



**LongForza** has achieved a superior position in petroleum equipment manufacturing. Our company had been awarded with quality system of ISO9001:2000 and API Q1 and API monograms of 4F, 5CT, 50, 7K, SA, 11AX.

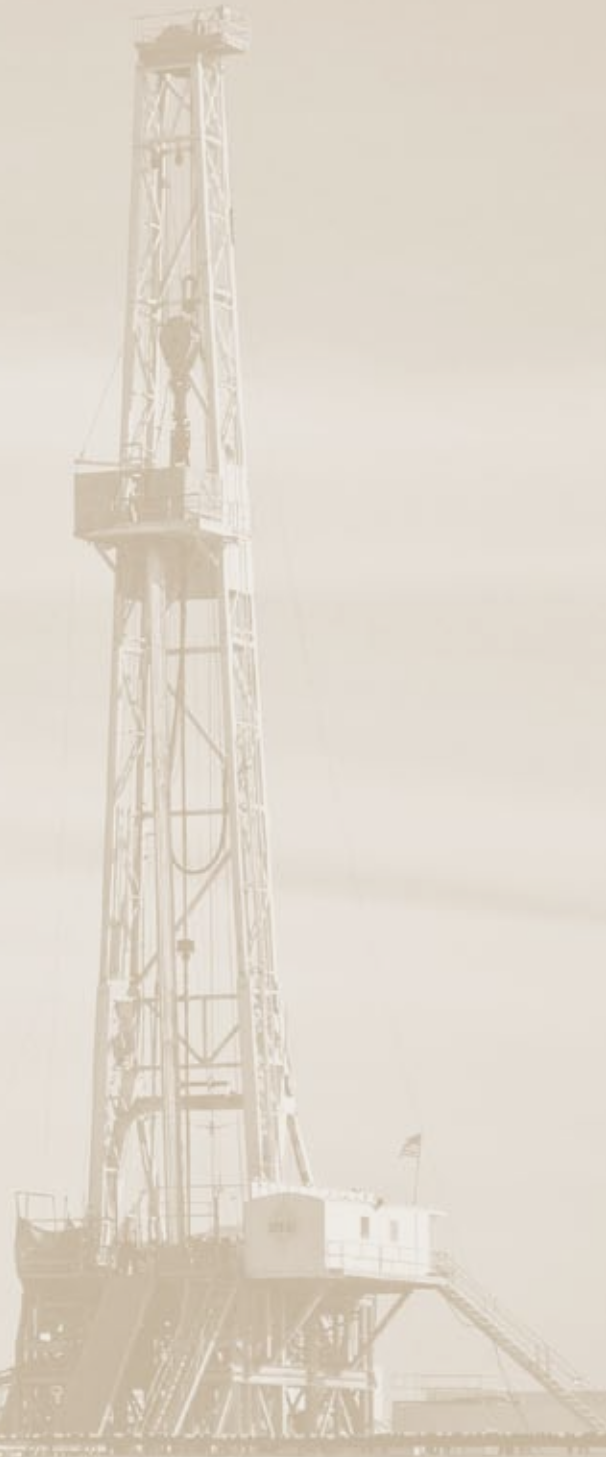
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### MECHANICAL DRIVE DRILLING RIGS

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The characteristic of the mechanical drive drilling rigs:

- 1.** The manufacturing of the main rig components is based on the API specifications and the basic parameters that are in compliance with SY / T5609 - 1999 (The Type and Basic Parameter of the Petroleum Drilling Rigs) and related API specifications.
- 2.** The assembling set for the diesel engine coupling and whole chain compound box are united to drive the hoisting winch. The mud pumps, rotary table, automated air compressor and energy saving electric generator are also operated by the diesel engine coupling, therefore it makes the operation smoother and produces a higher operating efficiency.
- 3.** The drawworks are assembled at ground level. The disc brake is used as the master brake, and the electromagnetism eddy brake (Eton brake) is being adopted as the secondary brake. Combined, they are used with the auxiliary drive device to lift up and down the derrick, to drill automatically and boot up in emergency situations.
- 4.** The K type derrick, is assembled at ground level, The substructure is a block type (double lifting for ZJ50 and ZJ70 rigs), conveniently disassembled and assembled with good stability and safety in mind.
- 5.** For the mechanical drive drillings rigs, the rotary table is driven by the rotary table driving unit, which makes the structure simple. For AC electric drive rotary table on the mechanical drive drillings rigs, the operation of the rotary table is digitally controlled and protected. The speed can be constantly changed.



