliary inspecting and testing devices. A complete set of research & development, production and quality assessment have been formed, project management has been applied make LILIN<sup>®</sup> become a large-scale and technological corporation in petroleum mechanism manufacture industry.

Tianjin Lilin Machinery Group Co., Ltd. has established complete quality control system. In addition, LILIN<sup>®</sup> has passed the certification of ISO 9001:2000 and got the monogram use authority of API spec 7-1 etc.

We would like to cooperate with friends at home and abroad for mutual development to make our outstanding contribution to the development of global energy.

# B

## Downhole Motor 螺杆钻具

天津立林石油机械有限公司是全球生产规模最大的螺杆钻具生产商。我们除了提供所有常规尺寸和配置的螺杆钻具外，还可以根据用户对扭矩、排量、井温等参数条件的个性化需要，为市场提供特殊设计的产品。

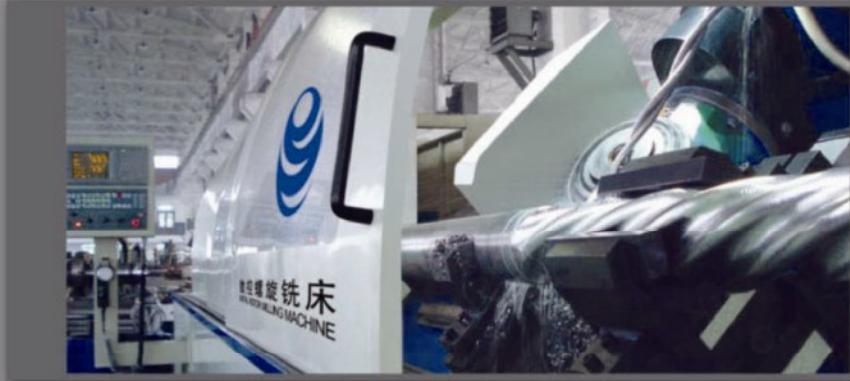
公司始终秉承技术为先导，团队不断开发和创新来适应当今的钻井要求，更好地满足用户的现场需要，成百上千的立林员工在不同的岗位勤恳地工作，默默地推进企业向前进步。

我们的目标是通过集体的奋斗实现共同的繁荣。立林的钻具产品已成为钻井工具领域的佼佼者，并以出色的表现服务于钻井勘探行业。

LILIN® is the largest manufacturer of downhole drilling motors in global area, who provides a complete line of downhole motors in different types and specifications. In addition, we can supply the products meeting different special requirement in torque, flowrate, well temperature and other specification from customers.

The most significant value of the company is our leading technology and our continually innovation on product or service update to meet requirements from customers. Such value will be achieved by our studious work which will push LILIN® go forward to next success.

LILIN® sees mutual prosperity by corporate struggle as company target. LILIN® downhole drilling motors will become the leader in drilling equipment and tools industry with superior and high performance product and service.



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# C

## Rock Bit 牙轮钻头

天津立林钻头有限公司是中国知名的牙轮钻头的生产商。立林公司可提供所有尺寸牙轮钻头，镶齿和钢齿，滑动密封轴承和浮动密封轴承，并附加不同结构特征。

我们拥有一流的各类机床，并不断吸收和借鉴国内外先进技术，广泛交流。

公司的技术设计师和工程师全部采用当今领先的绘图设计软件来研发产品，形成了以数控加工中心为主体的生产加工工艺流程。



Tianjin Liin Bit Co., Ltd. is well known as the manufacturer of tricone bits in domestic market. LILIN® provides a complete line of tricone bits in types of TCI and milled tooth with journal sealing bearing and floating sealing bearing despite of other different characteristics.

Equipped with advanced machine tool, we develop ourselves by absorbing and applying high standard technology from oversea countries.

For manufacturing high-tech product, engineers and technicians in LILIN® employ high standard drawing software in product invention. Also, CNC machine centre as the main production body in the manufacture system has been established by LILIN®.

