



ADVANCED BOLTING SOLUTIONS PVT. LTD.





# *Your Trusted Partner In* **Precision Bolting & Machining Solutions**

Since 1998, Advanced Bolting Solutions (ABS) has been revolutionizing industrial bolting with cutting-edge technology, precision engineering, and a commitment to quality. As a leader in joint integrity solutions, ABS specializes in high-torque applications (up to 72,000 Nm), tensioning (nut sizes up to 6 inches), on-site machining, and automated flange management—ensuring efficiency, safety, and reliability across industries.

## **Strengthening Saudi Arabia's Industrial Growth**

In alignment with Vision 2030, ABS is dedicated to empowering industries in Saudi Arabia and the GCC with world-class bolting solutions. Our expertise spans oil & gas, power generation, mining, infrastructure, defense, and heavy engineering, making us a trusted partner for mission-critical applications.

At ABS, we go beyond tools—we offer expert consultation, on-site support, certified training, and NABL-accredited calibration services, ensuring unmatched operational excellence.

# Our Manufacturing & Technology Edge

## Precision Engineering. Global Standards. Local Commitment.

At ABS, technology meets innovation to deliver world-class bolting solutions. Our state-of-the-art manufacturing facility, combined with strategic global partnerships, allows us to provide cutting-edge bolting tools and systems tailored for the most demanding industrial applications.

### ABS - Engineered for Excellence

Crafted under our "Make in India, Made for the World" initiative, ABS hydraulic bolting tools set the benchmark for power, precision, and durability. Designed for extreme industrial conditions, ABS products deliver unmatched performance, longevity, and reliability-making them the preferred choice for mission-critical bolting applications.

### RAD Torque Systems – Unrivaled Power & Precision

As the exclusive representative of RAD Torque Systems, ABS brings the world's most advanced torque tools to the industrial landscape. RAD's pneumatic, battery-operated, and electronic torque wrenches are renowned for their unparalleled speed, accuracy, and efficiency-perfect for high precision bolting in Oil & Gas, Power, And Heavy Engineering Sectors.

From hydraulic to pneumatic to battery-powered solutions, ABS is your trusted partner for End to end joint integrity and bolting excellence across the Saudi Arabian and GCC industrial sectors.

ABS is the only company in India with NABL Accreditation for torque tool calibration up to 27,000 Nm- a testament to our expertise and commitment to quality.



## Vision

To be the industry leader in comprehensive joint integrity solutions, delivering precision equipment, specialized on-site services, and advanced manufacturing solutions with uncompromising reliability, traceability, and innovation.



## Mission

To drive customer excellence by providing precision bolting and machining solutions, ensuring maximum productivity, quality, and safety through innovation and automation.



## Core Values

### Excellence

Delivering world-class solutions with consistency and precision.

### Integrity

Upholding the highest ethical standards in business practices.

### Innovation

Adopting cutting-edge technology to stay ahead.

### Empowerment

Developing skilled professionals through certified training.

### Sustainability

Supporting environmentally responsible industrial growth.



# QUALITY ASSURANCE & CERTIFICATIONS

We believe in unwavering quality management, backed by globally recognized certifications:



ISO 45001:2018  
Occupational Health & Safety



ISO 9001:2015  
Quality Management System



ISO/IEC 17025  
Testing & Calibration Laboratory  
Accreditation



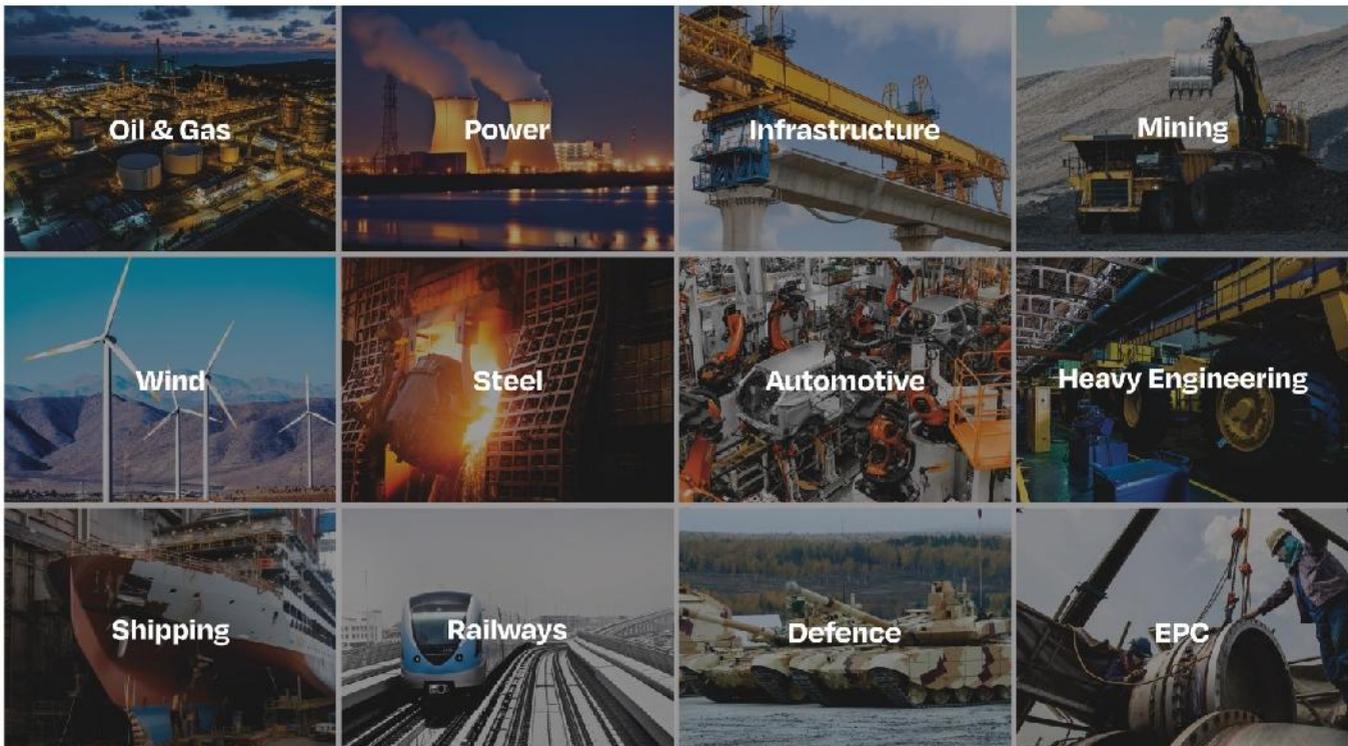
ECITB  
Approved Training Programs

## CLIENTELE



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## INDUSTRIES WE SERVE

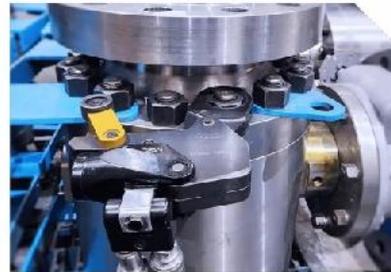


Since our inception, we have worked with the biggest names in all major industries and enjoy credible customer confidence.

## AT A GLANCE



Hydraulic Torque Wrenches  
Battery Torque Wrench  
Electric Torque Wrench



Hydraulic Bolt Tensioners  
Torquing & Tensioning Pumps and Hoses  
Flange Maintenance Tools



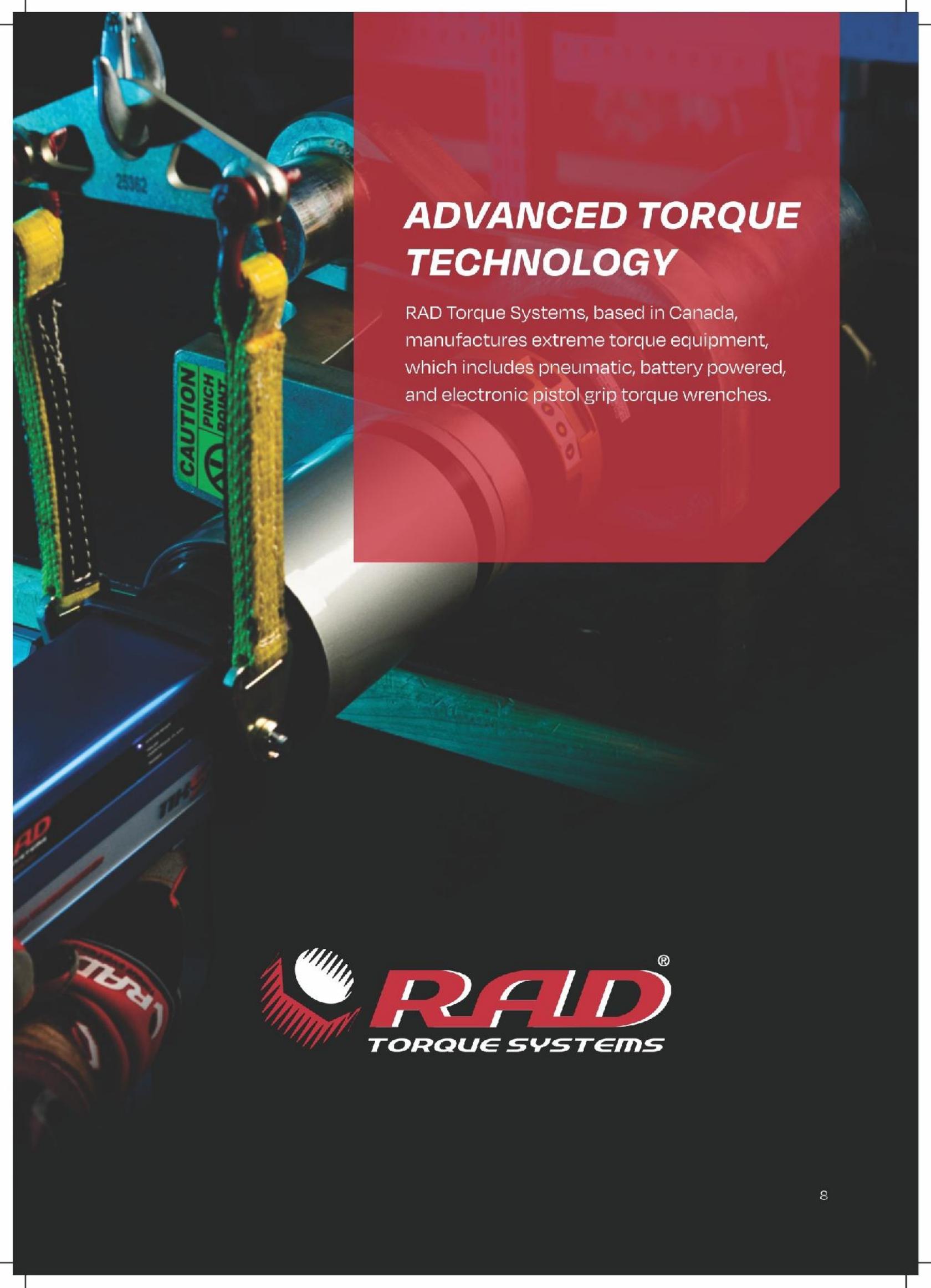
Bolting Accessories  
Torquing & Tensioning Service  
After-Sales Service

Training  
Calibration Support  
Pipe Cutting & Beveling



## TABLE OF CONTENT

|  |              |
|--|--------------|
| <b>RAD Torque Systems</b>                        | <b>8-15</b>  |
| <b>ELECTRONIC TORQUE TOOLS</b>                   |              |
| E-RAD BLU  | 9            |
| E-RAD BLU-S                                      | 10           |
| TOUCH CONTROL CASE                               | 10           |
| <b>ELECTRIC TORQUE TOOL</b>                      |              |
| SV-RAD SELECT                                    | 11           |
| <b>BATTERY TORQUE TOOLS</b>                      |              |
| B-RAD Xtreme                                     | 11           |
| B-RAD SELECT                                     | 12           |
| B-RAD SELECT OFFSET                              | 12           |
| DIGITAL B-RAD                                    | 13           |
| <b>PNEUMATIC TORQUE TOOLS</b>                    |              |
| RAD SINGLE SPEED                                 | 13           |
| RAD HIGH SPEED                                   | 14           |
| RAD WHEEL NUT & OTR MINING                       | 14           |
| <b>AUDIT EQUIPMENT</b>                           |              |
| B-RAD S  | 15           |
| RAD SMART SOCKETS™                               | 15           |
| RAD CALIBRATION SYSTEMS                          | 16           |
| <b>MULTIPLIER</b>                                |              |
| SDM LOW PROFILE MULTIPLIER                       | 16           |
| <b>ABS</b>                                       | <b>17-44</b> |
| <b>HYDRAULIC TORQUE TOOLS</b>                    |              |
| CNX Series                                       | 18           |
| CNZ Series                                       | 19           |
| CNZ Link Selection                               | 20-21        |
| CNO Series                                       | 22           |
| <b>TORQUING PUMPS</b>                            |              |
| ELECTRIC PUMPS                                   | 23           |
| PNEUMATIC PUMPS                                  | 24           |
| HYDRAULIC HOSES                                  | 24           |
| <b>TENSIONERS</b>                                |              |
| HFST Standard Tensioners Tensioners              | 25           |
| HFST Spring Return Tensioner                     | 26           |
| HFDF Direct Fit Tensioner                        | 27           |
| HFMT Multi Stage Tensioner                       | 27           |
| HFHN Hydraulic Nut                               | 28           |
| Tensioning Pumps                                 | 29           |
| <b>FLANGE MANAGEMENT TOOLS</b>                   |              |
| Nut Splitter                                     | 30           |
| Flange Spreaders                                 | 30           |
| <b>MANUAL TORQUE WRENCHES</b>                    |              |
| HFTW Manual Torque Wrenches                      | 31           |
| HFTM Torque Multipliers                          | 31           |
| <b>PIPE CUTTING &amp; BEVELING MACHINES</b>      | 32-39        |
| <b>FLANGE FACING AND SERRATION MACHINES</b>      | 40-41        |
| <b>OTHER BOLTING EQUIPMENT &amp; ACCESSORIES</b> |              |
| Sockets  | 42           |
| HFBW Backup Wrenches                             | 42           |
| Slugging Wrenches                                | 43           |
| Non-Sparking Industrial Safety Tools             | 44           |
| <b>TRAINING</b>                                  | <b>45</b>    |
| <b>VALUE ADDED SERVICES</b>                      | <b>46</b>    |
| Repair and Tool Maintenance                      | 47           |
| Tool Calibration                                 | 47           |
| Rentals  | 47           |
| <b>BOLT LOAD TORQUE CHART</b>                    | <b>48</b>    |



## **ADVANCED TORQUE TECHNOLOGY**

RAD Torque Systems, based in Canada, manufactures extreme torque equipment, which includes pneumatic, battery powered, and electronic pistol grip torque wrenches.



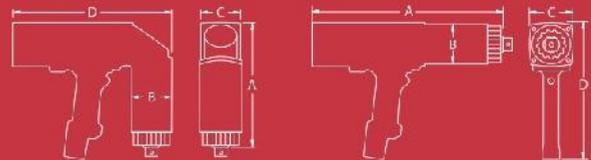
E-RAD BLU precision torque wrench tools are designed to provide a high degree of accuracy (+/- 2.8%) and repeatability (+/- 2%). Using a patented gearbox design and the precision of an electric AC Servo motor, these tools deliver smooth continuous torque.

### Advanced Data Logging and Tool Management Features

Available in a 90-Degree Gearbox

Lightweight and Ergonomic Pistol Grip

## E-RAD BLU ELECTRONIC TORQUE TOOL



| PART NUMBER | MODEL                      | DIMENSIONS (mm) |     |     |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |       | RPM  |      |
|-------------|----------------------------|-----------------|-----|-----|-----|------------|-------------|-------------|-------|------|------|
|             |                            | A               | B   | C   | D   |            |             | MIN.        | MAX.  | 120V | 230V |
| 21985       | E-RAD BLU 950-M            | 340             | 65  | 78  | 275 | 0.75"      | 5.5         | 135         | 950   | 15   | 30   |
| 26387       | E-RAD BLU 950-90-M Degree  | 197             | 63  | 78  | 293 | 0.75"      | 5.5         | 135         | 950   | 15   | 30   |
| 24162       | E-RAD BLU 2000-M           | 337             | 69  | 78  | 275 | 1.0"       | 5.9         | 270         | 2000  | 8    | 16   |
| 21986       | E-RAD BLU 3400-M COMP      | 380             | 76  | 78  | 275 | 1.0"       | 7.6         | 340         | 3400  | 4.9  | 10   |
| 22434       | E-RAD BLU 3400-90-M Degree | 210             | 76  | 78  | 300 | 1.0"       | 8.3         | 340         | 3400  | 6    | 12   |
| 21987       | E-RAD BLU 4000-M           | 430             | 88  | 88  | 287 | 1.0"       | 11          | 675         | 4000  | 4.1  | 8.5  |
| 21988       | E-RAD BLU 8000-M           | 419             | 100 | 100 | 287 | 1.5"       | 13.5        | 2000        | 8000  | 2.1  | 4.5  |
| 21989       | E-RAD BLU 10K-M            | 432             | 105 | 105 | 287 | 1.5"       | 15          | 2000        | 10000 | 1.5  | 3    |
| 24224       | E-RAD BLU 15K-M*           | 465             | 127 | 127 | 287 | 1.5"       | 20          | 4000        | 15000 | 1.2  | 2.3  |

Accuracy of +/-2.8%, Repeatability of +/-2% | \*Also available in a 2.5" square drive.

The integrated transducer measures torque output in real time, ensuring the tool stops precisely where it needs to. This feedback loop allows the E-RAD BLU-S to operate accurately regardless of the joint condition and will even allow you to check a previously tightened bolt without applying too much torque.

