# HYDRAULIC TECHNOLOGIES

Americas Tel: +1 800 541 1418 info.amer@hytec.com Europe Tel: +31 45 567 8877 info.emea@hytec.com

> S 526 7100

Asia Pacific

Tel: +86 021 2208 5659 (China) Tel: +61 02 9763 4900 (Australia) Tel: +65 6265 4366 (Singapore) info.apac@hytec.com

Bolting Rental Tel: 1-713-472-2500 (Pasadena, TX)

Tel: 1-361-445-3727 (Corpus Christi, TX) Tel: 1-225-774-0888 (Gonzales, LA) bolting.amer@hytec.com

Rail Systems Tel: +44 208 526 7100 info.rail@hytec.com Bolting Rental Tel: +65 6265 4366 bolting.apac@hytec.com

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# **BOLTING SYSTEMS**

boltingsystems.com



### **Comprehensive Range of Problem Solving**

#### **Precision in Every Turn**

Bolting Systems has built its reputation on delivering high-performance bolting solutions for critical joint integrity. From its beginnings, Bolting Systems has grown into a trusted global provider of controlled bolting tools and equipment.

#### Leaders in Controlled Bolting Technologies

With expertise in hydraulic, pneumatic, and electric torque and tension systems, Bolting Systems is a key innovator in high-force bolting technology. Our products are engineered for accuracy, durability, and safety across demanding industries.

#### **Tailored Tools for Complex Jobs**

Bolting Systems continues to expand its product range with innovative solutions and custom-engineered tools. From tensioners to torque wrenches and pumps, we offer equipment designed to solve complex bolting challenges.

#### The Bolting Systems Standard of Excellence

Our commitment to performance and quality is reflected in rigorous testing, ISO-certified processes, and industry-recognized reliability.

#### **Global Reach, Local Support**

A worldwide network of Bolting Systems distributors and service providers ensures responsive support, product availability, and expert service—wherever critical bolting matter



### **Bolting Systems Trade-Up Program**

• Bolting Systems will take any competitor brand of hydraulic torque wrench or 10,000 psi hydraulic pump unit as a trade-in for any new Bolting Systems product.

• Your local Bolting Systems salesperson will take an inventory of the tooling you would like to trade-in to ensure it meets our criteria (needs to be a complete tool – no missing parts or pieces).

• Bolting Systems will provide a quotation based on the new equipment to be purchased showing the trade-in value for each item.

• Once a purchase order is received, the trade-in tooling must be sent to our Bolting Systems facility in Pasadena, Texas for verification. Once received, we will process your order for the new Bolting Systems equipment and apply a line item credit to each item being purchased.

### **SEMINARS & TRAINING**



### Maintenance & Repair Training

This seminar explains the proper methods for keeping Bolting Systems products operating at peak levels of performance and reliability.

Topics include understanding hydraulic circuits, product maintenance, troubleshooting, and field repairs. In-house classes are three or five day seminars structured to meet your product knowledge requirements.

### **Safety Training**

Bolting Systems Safety Training Seminars demonstrate the proper methods for operating high-pressure hydraulic tools to avoid equipment damage and lost time accidents.

Safety seminars can be conducted at a customer facility, job site, Bolting Systems facilities, or HT headquarters.

# Torque Wrench Pumps

### A. Air Pumps

- Powerful 3HP motor starts under load
- Use with single or double acting tools. Not for lifting applications
- 4" (100mm) calibration capable gauge

### **B. Electric Pumps**

- Two Speed High Performance pump
- Retract side internal relief valve
   protects tool
- Hand remote
- Four-tool manifold (-4 models only) allow use of up to four tools simultaneously
- 4" (100mm) calibration capable gauge
- Use with single or double acting tools
- For powering portable tools such as spreaders, nut splitters, pipe flange spreaders, etc. Available in 115V and 230V models

### C. Gas Powered Hydraulic Pump

- High quality, reliable gasoline engine
- Continuous duty
- Air cooled 4-stroke engine
- Uses standard unleaded gasoline
- Large capacity, multi-chamber exhaust system to reduce noise

### **BOLTING SYSTEMS**





# Torque Wrenches

#### A. Low Clearance Torque Wrench

- Swivel manifold internal relief valve
   prevents retract side over-pressurization
- "Hardened" steel reaction pad on TWLC8, 15 & 30
- Low weight, high strength design
- Superior torsional strength

### **B. Pneumatic Torque Wrench**

- High-speed continuous rotation, speeds up bolt working times
- Torque output accurate to +/- 3%.
- Unique calibration for each tool, with certificate.
- Stepless torque adjustment via air control unit, large easy read air pressure gauge

### C. High Cycle Torque Wrench

- Designed for high cycle life: 2-3x more than existing technology
- Increased reliability: Simple drive assembly means less downtime
- Corrosion resistant material for use in harsh environments

# Tensioner Pumps\*

### A. High Flow Tensioner pump

- Over 100,000 cycles
- Continuous duty up to 122°F (50°C) ambient
- Calibrated 6" (150mm) Pressure Gauge
- Dual oil outlets with quick-connect, no spill couplings
- Pneumatic Filter/Regulator/Lubricator inc.

