

FASTORQ®



TOOLS & TECHNOLOGY

CUSTOM SOLUTIONS

INNOVATIVE DESIGN FOR:

ROBOTIC APPLICATIONS

SUBSEA / ROV TOOLING

ZIPNUT TECHNOLOGY

ENGINEERED LUBRICANTS

BOLTING SEMINARS

FIELD SERVICES

FASTORQ®

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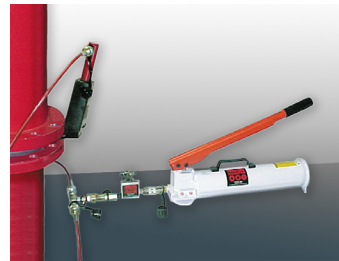
www.Fastorq.com

AUTO-SPREADER™ Flange Spreader - - Manual and Hydraulic Models



U.S. Patent #5678293

- Opens a 3" wide gap in a single pass
- Fits ALL flange sizes
- Only needs 3/32" gap to insert jaws
- Serrated Jaws - will not drift
- No loose wedges or parts
- Multi-step safety block included
- Can be operated remotely
- Provides 20,000 lbs. of spreading force per pair; 10,000 lbs. per unit



Applications

Gasket Maintenance
Opening Vessels
Lifting, Leveling
Lowering, Aligning
Turning Blinds
Bearing & Impeller Removal
Separating Manways
Toe Jack

AUTO-SPLITTER™ Hydraulic Nut Splitter



Cuts through the hardest nuts, including ASTM A 194/2H
Splits from 5/8" to 6-1/2" across flats and 6-1/8" on round nuts
Cuts any shape nut {shapes other than hex require an adapter}
SAFE - no hammers, no impact
Easily calibrated to cut only the nut, while preserving the bolt threads
Largest line of nut splitters in the world, 22 models:

- 10 Straight
- 7 Angle-head
- 5 Double-Cutting

AUTO-SPLITTER™ requires a 10,000 PSI hydraulic pump. Choose from :

Model #115E (electric)

Model #105A (air-hydraulic)

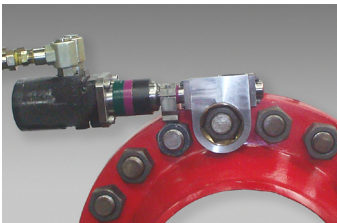
Model #100H (hand pump)

Model #150F (foot pump)

Each pump assembly includes a 12 ft. hydraulic hose, plus all fittings and quick disconnects needed.

SPIN-TORQ® Continuously Rotating Hydraulic Torque Wrench

FASTEST TORQUE WRENCH ON THE MARKET



U.S. Patent #6,305,236 B1

Three Motor sizes - Nine Wrench sizes, plus Stack Sockets & inserts

36 times faster than ratcheting wrenches!

Fully reversible with full power in both directions

Operates in tight spaces

Accuracy is +/- 3%

Manual or robotic control

Durable stainless steel body

Torque Range: 200-7,000 ft-lbs



SPIN-TORQ® Power Unit

MODEL 603A Spin-Torq Power Unit

Super high speed linear displacement double acting plunger pump driven by a 6 HP reciprocating air motor to provide 10 GPM maximum oil flow @ no load & 4 GPM @ 1500 PSI. Maximum output pressure 3000 PSI.

MODEL ST-CU Spin Torq Control Unit is recommended for use with rig or shop hydraulic systems to power Spin-Torq Wrenches.

AUTO-TORQ™ Hydraulic Torque Wrenches

AUTO-TORQ™ Hydraulic Thinline Wrench



- Fits easily in tight spaces, thinner than the nut height
- Light weight, "best power to weight ratio in the industry"
- Custom designs available
- Interchangeable wrench heads and reaction units available for any nut size
- Torque range up to 138,250 ft. lbs.

AUTO-TORQ™ Power Units More Speed, Power & Durability

MODEL 605A

5,500 PSI working pressure

MODEL 610A

10,000 PSI working pressure

Both power units Include a 25 ft. hydraulic hose with fittings, a 25 ft. remote control assembly, filter/regulator/lubricator and liquid filled hydraulic pressure gauge.

Durable welded frame protects components.