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# D

## Power Section Test System 螺杆钻具马达试验台

立林螺杆钻具马达试验台是当今井下马达运行情况模拟的重要部分，它主要用于对井下动力钻具马达的定转子配合性能进行检测，该试验台可实施同步完成动力钻具马达部分的最大扭矩，最小扭矩，压差和流量等参数的检测。用于对制造或维修后的马达做密封性能试验，为钻具能否下井使用及其特性状况提供科学依据，避免报废钻具而造成经济损失，同时避免盲目报废钻具下井而重新起下钻，从而提高钻井效率，降低钻井成本。

系统采用工业计算机进行实验过程的控制及实验数据的采集和处理，经微机运算处理，形成分析数据，可随时以数据表格形式或特性曲线形式打印输出，作为检验马达质量的依据，为评定螺杆钻具马达配合的线形设计，制造质量及维修质量提供准确的检测数据。试验台采用电气系统控制主机，可适应不同规格的井下马达，测试精度高。

LILIN® power section test system, as one of the important drilling simulation system, is mainly used for testing the quality of power section of downhole motors. This test system can realize synchronized parameters such as max torque and min torque, pressure difference, flowrate etc. Test platform is applied to seal tightness test on new motor or second-use motor to provide scientific basis for evaluating its reuse availability and its special condition, which is possible to avoid economic loss caused by blindly abandoning downhole motors and repeating trips due to application of the abandoned drill so as to enhance drilling efficiency and cut down drilling costs.

Test process and data collection and management are controlled by utilizing industry computer. The finished data can be stored in the computer or print output in data table or curve form as the correct data to reflect the quality of power section, which will provide the testing basis for line type of power section and quality evaluation on manufacture and maintenance process. The main body of the tester controlled by electrical system is suitable for power section in different sizes and types to rise up the testing accuracy.



LILIN GROUP

# E

## Progressive Cavity Downhole Pump 螺杆抽油泵



天津立林螺杆机械有限公司生产的螺杆抽油泵由地面驱动装置和地下抽油泵两部分组成，该产品广泛应用于油田，为用户的高效生产提供了保障。

立林螺杆抽油泵具有一次性投资小，生产效率高，能量消耗低，作业、安装、维护方便的特点。

广泛应用于高凝固点油，高含蜡油，高含砂油，高含气油，低粘度和高粘度原油等油类。



The LILIN® progressive cavity downhole pump (PC pump) consists of two sections: surface drive head and the downhole pump. They have been widely applied in oilfields supplying security for high production efficiency.

Low lump-sum investment, high productivity, low energy consumption, simple structure and convenient operation, installation and repair are characteristics of the downhole pump. The pump can be widely used in low viscosity crude oil exploitation, heavy viscosity crude oil transportation, high freezing point oil, high wax-content oil, high sand-content oil, high gas exploitation condition.

LILIN GROUP

# F

## Complete Downhole Motors Test System 螺杆钻具整机试验台

立林螺杆钻具整机测试系统是当今钻井模拟测试系统中的重要部分，它主要用于对井下动力钻具整机性能的优劣进行检测，该试验台可实现同步完成动力钻具的输出扭矩，输出转速，进出口压力降及流量等参数的检测。

系统采用工业计算机进行实验过程的控制及实验数据的采集和处理，经微机运算处理，形成分析数据，既可长期保存于计算机，又可随时以数据表格形式或特性曲线形式打印输出，为评定螺杆钻具的设计质量，制造质量及维修质量提供准确的检测数据。试验台采用开放式设计，由电气系统控制主机，该设备适应的钻具规格范围广，测试精度高。

LILIN® complete downhole motors test system is an important one of drilling simulation system, it is mainly used for test the quality of complete downhole motors, this test system can realize synchronized parameter such as output torque and output rotary speed, entrance pressure, flowrate etc.

We control the test process and collection and manage of data utilize industry computer. The finished data can store in computer or print output by data form and characteristic curve. They will provide correct data for reflect the quality of design and manufacture. Scope of suitable tube is wide, precision of test is high.



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# G

## Breakout Unit 液压拆装工具



天津立林石油机械有限公司生产的液压拆装工具先后进行四次技术升级，操作功能不断完善，操作程序简化易行，制作工艺严谨，设计结构合理。多种规格拆装工具产品可满足不同管径和不同工作压力的丝扣连接部分的拆卸和组装。

立林拆装工具具有结构设计安全合理，适用管具范围广的特点，实现了全液压集中操作，扭矩数值直接读取，是油田车间必不可少的综合维修设备。



4 times technology improvement on LILIN® breakout unit leads to more perfect operation function, easier operation procedure, more strict production techniques and more reasonable configuration of hydraulic breakout unit. Various types of breakout unit meet different OD and different pressure needs from customers.