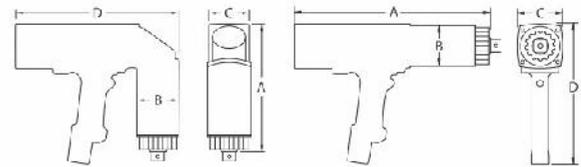
## E-RAD BLU-S ELECTRONIC TORQUE TOOL



### Built-in Transducer

Capable of Torque and Angle Bolting Sequence

Extremely Low Noise Level at Only 75dB



| PART NUMBER | MODEL                     | DIMENSIONS (mm) |       |    |       | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |       | RPM  |      |
|-------------|---------------------------|-----------------|-------|----|-------|------------|-------------|-------------|-------|------|------|
|             |                           | A               | B     | C  | D     |            |             | MIN.        | MAX.  | 120V | 230V |
| 26937       | E-RAD BLU-S 950-M         | 380             | 72    | 77 | 270.5 | 0.75"      | 5.9         | 135         | 950   | 15   | 30   |
| 26938       | E-RAD BLU-S 3400-S-M COMP | 412             | 87    | 77 | 270.5 | 1.0"       | 8.6         | 340         | 3400  | 5    | 10   |
| 22759       | E-RAD BLU-S 4000-M        | 451             | 95    | 88 | 287   | 1.0"       | 11.1        | 675         | 4000  | 5    | 10   |
| 25262       | E-RAD BLU-S 8000-M        | 450             | 110.5 | 88 | 287   | 1.5"       | 13.6        | 1350        | 8100  | 2.1  | 4.5  |
| 26939       | E-RAD BLU-S 10K-M         | 471             | 114   | 88 | 287   | 1.5"       | 15.4        | 2000        | 10000 | 1.5  | 3    |
| 29315       | E-RAD BLU-S 15K-M*        | 503             | 132   | 88 | 287   | 1.5"*      | 20          | 4050        | 15000 | 1.5  | 2.3  |

Accuracy of +/- 2.8%, Repeatability of +/- 2% | \*Also available in a 2.5" square drive.

This Touch Control Case allows the user to dial up and down using the touchscreen. Torque and angle can be set in single digit increments to their desired torque.

- 2 x 3" touchscreen
- Standard with variable torque and angle
- Field calibration
- Multi-user level password protection
- Life cycle and maintenance counters
- Advanced data collection and operator identification
- Low noise level at only 75 dB

## TOUCH CONTROL CASE



### Ergonomics

### Productivity

### Reliability

V-RAD Select electric torque wrench is used for the installation or removal of heavy-duty fasteners where accuracy, power, and safety are required. Quick adjust torque settings. Equal power in forward and reverse.

## V-RAD SELECT ELECTRIC TORQUE TOOL

**Digital Torque Settings to Increase and Decrease the Value by 10 ft. lbs./ 10 Nm**

**Available in Both 120V or 230V**



| PART NUMBER | MODEL               | DIMENSIONS (mm) |    |    |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM |
|-------------|---------------------|-----------------|----|----|-----|------------|-------------|-------------|------|-----|
|             |                     | A               | B  | C  | D   |            |             | MIN.        | MAX. |     |
| 25633       | V-RAD SELECT 1400-M | 305             | 64 | 74 | 203 | 0.75"      | 3.9         | 140         | 1400 | 8.8 |
| 25634       | V-RAD SELECT 2000-M | 311             | 69 | 74 | 203 | 1.0"       | 5.9         | 200         | 2000 | 5.7 |
| 25636       | V-RAD SELECT 4000-M | 343             | 79 | 79 | 203 | 1.0"       | 6.2         | 400         | 4000 | 2.7 |

Accuracy of +/-5%, Repeatability of +/-2%

The all-new B-RAD Xtreme (B-RAD X) raises the bar for torque range capacity with a battery tool, maxing out at an impressive 11,000 ft. lbs./ 15,000 Nm. – making the B-RAD X officially the biggest cordless torque tool on the market. Plus, with 4% accuracy this tool will stand up to the toughest scrutiny.

## B-RAD Xtreme BATTERY TORQUE TOOL

**Two-Hand Start Options to Prevent Hand Injuries**

**Redesigned Anti-Fatigue Trigger Switch**

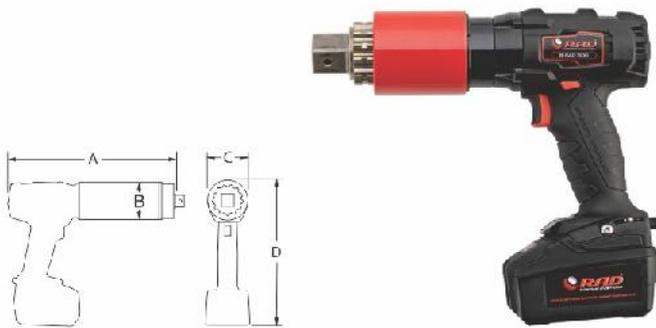
**Brushless DC Motor**



| PART NUMBER | MODEL          | DIMENSIONS (mm) |     |     |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |       | RPM |
|-------------|----------------|-----------------|-----|-----|-----|------------|-------------|-------------|-------|-----|
|             |                | A               | B   | C   | D   |            |             | MIN.        | MAX.  |     |
| 30984       | B-RAD X 4000-M | 298             | 83  | 89  | 349 | 1"         | 7.9         | 340         | 4000  | 3.9 |
| 30657       | B-RAD X 7000-M | 318             | 95  | 95  | 362 | 1.5"       | 10.5        | 700         | 7000  | 2.4 |
| 30659       | B-RAD X 10K-M  | 349             | 108 | 108 | 369 | 1.5"       | 13.8        | 1000        | 10850 | 1.7 |
| 30661       | B-RAD X 15K-M* | 387             | 127 | 127 | 375 | 1.5"       | 19.3        | 1500        | 15000 | 1.2 |

Accuracy of +/-4%, Repeatability of +/-2% | \*Also available in a 2.5" square drive.

The B-RAD Select Series offers higher speed and longer battery life while incorporating a new torque display with buttons. The B-RAD Select allows the user to easily select the target torque. Patented Product.



## B-RAD SELECT BATTERY TORQUE TOOL

Equipped with the Latest  
Lithium-Ion Technology

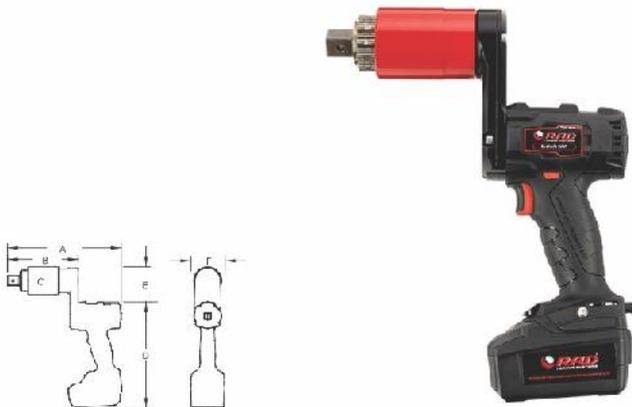
Digital  
Torque Settings

Longer  
Battery Life

| PART NUMBER | MODEL                 | DIMENSIONS (mm) |    |    |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM  |
|-------------|-----------------------|-----------------|----|----|-----|------------|-------------|-------------|------|------|
|             |                       | A               | B  | C  | D   |            |             | MIN.        | MAX. |      |
| 29594       | B-RAD SELECT 275-M    | 228             | 63 | 68 | 262 | 0.75"      | 3.3         | 50          | 270  | 46.5 |
| 28264       | B-RAD SELECT 700-M    | 231             | 63 | 67 | 262 | 0.75"      | 3.5         | 170         | 700  | 21.5 |
| 28268       | B-RAD SELECT 1400-M   | 231             | 63 | 67 | 262 | 0.75"      | 3.5         | 270         | 1400 | 10.5 |
| 28267       | B-RAD SELECT 1400-2-M | 279             | 63 | 67 | 262 | 0.75"      | 4.3         | 540         | 1400 | 71   |
| 28268       | B-RAD SELECT 2000-M   | 244             | 69 | 69 | 262 | 1.0"       | 4.0         | 400         | 2000 | 6    |
| 28269       | B-RAD SELECT 2000-2-M | 298             | 69 | 69 | 262 | 1.0"       | 4.9         | 400         | 2000 | 19.5 |
| 28270       | B-RAD SELECT 4000-M   | 285             | 81 | 81 | 266 | 1.0"       | 6.0         | 800         | 4000 | 3    |
| 28271       | B-RAD SELECT 4000-2-M | 337             | 81 | 81 | 266 | 1.0"       | 6.7         | 800         | 4000 | 20   |
| 28272       | B-RAD SELECT 7000-M   | 295             | 95 | 95 | 272 | 1.5"       | 8.8         | 1350        | 7000 | 2.1  |

Accuracy of +/-5%, Repeatability of +/-2%

The B-RAD Select Offset offers more flexibility for those tight spaces. The design is meant to allow the tool to get into spaces, specifically flanges, where there isn't enough overhead clearance for most pistol grip tools.



## B-RAD SELECT OFFSET BATTERY TORQUE TOOL

Durable, Light Weight,  
Shock Proof

Equipped with the Latest  
Lithium-Ion Technology

Longer  
Battery Life

| PART NUMBER | MODEL                      | DIMENSIONS (mm) |     |    |     |     |    | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM  |
|-------------|----------------------------|-----------------|-----|----|-----|-----|----|------------|-------------|-------------|------|------|
|             |                            | A               | B   | C  | D   | E   | F  |            |             | MIN.        | MAX. |      |
| 30003       | B-RAD SELECT OFFSET 700-M  | 260             | 155 | 63 | 262 | 83  | 83 | 0.75"      | 3.9         | 170         | 700  | 21.5 |
| 29574       | B-RAD SELECT OFFSET 1400-M | 260             | 165 | 63 | 262 | 83  | 83 | 0.75"      | 3.9         | 270         | 1400 | 10.5 |
| 30005       | B-RAD SELECT OFFSET 2000-M | 277             | 172 | 69 | 262 | 86  | 83 | 1.0"       | 4.4         | 400         | 2000 | 6    |
| 30007       | B-RAD SELECT OFFSET 4000-M | 312             | 208 | 81 | 262 | 92  | 83 | 1.0"       | 6.4         | 800         | 4000 | 3    |
| 30009       | B-RAD SELECT OFFSET 7000-M | 335             | 230 | 95 | 262 | 100 | 83 | 1.5"       | 9.2         | 1350        | 7000 | 2.1  |

Accuracy of +/-5%, Repeatability of +/-2%

Digital B-RAD is the world's first digital, cordless, and lithium-ion battery tool on the market. With advanced patented technology containing digital display and single increment torque settings.



## DIGITAL B-RAD BATTERY TORQUE TOOL

**Automatic 2-Speed  
Gearbox**

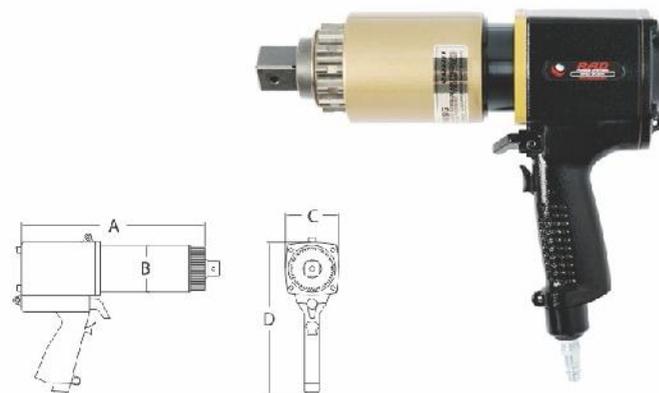
**Durable, Light Weight,  
Shock Proof**

**Available with  
Torque and Angle Option**

| PART NUMBER | MODEL           | NOISE LEVEL (dB) | DIMENSIONS (mm) |    |    |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM |
|-------------|-----------------|------------------|-----------------|----|----|-----|------------|-------------|-------------|------|-----|
|             |                 |                  | A               | B  | C  | D   |            |             | MIN.        | MAX. |     |
| 22876       | DB-RAD 700-2-M  | 80               | 321             | 63 | 63 | 279 | 0.75"      | 5.0         | 70          | 700  | 59  |
| 22878       | DB-RAD 1400-2-M | 80               | 330             | 63 | 63 | 279 | 0.75"      | 5.2         | 140         | 1400 | 19  |
| 22880       | DB-RAD 2000-2-M | 80               | 330             | 68 | 68 | 279 | 1.0"       | 5.3         | 200         | 2000 | 17  |
| 24866       | DB-RAD 4000-2-M | 80               | 398             | 81 | 81 | 279 | 1.0"       | 7.1         | 400         | 4000 | 9   |

Accuracy of +/- 5%, Repeatability of +/- 2%

Nearly 30 years of experience in gearbox engineering and design has brought about our latest generation in planetary gearboxes – RAD Single Speed.



## RAD SINGLE SPEED PNEUMATIC TORQUE TOOL

**The Ultimate in  
Power-to-Weight Ratio**

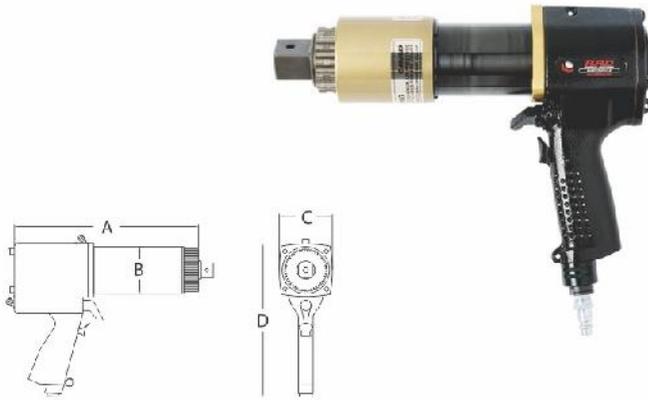
**Wide Torque Range to Suit  
Multiple Applications**

**Unmatched Reliability**

| PART NUMBER | MODEL       | DIMENSIONS (mm) |     |     |     | NOISE LEVEL (dB) | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |       | RPM |
|-------------|-------------|-----------------|-----|-----|-----|------------------|------------|-------------|-------------|-------|-----|
|             |             | A               | B   | C   | D   |                  |            |             | MIN.        | MAX.  |     |
| 13573       | RAD 475SL-M | 167             | 61  | 70  | 222 | 80               | 0.75"      | 2.7         | 70          | 475   | 65  |
| 13539       | RAD 10GX-M  | 228             | 63  | 70  | 228 | 80               | 0.75"      | 3.6         | 150         | 950   | 30  |
| 13549       | RAD 14GX-M  | 228             | 63  | 70  | 228 | 80               | 0.75"      | 3.8         | 275         | 1400  | 20  |
| 19135       | RAD 20DX-M  | 203             | 69  | 70  | 228 | 80               | 1.0"       | 4.0         | 400         | 2000  | 10  |
| 13565       | RAD 34GX-M  | 240             | 78  | 83  | 241 | 85               | 1.0"       | 6.1         | 700         | 3400  | 9   |
| 24717       | RAD 40DX-M  | 254             | 81  | 83  | 241 | 85               | 1.0"       | 6.7         | 1200        | 4000  | 8   |
| 13571       | RAD 46GX-M* | 317             | 86  | 94  | 274 | 85               | 1.0"       | 9.0         | 1400        | 4600  | 12  |
| 26133       | RAD 70DX-M  | 285             | 95  | 95  | 264 | 85               | 1.5"       | 10.6        | 2000        | 7000  | 6.7 |
| 15805       | RAD 80DX-M  | 348             | 101 | 101 | 276 | 85               | 1.5"       | 12.4        | 2700        | 8000  | 6.6 |
| 23229       | RAD 110DX-M | 308             | 108 | 108 | 270 | 85               | 1.5"       | 13.7        | 3400        | 11000 | 4   |
| 26153       | RAD 150DX-M | 353             | 127 | 127 | 281 | 85               | 1.5"       | 18.9        | 5500        | 15000 | 3   |

Accuracy of +/-1%, Repeatability of +/-2% | \*Also available in a 1.5" square drive.

RAD High Speed torque wrenches incorporate a precision engineered, high-speed gearbox designed for faster run down and quick reaction point positioning on time sensitive bolting applications.



## RAD HIGH SPEED PNEUMATIC TORQUE TOOL

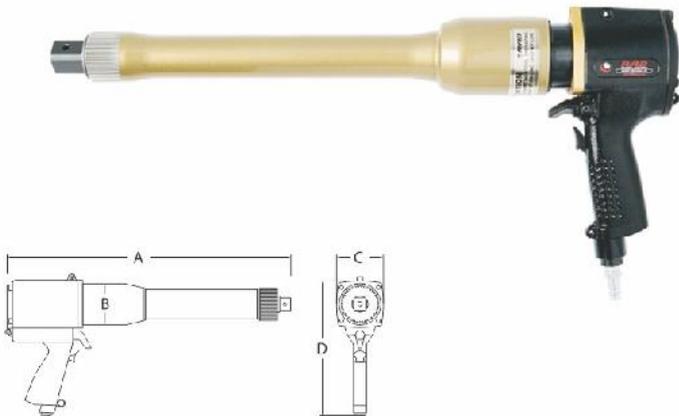
**The Ultimate in  
Power-to-Weight Ratio**

**Wide Torque Range to Suit  
Multiple Applications**

| PART NUMBER | MODEL        | DIMENSIONS (mm) |    |    |     | NOISE LEVEL (dB) | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM |
|-------------|--------------|-----------------|----|----|-----|------------------|------------|-------------|-------------|------|-----|
|             |              | A               | B  | C  | D   |                  |            |             | MIN.        | MAX. |     |
| 19774       | RAD 14GX-2-M | 261             | 63 | 70 | 205 | 80               | 0.75"      | 4.5         | 475         | 1400 | 85  |
| 19775       | RAD 20DX-2-M | 251             | 68 | 70 | 205 | 80               | 1.0"       | 4.7         | 700         | 2000 | 50  |
| 19776       | RAD 34GX-2-M | 305             | 78 | 84 | 254 | 80               | 1.0"       | 7.5         | 950         | 3400 | 44  |
| 24952       | RAD 40DX-2-M | 309             | 81 | 83 | 254 | 80               | 1.0"       | 7.3         | 1400        | 4000 | 49  |

Accuracy of +/-4%, Repeatability of +/-2%

RAD Wheel Nut Bolting & Off-The-Road (OTR) tools were designed with one job in mind – to secure wheel nuts on OTR mining trucks. This pneumatic torque wrench comes with a nose extension that is ideal for reaching wheel nut studs that are recessed and have tight clearances.



