

# SpinTORQ

360° Continuously Rotating Torque Wrench



# Operation and Maintenance Manual Keep for your records

# INTRODUCTION

You have acquired SpinTORQ the fastest hydraulic torque wrench on the market. The SpinTORQ is a 360-degree, continuously rotating hydraulic torque wrench. SpinTORQ is a 2,000 psi. system wrench. SpinTORQ can be used for both surface and sub-sea bolting operations. Because of its 2,000 psi. pressure rating SpinTORQ can easily adapt to the ROV without the use of hydraulic hose down line. SpinTORQ Wrenches are dependable and durable. When

operated properly, SpinTORQ Torque Wrenches will deliver accurate torque within their specified range.

All metals contain no more than 7.5% magnesium

All corrosion protection coating is limited to no more than 2mm thickness.

Please be sure to read this manual very carefully. Save it in a secure place and refer to it when needed.

For additional information call FASTORQ at 281.449.6466, Toll Free at 1.800.231.1075 or by e-mail at sales@FASTORQ.com.

# **UNIT SPECIFICATIONS**

Hydraulic Input Flow	
Maximum	15 GPM
Minimum	3 GPM
Hydraulic Output Pressure	
Maximum	2,000 PSI

# **MAIN COMPONENTS**

*SpinTORQ* - The patented technology of the SpinTORQ wrench provides a 360° degree continuous rotation to create speed and accuracy with little effort. The convenience of full power in both directions, together with tremendous speed, results in dramatic timesaving benefits.

What gives the SpinTORQ its power to deliver full torque is the double enveloping worm gear.



**SpinTORQ HOUSING & SPLINE CONNECTION** – SpinTORQ housing has a special corrosion resistant coating so it will not rust during normal operation. SpinTORQ housing also houses the Double Enveloping Gear.

HYDRAULIC MOTOR ASSY. - Hydraulic Motors Convert the movement (kinetic energy) and pressure (potential energy) of a stream of hydraulic fluid into continuous moving energy of a rotating shaft.



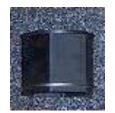
**STORM CASES WITH FOAM INSERTS** – SpinTORQ is protected from weather and damage and is tightly positioned in a tailor made storm case.

# **OPTIONAL ACCESSORIES**

**STACK SOCKETS WITH RETAINING RING**- User can change to a different hex size nut without changing the wrench head of the SpinTORQ.



**INSERT SOCKETS WITH RETAINING RING-** Low profile socket that the user can change to a different hex size nut without changing the wrench head of the SpinTORQ.



# **POWER REQUIREMENTS**

SpinTORQ Torque Wrench is powered by using external hydraulics such as the tong circuit on a drilling rig, ROV hydraulics or the FASTORQ Model 603A SpinTORQ Power Unit.

603A Pump (Optional)

The FASTORQ 603A is a high speed linear displacement double actingpump, driven by a 7 HP reciprocating air motor to provide 6.6 GPM maximum oil flow at no load and 2.8 GPM at 1,500 psi.



#### ST-CU Unit (Optional)

The ST-CU unit Maximum output pressure is 3,000 psi.

Integrated Control Console:

Pressure reducing valve for pressure (torque) control Flow control valve for speed control

Air pilot operated 4-way valve for directional control

Glycerin-filled easy-to-read pressure gauge

Inlet & outlet hydraulic ports for use with external hydraulic source

Adjustable pressure (torque) control from 200 PSI to 3,000 psi.

Adjustable speed control from 0 to 15gpm.



# UNPACKING

#### The SpinTORQ Torque Wrench is **FULLY TESTED AND CALIBRATED** before it is shipped..

## SAFETY PRECAUTIONS

#### **IMPORTANT**

Please read and follow all instructions to avoid the risk of personal injury and / or property damage.

#### CAUTION

Always wear safety goggles or safety glasses, and protective gloves when operating the SpinTORQ Torque Wrench.

#### WARNING

Do not allow hydraulic hoses to kink, twist, curl or bend.

Never attempt to grasp the hex part of the SpinTORQ while in operation.