FAST - Desired torque at a touch of a button

SAFE - Eliminates hammers, slugging wrenches cheater pipes; prevents accidents & lost time

QUIET - No ear ringing or bone jarring vibrations

ACCURATE - Eliminates guesswork by providing +/- 3% torque control automatically with repeatability within 2%; certified calibration available for all models

CONSISTENT - Delivers same torque to every bolt in the pattern; gaskets seal - eliminating leaks

IU-XL & SU-XL Hydraulic Torque Wrenches



INLINE RATCHET - Standard fractional head sizes from 3/4" nuts across the flats. Metric and special sizes available.
Slotted Piston Rod - Maintains 90° relationship between piston rod and nut.



SQUARE DRIVE - For use with all standard sizes square drive impact sockets. Easily shifts from makeup to break-out without disassembly.
Anti-reverse pawl release mechanism allows manual release of tool if binding occurs.

AUTO-ZIP™ PRODUCTS & DOUBLE-ZIP™ TECHNOLOGY™

With patented *Double-Zip technology* - - a “push-on - pull-off” segmented thread assembly
Provides more speed and safety than standard thread assemblies
Auto-Zip reduces labor costs and cross threading is eliminated
Auto-Zip products are especially suited for robotic operations

AUTO-ZIP PRODUCTS CAN BE CUSTOM-BUILT TO CUSTOMER'S SPECIFICATIONS

FAST - Simply push on and pull off, no twisting and turning

EFFICIENT - Self-aligning design eliminates cross threading, time and labor costs are reduced

SAFE - Robotic adaptability eliminates the need for human exposure to hazardous environments

DURABLE - All parts are stainless steel, nickel-plated or coated for corrosion protection

ZIP-LIFT™ Load Connector

Robotically retrieves and deploys heavy loads, either subsea or topside



Models available with lifting capacities ranging from 35,000 to 422,000 lbs.

Hydraulic or pneumatic cylinders can be integrated into the system to release the thread segments

Will not release until load is set down

Shackles and pins are eliminated

Especially suited for subsea and nuclear applications where human intervention is restricted

AUTO-ZIP™ Subsea Flange Puller

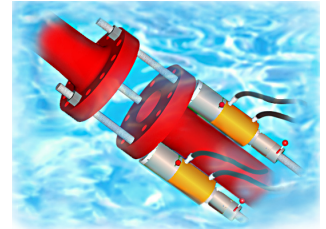
LARGEST load capacity pulling system in the industry
Fully automatic thread segments slide over threaded rod, eliminating the time-consuming task of tightening nuts and bolts

Hydraulic powered, 10,000 PSI working pressure

Designed to use in multiple units with a single pump to provide uniform flange makeup

Subsea or surface operation, ROV & hardsuit compatible

Especially suited for subsea flange pulling and alignment, as well as heavy equipment positioning and maneuvering



AUTO-ZIP™ Stud Tensioners

Simultaneously tensions multiple threaded fasteners in half the time required by conventional stud tensioners (eliminates manual rotation)

Design allows for 100% stud coverage from one side of any ANSI or API flange

One piece installation - - Compact and light weight

Low-friction seals are self-lubricating and provide unlimited shelf life

Especially suited for subsea and nuclear applications



AUTO-TENSION™ Stud Tensioners

Quick, safe and accurate method of simultaneously loading multiple threaded fasteners

Available in two styles: Variable and Fixed

Eliminates costly, time-consuming rework

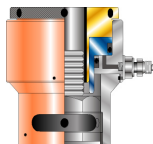
Provides accurate bolt tension independent of “coefficient of friction” and no torsional loading of fastener

Reliable, low-friction seals

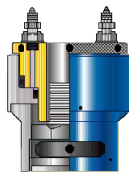
Captive nut rotator, two hydraulic ports and over-stroke indicator

Recommended power unit: FASTORQ Model

HTP-2000, featuring a power vacuum return pump



VARIABLE



FIXED

AUTO-TENSION™ Power Units

For optimum performance and fast turnaround, power FASTORQ Stud Tensioners with a FASTORQ power unit.

Suitable for Variable, Fixed, Auto-Zip and multiple tensioning systems.