## RAD WHEEL NUT & OTR MINING PNEUMATIC TORQUE TOOL

**Removable Custom  
Reaction Arms**

**Accuracy to Ensure Correct  
Tightened Wheels**

**Extended Reaction Point for  
Safe and Quick Operation**

| PART NUMBER | MODEL           | DIMENSIONS (mm) |    |     |    |    |     | NOISE LEVEL (dB) | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM |
|-------------|-----------------|-----------------|----|-----|----|----|-----|------------------|------------|-------------|-------------|------|-----|
|             |                 | A               | B  | C   | D  | E  | F   |                  |            |             | MIN.        | MAX. |     |
| 13541       | RAD 10GX-R-M    | 345             | 63 | 78  | 43 | 70 | 228 | 80               | 0.75"      | 5.4         | 400         | 1000 | 115 |
| 14550       | RAD 14GX-NX-M   | 518             | 63 | 243 | 43 | 70 | 228 | 80               | 0.75"      | 3.6         | 275         | 1400 | 20  |
| 20809       | RAD 20NDX-R-M   | 513             | 69 | 307 | 44 | 70 | 228 | 80               | 1.0"       | 7.2         | 400         | 2000 | 10  |
| 19340       | RAD 20DX-NX-M   | 513             | 69 | 248 | 44 | 70 | 228 | 80               | 1.0"       | 3.9         | 400         | 2000 | 10  |
| 13563       | RAD 2400NGX-R-M | 515             | 76 | 279 | 51 | 84 | 242 | 85               | 1.0"       | 12.4        | 700         | 2400 | 10  |

Accuracy of +/-4%, Repeatability of +/-2%

Equipped with a built-in transducer, the B-RAD S makes logging torque output easier and more efficient than ever with its ability to read and display torque in real time. The transducer enables the B-RAD S to audit previously tightened bolts – accurately measuring the applied torque and creating zero risk of an over-torque.



## B-RAD S BATTERY TORQUE TOOL AUDIT EQUIPMENT

- Bolt Counter**
- Built-In Transducer**
- Password Protection**

| PART NUMBER | MODEL          | NOISE LEVEL (dB) | DIMENSIONS (mm) |    |    |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      | RPM |
|-------------|----------------|------------------|-----------------|----|----|-----|------------|-------------|-------------|------|-----|
|             |                |                  | A               | B  | C  | D   |            |             | MIN.        | MAX. |     |
| 31801       | B-RAD S 700-M  | 85               | 311             | 63 | 70 | 254 | 0.75"      | 4.2         | 70          | 700  | 21  |
| 31803       | B-RAD S 1400-M | 85               | 311             | 63 | 70 | 254 | 0.75"      | 4.3         | 135         | 1400 | 9.6 |
| 31805       | B-RAD S 2000-M | 85               | 321             | 69 | 70 | 254 | 1.0"       | 4.9         | 200         | 2000 | 5.6 |
| 31807       | B-RAD S 4000-M | 85               | 337             | 81 | 81 | 257 | 1.0"       | 7.2         | 400         | 4000 | 3.0 |
| 31809       | B-RAD S 7000-M | 85               | 362             | 95 | 95 | 267 | 1.5"       | 9.8         | 700         | 7000 | 1.9 |

Accuracy of +/-5%, Repeatability of +/-2%

RAD Smart Sockets™ use RAD Torque's transducer technology combined with a custom socket to measure the actual torque applied to the bolt during a torque cycle. By innovative design, the Smart Sockets™ is no larger than a standard socket.



## RAD SMART SOCKETS™ AUDIT EQUIPMENT

- Measures and Displays Peak Torque**
- View in Real Time Via Bluetooth®**

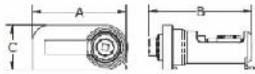
| SMART SOCKET™ SERIES                                      | PART NUMBER | SOCKET HEX SIZE  | DIMENSIONS (mm) |          | DRIVE SIZE | WEIGHT (kg) |
|---|-------------|------------------|-----------------|----------|------------|-------------|
|   |             |                  | HEIGHT (A)      | DIA. (B) |            |             |
| SMART SOCKET™ 1500/2000-M<br>(Metric range: 200-2000)     | 20879       | 33mm             | 100             | 72       | 1"         | 1.2         |
|   | 21363       | 36mm             | 87              | 72       | 1"         | 1.2         |
|   | 22158       | 41mm (1-5/8")    | 87              | 72       | 1"         | 1.2         |
|   | 20880       | 46mm (1-13/16")  | 87              | 72       | 1"         | 1.2         |
| SMART SOCKET™ 3400/4600-M<br>(Metric range: 460-4800)     | 20881       | 50mm             | 89              | 86       | 1"         | 1.5         |
|   | 20882       | 55mm             | 89              | 86       | 1"         | 1.5         |
|   | 20883       | 60mm             | 89              | 86       | 1"         | 1.5         |
| SMART SOCKET™ 8000/10800-M<br>(Metric range: 1100-10800)  | 23890       | 65mm (2-9/16")   | 121             | 115      | 1.5"       | 4           |
|   | 28722       | 70mm (2-3/4")    | 121             | 105      | 1.5"       | 4           |
|   | 20885       | 80mm             | 121             | 115      | 1.5"       | 4           |
| SMART SOCKET™ 12000/16200-M<br>(Metric range: 1600-16200) | 25657       | 90mm             | 126             | 131      | 1.5"       | 5.8         |
|   | 25658       | 100mm (3-15/16") | 132             | 146      | 1.5"       | 7.2         |

Accuracy of +/-1% | \*Must be used with a deep reaction arm.

The RAD Calibration Systems have earned their place in calibration laboratories worldwide because of their high accuracy and repeatability.

Introducing the solution for big torque tools – RAD Torque's Large Calibration Stand. With the power to calibrate tools up to a whopping 18K ft. lbs./24K Nm, precision meets extreme performance.

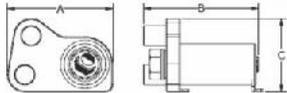
## RAD CALIBRATION SYSTEMS



### SMALL CALIBRATION SYSTEM

- Ranges up to 7,000 ft. lbs./ 9,500 Nm
- Screen on transducer allows for convenient reading
- Connect to RAD Torque Transducer Software via your computer or tablet
- Classified to BS 7882:2017 as Class 1 or better for the primary range (+/-0.5% of reading from 20% to 100% of full scale)

| PART NUMBER | MODEL                       | DIMENSIONS (mm) |     |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |      |
|-------------|-----------------------------|-----------------|-----|-----|------------|-------------|-------------|------|
|             |                             | A               | B   | C   |            |             | MIN.        | MAX. |
| 23442       | RAD CALIBRATION SYSTEM 1500 | 298             | 293 | 140 | 1.0"       | 1.8         | 100         | 2000 |
| 23443       | RAD CALIBRATION SYSTEM 3500 | 368             | 344 | 178 | 1.5"       | 4.5         | 250         | 4750 |
| 23444       | RAD CALIBRATION SYSTEM 7000 | 368             | 344 | 178 | 1.5"       | 4.9         | 475         | 9500 |



### LARGE CALIBRATION SYSTEM

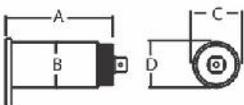
- 4340-material bolt, heat-treated for unparalleled strength and durability
- Optional 12K or 18K\* Smart Sockets, delivering accurate data logging for all your calibration needs
- Secure shipping crate to protect your investment

| PART NUMBER | MODEL                       | DIMENSIONS (mm) |     |     | DRIVE SIZE | WEIGHT (kg) | TORQUE (Nm) |       |
|-------------|-----------------------------|-----------------|-----|-----|------------|-------------|-------------|-------|
|             |                             | A               | B   | C   |            |             | MIN.        | MAX.  |
| 30526       | RAD 12K CALIBRATION SYSTEM  | 383             | 501 | 270 | 1.5"       | 106.5       | 800         | 16000 |
| 33736       | RAD 18K CALIBRATION SYSTEM* | 383             | 501 | 270 | 2.5"       | 106.5       | 1200        | 24000 |

\*Must be used with a deep reaction arm.

For applications where tool access to the bolt is limited, The RAD SDM Low Profile series multipliers can provide you a solution. Based on RAD's long experience with planetary gear reduction technology, the SDM Low Profile gearbox was designed for confined applications in multiple industries. The RAD SDM Multipliers are to be combined with a nut runner.

## RAD SDM LOW PROFILE MULTIPLIERS



| PART NUMBER | MODEL   | DIMENSIONS (mm) |      |      |       | RATIO   | INPUT | OUTPUT | TORQUE (Nm) |
|-------------|---------|-----------------|------|------|-------|---------|-------|--------|-------------|
|             |         | A               | B    | C    | D     |         |       |        |             |
| 10676       | SDM 400 | 90.17           | 63.5 | 63.5 | 94.23 | 82 : 1  | 1/4"  | 3/4"   | 542         |
| 10510       | SDM 400 | 90.17           | 63.5 | 63.5 | 94.23 | 144 : 1 | 1/4"  | 3/4"   | 542         |
| 12914       | SDM 10  | 110.49          | 63.5 | 63.5 | 94.23 | 128 : 1 | 1/4"  | 3/4"   | 1356        |
| 13194       | SDM 10  | 110.49          | 63.5 | 63.5 | 94.23 | 101 : 1 | 3/8"  | 3/4"   | 1356        |

# ***Best in-class hydraulic tensioners and bolting accessories***

ABS is the indigenous brand of ABS that delivers solutions where it matters the most. Recognized through our commitment towards quality we provide a wide range of bolting tools & accessories that is developed by our skilled workmanship and technical in-house team.

# **ABS**

**ADVANCED BOLTING SOLUTIONS PVT. LTD.**

## CNX SERIES HYDRAULIC TORQUE TOOL

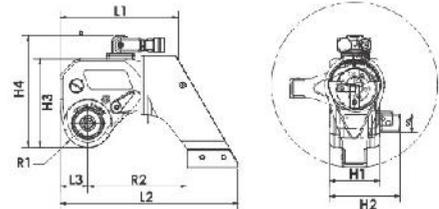
ABS CNX is built to exceed the expectations of professionals seeking unmatched speed, durability, reliability, and user-friendliness in their bolting tasks. Constructed with high-strength aluminium and undergoing controlled vacuum heat treatment, the ABS CNX boasts exceptional strength and resilience. We prioritise operator comfort and ease of use with an ergonomic design that minimises fatigue and strain, while intuitive controls ensure smooth operation and error-free tightening.

The ABS CNX series offers a versatile range of torque capacities and square drive sizes, effortlessly adapting to your specific needs. Whether tackling static or dynamic applications, these wrenches deliver optimal performance every time.

**High Strength Aerospace Aluminium Material**

**One-Way Ratcheting Mechanism**

**Multi-Axis  
360°-180° Swivel**



| MODEL   | L1<br>(inch/<br>mm) | L2<br>(inch/<br>mm) | L3<br>(inch/<br>mm) | H1<br>(inch/<br>mm) | H2<br>(inch/<br>mm) | H3<br>(inch/<br>mm) | H4<br>(inch/<br>mm) | R1<br>(inch/<br>mm) | R2<br>(inch/<br>mm) | DRIVE<br>SIZE | WEIGHT<br>(lbs/<br>kg) | TORQUE<br>(ft.lbs./Nm) |                 |
|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|------------------------|------------------------|-----------------|
|         |                     |                     |                     |                     |                     |                     |                     |                     |                     |               |                        | MIN.                   | MAX.            |
| CNX-02  | 4.9<br>124          | 7.3<br>186.5        | 1.1<br>28.8         | 2.0<br>51.6         | 2.9<br>72.6         | 3.7<br>93.3         | 4.9<br>124.4        | 1.0<br>25           | 4.1<br>104.3        | 3/4"          | 4.41<br>2              | 200<br>271             | 1339<br>1816    |
| CNX-04  | 6.4<br>161.9        | 9.7<br>245.5        | 1.5<br>39.1         | 2.7<br>68.8         | 3.7<br>94.4         | 4.8<br>121.2        | 6.4<br>162.1        | 1.3<br>33.3         | 5.3<br>135.2        | 1"            | 10.36<br>4.7           | 479<br>650             | 3228<br>4377    |
| CNX-07  | 7.7<br>195.6        | 11.7<br>296.1       | 1.9<br>48.5         | 3.3<br>82.6         | 5.0<br>126.9        | 5.7<br>143.7        | 7.3<br>185.1        | 1.6<br>39.9         | 6.4<br>161.6        | 1-1/2"        | 18.08<br>8.2           | 834<br>1131            | 5587<br>7575    |
| CNX-11  | 7.7<br>195.6        | 12.6<br>319.3       | 2.2<br>55.2         | 3.6"<br>90.7        | 5.1<br>129.3        | 6.5<br>165.1        | 8.5<br>215.9        | 1.7<br>44.7         | 6.9<br>176.8        | 1-1/2"        | 24.91<br>11.3          | 1200<br>1627           | 8000<br>10846   |
| CNX-15  | 9.6<br>243          | 14.4<br>366.2       | 2.3<br>57.2         | 4.1<br>103.3        | 5.7<br>145.7        | 7.2<br>183.2        | 9.1<br>231.4        | 2.0<br>49.8         | 8.0<br>203.5        | 1-1/2"        | 33.07<br>15            | 1754<br>2378           | 11513<br>15610  |
| CNX-20  | 10.54<br>267.8      | 15.5<br>392.9       | 2.5<br>63.3         | 4.4<br>113          | 7.1<br>180.6        | 8.1<br>206          | 10.2<br>258.7       | 2.2<br>55.5         | 8.8<br>223.8        | 2-1/2"        | 44.53<br>20.2          | 2012<br>2728           | 14082<br>19093  |
| CNX-30  | 11.4<br>289.8       | 17.3<br>438.7       | 2.7<br>68.8         | 4.7<br>120.1        | 7.1<br>180.3        | 8.8<br>223          | 10.2<br>260.1       | 2.4<br>59.9         | 9.6<br>243.3        | 2-1/2"        | 43.43<br>19.7          | 2958<br>4011           | 19748<br>26775  |
| CNX-35  | 11.8<br>299.7       | 18.5<br>470.4       | 3.1<br>78.4         | 5.2<br>133.3        | 7.5<br>190          | 9.6<br>243.8        | 11.5<br>292.1       | 2.6<br>66.0         | 10.2<br>260.3       | 2-1/2"        | 68.56<br>31.1          | 3883<br>5265           | 25890<br>35102  |
| CNX-50  | 14.0<br>356.3       | 21.2<br>539.2       | 3.3<br>84.6         | 5.8<br>147.8        | 8.3<br>211.3        | 10.8<br>274.1       | 12.4<br>313.9       | 2.9<br>73.7         | 11.7<br>298.2       | 2-1/2"        | 77.60<br>35.2          | 5397<br>7317           | 37078<br>50271  |
| CNX-72  | 15.5<br>393.7       | 23<br>584           | 3.7<br>94           | 6.6<br>166.8        | 9.4<br>237.7        | 11.0<br>279.4       | 12.8<br>325.1       | 3.3<br>82.6         | 12.8<br>325.6       | 2-1/2"        | 124.34<br>56.4         | 7875<br>10677          | 59995<br>81338  |
| CNX-120 | 20.0<br>509         | 19.5<br>496         | 5.2<br>132          | 7.5<br>190          | 9.7<br>247          | 15.0<br>383         | 16.8<br>429         | 4.7<br>119          | 14.8<br>377         | 3-1/2"        | 280.5<br>127.5         | 11965<br>16213         | 88510<br>120000 |

\*Minimum and maximum torque output data may vary.

CE conformity

The CNZ hex drive torque wrench series, your ultimate allies in conquering the most challenging, space-restricted bolting tasks. Our sleek, compact design delivers unmatched accessibility, slipping into tight spaces where other tools simply can't reach. No more contorting yourself or compromising accuracy.

Just like the CNX series, the CNZ features a convenient release lever, simplifying tool disengagement and saving you time and effort. The secondary pawl accelerates tightening cycles while standing firm against unwanted rollback, ensuring efficient and reliable bolting. From delicate 329 Nm tasks to heavy-duty 41986 Nm applications, the CNZ series offers a diverse range of models to perfectly match your needs. Find the perfect fit for your toughest jobs.