Reasonable design on configuration and widely used characteristics make LILIN® breakout unit achieve complete hydraulic operation, direct data read which are necessary elements of synthetic equipment used in oilfield workshop.

LILIN GROUP

# H

## Design & Invention 设计&研发

我们拥有强大的技术支持和智力保障，并建立起合作开发团队。在现有技术基础上不断自主创新，取得多项研发专利，始终以满足国际化标准设计要求为出发点。

在设计和研发领域，全面与国际先进水平接轨，积极借助现有行业资源，搭建技术创新平台，实现新工艺和新产品的产业化和市场化。力求以科学技术为先导，加快实用技术向产品转化。

技术创新和工艺改进为产品的自我超越奠定了基础，以市场为导向的设计定位，使设计与市场对接的构想得以实现。

Exploration group is established on the basis of our strong technical support and wisdom security. Meeting international normal design requirements is always looked as our start, which is on the basis of lots of invention patents by constant creation.

In the field of design and invention, technical creation flat is built up by catching up with the developing pace in international world and using available resource at hand, achieving industrialization and marketization of the new arts and products. We wish to change the practical technology into actual products leading by science and technology.

Transcendence of the products can be attained by technology creation and arts improvement. Design matching with the market needs is realized by making sure the design on the basis of the market.



LILIN GROUP

## Manufacture & Process 生产&加工

我们拥有当代先进的数控加工设备和检验仪器装置，确保运行程序的科学执行。技能专业且技能丰富的操作者，见证了产品从雏形到诞生的过程。利用先进设备和加工软件结合的优势，实现从设计到制造的自动化，数字化。

成熟的加工工艺流程，配以现代化的现场管理，营造出孕育高质量产品的环境。

Circulating process is strictly executed by our advanced CNC equipment and inspecting set. Complete manufacturing course from the first step to product finish is assured by experienced and specialized operators. Advanced equipment together with software functioning as one advantage is used to achieve automatization, routinization and digitization.

Good environment for high quality goods production is created by mature manufacture arts and modern scene management.



LILIN GROUP

# J

## Quality System 质量体系

ISO 9001:2000质量管理体系和API spec 7-1专业规范体系是我们始终遵循的主要质量标准，严格执行检验工艺和积极改进检验方法，最终达到全面提升整体质量水平，是我们对产品负责的核心表现。

保证企业长期稳定地生产出既符合国际标准又满足顾客要求的产品，使质量管理水平在运行过程中持续改进，日臻完善。质量是企业生命，更是竞争的核心。我们以持续不断地改进质量，来体现产品使用中的超越价值。

ISO 9001: 2000 quality control system and API spec 7-1 professional standard system are two main quality standard which we always obey to. Strict execution on inspecting arts and active improvement on inspecting method are done to upgrade whole quality standard, which becomes our core behavior when taking charge of product quality.

Products are upgraded and manufactured steadily to meet the requirements from the clients, making quality control standard continually improved and achieved perfect during system running.

Quality is the core of the competition, other than the key in the enterprise. Quality should be continually improved to display their overvalue using the products.



LILIN GROUP

# K

## Service System 服务体系

我们在保障成套钻井工具供应的同时，积极致力于服务的延伸。强大的技术服务工程师队伍，能够及时地提供全方位技术、生产、解决方案等服务指导和帮助，我们跟踪产品同步前行，始终与用户在一起。

日新月异的服务理念，层出不穷的服务措施，努力创建服务型产品，力争打造服务型企业，实施服务为产品生命护航的强大辐射网络。

我们始终把服务体系作为企业的市场发展战略和销售系统工程，通过服务提高产品信誉度，扩大品牌影响力，提升客户忠诚度，售后服务是企业提高竞争力的利器。

When securing supply of complete drilling tools, service system is actively extended by our efforts. All-wave technology, manufacturing, problem solving plan and service guide and help are provided in time with our strong technical service engineer group. Always stand at the side of the clients and go along with the products lead to one more success in our industrial market.

Creating servicing products and servicing enterprise depend on updating service idea and service measures, which is necessary to achieve large radiate web with products service system.

Always, we look service system as the systematic project in market development, which is done by improving products reputation, enlarging brand influence and stepping up products loyalty to our clients. Service after-sale is our sharp weapon in elevating enterprise competitive ability.