### **B. High Pressure Electric Pump**

- Light Weight and portable: 45.5 lb (20.6 kg) [without oil]
- Quick Release, removable control pendant (15ft / 5m)
- Removable 4" (100mm), calibrationcapable, gauge
- Universal Motor for reduced voltage
   applications (up to -20% nominal voltage)
- Tensioners are designed to daisy-chain so multiple tools can run off one pump

### C. High Pressure Hand Pump

- Two-speed reduces handle strokes so you work faster and easier
- Built-in, protected pressure gauge
- Ergonomic design
- Lightweight aluminum reservoir

\*Rated for high-pressure tensioner applications 21,750 PSI (1500 Bar).







### **Tensioners\***

### A. Spring Return Tensioners

- Bolt coverage from 3/4" to 41/2" (20-115mm) with 8 tools
- Piston overstroke prevention
- Twin hydraulic couplings for multiple tool connections
- Designed to fit BS1560/ANSI B16.5/API flanges

### **B. Subsea Tensioners**

- Bolt coverage from 3/4" to 4" (M20 to M100)
- Designed to fit BS1560/ANSI B16.5/API
- flanges and most compact flange designs
- Anti-corrosion coating

### **C. Wind Tensioners**

- Achieves 90% proof load requirement for ISO 898 Grade 10.9 bolts
- Fully enclosed load cell eliminates debris in piston retraction mechanism
- 19,580 psi / 1,350 bar maximum operating pressure

\*Rated for high-pressure tensioner applications 21,750 PSI (1500 Bar)

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### Tools

### A. Flange Spreader Kit

- Jaws fully supported by wedge for excellent durability
- · All kits are CE rated
- 15T wedge-driven spreader. Jaws fully supported by wedge durability
- Compact and lightweight design
   9.9" (250mm) long and 7lb (3.17kg)
- Low friction provided by heavy-duty extended-life lubricant, ideal for flanges with narrow gaps

### B. Hydraulic Pipe Flange Spreader

• Eliminate hammer and chisel methods that waste time. Used in pairs to provide an even spreading force

### C. Hydraulic Spreader

- Use to lift machines to spread concrete forms or rebar and straightening jobs
- Jaws are spring-return to retract auto matically when pressure is released

### **D. Hydraulic Nut Splitter**

• "Dial-in" feature on HNS150 makes adjustment of splitter simple, without the worry of damaging the bolt

### **BOLTING SYSTEMS**





# System Components

#### A. Gauges (Digital and Analog)

- (Analog) Gauges are calibrated and comply to ASME B40.1 GRADE B
- (Analog) High strength steel bourdon tube ensures high cycle life.
- (Digital) Agency Compliance / Approval: RoHS, CE, ASME B40.7, UL, cUL 61010-1.
- (Digital) Vibration & shock tested to MIL-STD-202G.
- (Digital) IP67 weatherproof rating.

### **B.** Hoses

- Hoses are equipped with plastic hose guards (except for the 1/4" (6mm) I.D. polyurethane hoses which have spring guards).
- Rubber, Polyurethane, and non-Conductive.

### **C. Hydraulic Fluids**

• For dependable performance of all your hydraulic pumps and cylinders.

### **D.** Couplers

• Quick-connect, screw-on Female or male nipple. Used on 10,000 psi (700 bar) torque wrenches, nutsplitters, hoses, and pumps. 1/4" (6mm) NPT Female Thread

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### Software

### **A. Joint Calculator**

- Select the joint data from the extensive library or enter your own.
- Instantly perform stress calculations per ASME PCC-1 and WRC 538, with the ability to view all engineering calculations performed
- Perform torque and tension calculations using the ASME PCC-1 principles.

#### **B. Joint Manager**

- Create linked pins on images
- Create QR codes linked to the joint
- Import and export data
- Regulate access and permissions

### C. Joint Tightening

- Save and edit joints
- Upload and markup attachments
- Track individual Joint Status
- Export Joint Tightening Sheets
- Download Joint and Work Pack Data

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# Rental

Bolting Systems provides flexible rental solutions, giving customers access to topof-the-line bolting equipment without the hassle of ownership. This helps optimize both resource allocation and project management.

With Rental, Sales, and Service facilities strategically located worldwide, we ensure fast and efficient support for our global customers. To enhance our reach, we've expanded with new service centers in key locations.

Our Repair & Calibration centers are dedicated to keeping our rental equipment in peak condition, maintaining the highest quality standards and regulatory compliance. These centers act as hubs for maintenance, repair, and calibration, ensuring your equipment performs at its best and lasts longer.

At Bolting Systems, we don't just deliver solutions—we're committed to building partnerships and supporting you through every phase of your project.

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