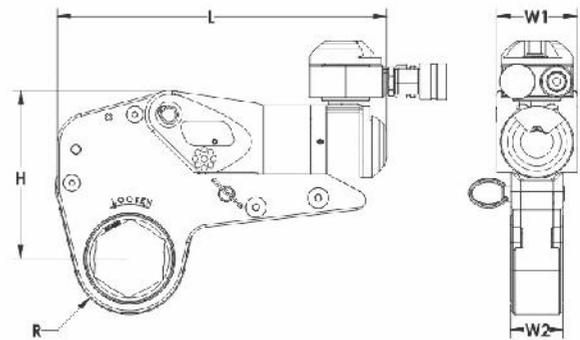
## CNZ SERIES HYDRAULIC TORQUE TOOL

### Secondary Pawl for Faster Tightening

360° x 360°  
Hose Uniswivel

Ratchet Freeing Mechanism

Multipurpose Accessories



| MODEL  | H<br>(inch/<br>mm) | W1<br>(inch/<br>mm) | W2<br>(inch/<br>mm) | L<br>(inch/<br>mm) | R<br>(inch/<br>mm) | HEX<br>(inch/mm) | WEIGHT<br>(lbs/kg)<br>(Without Link) | TORQUE<br>(ft.lbs./Nm) |       |
|--------|--------------------|---------------------|---------------------|--------------------|--------------------|------------------|--------------------------------------|------------------------|-------|
|        |                    |                     |                     |                    |                    |                  |                                      | MIN.                   | MAX.  |
| CNZ-02 | 4.02               | 1.97                | 1.25                | 7.5                | 0.95 - 1.79        | 3/4" - 2 3/8"    | 1.98                                 | 243                    | 1686  |
|        | 102.1              | 50                  | 31.8                | 190.4              | 24.1 - 45.5        | 19 - 60          | 0.9                                  | 329                    | 2286  |
| CNZ-05 | 5.37               | 2.59                | 1.67                | 10.16              | 1.30 - 2.67        | 1 5/16" - 3 3/4" | 4.41                                 | 580                    | 3853  |
|        | 136.4              | 65.8                | 42.4                | 258                | 33.1 - 68          | 34 - 95          | 2                                    | 786                    | 5224  |
| CNZ-10 | 6.7                | 3.23                | 2.09                | 12.29              | 1.78 - 2.90        | 2" - 3 7/8"      | 7.50                                 | 1142                   | 8146  |
|        | 170.3              | 82.15               | 53                  | 312.1              | 45 - 73.9          | 50 - 100         | 3.4                                  | 1549                   | 11045 |
| CNZ-18 | 8.04               | 3.87                | 2.49                | 14.66              | 2.31 - 3.48        | 2 3/4" - 4 5/8"  | 12.13                                | 2009                   | 13392 |
|        | 204.1              | 98.4                | 63.2                | 372.4              | 58.9 - 88.4        | 70 - 120         | 5.5                                  | 2724                   | 18157 |
| CNZ-25 | 9.09               | 4.41                | 2.83                | 16.57              | 2.47 - 4.21        | 2 3/4" - 5 3/4"  | 14.85                                | 2790                   | 19100 |
|        | 231                | 112                 | 72                  | 421                | 62.8 - 107         | 70 - 145         | 6.7                                  | 3780                   | 25881 |
| CNZ-42 | 10.71              | 5.18                | 3.33                | 19.46              | 3.03 - 4.72        | 3 1/2" - 6 1/2"  | 24.03                                | 4577                   | 30967 |
|        | 272.1              | 131.5               | 84.6                | 494.25             | 77 - 120           | 90 - 165         | 10.9                                 | 6205                   | 41986 |
| CNZ-80 | 13.39              | 6.48                | 4.18                | 21.14              | 4.28 - 5.79        | 4-5/8" - 7-1/2"  | 48                                   | 8887                   | 59120 |
|        | 340.1              | 164.1               | 105.8               | 573                | 108 - 147          | 120 - 180        | 21.7                                 | 12020                  | 80150 |

\*Minimum and maximum torque output data may vary.





## CNZ LINK SELECTION HYDRAULIC TORQUE TOOL

**Improves Reliability  
Through Longer Arm**

**Increased Accuracy &  
Ease-of-Usage**

**360°x360°  
Swivel**

| CNZ-02   | HEX SIZE |        |
|----------|----------|--------|
|          | IMPERIAL | METRIC |
| ZL-02-19 | 3/4"     | 19mm   |
| ZL-02-20 | 13/16"   | -      |
| ZL-02-21 | -        | 21mm   |
| ZL-02-22 | 7/8"     | 22mm   |
| ZL-02-23 | 15/16"   | -      |
| ZL-02-24 | -        | 24mm   |
| ZL-02-25 | 1"       | -      |
| ZL-02-27 | 1-1/16"  | 27mm   |
| ZL-02-28 | 1-1/8"   | -      |
| ZL-02-30 | 1-3/16"  | 30mm   |
| ZL-02-31 | 1-1/4"   | -      |
| ZL-02-32 | -        | 32mm   |
| ZL-02-33 | 1-5/16"  | -      |
| ZL-02-34 | -        | 34mm   |
| ZL-02-35 | 1-3/8"   | 35mm   |
| ZL-02-36 | -        | 36mm   |
| ZL-02-37 | 1-7/16"  | -      |
| ZL-02-38 | 1-1/2"   | 38mm   |
| ZL-02-39 | 1-9/16"  | -      |
| ZL-02-41 | 1-5/8"   | 41mm   |
| ZL-02-42 | 1-11/16" | -      |
| ZL-02-44 | 1-3/4"   | -      |
| ZL-02-46 | 1-13/16" | 46mm   |
| ZL-02-47 | 1-7/8"   | -      |
| ZL-02-49 | 1-15/16" | 49mm   |
| ZL-02-50 | -        | 50mm   |
| ZL-02-51 | 2"       | -      |
| ZL-02-52 | 2-1/16"  | -      |
| ZL-02-54 | 2-1/8"   | -      |
| ZL-02-55 | 2-3/16"  | 55mm   |
| ZL-02-57 | 2-1/4"   | -      |
| ZL-02-59 | 2-5/16"  | -      |
| ZL-02-60 | 2-3/8"   | 60mm   |

| CNZ-05   | HEX SIZE |        |
|----------|----------|--------|
|          | IMPERIAL | METRIC |
| ZL-05-33 | 1-5/16"  | -      |
| ZL-05-34 | -        | 34mm   |
| ZL-05-35 | 1-3/8"   | -      |
| ZL-05-36 | -        | 36mm   |
| ZL-05-37 | 1-7/16"  | -      |
| ZL-05-38 | 1-1/2"   | 38mm   |
| ZL-05-39 | 1-9/16"  | -      |
| ZL-05-41 | 1-5/8"   | 41mm   |
| ZL-05-42 | 1-11/16" | -      |
| ZL-05-44 | 1-3/4"   | -      |
| ZL-05-46 | 1-13/16" | 46mm   |
| ZL-05-47 | 1-7/8"   | -      |
| ZL-05-49 | 1-15/16" | 49mm   |
| ZL-05-50 | -        | 50mm   |
| ZL-05-51 | 2"       | -      |
| ZL-05-52 | 2-1/16"  | -      |
| ZL-05-53 | 2-1/8"   | -      |
| ZL-05-55 | 2-3/16"  | 55mm   |
| ZL-05-57 | 2-1/4"   | -      |
| ZL-05-58 | 2-5/16"  | -      |
| ZL-05-60 | 2-3/8"   | 60mm   |
| ZL-05-61 | 2-7/16"  | -      |
| ZL-05-63 | 2-1/2"   | -      |
| ZL-05-65 | 2-9/16"  | 65mm   |
| ZL-05-66 | 2-5/8"   | -      |
| ZL-05-68 | 2-11/16" | -      |
| ZL-05-70 | 2-3/4"   | 70mm   |
| ZL-05-71 | 2-13/16" | -      |
| ZL-05-73 | 2-7/8"   | -      |
| ZL-05-75 | 2-15/16" | 75mm   |
| ZL-05-76 | 3"       | -      |
| ZL-05-77 | 3-1/16"  | -      |
| ZL-05-79 | 3-1/8"   | -      |
| ZL-05-80 | -        | 80mm   |

| CNZ-10    | HEX SIZE |        |
|-----------|----------|--------|
|           | IMPERIAL | METRIC |
| ZL-10-41  | 1-5/8"   | 41mm   |
| ZL-10-42  | 1-11/16" | -      |
| ZL-10-44  | 1-3/4"   | -      |
| ZL-10-46  | 1-13/16" | 46mm   |
| ZL-10-47  | 1-7/8"   | -      |
| ZL-10-49  | 1-15/16" | 49mm   |
| ZL-10-50  | -        | 50mm   |
| ZL-10-51  | 2"       | -      |
| ZL-10-52  | 2-1/16"  | -      |
| ZL-10-54  | 2-1/8"   | -      |
| ZL-10-55  | 2-3/16"  | 55mm   |
| ZL-10-57  | 2-1/4"   | -      |
| ZL-10-58  | 2-5/16"  | -      |
| ZL-10-60  | 2-3/8"   | 60mm   |
| ZL-10-61  | 2-7/16"  | -      |
| ZL-10-63  | 2-1/2"   | -      |
| ZL-10-65  | 2-9/16"  | 65mm   |
| ZL-10-66  | 2-5/8"   | -      |
| ZL-10-68  | 2-11/16" | -      |
| ZL-10-70  | 2-3/4"   | 70mm   |
| ZL-10-71  | 2-13/16" | -      |
| ZL-10-73  | 2-7/8"   | -      |
| ZL-10-75  | 2-15/16" | 75mm   |
| ZL-10-76  | 3"       | -      |
| ZL-10-77  | 3-1/16"  | -      |
| ZL-10-79  | 3-1/8"   | -      |
| ZL-10-80  | -        | 80mm   |
| ZL-10-81  | 3-3/16"  | -      |
| ZL-10-82  | 3-1/4"   | -      |
| ZL-10-84  | 3-5/16"  | -      |
| ZL-10-85  | -        | 85mm   |
| ZL-10-86  | 3-3/8"   | -      |
| ZL-10-87  | 3-7/16"  | -      |
| ZL-10-88  | 3-1/2"   | -      |
| ZL-10-90  | -        | 90mm   |
| ZL-10-91  | 3-9/16"  | -      |
| ZL-10-92  | 3-5/8"   | -      |
| ZL-10-93  | 3-11/16" | -      |
| ZL-10-95  | 3-3/4"   | 95mm   |
| ZL-10-96  | 3-13/16" | -      |
| ZL-10-98  | 3-7/8"   | -      |
| ZL-10-100 | 3-15/16" | 100mm  |
| ZL-10-101 | 4"       | -      |
| ZL-10-103 | 4-1/16"  | -      |
| ZL-10-105 | 4-1/8"   | 105mm  |

## CNZ LINK SELECTION HYDRAULIC TORQUE TOOL

| CNZ-18    | HEX SIZE |        |
|-----------|----------|--------|
|           | IMPERIAL | METRIC |
| ZL-18-50  | -        | 50mm   |
| ZL-18-51  | 2"       | -      |
| ZL-18-52  | 2-1/16"  | -      |
| ZL-18-53  | 2-1/8"   | -      |
| ZL-18-55  | 2-3/16"  | 55mm   |
| ZL-18-57  | 2-1/4"   | -      |
| ZL-18-58  | 2-5/16"  | -      |
| ZL-18-60  | 2-3/8"   | 60mm   |
| ZL-18-62  | 2-7/8"   | -      |
| ZL-18-63  | 2-1/2"   | -      |
| ZL-18-65  | 2-9/16"  | 65mm   |
| ZL-18-66  | 2-5/8"   | -      |
| ZL-18-68  | 2-11/16" | -      |
| ZL-18-70  | 2-3/4"   | 70mm   |
| ZL-18-71  | 2-13/16" | -      |
| ZL-18-73  | 2-7/8"   | -      |
| ZL-18-75  | 2-15/16" | 75mm   |
| ZL-18-76  | 3"       | -      |
| ZL-18-77  | 3-1/16"  | -      |
| ZL-18-79  | 3-1/8"   | -      |
| ZL-18-80  | -        | 80mm   |
| ZL-18-81  | 3-3/16"  | -      |
| ZL-18-82  | 3-1/4"   | -      |
| ZL-18-84  | 3-5/16"  | -      |
| ZL-18-85  | -        | 85mm   |
| ZL-18-86  | 3-3/8"   | -      |
| ZL-18-87  | 3-7/16"  | -      |
| ZL-18-89  | 3-1/2"   | -      |
| ZL-18-90  | -        | 90mm   |
| ZL-18-91  | 3-9/16"  | -      |
| ZL-18-92  | 3-5/8"   | -      |
| ZL-18-93  | 3-11/16" | -      |
| ZL-18-95  | 3-3/4"   | 95mm   |
| ZL-18-96  | 3-13/16" | -      |
| ZL-18-88  | 3-7/8"   | -      |
| ZL-18-100 | 3-15/16" | 100mm  |
| ZL-18-101 | 4"       | -      |
| ZL-18-104 | 4-1/8"   | -      |
| ZL-18-105 | 4-1/8"   | 105mm  |
| ZL-18-106 | 4-3/16"  | -      |
| ZL-18-107 | 4-1/4"   | -      |
| ZL-18-109 | 4-5/16"  | -      |
| ZL-18-110 | -        | 110mm  |
| ZL-18-111 | 4-3/8"   | -      |
| ZL-18-112 | 4-7/16"  | -      |
| ZL-18-114 | 4-1/2"   | -      |
| ZL-18-115 | -        | 115mm  |
| ZL-18-117 | -        | 117mm  |

| CNZ-25    | HEX SIZE |        |
|-----------|----------|--------|
|           | IMPERIAL | METRIC |
| ZL-25-75  | 2-15/16" | 75mm   |
| ZL-25-76  | 3"       | -      |
| ZL-25-77  | 3-1/16"  | -      |
| ZL-25-79  | 3-1/8"   | -      |
| ZL-25-80  | -        | 80mm   |
| ZL-25-81  | 3-3/16"  | -      |
| ZL-25-82  | 3-1/4"   | -      |
| ZL-25-84  | 3-5/16"  | -      |
| ZL-25-85  | -        | 85mm   |
| ZL-25-86  | 3-3/8"   | -      |
| ZL-25-87  | 3-7/16"  | -      |
| ZL-25-89  | 3-1/2"   | -      |
| ZL-25-90  | -        | 90mm   |
| ZL-25-91  | 3-9/16"  | -      |
| ZL-25-92  | 3-5/8"   | -      |
| ZL-25-93  | 3-11/16" | -      |
| ZL-25-95  | 3-3/4"   | 95mm   |
| ZL-25-96  | 3-13/16" | -      |
| ZL-25-98  | 3-7/8"   | -      |
| ZL-25-100 | 3-15/16" | 100mm  |
| ZL-25-101 | 4"       | -      |
| ZL-25-104 | 4-1/8"   | -      |
| ZL-25-105 | 4-1/8"   | 105mm  |
| ZL-25-106 | 4-3/16"  | -      |
| ZL-25-107 | 4-1/4"   | -      |
| ZL-25-109 | 4-5/16"  | -      |
| ZL-25-110 | -        | 110mm  |
| ZL-25-111 | 4-3/8"   | -      |
| ZL-25-112 | 4-7/16"  | -      |
| ZL-25-114 | 4-1/2"   | -      |
| ZL-25-115 | -        | 115mm  |
| ZL-25-117 | -        | 117mm  |
| ZL-25-108 | 4-1/4"   | -      |
| ZL-25-109 | 4-5/16"  | -      |
| ZL-25-110 | -        | 110mm  |
| ZL-25-111 | 4-3/8"   | -      |
| ZL-25-112 | 4-7/16"  | -      |
| ZL-25-114 | 4-1/2"   | -      |
| ZL-25-115 | -        | 115mm  |
| ZL-25-116 | 4-9/16"  | -      |
| ZL-25-117 | 4-5/8"   | 117mm  |
| ZL-25-119 | 4-11/16" | -      |
| ZL-25-120 | -        | 120mm  |
| ZL-25-121 | 4-3/4"   | -      |
| ZL-25-122 | 4-13/16" | -      |
| ZL-25-123 | 4-7/8"   | -      |
| ZL-25-125 | -        | 125mm  |
| ZL-25-126 | 4-15/16" | -      |
| ZL-25-127 | 5"       | 127mm  |
| ZL-25-128 | 5-1/16"  | -      |
| ZL-25-130 | 5-1/8"   | -      |
| ZL-25-131 | 5-3/16"  | -      |
| ZL-25-133 | 5-1/4"   | -      |
| ZL-25-134 | 5-5/16"  | 135mm  |
| ZL-25-136 | 5-3/8"   | -      |
| ZL-25-138 | 5-7/16"  | -      |
| ZL-25-140 | 5-1/2"   | 140mm  |
| ZL-25-141 | 5-9/16"  | -      |
| ZL-25-142 | 5-5/8"   | -      |
| ZL-25-144 | 5-11/16" | -      |
| ZL-25-145 | -        | 145mm  |

| CNZ-42    | HEX SIZE |        |
|-----------|----------|--------|
|           | IMPERIAL | METRIC |
| ZL-42-108 | 4-1/4"   | -      |
| ZL-42-109 | 4-5/16"  | -      |
| ZL-42-110 | -        | 110mm  |
| ZL-42-111 | 4-3/8"   | -      |
| ZL-42-112 | 4-7/16"  | -      |
| ZL-42-114 | 4-1/2"   | -      |
| ZL-42-115 | -        | 115mm  |
| ZL-42-116 | 4-9/16"  | -      |
| ZL-42-117 | 4-5/8"   | 117mm  |
| ZL-42-119 | 4-11/16" | -      |
| ZL-42-120 | -        | 120mm  |
| ZL-42-121 | 4-3/4"   | -      |
| ZL-42-122 | 4-13/16" | -      |
| ZL-42-123 | 4-7/8"   | -      |
| ZL-42-125 | -        | 125mm  |
| ZL-42-126 | 4-15/16" | -      |
| ZL-42-127 | 5"       | 127mm  |
| ZL-42-128 | 5-1/16"  | -      |
| ZL-42-130 | 5-1/8"   | -      |
| ZL-42-131 | 5-3/16"  | -      |
| ZL-42-133 | 5-1/4"   | -      |
| ZL-42-134 | 5-5/16"  | 135mm  |
| ZL-42-136 | 5-3/8"   | -      |
| ZL-42-138 | 5-7/16"  | -      |
| ZL-42-140 | 5-1/2"   | 140mm  |
| ZL-42-141 | 5-9/16"  | -      |
| ZL-42-142 | 5-5/8"   | -      |
| ZL-42-144 | 5-11/16" | -      |
| ZL-42-145 | -        | 145mm  |
| ZL-42-146 | 5-3/4"   | -      |
| ZL-42-147 | 5-13/16" | -      |
| ZL-42-149 | 5-7/8"   | -      |
| ZL-42-150 | -        | 150mm  |
| ZL-42-151 | 5-15/16" | -      |
| ZL-42-152 | 6"       | -      |
| ZL-42-153 | 6-1/16"  | -      |
| ZL-42-155 | -        | 155mm  |
| ZL-42-156 | 6-1/8"   | -      |
| ZL-42-157 | 6-3/16"  | -      |
| ZL-42-158 | 6-1/4"   | -      |
| ZL-42-160 | -        | 160mm  |
| ZL-42-161 | 6-5/16"  | -      |
| ZL-42-162 | 6-3/8"   | -      |
| ZL-42-163 | 6-7/16"  | -      |
| ZL-42-165 | 6-1/2"   | 165mm  |
| ZL-42-166 | 6-9/16"  | -      |
| ZL-42-168 | 6-5/8"   | -      |
| ZL-42-170 | 6-11/16" | 170mm  |
| ZL-42-171 | 6-3/4"   | -      |
| ZL-42-173 | 6-13/16" | -      |
| ZL-42-174 | 6-7/8"   | -      |
| ZL-42-175 | -        | 175mm  |

Experience zero-damage fastening with the innovative CNO Series! Its unique roller design eliminates scratches and dents, perfect for delicate applications like electronics and precision machinery. Save time and effort with the 3-in-1 convenience.