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## API Certification 体系认证

API规范认证：有利于企业提高产品技术和产品质量水平，促进质量管理水平的提升，提高产品的核心竞争力。

1. API规范在螺杆钻具的螺纹及台肩所涉及的材料、规格和型号、试验、标记、质量控制、储存和发运中相关的规定充分体现了规范的合理性、先进性以及对产品安全性的要求。
2. 公司按照此规范编制并保持相关的技术图样、工艺文件，并在生产全过程严格执行标准的要求，确保生产的每一件产品都具有国际先进水平，符合国际应用标准。
3. 公司积极推行并严格执行API规范7-1中关于石油钻井工具关键部位的尺寸和加工工艺的特殊要求，企业的技术和质量水平稳步提高，从而赢得国内和国外市场好评。
4. API规范7-1对产品质量形成全过程的各种技术、质量管理到产品完成提出了全面控制的要求，使我们的产品诞生每一步都有章可循，有法可依。
5. 通过建立并保持质量保证手册、程序文件以及详细的作业文件，使各项质量活动有序地开展。
6. 建立并保持质量记录，保证了企业长期稳定地生产出既符合国际标准又满足客户要求的产品，使质量管理水平在运行过程中持续改进，日臻完善。

API spec 7-1 certificate: improve level of technology and quality of products, enhance the level of quality management, make the best core competitive ability.

1. API gives the relevant regulation including: material, specification, model, test, mark, quality control, storage and transportation involved the thread and shoulder. The regulation sufficiently embodies the request of rationality, advanced level and security.
2. Company compiles and keeps relevant technology drawing, technological document and performs this standard strictly through producing schedule, assure every spare part and finished product featuring international advanced level, conforming to the international application standard.
3. The company positively carries out and strictly performs the API standard spec 7-1 about the dimension and size important section of petroleum well drilling tool and the processing craft special request. Company's technology and the quality level develops with steady steps, and wins domestic and the overseas two markets.
4. The API standard spec 7-1 show all controlling requests from every kind technology, quality controlling to product finish. That makes our product to be born on a legal basis, and the law basis.
5. Through the establishment and the maintenance manual of quality guarantee handbook, the procedure document as well as the detailed work document, enable each quality activity realize foreword development.
6. The establishment and the maintenance of quality record, guarantees the long-term stable production of the company, which both conforms to the international standard and satisfies the customer's requests. Therefore, the quality control level will be improved and perfected day by day.



## ISO Certification 体系认证

质量体系认证：使企业在管理、实际工作、供应商和分销商关系及产品、市场、售后服务等所有方面建立起一套完善的质量管理体系，企业运行有章可循。

1. 通过采购控制，帮助公司建立一套完善对供方选择和评价的方法，以合理的价格买到满意的产品。
2. 以服务顾客为中心，建立完善的制度化管理体系，建立公司工作流程，提高工作效率、降低成本、持续改进企业产品质量和服务质量。
3. 通过顾客满意调查，准确地识别顾客需要，并不断满足顾客需要，争取超越顾客期望和增强顾客满意，扩展顾客网络。
4. 通过ISO国际标准化认证，公司具备了满足顾客质量要求的能力，从而取得顾客的信任，扩大了企业的知名度，促进了业务的发展，树立企业品牌形象。
5. 良好的质量管理，有利于企业提高效率、降低成本、提供优质产品和服务，增强顾客满意。



ISO 9001:2000 quality system certificate: causes the enterprises in company management, practical work field, the supplier and retails business relations and the product, the marketing, after sale service and so on all aspects establish a set of perfect quality control system. The enterprise movement has a legal basis.

1. Through the purchase control, helps the company to establish a set of methods improving supplier choice and appraisal, which is useful for company to purchase product by reasonable price.
2. Takes serving the customer as the center, establishes the perfect institution management system, and the company work flow, to enhance the working efficiency, reduce the cost and continue to improve the enterprise product quality and the grade of service.
3. By customers satisfaction investigation, accurately recognizes the accurate recognition customer needs, and increasing unceasingly meets the customer needs, strives for increasing and overtaking the quests from customers to expend network.
4. Through the ISO international standardization authentication, the company is able to satisfy the customer quality requirement. Therefore, it is easy for company to obtained customer's trust, and expend enterprise's well-knowness promoting the service development and keeping company's image.
5. The good quality control is advantageous for the enterprise to enhance the efficiency, reduce the cost, provide the quality product and the service as well as satisfaction degree of the customers.

# ISO 9001:2000