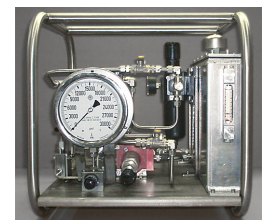
MODEL HTP-2000

30,000 PSI air-driven pump

Filter, regulator and lubricator

Rugged stainless-steel cage

Power vacuum return pump



STAINLESS STEEL CAGE

DTIs ~ DIRECT TENSION INDICATOR Patented Bolt Load Measuring Technology

Prevents Leaks - Eliminates Fugitive Emissions



Verifies correct tension for secure joints, permanent load verification to +/- 2% of bolt load

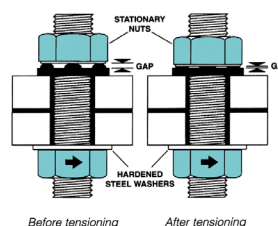
Bolt load achieved regardless of bolt condition and torque applied

Simple to install & inspect with standard tools, no special training

Low cost alternative to ultrasonic measuring

Conforms to ASTM F959

Customized DTI's available



The DTI is a specially designed load measuring device with protrusions on one face. It is placed under the bolt head or nut, and the protrusions create a gap. As the bolt is tensioned, the clamping force flattens the protrusions, reducing the gap. A “no-go” feeler gauge is used to insure that the specified bolt tension is achieved.

FASTORQ® ENGINEERED LUBRICANTS



FASTORQ® Lubricants Reduce Friction & Prevents Galling & Seizing...GUARANTEED!!

FASTORQ A/G - Guaranteed to eliminate galling and seizing; superior sealant; reduces torque requirements; excellent for stainless steel & other gall-susceptible metals, eliminates the need for teflon tape

FASTORQ A/G 2+ - Same as A/G, except formulated for pipe & fittings over 2"

FASTORQ RS18 - Anti-gall thread lubricant, superior ease of application

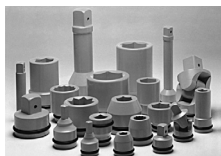
FASTORQ 70+ - Moly Paste, prevents rust & corrosion at temperatures up to 750°F

FASTORQ 72 - Nickel high-temperature bolting lubricant; up to 2,550°F; provides easy breakout

FASTORQ 444 - Waterproof lubricant, prevent corrosion in salt water, won't wash off

IMPACT SOCKETS

- Hex, 12-pt, square & double square
- Standard, deep or thinwall
- High strength alloy steel
- Up to 3-1/2" Square Drive
- #5 Spline Drive
- Custom designs available



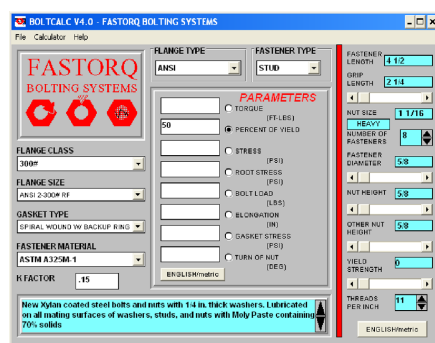
12-PT SLUGGING WRENCHES

STRAIGHT or OFFSET

- Drop forged from high tensile, heat treated alloy steel
- Electroplated black oxidizing to prevent rust
- Larger striking area, greater sectional area



BOLT CALC™ Bolting Technology Software



User-friendly engineering software designed to calculate bolt load, gasket stress, torque & tension in bolted joints

Select your bolted joint specifications and enter known parameters - BOLT CALC does the rest

User-defined category stores custom specs

Converts between English & Metric units

Standard data stored in memory - ANSI & API flanges, ASTM, SAE & metric bolts, spiral wound, ring joint & flat gaskets; empirical data such as "K" factors for bolted joints with various fastener materials, lubricants & coatings

ADDITIONAL FASTORQ® PRODUCTS

Torque Calibration Systems
Pipe Cutter/Crimper
USM Ultrasonic Bolt Meter
FASTBAK™ Backup Wrench
Auto-Gripper™ Stud Extractor
Hydraulic Chain Pipe Wrench
Inline Ratchet Wrenches

FASTORQ® SERVICES

Pipe Weighing	Bolt Torquing
Nut Splitting	Bolt Tensioning
Stud Removal	Ultrasonic Bolt Measurement
Consulting	Bolting Seminars

INDUSTRIES SERVED

Refineries	Oil & Gas Drilling
Petrochemical Plants	Power Generation Plants
Nuclear	Pulp & Paper Mills
Steel Mills	Pipelines
Mines	Bridge & Building Construction
Aviation	Military
Subsea	Manufacturing

FASTORQ® is located in Houston, TX and is a global provider of precision bolt loading and removal solutions. With over 50 years of experience, **FASTORQ®** designs, manufactures, tests and calibrates precision crafted tools and custom-built products. The company's highly skilled team of engineers and bolting technicians deliver timely resolution to bolting applications of all sizes.

Contact **FASTORQ®** for all your bolting and lubricant solutions.

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