# CNO SERIES OFFSET SPANNER ATTACHMENTS

## Zero-Damage Guarantee

## Built to Last & Perform

## Unmatched Accuracy



OPEN SPANNER



RING SPANNER

### ROLLER TYPE SPECIAL TOOL DESIGN FOR APPLICATIONS:

- Christmas Tree
- BOP
- Valves
- Limited Clearance Area
- Well-Head Equipment
- Valve Manifold
- Skids

| OPEN SPANNER:   | RING SPANNER:   | RATCHETING SPANNER:                                       |
|---|---|---|
| Ideal for accessing exposed nuts and bolts in tight spaces. | Offers superior grip and torque for even the most stubborn fasteners. | Enables fast, continuous operation, improving efficiency. |
|   |   |   |

| MODEL  | HEX SIZE (mm) | TORQUE |       | OPEN SPANNER LINK (mm) |        |       |      | RING SPANNER LINK (mm) |       |       |      | RATCHET LINK (mm) |       |       |      |
|--------|---------------|--------|-------|------------------------|--------|-------|------|------------------------|-------|-------|------|-------------------|-------|-------|------|
|        |               | FT.LBS | NM    | C                      | W      | WIDTH |      | R                      | T     | WIDTH |      | R                 | T     | WIDTH |      |
|        |               |        |       |                        |        | A     | B    |                        |       | A     | B    |                   |       | A     | B    |
| CNO-02 | 24            | 243    | 329   | 16.8                   | 53.6   | 24    | 61   | 22.86                  | 9.06  | 19    | 61   | 25.4              | 10.33 | 25.2  | 61   |
|        | 27            |        |       | 18.8                   | 58.05  |       |      | 22.86                  | 7.34  |       |      | 25.4              | 9.88  |       |      |
|        | 32            |        |       | 22.9                   | 64.8   |       |      | 24.65                  | 6.25  |       |      | 27.43             | 9.03  |       |      |
|        | 36            |        |       | 24.9                   | 71.5   |       |      | 27.43                  | 6.73  |       |      | 29.97             | 9.27  |       |      |
|        | 41            |        |       | 27.9                   | 79.8   |       |      | 31.24                  | 7.67  |       |      | 32.77             | 9.20  |       |      |
|        | 46            |        |       | 30.7                   | 93.5   |       |      | 34.8                   | 8.35  |       |      | 35.56             | 9.11  |       |      |
|        | 50            |        |       | 36.8                   | 94     |       |      | 38.61                  | 9.29  |       |      | 41.15             | 11.83 |       |      |
| 55     | 37            | 109.8  | 38.61 | 6.99                   | 41.15  | 9.53  |      |                        |       |       |      |                   |       |       |      |
| CNO-04 | 41            | 580    | 786   | 27.2                   | 77.9   | 31    | 82.6 | 32.8                   | 9.19  | 25.4  | 82.6 | 33.8              | 10.21 | 31    | 82.6 |
|        | 46            |        |       | 30.2                   | 92.9   |       |      | 35.6                   | 9.11  |       |      | 36.8              | 10.32 |       |      |
|        | 50            |        |       | 33.5                   | 90     |       |      | 38.4                   | 9.60  |       |      | 39.2              | 10.44 |       |      |
|        | 55            |        |       | 36.1                   | 108.9  |       |      | 41.1                   | 9.52  |       |      | 42.3              | 10.63 |       |      |
|        | 60            |        |       | 39.9                   | 108.9  |       |      | 45.0                   | 10.46 |       |      | 45.5              | 10.98 |       |      |
|        | 65            |        |       | 55.60                  | 114.00 |       |      | 46.7                   | 9.26  |       |      | 48.7              | 11.35 |       |      |
| CNO-08 | 75            | 1142   | 1548  | 49.50                  | 132.80 | 38    | 83   | 52.1                   | 8.94  | 32    | 83   | 54.7              | 11.56 | 37.2  | 83   |
|        | 50            |        |       | 33.1                   | 110.4  |       |      | 40.13                  | 11.38 |       |      | 44.2              | 15.45 |       |      |
|        | 55            |        |       | 36.1                   | 115.4  |       |      | 42.83                  | 11.3  |       |      | 46.99             | 15.37 |       |      |
|        | 60            |        |       | 39.1                   | 120.4  |       |      | 45.72                  | 11.22 |       |      | 49.78             | 15.28 |       |      |
|        | 65            |        |       | 43.7                   | 127    |       |      | 48.51                  | 11.14 |       |      | 52.58             | 15.2  |       |      |
|        | 70            |        |       | 46.7                   | 133.6  |       |      | 51.31                  | 11.06 |       |      | 55.37             | 15.12 |       |      |
|        | 75            |        |       | 49.7                   | 146    |       |      | 54.36                  | 11.23 |       |      | 58.42             | 15.3  |       |      |
|        | 80            |        |       | 53.3                   | 152.6  |       |      | 57.15                  | 11.15 |       |      | 61.21             | 15.21 |       |      |
|        | 85            |        |       | 58.1                   | 162    |       |      | 60.2                   | 11.32 |       |      | 64.26             | 15.39 |       |      |
|        | 90            |        |       | 61.5                   | 163.3  |       |      | 62.99                  | 11.24 |       |      | 67.06             | 15.31 |       |      |
|        | 95            |        |       | 65.3                   | 172.4  |       |      | 66.04                  | 11.42 |       |      | 70.1              | 15.48 |       |      |
| 100    | 65.3          | 178    | 68.58 | 11.08                  | 72.9   | 15.4  |      |                        |       |       |      |                   |       |       |      |
| 105    | 69.1          | 188.9  | 71.48 | 11.4                   | 75.8   | 15.5  |      |                        |       |       |      |                   |       |       |      |

Available in electric and pneumatic power sources, ABS torquing pumps are specifically designed to simplify the process of tightening or loosening bolts, nuts, and other fasteners. Our pumps apply torque with precision and generate the necessary hydraulic pressure, serving as an integral component of torque wrench systems. We offer a wide range of distinct models that can be selected according to specific requirements.

## TORQUING PUMPS

### TECHNICAL SPECIFICATIONS

| ELECTRIC                   | HFDE - M - 2 - 0.55KW |
|----------------------------|-----------------------|
| Voltage                    | 1~230V 50Hz           |
| Nominal power output       | 0.55kW                |
| Low pressure < 75 bar      | 6.5 l/min             |
| Medium pressure 75-220bar  | 1.8 l/min             |
| High pressure up to 700bar | 0.7 l/min             |
| Connection                 | 2- / 4- / 8- Port     |
| Weight without/with oil    | 25/29 kg              |
| Fluid capacity             | 4.0 litre             |
| Fluids DIN 51524-2         | HLP32 oder HLP48      |
| Dimensions: (L x W x H)    | 40 x 28 x 40 cm       |
| Noise Level                | 82 dB(A)              |



### TECHNICAL SPECIFICATIONS

| ELECTRIC                   | HFDE - M - 3 - 0.55KW |
|----------------------------|-----------------------|
| Voltage                    | 1~230V 50Hz           |
| Nominal power output       | 0.55kW                |
| Low pressure < 75 bar      | 6.5 l/min             |
| Medium pressure 75-220bar  | 1.8 l/min             |
| High pressure up to 700bar | 0.7 l/min             |
| Connection                 | 2- / 4- / 8- Port     |
| Weight without/with oil    | 25/29 kg              |
| Fluid capacity             | 4.0 litre             |
| Fluids DIN 51524-2         | HLP32 oder HLP48      |
| Dimensions: (L x W x H)    | 40 x 28 x 40 cm       |
| Noise Level                | 82 dB(A)              |



\*Specifications are subject to change without notice.

**TECHNICAL SPECIFICATIONS**

| PNEUMATIC                   | HFDP - M - 2   |
|-----------------------------|----------------|
| Air pressure:               | 5-10 bar       |
| Nominal power output:       | 2.8kW/ 3,8HP   |
| Low pressure < 75 bar:      | 7.5 l/min      |
| Medium pressure 75-220bar:  | 2.5 l/min      |
| High pressure up to 700bar: | 0.9 l/min      |
| Connection:                 | 2-/4-/8-Port   |
| Weight without/with oil:    | 27/30 kg       |
| Fluid capacity:             | 4.0 litre      |
| Fluids DIN 51524-2:         | HLP32 or HLP46 |
| Dimensions: (L x W x H)     | 50x27x39 cm    |
| Noise Level:                | 82 dB(A)       |



**TECHNICAL SPECIFICATIONS**

| PNEUMATIC                   | HFDP - M - 8   |
|-----------------------------|----------------|
| Air pressure:               | 5-10 bar       |
| Nominal power output:       | 2.8kW/ 3,8HP   |
| Low pressure < 75 bar:      | 7.5 l/min      |
| Medium pressure 75-220bar:  | 2.5 l/min      |
| High pressure up to 700bar: | 0.9 l/min      |
| Connection:                 | 2-/4-/8-Port   |
| Weight without/with oil:    | 27/30 kg       |
| Fluid capacity:             | 4.0 litre      |
| Fluids DIN 51524-2:         | HLP32 or HLP46 |
| Dimensions: (L x W x H)     | 50x27x39 cm    |
| Noise Level:                | 82 dB(A)       |



**HYDRAULIC HOSES**

- Suitable for working pressures up to 700 bar
- Equipped with a wide variety of (safety) couplings
- High flexibility
- Pressure tested before dispatch



\*Specifications are subject to change without notice.

ABS standard tensioners operating at maximum pressure of 1500 bar are designed to fit most of ANSI B 16.5, 18.47, API flanges.

## HFST SERIES STANDARD TENSIONERS

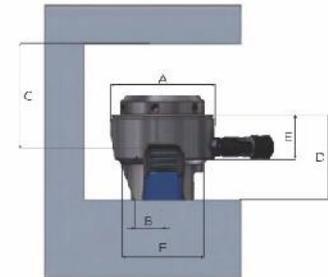
**Safe &  
Reliable**

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**Latest  
Seal Technology**

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**Long Stroke  
Design**



| MODEL   | BOLT SIZE |      | MAXIMUM TENSIONER LOAD |       | HYDRAULIC PRESSURE AREA<br>mm <sup>2</sup> | MAX. PRESSURE<br>bar | STROKE<br>mm | DIMENSIONS (mm) |      |     |       |      |        |
|---------|-----------|------|------------------------|-------|--|----------------------|--------------|-----------------|------|-----|-------|------|--------|
|         | inch      | mm   | kN                     | tonf  |  |                      |              | A               | B    | C   | D     | E    | F      |
| HFST-11 | -         | M16  | 233                    | 23.8  | 1555                                       | 1500                 | 12           | 74              | 31   | 64  | 79.3  | 44   | 74     |
|         | 3/4"      | M20  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 7/8"      | M22  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1"        | M24  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-1/8"    | M27  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-12 | 1-1/8"    | M27  | 443                    | 44.0  | 2684                                       | 1500                 | 15           | 108             | 42   | 89  | 101.2 | 58.1 | 102.1  |
|         | -         | M30  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-1/4"    | M33  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-3/8"    | M36  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-1/2"    | M39  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-13 | 1-1/2"    | M39  | 791                    | 80.0  | 5271                                       | 1500                 | 15           | 136             | 54   | 89  | 116   | 58   | 132.47 |
|         | 1-5/8"    | M42  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-3/4"    | M45  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 1-7/8"    | M48  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 2"        | M52  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-14 | 2"        | M52  | 1207                   | 129.0 | 8445                                       | 1500                 | 15           | 172             | 65.5 | 102 | 119.5 | 58   | 162    |
|         | 2-1/4"    | M56  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 2-1/2"    | M64  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-15 | 2-1/2"    | M64  | 1830                   | 186.0 | 12197                                      | 1500                 | 15           | 200             | 76   | 98  | 131   | 64   | 187    |
|         | 2-3/4"    | M72  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 3"        | M76  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-16 | 3"        | M76  | 2502                   | 255   | 16682                                      | 1500                 | 15           | 235             | 94   | 125 | 163   | 68   | 218    |
|         | 3-1/4"    | M80  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 3-1/2"    | M90  |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-17 | 3-1/2"    | M90  | 2629                   | 268   | 17530                                      | 1500                 | 15           | 245             | 102  | 125 | 148   | 66   | 245    |
|         | 3-3/4"    | M95  |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 4"        | M100 |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-18 | 4"        | M100 | 3802                   | 387.7 | 25349                                      | 1500                 | 15           | 288             | 122  | 133 | 157   | 73   | 284    |
|         | 4-1/2"    | M110 |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 5"        | M125 |                        |       |  |                      |              |                 |      |     |       |      |        |
| HFST-19 | 5"        | M125 | 4903                   | 500.0 | 32688                                      | 1500                 | 15           | 335             | 143  | 165 | 191   | 78   | 325    |
|         | 5-1/4"    | M130 |                        |       |  |                      |              |                 |      |     |       |      |        |
|         | 5-3/4"    | M150 |                        |       |  |                      |              |                 |      |     |       |      |        |

\*2500 bar can also be provided on request.

\*Tool dimensions and load value are subject to design specification.

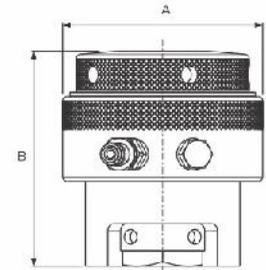
The auto return tensioner range has been designed to ensure fast, simple, safe and reliable operation. With a focus on productivity and a reduction in downtime we have implemented state of the art materials and technology resulting in significant time saving during operation.