REGISTRATION NO. Q1 - 0063

### Certificate of Registration

The American Petroleum Institute certifies that the quality management system of SHENGLI OIL FIELD HIGHLAND PETROLEUM EQUIPMENT CO., LTD. No. 739 Dong Er Road Dongying City, Shandong Province People's Republic of China


has been assessed by API and found to be in conformance with the quality system requirements of

## API Specification Q1

The scope of this registration and the approved quality management system applies to the: Design, Manufacture and Service of Sucker Rod Pumps, Sucker Rods, Pumping Units, Drilling Rigs, PC Pumps, Casing, Tubing, Drill Pipe and Down Hole Motors Under IAF Scope Categories 17; 19

APIQP® approves the organization's justification for excluding:  
No Exclusions Identified as Applicable

Effective Date: AUGUST 28, 2006  
Registered Since: DECEMBER 23, 2002



*Gerardo Medina*  
Manager of Operations, APIQP

Approval of this Certificate indicates that the quality management system of the organization conforms to the requirements of API Spec Q1, Specification for Quality Management Systems for the Design, Manufacture and Service of Sucker Rod Pumps, Sucker Rods, Pumping Units, Drilling Rigs, PC Pumps, Casing, Tubing, Drill Pipe and Down Hole Motors. The Certificate is not a product of API and is not a product of the American Petroleum Institute. It is a product of the American Petroleum Institute's Quality Management System. For more information on the American Petroleum Institute's Quality Management System, visit our website at [www.api.org/qm](http://www.api.org/qm).

**QMS REGISTERED**

### Certificate of Registration

APIQP® REGISTRATION NUMBER 0339

This certifies that the quality management system of SHENGLI OIL FIELD HIGHLAND PETROLEUM EQUIPMENT CO., LTD. No. 739 Dong Er Road Dongying City, Shandong Province People's Republic of China

has been assessed by the American Petroleum Institute Quality Registrar (APIQP) and found it to be in conformance with the following quality system standard:

## ISO 9001:2000

The scope of this registration and the approved quality management system applies to the Design, Manufacture and Service of Sucker Rod Pumps, Sucker Rods, Pumping Units, Drilling Rigs, PC Pumps, Casing, Tubing, Drill Pipe and Down Hole Motors Under IAF Scope Categories 17; 19

APIQP approves the organization's justification for excluding the following section(s) of ISO 9001:2000:  
No Exclusions Identified as Applicable

EFFECTIVE DATE: August 28, 2006  
APIQP ISO 9001:2000 Registrant since: N/A  
ISO 9001:2000 Registered since: December 23, 2002

*Gerardo Medina*  
Manager of Operations, APIQP



REGISTRATION NO. TS-0159

### Certificate of Registration

The American Petroleum Institute certifies that the quality management system of SHENGLI OIL FIELD HIGHLAND PETROLEUM EQUIPMENT CO., LTD. No. 739 Dong Er Road Dongying City, Shandong Province People's Republic of China

has been assessed by API and found to be in conformance with the quality system requirements of

## ISO/TS 29001

The scope of this registration and the approved quality management system applies to the: Design, Manufacture and Service of Sucker Rod Pumps, Sucker Rods, Pumping Units, Drilling Rigs, PC Pumps, Casing, Tubing, Drill Pipe and Down Hole Motors Under IAF Scope Categories 17; 19

APIQP® approves the organization's justification for excluding:  
No Exclusions Identified as Applicable

Effective Date: AUGUST 28, 2006  
Registered Since: AUGUST 28, 2006



*Gerardo Medina*  
Manager of Operations, APIQP

Approval of this Certificate indicates that the quality management system of the organization conforms to the requirements of ISO/TS 29001, Petroleum, petrochemical and related products - Design, manufacture and service of sucker rod pumps, sucker rods, pumping units, drilling rigs, PC pumps, casing, tubing, drill pipe and down hole motors. The Certificate is not a product of API and is not a product of the American Petroleum Institute. It is a product of the American Petroleum Institute's Quality Management System. For more information on the American Petroleum Institute's Quality Management System, visit our website at [www.api.org/qm](http://www.api.org/qm).

### Certificate of Authority to use the Official API Monogram

License Number: 4F-0112 ORIGINAL

The American Petroleum Institute hereby grants to SHENGLI OIL FIELD HIGHLAND PETROLEUM EQUIPMENT CO., LTD. No. 739 Dong Er Road Dongying City, Shandong Province People's Republic of China

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API Spec 4F and in accordance with the provisions of the License Agreement.

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The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute. The scope of this license includes the following products: Main, Substrates & PSL 1

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 23, 2005  
Expiration Date: DECEMBER 23, 2008




*John M. ...*  
Director of Certification Programs

### Certificate of Authority to use the Official API Monogram

License Number: 7K-0111 ORIGINAL

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In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with the certificate number: 7K-0111

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute. The scope of this license includes the following product: Downhole Components

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: AUGUST 28, 2006  
Expiration Date: DECEMBER 23, 2008




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Director of Certification Programs

### Certificate of Authority to use the Official API Monogram

License Number: 8A-0082 ORIGINAL

The American Petroleum Institute hereby grants to SHENGLI OIL FIELD HIGHLAND PETROLEUM EQUIPMENT CO., LTD. No. 739 Dong Er Road Dongying City, Shandong Province People's Republic of China

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In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with the certificate number: 8A-0082

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute. The scope of this license includes the following product: Hoisting Devices

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: AUGUST 28, 2006  
Expiration Date: DECEMBER 23, 2008




*John M. ...*  
Director of Certification Programs