Never exceed the rated Torque Value of the tool.

DO NOT exceed maximum calibrated pressure.

DO NOT repeatedly press and release the button in an attempt to release the load. If after two (2) attempts the nut will not release, higher capacity equipment will be needed.

# **PRE-TORQUE INSTRUCTIONS**

Insure that the threads are clean and in excellent condition. This is verified when the nuts are being assembled onto the studs. The nuts should screw on the studs freely by hand.

Torque value is set to the pressure on the 603A Pump or the ST-CU Unit. See calibration Torque vs. Pressure sheet at the included with the wrench.

# **OPERATION INSTRUCTIONS**

1. Each SpinTORQ hex cartridge (Fig 1) is a sealed unit. The precision gearing is installed and adjusted at the factory. <u>DO</u> <u>NOT ATTEMP TO OPEN THE HOUSING WITHOUT</u> <u>FACTORY ASSISTANCE.</u> Opening these connections will void the warranty.

- 2. The SpinTORQ Housings are connected to the hydraulic motor at the motor adapter. Several hex housing of different sizes may be interchangeably connected to the motor.
- 3. To operate the SpinTORQ, refer to the "Pressure vs. Torque Chart" supplied with each serial numbered unit located at the end of the manual. DO NOT EXCEED THE MAXIMUM PRESSURE INDICATED ON THE TORQUE CHART.
- 4. Preset the SpinTORQ Control Unit or 603A Power Unit to the desired torque, and follow the instructions of the control unit.
- 5. Place the SpinTORQ on the nut and press one of the buttons on the control pendant to start rotation. To reverse direction of rotation, press the other button.
- 6. During the torquing operation, allow the SpinTORQ to react against an adjacent nut. This is the preferred reaction point.
- 7. When the nut is torqued to preset level, the SpinTORQ cartridge will stall.
- 8. To release the reaction point, reverse the SpinTORQ rotation a few degrees until loosened.

#### **DANGER:**

Ensure that fingers & hands are not in the pinch point areas of the tool.

# **TROUBLE SHOOTING**

SYMPTOMS	CAUSE	SOLUTIONS
SpinTORQ not turning the correct way. Loosen / Tighten	Incorrect setup of Pendent Block.	Check OMM for the Pump or ST-CU units to ensure correct set-up
SpinTORQ not turning	Hydraulic hose not connected properly.	Reconnect Hydraulic Hose. Ensure that all hydraulic hose quick disconnects are clean.
Torque Value is to High / Low	Pump / ST-CU units are not set to correct setting.	Stop torque procedures Refer to torque chart for correct torque value. On pump / ST-CU ensure that
		pressure control knob is locked in place.

#### MAINTENANCE

• After every use rinse and clean the SpinTORQ with fresh water, pat dry and lubricate with light oil film on the motor and fittings.

• The grease used in the Housing for the Double Enveloping Gear is FastLUBE Part AGST. On the top of the Housing is a stainless steel plug remove plug with a 1/8" hex wrench and with the use of a grease gun pump the FastLUBE inside the Housing until resistance is encountered while turning the shaft manually. Once resistance is felt stop pumping the grease and reinstall the stainless steel plug. This should be done every 150 hours of operation. FastLUBE is purchased through FASTORQ. See Assistance section of this manual page 18.

#### **MAINTENANCE WARNING**

• Never disassemble the Housing this will VOID the warranty. Return tool to FASTORQ for evaluation.

## **STORING TIPS**

• Rinse and clean the SpinTORQ with fresh water after every job, and lubricate with light oil film on the motor and fittings.

• Store in a dry cool area.

## **REPAIR AND SERVICE**

FASTORQ shall provide complete and prompt service on all its products. It is recommended to return the unit to the factory in the event of a failure or a general maintenance requirement. FASTORQ's trained and experienced technicians can properly inspect and repair the unit.

#### ASSISTANCE

FASTORQ provides technical support and assistance to all its customers. Help is available 7 days a week, 24 hours a day by calling 281.449.6466 or Toll Free 1.800.231.1075.

Please contact us whenever you have a question or need assistance. We may be reached by phone or e-mail.

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