## HFSRT SERIES SPRING RETURN TENSIONERS

**Improved Seal Technology**

**Increased Safety**

**Durable**



| MODEL    | BOLT DIAMETER |      | MAXIMUM TENSIONER LOAD |         | HYDRAULIC PRESSURE AREA<br>mm <sup>2</sup> | MAX. PRESSURE<br>bar | STROKE |    | DIMENSIONS (mm) |     |
|----------|---------------|------|------------------------|---------|--|----------------------|--------|----|-----------------|-----|
|          | inch          | mm   | kN                     | lbf     |  |                      | inch   | mm | A               | B   |
| HFSRT-0* | 3/4"          | M20  | 160                    | 35,970  | 1,070                                      | 1500                 | 0.315" | 8  | 66              | 93  |
|          | 7/8"          | M22  |                        |         |  |                      |        |    |                 | 93  |
| HFSRT-1  | 1"            | M24  | 280                    | 62,950  | 1,870                                      | 1500                 | 0.375" | 10 | 87              | 117 |
|          | 1 1/8"        | M27  |                        |         |  |                      |        |    |                 | 117 |
| HFSRT-2  | —             | —    | 450                    | 101,160 | 3,000                                      | 1500                 | 0.375" | 10 | 103             | 120 |
|          | 1"            | M24  |                        |         |  |                      |        |    |                 | 117 |
|          | 1 1/8"        | M27  |                        |         |  |                      |        |    |                 | 117 |
|          | 1 1/4"        | M30  |                        |         |  |                      |        |    |                 | 120 |
|          | 1 3/8"        | M33  |                        |         |  |                      |        |    |                 | 123 |
| HFSRT-3  | —             | M36  | 680                    | 148,370 | 4,400                                      | 1500                 | 0.375" | 10 | 118             | 126 |
|          | 1 1/4"        | M33  |                        |         |  |                      |        |    |                 | 130 |
|          | 1 3/8"        | M36  |                        |         |  |                      |        |    |                 | 133 |
|          | 1 1/2"        | M39  |                        |         |  |                      |        |    |                 | 133 |
| HFSRT-4  | 1 5/8"        | M42  | 1,000                  | 224,810 | 6,670                                      | 1500                 | 0.375" | 10 | 141             | 132 |
|          | —             | M39  |                        |         |  |                      |        |    |                 | 135 |
|          | 1 1/2"        | M42  |                        |         |  |                      |        |    |                 | 139 |
|          | 1 3/4"        | M45  |                        |         |  |                      |        |    |                 | 142 |
|          | 1 7/8"        | M48  |                        |         |  |                      |        |    |                 | 145 |
| HFSRT-5  | 2"            | —    | 1,500                  | 337,210 | 10,000                                     | 1500                 | 0.375" | 10 | 176             | 148 |
|          | —             | M52  |                        |         |  |                      |        |    |                 | 154 |
|          | 2 1/4"        | M56  |                        |         |  |                      |        |    |                 | 161 |
|          | 2 1/2"        | M60  |                        |         |  |                      |        |    |                 | 161 |
|          | 2 3/4"        | M64  |                        |         |  |                      |        |    |                 | 167 |
| HFSRT-6  | —             | M68  | 2,500                  | 562,020 | 16,670                                     | 1500                 | 0.375" | 10 | 219             | 167 |
|          | 2 3/4"        | M72  |                        |         |  |                      |        |    |                 | 171 |
|          | 3"            | M76  |                        |         |  |                      |        |    |                 | 180 |
|          | 3 1/4"        | M80  |                        |         |  |                      |        |    |                 | 180 |
|          | 3 1/2"        | M85  |                        |         |  |                      |        |    |                 | 186 |
| HFSRT-7  | —             | M90  | 3,200                  | 719,390 | 21,340                                     | 1500                 | 0.375" | 10 | 252             | 186 |
|          | 3 1/2"        | M90  |                        |         |  |                      |        |    |                 | 186 |
|          | 3 3/4"        | M95  |                        |         |  |                      |        |    |                 | 192 |
|          | 4"            | M100 |                        |         |  |                      |        |    |                 | 199 |

\*HFSRT-0 is not an auto return tensioner.

When space is tight and loads are heavy, our Direct Fit tensioners step up to conquer the challenge. This ingenious one-piece design delivers a perfect fit for confined environments, eliminating the need for bulky adapters and simplifying setup. Gone are the days of frequent maintenance hassles. The streamlined design minimises wear and tear, keeping your bolting operations running smoothly. Plus, its versatility allows for customisation to specific requirements, ensuring optimal performance for any task.

Don't let limited clearance hold you back. The compact design packs a powerful punch, tackling even the most demanding high-load applications with ease. Experience the freedom and efficiency of a tensioner that adapts to your space, not the other way around.

### Compact Design

Allows the operator easy usage and smooth process flow.

### Increased Safety & Speed

Designed to boost safety and speed for operators.

### Customizable Design

Can be customized to fit all applications.

### Hassle Free Operations

Preferred tool for confined spaces.

The ABS multi-stage bolt tensioners exemplify versatility and reliability, making them ideal hydraulic bolt tensioners for demanding applications, especially in high-load and confined-space scenarios. Designed for various applications, these hydraulic bolt tensioners are crafted to withstand prolonged usage while demanding minimal maintenance.

- **Minimal Maintenance:** Invest in reduced downtime and lower operating costs with the tensioner's minimal maintenance requirements.
- **User-Friendly Design:** Intuitive controls and a smooth operation ensure efficient and error-free bolting, minimizing user fatigue.
- **Handle the Toughest Jobs:** Engineered for exceptional strength and durability, these tensioners withstand demanding applications and prolonged use.

## HFDF SERIES DIRECT FIT TENSIONERS

**BOLT SIZE RANGE** 3/4" - 4"

**M20 - M100**



## HFMT SERIES MULTI STAGE TENSIONER



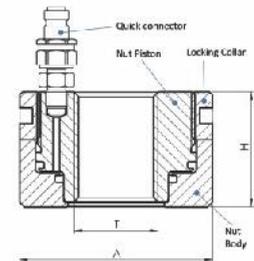
| MODEL   | BOLT DIA |     | MAX. LOAD |         | TENSIONER DIA |      | TENSIONER HEIGHT |       | TENSIONER STROKE |    |
|---------|----------|-----|-----------|---------|---------------|------|------------------|-------|------------------|----|
|         | inch     | mm  | kN        | lbf     | inch          | mm   | inch             | mm    | inch             | mm |
| HFMT-24 | 1"       | M24 | 288       | 64,742  | 2.36          | 60   | 7.40             | 185   | 0.28             | 7  |
| HFMT-27 | 1-1/8"   | M27 | 375       | 84,300  | 2.60          | 66   | 7.62             | 193.5 | 0.28             | 7  |
| HFMT-30 | 1-1/8"   | M30 | 462       | 103,858 | 2.83          | 72   | 7.91             | 201   | 0.28             | 7  |
| HFMT-33 | 1-1/4"   | M33 | 572       | 128,586 | 3.07          | 78   | 8.50             | 216   | 0.31             | 8  |
| HFMT-36 | 1-3/8"   | M36 | 670       | 150,616 | 3.25          | 82.5 | 9.04             | 229.5 | 0.39             | 10 |
| HFMT-39 | 1-1/2"   | M39 | 802       | 180,290 | 3.62          | 92   | 10.31            | 263   | 0.39             | 10 |
| HFMT-42 | 1-5/8"   | M42 | 920.5     | 206,928 | 3.86          | 98   | 10.31            | 262   | 0.39             | 10 |
| HFMT-45 | 1-3/4"   | M45 | 1082      | 243,284 | 4.13          | 105  | 10.91            | 281.5 | 0.39             | 10 |
| HFMT-48 | 1-7/8"   | M48 | 1222      | 274,706 | 4.37          | 111  | 11.56            | 293.5 | 0.39             | 10 |
| HFMT-52 | 2"       | M52 | 1452      | 326,410 | 4.72          | 120  | 12.80            | 327   | 0.39             | 10 |
| HFMT-56 | 2-1/4"   | M56 | 1675      | 376,540 | 5.04          | 128  | 12.99            | 330   | 0.39             | 10 |
| HFMT-64 | 2-1/2"   | M64 | 2244      | 494,560 | 5.83          | 146  | 14.23            | 376   | 0.47             | 12 |

NOTE: 1) For low radial clearance applications

ABS hydraulic nuts revolutionize large bolt tensioning, offering a safe, efficient, and precise solution. This nut features an internal jack with an external locking collar. Pressure creates a gap between the nut and collar due to joint compression, gasket presence (if applicable), and bolt elongation. The nut is pressurized above the desired pre-load, then the collar is tightened. Releasing pressure transfers the load to the collar, but some pre-load loss occurs due to collar thread settling. This loss is more significant with shorter bolts.

## HFHN SERIES HYDRAULIC NUT

- Even and accurate pre-load: Achieved through controlled hydraulic pressure.
- No flogging hammers or spanners: Faster and safer tightening.
- Single or multiple tightening: Suitable for various applications.
- Confined space friendly: Compact design allows operation in tight areas.
- Self-aligning and low load loss (shim type): Minimizes installation challenges.
- Eliminates thread damage: Protects bolts from damage during tightening.



HFHN-15 RANGE - MAX 1500 BAR

| PART NUMBER  |              | BOLT THREAD SIZE |          | MAX. LOAD |       | Pressure Area<br>HPA | NUT OD<br>A | NUT HEIGHT<br>H | NUT STROKE | WEIGHT |
|--------------|--------------|------------------|----------|-----------|-------|----------------------|-------------|-----------------|------------|--------|
|              |              | T                | F        | kn        | tonf  |                      |             |                 |            |        |
| METRIC       | IMPERIAL     | METRIC           | IMPERIAL | kn        | tonf  | mm <sup>2</sup>      | mm          | mm              | mm         | kg     |
| HFHN-15-M22  | HFHN-15-0875 | M22              | 7/8"     | 152       | 15.2  | 1011                 | 57          | 44              | 5          | 0.7    |
| HFHN-15-M24  | HFHN-15-1000 | M24              | 1"       | 176       | 17.7  | 1175                 | 60          | 45              | 5          | 0.8    |
| HFHN-15-M27  | HFHN-15-1125 | M27              | 1 1/8"   | 230       | 23.1  | 1531                 | 65          | 46              | 5          | 1.0    |
| HFHN-15-M30  | -            | M30              | -        | 280       | 28.1  | 1869                 | 73          | 48              | 5          | 1.3    |
| HFHN-15-M33  | HFHN-15-1250 | M33              | 1 1/4"   | 312       | 31.3  | 2081                 | 78          | 52              | 6          | 1.6    |
| HFHN-15-M36  | HFHN-15-1375 | M36              | 1 3/8"   | 368       | 36.9  | 2450                 | 85          | 56              | 6          | 2.0    |
| HFHN-15-M39  | HFHN-15-1500 | M39              | 1 1/2"   | 390       | 39.2  | 2602                 | 88          | 58              | 6          | 2.2    |
| HFHN-15-M42  | HFHN-15-1625 | M42              | 1 5/8"   | 448       | 45.0  | 2989                 | 93          | 61              | 6          | 2.6    |
| HFHN-15-M45  | HFHN-15-1750 | M45              | 1 3/4"   | 522       | 52.4  | 3483                 | 101         | 64              | 6          | 3.2    |
| HFHN-15-M48  | HFHN-15-1875 | M48              | 1 7/8"   | 589       | 59.1  | 3928                 | 107         | 68              | 8          | 3.8    |
| HFHN-15-M52  | HFHN-15-2000 | M52              | 2"       | 703       | 70.6  | 4688                 | 116         | 70              | 8          | 4.6    |
| HFHN-15-M56  | HFHN-15-2250 | M56              | 2 1/4"   | 812       | 81.5  | 5413                 | 125         | 72              | 8          | 5.5    |
| HFHN-15-M60  | -            | M60              | -        | 945       | 94.8  | 6299                 | 134         | 74              | 8          | 6.5    |
| HFHN-15-M64  | HFHN-15-1500 | M64              | 2 1/2"   | 1070      | 107.4 | 7136                 | 142         | 80              | 8          | 7.9    |
| HFHN-15-M68  | HFHN-15-2750 | M68              | 2 3/4"   | 1222      | 122.7 | 8147                 | 152         | 84              | 10         | 9.5    |
| HFHN-15-M72  | HFHN-15-3000 | M72              | 3"       | 1384      | 138.9 | 9226                 | 161         | 88              | 10         | 11.2   |
| HFHN-15-M80  | HFHN-15-3250 | M80              | 3 1/4"   | 1738      | 174.4 | 11584                | 179         | 92              | 10         | 14.5   |
| HFHN-15-M90  | HFHN-15-3500 | M90              | 3 1/2"   | 2236      | 224.4 | 14908                | 203         | 96              | 10         | 19.5   |
| HFHN-15-M95  | HFHN-15-3750 | M95              | 3 3/4"   | 2509      | 251.6 | 16728                | 215         | 100             | 10         | 22.8   |
| HFHN-15-M100 | HFHN-15-4000 | M100             | 4"       | 2798      | 280.8 | 18652                | 226         | 105             | 15         | 26.4   |
| HFHN-15-M110 | HFHN-15-4500 | M110             | 4 1/2"   | 3422      | 343.5 | 22815                | 250         | 110             | 15         | 34.0   |
| HFHN-15-M125 | HFHN-15-5000 | M125             | 5"       | 4477      | 449.3 | 29844                | 285         | 125             | 15         | 50.2   |
| HFHN-15-M140 | HFHN-15-5500 | M140             | 5 1/2"   | 5672      | 569.3 | 37815                | 321         | 140             | 15         | 71.6   |
| HFHN-15-M150 | HFHN-15-6000 | M150             | 6"       | 6548      | 657.2 | 43653                | 345         | 150             | 15         | 88.7   |

\*HFHN-25 Range - MAX 2500 bar pressure also available as per requirements.

ABS tensioning pumps revolutionize bolting applications by offering precise and controlled force. This capability ensures consistent and accurate bolt tensioning, effectively minimizing the risks of over- or under-tightening. Such precision plays a crucial role in averting joint failure or damage, setting ABS apart from traditional methods.

Our pumps go beyond conventional practices by enhancing safety and versatility in bolting operations. Unlike manual methods, these pumps eliminate the risk of injuries associated with excessive force or repetitive motions. Furthermore, their seamless compatibility with various hydraulic tensioners allows them to efficiently tackle a diverse range of bolt sizes and applications, contributing to both safety and operational efficiency.

## TENSIONING PUMPS

### HYDRAULIC HAND PUMPS

- CE Certified: Complies with stringent safety and quality standards.
- Precision Monitoring: Equipped with a 100mm dual-scale (psi/bar) pressure gauge, ensuring clear and accurate pressure monitoring.
- Efficient Design: Two-stage construction for increased power and efficiency, requiring fewer pump strokes.
- Variable Pressure Options: Choose from 1000, 1500, and 2500 bar configurations based on your specific bolting needs.



### AIR POWERED HYDRAULIC PUMPS

- Specifically designed for efficient pressurization of hydraulic bolt tensioners, ensuring consistent and accurate bolt tightening.
- Pneumatic Filter/Regulator/Lubricator for clean, controlled, and lubricated air supply.
- 1000bar to 3000bar options
- Calibrated Gauge for accurate pressure monitoring.
- Air Pressure Safety Relief Valve to prevent exceeding safe pressure limits.



### ELECTRIC PUMPS

- Withstands rough handling in workshops, mobile operations, and industrial settings.
- Options: 1500 and 2500 Bar for specific bolting needs.
- Precise Pressure Monitoring: 100mm dual-scale gauge (MPa gauge option).
- 5L Tank with Level Glass for easy fluid level monitoring.
- Optional FMF Fine Mesh Filter for enhanced contamination protection.



### HYDRAULIC HOSES

- Hoses can be inter-connected in multi-tool set-ups using nipples, couplers, T-pieces and Y-Pipe assemblies.
- Includes dust caps
- Pressure tested before dispatch
- Available as 700 bar, 1000 bar, 1500 bar and 2500 bar outputs (higher pressures available on request)



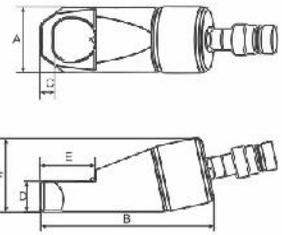


## Heavy-Duty Hydraulic Cylinder 10-50 TON Capacity

## HFNS SERIES NUT SPLITTER

### FEATURES

- Compact design used in confined space with enough force to split the rusted nuts.
- All models feature a rugged one-piece cutting frame coupled to heavy-duty hydraulic cylinder.
- Specially designed "tool steel" cutter blade cuts the nut to the precise point where it cracks.
- Unique angled head design to keep full contact with the nut being penetrated.
- Unique angled cutter blade with radius to have the greater resistance to cutting and breaking nuts.
- 5 popular models applicable to cover the most range of nuts.



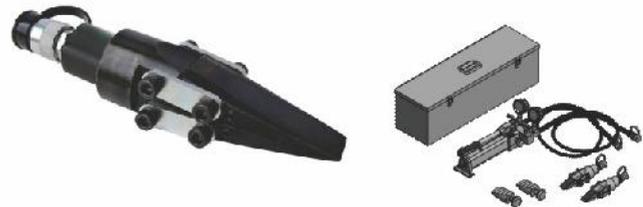
| MODEL     | HEXAGON NUT RANGE (mm) | BOLT RANGE (mm) | CAPACITY (TON) | OIL CAPACITY (c.c.) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | WEIGHT (Kg) |
|-----------|------------------------|-----------------|----------------|---------------------|--------|--------|--------|--------|--------|--------|-------------|
| HFNS-1924 | 19-24                  | M12-M16         | 10             | 18                  | 60     | 171.5  | 10     | 25     | 40     | 68     | 2.2         |
| HFNS-2432 | 24-32                  | M16-M22         | 15             | 40                  | 70     | 192    | 18     | 30     | 52     | 79     | 3.3         |
| HFNS-3241 | 32-41                  | M22-M27         | 20             | 68                  | 80     | 230    | 16     | 38     | 65     | 92     | 4.4         |
| HFNS-4150 | 41-50                  | M27-M33         | 35             | 150                 | 100    | 286    | 21     | 45     | 76     | 116    | 8.2         |
| HFNS-5060 | 50-60                  | M33-M39         | 50             | 250                 | 117    | 321    | 24     | 54.5   | 92     | 134    | 11.7        |

\*The hardness of nut material must not exceed HRC-44. Should not be used on stainless steel nuts and/or square shape nuts.

### HYDRAULIC FLANGE SPREADER

| MODEL       | CAPACITY (TON)* | SPREAD (mm) |     | STROKE (mm) | WEIGHT (kg) |
|-------------|-----------------|-------------|-----|-------------|-------------|
|             |                 | MIN         | MAX |             |             |
| HF-FS-15EK  | 15              | 5           | 15  | 25          | 3.3         |
| HF-FS-15EMK | 15 X 2          | 5           | 15  | 25          | 3.3         |
| HF-FS-25EK  | 25              | 7           | 23  | 65          | 7.8         |
| HF-FS-25EMK | 25 X 2          | 7           | 23  | 65          | 7.8         |

### FLANGE SPREADER



### INTEGRAL HYDRAULIC FLANGE SPREADER

| MODEL     | CAPACITY (TON)* | SPREAD (mm)** | WEIGHT (kg) WITH INTEGRAL HYDRAULIC PUMP CYLINDER |
|-----------|-----------------|---------------|---|
|           |                 | MAX           |   |
| HF-FSI-15 | 14.5            | 81            | 9   |

Range of application: All flanges with a minimum access gap of 6 mm.

\*With 700 bar (10,000 psi) hydraulic pressure applied: 14.5 Ton per tool.

It is recommended that tools are used in pairs giving:

2 x 14.5 Ton = 29 Ton

\*\*Stepped blocks is used in pairs to increase the spreading distance.



### MECHANICAL FLANGE SPREADER

| MODEL     | CAPACITY (TON)* | SPREAD (mm)** |     | WEIGHT (kg) |               |              |
|-----------|-----------------|---------------|-----|-------------|---------------|--------------|
|           |                 | MIN           | MAX | TOOL        | TORQUE WRENCH | SAFETY BLOCK |
| HF-FSM-9T | 9.4             | 9             | 81  | 5.5         | 1.5           | 0.5          |

Range of application: All flanges with a minimum access gap of 6 mm.

\*With 203 Nm of torque applied.

It is recommended that tools are used in pairs giving:

2 x 9.4 Ton = 18.8 T

\*\*Stepped blocks is used in pairs to increase the spreading distance.



ABS manual torque wrenches are specialized tools featuring a calibrated mechanism that allows you to apply controlled and measurable torque to a fastener. They typically consist of a handle, a body with a scale displaying torque values, and an attachment for sockets or other drives.



### RATCHET TYPE

| MODEL       | TORQUE (Nm) |      | SQ. DRIVE (inch) | WEIGHT (kg) | OAL (mm) |
|-------------|-------------|------|------------------|-------------|----------|
|             | MIN.        | MAX. |                  |             |          |
| HFTW-211R   | 2.5         | 11   | 3/8"             | 0.73        | 390      |
| HFTW-235R   | 5           | 35   | 3/8"             | 0.825       | 495      |
| HFTW-368R   | 12          | 68   | 1/2"             | 1.25        | 550      |
| HFTW-3135R  | 25          | 135  | 1/2"             | 1.8         | 585      |
| HFTW-3225R  | 50          | 225  | 1/2"             | 2           | 635      |
| HFTW-3330R  | 70          | 330  | 1/2"             | 3.1         | 835      |
| HFTW-4560R  | 140         | 560  | 3/4"             | 7.5         | 1070     |
| HFTW-4780R  | 135         | 780  | 3/4"             | 8.5         | 1140     |
| HFTW-5780R  | 135         | 780  | 1"               | 9           | 1200     |
| HFTW-4810R  | 200         | 810  | 3/4"             | 8.5         | 1140     |
| HFTW-41050R | 475         | 1050 | 1"               | 15          | 1195     |
| HFTW-51050R | 475         | 1050 | 1"               | 16          | 1120     |
| HFTW-51380R | 540         | 1380 | 1"               | 22          | 1340     |
| HFTW-51900R | 1000        | 1900 | 1"               | 24          | 1340     |

## HFTW SERIES MANUAL TORQUE WRENCHES



### NON RATCHET TYPE

| MODEL      | TORQUE (Nm) |      | SQ. DRIVE (inch) | WEIGHT (kg) | OAL (mm) |
|------------|-------------|------|------------------|-------------|----------|
|            | MIN.        | MAX. |                  |             |          |
| HFTW-211   | 2.5         | 11   | 3/8"             | 0.65        | 350      |
| HFTW-235   | 5           | 35   | 3/8"             | 0.725       | 450      |
| HFTW-368   | 12          | 68   | 1/2"             | 1.1         | 505      |
| HFTW-3135  | 25          | 135  | 1/2"             | 1.65        | 570      |
| HFTW-3225  | 50          | 225  | 1/2"             | 1.75        | 590      |
| HFTW-3330  | 70          | 330  | 1/2"             | 2.8         | 750      |
| HFTW-4560  | 140         | 560  | 3/4"             | 6.45        | 995      |
| HFTW-4780  | 135         | 780  | 3/4"             | 7.8         | 1070     |
| HFTW-5780  | 135         | 780  | 1"               | 8           | 1150     |
| HFTW-4810  | 200         | 810  | 3/4"             | 8.5         | 1070     |
| HFTW-41050 | 475         | 1050 | 1"               | 12          | 1120     |
| HFTW-51050 | 475         | 1050 | 1"               | 12.5        | 1120     |
| HFTW-51380 | 540         | 1380 | 1"               | 21          | 1340     |
| HFTW-51900 | 1000        | 1900 | 1"               | 23          | 1340     |

- The ratio stated is the true torque multiplication factor.
- Accuracy better than 5%.
- Precision tightening and loosening of all heavy duty fasteners.
- Higher capacity multipliers are furnished with strong ratchets (Anti-wind up mechanism) allowing jobs to be performed easily, efficiently, and safely.
- Precision Manufacturing ensures long life and premier quality.
- A groove on output Square breaks if over loaded in excess of 20% of its capacity.

## STANDARD INDUSTRIAL TORQUE MULTIPLIER



| MODEL         | TORQUE OUTPUT CAPACITY (MAX.) |       |      | DIA. (mm) | HEIGHT (mm) | INPUT DRIVE FEMALE (inch) | OUTPUT DRIVE MALE (inch) | WEIGHT (kg) |
|---------------|-------------------------------|-------|------|-----------|-------------|---------------------------|--------------------------|-------------|
|               | ft. lbs.                      | Nm    | Kgm  |           |             |                           |                          |             |
| HFTM-3417-5   | 1250                          | 1700  | 170  | 115       | 87          | 1/2"                      | 3/4"                     | 7           |
| HFTM-4517-5   | 1250                          | 1700  | 170  | 115       | 90          | 3/4"                      | 1"                       | 7.5         |
| HFTM-3517-25  | 1250                          | 1700  | 170  | 115       | 120         | 1/2"                      | 1"                       | 9           |
| HFTM-4527-5   | 2000                          | 2700  | 275  | 136       | 135         | 3/4"                      | 1"                       | 11          |
| HFTM-3527-25  | 2000                          | 2700  | 275  | 136       | 163         | 1/2"                      | 1"                       | 11          |
| HFTM-3634-5   | 2500                          | 3400  | 345  | 136       | 148         | 3/4"                      | 1-1/2"                   | 12          |
| HFTM-3634-25  | 2500                          | 3400  | 345  | 136       | 176         | 1/2"                      | 1-1/2"                   | 18          |
| HFTM-3660-5   | 4500                          | 6000  | 622  | 168       | 174         | 3/4"                      | 1-1/2"                   | 18          |
| HFTM-3660-25  | 4500                          | 6000  | 622  | 168       | 226         | 1/2"                      | 1-1/2"                   | 22          |
| HFTM-4695-25  | 7000                          | 9500  | 965  | 195       | 256         | 3/4"                      | 1-1/2"                   | 33          |
| HFTM-47170-25 | 12500                         | 17000 | 1735 | 220       | 330         | 3/4"                      | 2-1/2"                   | 62          |
| HFTM-47475-25 | 35000                         | 47500 | 4845 | 315       | 550         | 3/4"                      | 2-1/2"                   | 80          |

The cold cutting machine is a portable machining tool featuring a split-frame design and dedicated cutting blades for pipe sectioning. Machine Functions: Cutting, Beveling, Facing, Counter boring, Shaft OD machining/Grinding

## CBM SERIES PIPE CUTTING & BEVELING MACHINES

### SPLIT-FRAME MACHINES

#### Light Weight

#### Easy Installation

#### Fast & Precision Quality Operations

#### Heavy Thickness Cut

#### OTHER FEATURES:

- Lower axial and radial clearance; lightweight design, suitable for working in narrow and complicated sites.
- Can be separated into two halves, making it easy to mount on pipes when both ends are not open.
- The machine performs cutting and beveling simultaneously.
- The tool can process carbon steel, stainless steel, and alloy pipes with U or V welding seams, and can also process convex flange welds.

#### APPLICATION RANGE:

- They are widely used in the fields of petroleum, chemical, natural gas, power supply construction, boiler and nuclear power

#### DRIVING TYPE:

- Electric, Pneumatic, Hydraulic, Numerical Controller-Series

#### SAFETY:

- Eliminates Health Risks: No hazardous gas fumes or sparks are generated during operation.
- Enhanced Safety: Facilitates remote operation, minimizing operator exposure.

#### EFFICIENCY:

- Streamlined Setup: Enables quick and effortless installation.
- Portability and Maneuverability: Lightweight and portable design for convenient transportation and jobsite use.
- Single-Step Completion: Achieves both cutting and beveling in one efficient pass.
- Superior Cutting Speed: Offers significantly faster cutting compared to gas cutting technology.



#### COST-EFFECTIVENESS:

- Low Consumables: Requires minimal replacement parts, reducing operational costs.
- Reduced Maintenance Requirements: Streamlined maintenance procedures for optimal performance.
- Optimized Manpower Needs: Efficient operation minimizes required personnel.
- Sustainable Tooling: Utilizes re-grindable cutting tools, maximizing lifespan and minimizing waste.

#### QUALITY:

- Precision Cutting: Delivers accurate and consistent cuts every time.
- Controlled Beveling: Enables precise bevel angles as specified by drawings.

## PIPE CUTTING & BEVELING MACHINES

### ELECTRIC

#### OD-Mounted Electric Series:

- Power Supply: 220-240V 1PH 50-60HZ
- Motor Power: 1.5-2KW

#### Electric (OCE):

- Motor Power: 1800W / 2000W
- Working Voltage: 220-240V
- Working Frequency: 50-60Hz
- Working Current: 8-10A



### PNEUMATIC

- Working Pressure: 0.8-1.0 mpa
- Working Air Consumption: 1000-2000 l/min
- Single/Double Motor Drive Available

### HYDRAULIC

- Working Power of Hydraulic Station: 5.5kW, 7.5kW, 11kW
- Working Voltage: 380V 3 Phase 5 Wire (Other Voltages can be Customized)
- Working Frequency: 50Hz
- Rated Pressure: 10MPa
- Rated Flow: 50-45 l/min (Stepless Speed Regulation)
- With 50 Meters Remote Control, PLC Control



### (SERVO)

- Servo Motor Power: 2.3kW-4.0kW (Customizable Non-Standard)
- Working Voltage: 220V / 380V
- Working Frequency: 50-60Hz
- Equipped with Remote 50 Meter Remote Start/Stop

# PIPE CUTTING & BEVELING MACHINES

## MACHINE USAGE APPLICATION

### FABRICATION YARDS & SHOPS:

- **Precise Pipe Length Cutting:** Achieve accurate cuts to exact specifications, eliminating material waste and ensuring proper pipe fitting during assembly.
- **Streamlined Joining Preparation:** Prepare pipe ends for welding, flanging, or other joining methods by creating smooth, clean surfaces that ensure optimal joint integrity.

### HAZARDOUS AREAS:

- **Safe Cutting of Hazardous Materials:** Cut and bevel pipes containing flammable or toxic substances (such as crude oil, petrol, diesel, gas, and chemicals) without generating sparks. This minimizes the risk of explosions or fires and ensures a safer work environment for personnel.
- **Spark-Free Beveling:** Create precise bevels on pipe ends for welding, even in environments with strict spark-control requirements.

### VERSATILITY:

- **Broad Material Compatibility:** Cut and bevel a wide range of steel pipe materials used across different applications, eliminating the need for specialized cutting equipment for each pipe type.

### ADDITIONAL CAPABILITIES:

- **Internal Machining:** Perform internal machining of pipe ends to achieve specific angles required for joining or other processes. This eliminates the need for separate machining equipment and streamlines the overall workflow.

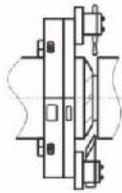
### HIGH CAPACITY:

- **Handles Thick Pipes:** The machine can handle pipes with wall thicknesses up to 110 mm using standard accessories. This eliminates the need for additional equipment or modifications for thicker pipes encountered in demanding applications.

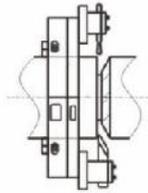
### PLANT SHUTDOWNS & PROJECT WORK:

- **High Wall Thickness Capability:** Effectively cut and bevel pipes with thick walls, commonly encountered during plant shutdowns and large-scale projects. This eliminates the need for slower, less efficient cutting methods like oxy-fuel cutting.
- **Reduced Downtime:** The machine's portability and quick setup minimize downtime associated with equipment mobilization and preparation, allowing for faster completion of cutting tasks on large projects.

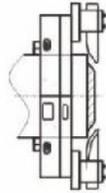
## PROCESSING DRAWING



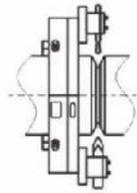
A - Cutting & Beveling (RH)



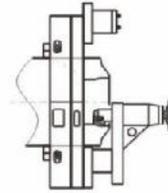
B - Cutting & Beveling (LH)



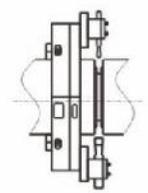
C - 37.5 & 10 Degree Compound Beveling



D - Double V Beveling



E - Counter Boring



F - Cold Cutting

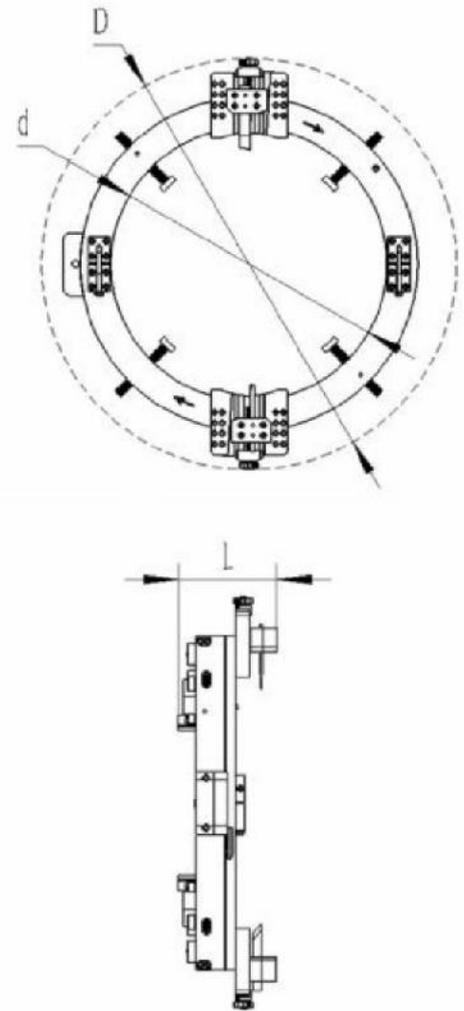
## PROCESSING SCHEMATIC

| MODEL       | SPECIFICATION | CAPACITY (OD) |       | WALL THICKNESS |            | ROTATION SPEED |
|-------------|---------------|---------------|-------|----------------|------------|----------------|
|             |               | mm            | in    | STANDARD       | HEAVY DUTY |                |
| AB-CBM-106  | 39            | 25-39         | 1-3   | ≤30            | -          | 12             |
| AB-CBM-206  | 138           | 50-138        | 2-3   | ≤30            | ≤50        | 20             |
| AB-CBM-308  | 230           | 90-230        | 3-3   | ≤30            | ≤50        | 15             |
| AB-CBM-510  | 275           | 125-275       | 5-10  | ≤30            | ≤70        | 15             |
| AB-CBM-610  | 305           | 150-305       | 6-10  | ≤30            | ≤110       | 13             |
| AB-CBM-612  | 325           | 150-325       | 6-12  | ≤30            | ≤110       | 13             |
| AB-CBM-814  | 377           | 218-377       | 8-14  | ≤30            | ≤110       | 13             |
| AB-CBM-1018 | 426           | 273-426       | 10-18 | ≤30            | ≤110       | 12             |
| AB-CBM-1218 | 457           | 300-457       | 12-18 | ≤30            | ≤110       | 12             |
| AB-CBM-1420 | 508           | 355-508       | 14-20 | ≤30            | ≤110       | 11             |
| AB-CBM-1322 | 530           | 400-530       | 13-22 | ≤30            | ≤110       | 11             |
| AB-CBM-1324 | 510           | 457-610       | 13-24 | ≤30            | ≤110       | 11             |
| AB-CBM-2024 | 630           | 480-630       | 20-24 | ≤30            | ≤110       | 11             |
| AB-CBM-2026 | 660           | 508-660       | 20-26 | ≤30            | ≤110       | 11             |
| AB-CBM-2228 | 715           | 560-715       | 22-28 | ≤30            | ≤110       | 10             |
| AB-CBM-2430 | 782           | 610-782       | 24-30 | ≤30            | ≤110       | 10             |
| AB-CBM-2832 | 830           | 680-830       | 26-32 | ≤30            | ≤110       | 10             |
| AB-CBM-3036 | 914           | 762-914       | 30-36 | ≤30            | ≤110       | 10             |
| AB-CBM-3642 | 1030          | 914-1066      | 36-42 | ≤30            | ≤110       | 9              |
| AB-CBM-4248 | 1230          | 1066-1230     | 42-48 | ≤30            | ≤110       | 9              |
| AB-CBM-4856 | 1430          | 1213-1430     | 48-56 | ≤30            | ≤110       | 8              |
| AB-CBM-5664 | 1630          | 1422-1630     | 56-64 | ≤30            | ≤110       | 7              |
| AB-CBM-8472 | 1830          | 1330-1830     | 84-72 | ≤30            | ≤110       | 5              |

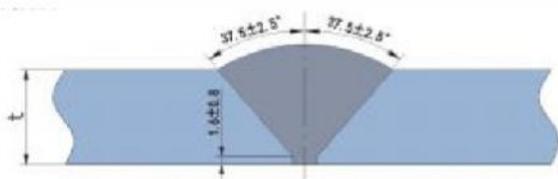
Note: Non-standard machines are available according to customers requirement.

**OD MOUNTED PIPE CUTTING AND BEVELING MACHINE**

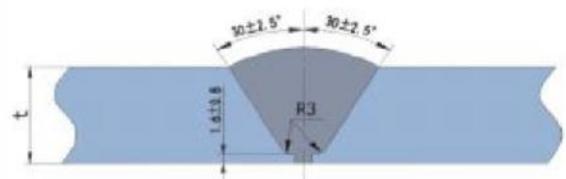
| MODEL SIZE  | d (mm) | D (mm) | L (mm) |
|-------------|--------|--------|--------|
| AB-CBM-106  | 95     | 300    | 160    |
| AB-CBM-208  | 185    | 480    | 178    |
| AB-CBM-308  | 236    | 535    | 178    |
| AB-CBM-510  | 283    | 584    | 178    |
| AB-CBM-610  | 316    | 808    | 178    |
| AB-CBM-612  | 334    | 836    | 178    |
| AB-CBM-814  | 386    | 690    | 178    |
| AB-CBM-1016 | 438    | 744    | 180    |
| AB-CBM-1218 | 466    | 772    | 180    |
| AB-CBM-1420 | 518    | 928    | 190    |
| AB-CBM-1622 | 570    | 978    | 190    |
| AB-CBM-1824 | 620    | 928    | 190    |
| AB-CBM-2024 | 643    | 965    | 190    |
| AB-CBM-2026 | 670    | 978    | 190    |
| AB-CBM-2228 | 720    | 1050   | 190    |
| AB-CBM-2430 | 772    | 1110   | 190    |
| AB-CBM-2632 | 840    | 1174   | 192    |
| AB-CBM-3036 | 928    | 1260   | 212    |
| AB-CBM-3642 | 1078   | 1513   | 212    |
| AB-CBM-4248 | 1248   | 1584   | 212    |
| AB-CBM-4856 | 1438   | 1784   | 220    |



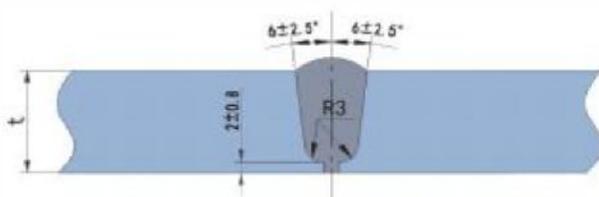
**WELDING ANGLE DIAGRAM**



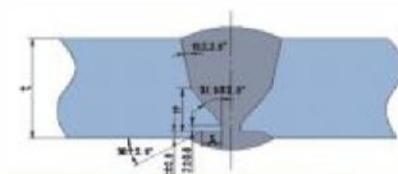
37.5 deg. V T Type Beveling with 1.6mm Root



30 deg. U Type Beveling with 1.6mm Root, R= 3mm



6 deg. U Type Beveling with 2mm Root, R= 5mm



Compound Beveling According to ASME B16.[1].25

**ACCESSORIES**

**STANDARD TOOL SLIDE**

**Applicable processing wall thickness  $\leq 30\text{mm}$**

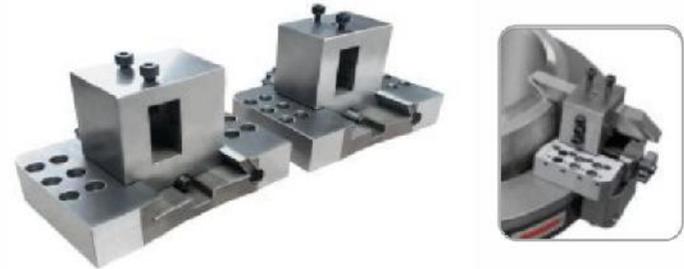
Clamshell C/W the standard tool slide as standard supply with standard tool bits, achieve cut/bevel up to 30mm wall thickness in one pass.



**HEAVY WALL TOOL SLIDE**

**Applicable processing wall thickness  $\leq 70\text{mm}$**

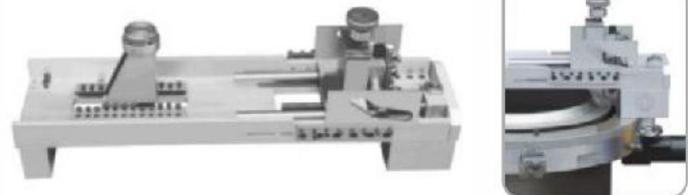
Special for heavy walled pipe, especially for power plant with special tool bits, achieve cut/bevel up to 70mm wall thickness in multi passes.



**BRIDGE TOOL SLIDE**

**Suitable for ultra-thick pipe processing, maximum thickness not exceeding 110mm**

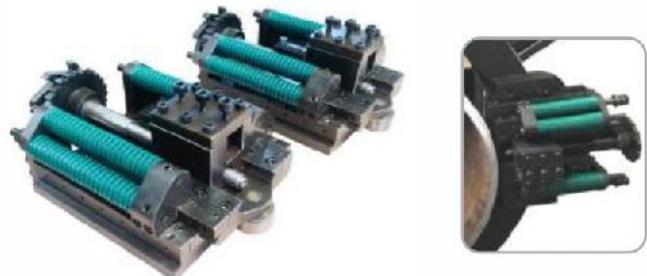
Complete with counterbore/LD beveling tool, LD beveling angle available for adjust. Special for heavy walled pipe, achieve cut/bevel up to 110mm wall thickness in multi passes also can process flange facing.



**TRACKING TOOL SLIDE**

**Suitable for high-precision processing or deformed pipes with diameters greater than 700mm for foot length compensation**

O.D tracking slide compensate for out-of-round pipe travel along the OD makes the bevel face balanced. Usually apply on large size diameter pipe.



**UNIVERSAL COUNTER BORING TOOL SLIDE**

**Used for processing the inner wall of pipes**

Performs inside beveling and counter boring  
Tool Feed: Manually  
Max. Travel: 70mm.



**TOOL HOLDER FOR PIPE OUTER WALL MACHINING**

**Used for trimming the outer wall of pipes and removing anti-corrosion layers**

Pipe outer wall axial processing tool post to removal of anti-corrosion layer and turning.



**SELECTION OF HYDRAULIC STATION**

**PLC TYPE HYDRAULIC STATION**

|                        |                       |
|------------------------|-----------------------|
| POWER SUPPLY           | 7.5kW                 |
| WORKING VOLTAGE        | 380V, 3 PH, 5 Lines   |
| WORKING FREQUENCY      | 50Hz                  |
| RATED WORKING PRESSURE | 10Mpa                 |
| RATED FLOWING          | 0-36 l/min            |
| CONTROL SYSTEM         | PLC Control           |
| WORKING SPEED          | Remote Control        |
| CONTROL PANEL          | Electronic Display    |
| OPEN WAY               | Manual/Remote Control |
| OIL LINE LENGTH        | 6m (Standard)         |
| NET WEIGHT (KG)        | 239Kg                 |



**EXPLOSION-PROOF HYDRAULIC STATION**

|                        |                         |
|------------------------|-------------------------|
| POWER SUPPLY           | 7.5kW                   |
| WORKING VOLTAGE        | 380V, 3 PH, 5 Lines     |
| WORKING FREQUENCY      | 50Hz                    |
| EXPLOSION-PROOF GRADE  | BT4 / CT4               |
| RATED WORKING PRESSURE | 10Mpa                   |
| RATED FLOWING          | 36 l/min                |
| OPEN WAY               | Manual / Remote Control |
| OIL LINE LENGTH        | 6m (Standard)           |



**DIESEL POWER HYDRAULIC STATION**

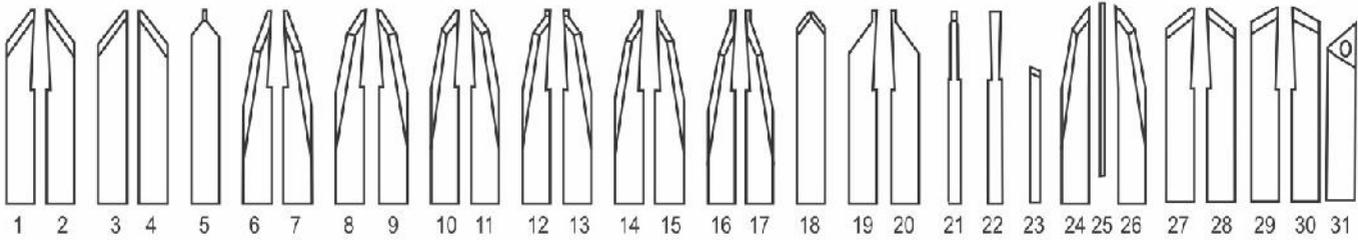
|                        |             |
|------------------------|-------------|
| ENGINE POWER           | 22HP (15KW) |
| RATED WORKING PRESSURE | 10Mpa       |
| RATED FLOWING          | 50 l/min    |
| OPEN WAY               | Manual      |



Need other power, rated flowing, explosion-proof grade, etc., can be customized.

# PIPE CUTTING & BEVELING MACHINES

## STANDARD AB-CBM TOOLING



| ITEM | DESCRIPTION                              |
|------|--|
| 1    | 37° R.H. Bevel, 7-Inch (178 mm)          |
| 1    | 37° R.H. Bevel, 3.5-inch (89 mm)         |
| 2    | 37° L.H. Bevel, 7-Inch (178 mm)          |
| 2    | 37° L.H. Bevel, 3.5-inch (89 mm)         |
| 3*   | 37° R.H. Double Bevel, 7-inch (178 mm)   |
| 3*   | 37° R.H. Double Bevel, 3.5-inch (89 mm)  |
| 4*   | 37° L.H. Double Bevel, 7-inch (178 mm)   |
| 4*   | 37° L.H. Double Bevel, 3.5-inch (89 mm)  |
| 5    | 37° Double Bevel Sever, 7-inch (178 mm)  |
| 5    | 37° Double Bevel Sever, 3.5-inch (89 mm) |
| 6    | 20° - 10° R.H. Bevel, 7-inch (178 mm)    |
| 7    | 20° - 10° L.H. Bevel, 7-inch (178 mm)    |
| 8    | 30° - 10° R.H. Bevel, 7-inch (178 mm)    |
| 9    | 30° - 10° L.H. Bevel, 7-inch (178 mm)    |
| 10   | 37° - 10° R.H. Bevel, 7-inch (178 mm)    |
| 11   | 37° - 10° L.H. Bevel, 7-inch (178 mm)    |
| 12   | 37° - 10° R.H. Sever, 7-inch (178 mm)    |
| 13   | 37° - 10° L.H. Sever, 7-inch (178 mm)    |
| 14   | 30° - 10° R.H. Sever, 7-inch (178 mm)    |
| 15   | 30° - 10° L.H. Sever, 7-inch (178 mm)    |
| 16   | 20° - 10° R.H. Sever, 7-inch (178 mm)    |
| 17   | 20° - 10° L.H. Sever, 7-inch (178 mm)    |
| 18   | 37° Double Bevel, 7-inch (178 mm)        |
| 18   | 37° Double Bevel, 3.5-inch (89 mm)       |

| ITEM | DESCRIPTION                                    |
|------|--|
| 19   | 37° R.H. Sever, 7-Inch (178 mm)                |
| 19   | 37° R.H. Sever, 3.5-inch (89 mm)               |
| 20   | 37° L.H. Sever, 7-Inch (178 mm)                |
| 20   | 37° L.H. Sever, 3.5"                           |
| 21   | 1/4-inch (6.35 mm) Sever, 7-inch (178 mm)      |
| 21   | 1/4-inch (6.35 mm) Sever, 3.5-inch (89 mm)     |
| 22   | 3/8-inch (9.53 mm) Sever, 7-inch (178 mm)      |
| 22   | 3/8-inch (9.53 mm) Sever, 3.5-inch (89 mm)     |
| 23   | 10 <sup>d</sup> Counter Bore, 2-inch (50.8 mm) |
| 24*  | 37° - 10° R.H. Double Bevel, 7-Inch (178 mm)   |
| 25*  | 1/8-inch (3.18 mm) Sever, 8-inch (152.4)       |
| 26*  | 37° - 10° L.H. Double Bevel, 7-inch (178 mm)   |
| 27   | 45° R.H. Bevel, 7-inch (178 mm)                |
| 27   | 45° R.H. Bevel, 3.5-inch (89 mm)               |
| 28   | 45° L.H. Bevel, 7-inch (178 mm)                |
| 28   | 45° L.H. Bevel, 3.5-inch (89 mm)               |
| 29   | 30° R.H. Bevel, 7-inch (178 mm)                |
| 29   | 30° R.H. Bevel, 3.5-inch (89 mm)               |
| 30   | 30° L.H. Bevel, 7-inch (178 mm)                |
| 30   | 30° L.H. Bevel, 3.5-inch (89 mm)               |
| 31   | Counterbore Insert Holder                      |
| 31   | Carbide Insert                                 |

\* Blades used as a set.

### CARBIDE HOLDERS

**Max depth of cut/max wall capacity = 3.5-inches [89 mm]**

#4 Insert Holder

#6 Insert Holder

#8 Insert Holder

#10 Insert Holder

**37° Insert holder max wall capacity = 1.090" (27.7 mm)**

370 x 3.5-inch (89 mm) RH Insert Holder

370 x 3.5-inch (89 mm) LH Insert Holder

370 x 7-inch (178 mm) RH Insert Holder

370 x 7-inch (178 mm) LH Insert Holder

**30° Insert holder max wall capacity = 1.190" (30.2mm)**

300 x 3.5-inch (89 mm) RH Insert Holder

300 x 3.5-inch (89 mm) LH Insert Holder

300 x 7-inch (178 mm) RH Insert Holder

300 x 7-inch (178 mm) LH Insert Holder

**37° - 30° Max wall capacity = 3.180-Inch (80.8 mm)**

37° - 30° x 7-inch (178 mm) RH Insert Holder

37° - 30° x 7-inch (178 mm) LH Insert Holder

### CARBIDE INSERT

**Max depth of cut/max wall capacity = 3.5-inches [89 mm]**

#4 Insert

#6 Insert

#8 Insert (M5 X 0.80 X 20mm screw)

#10 Insert (M8 X 1.0 X 25mm screw)

**37° Insert holder max wall capacity = 1.090" (27.7 mm)**

RH Bevel Insert

LH Bevel Insert

M4 Torx screw

**30° Insert holder max wall capacity = 1.190" (30.2mm)**

RH Bevel Insert

LH Bevel Insert

M4 Torx screw

**37° - 30° Max wall capacity = 3.180-Inch (80.8 mm)**

RH Bevel Insert

LH Bevel Insert

M4 Torx screw

Customize solution available on request.

## T-TYPE BEVELING MACHINE

### PRODUCT DESCRIPTION

- Quick and easy ID mounting, self locates centre of the pipe.
- Beveling and grooving with high speed. Used for the welding preparation.
- Can process facing, flange, convex surface and seal groove.
- Cold cutting process will not influence the quality of the material of the pipe.
- High quality beveling tool, can process different grades of carbon steel, alloy steel, stainless steel and so on.
- Can process the U, V and J shape of pipe beveling according to the requirements.

### SPECIFICATIONS

#### HSDS SERIES ELECTRIC

Driven by low-energy consumption electric motor 110V or 220V optional, 50-60Hz

### SPECIFICATIONS

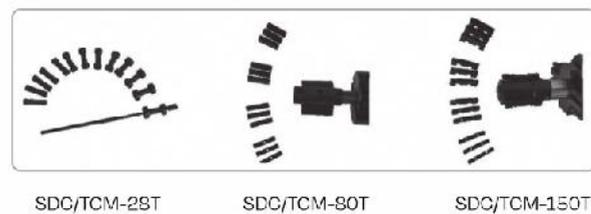
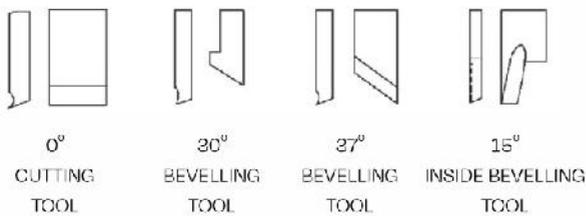
#### HTCM SERIES PNEUMATIC

Driven by pneumatic motor.  
Air working pressure: 0.6-0.8Mpa,  
Air consuming flux: 650-960L/min



### BEVELING TYPES

- Other bevel angles for alloy steel, cast steel.



| MODEL SIZE         | SIZE | WORKING RANGE (ID) mm | WALL THICKNESS mm | RATED POWER kW | ROTATING RATE rpm |
|--------------------|------|-----------------------|-------------------|----------------|-------------------|
| Electric:<br>HSDC  | 80T  | 28-78                 | ≤15               | 0.9            | 53                |
|                    | 120T | 45-93                 | ≤20               | 1.43           | 34                |
| Pneumatic:<br>HTCM | 150T | 65-159                | ≤20               | 1.43           | 34                |
|                    | 350T | 150-330               | ≤20               | 1.43           | 34                |

## OD MOUNTED FLANGE FACING AND SERRATION MACHINES

### Product introduction:

- The machine adopts an external card clamping mechanism, providing high rigidity and stability. It can be used with both horizontal and vertical knife holders, and features a feed handwheel with a scale display for precise adjustments. This design makes it suitable for processing the inner holes of flanges as well as various types of sealing surfaces, including RF, RAT, and others.

### Characteristic:

- The modular design allows for quick installation and disassembly, making it suitable even for demanding processing environments.
- Equipped with precision circular guide rails, the machine ensures long service life and excellent stability.
- Operates smoothly and without vibration, enhancing reliability and user comfort.
- A high-precision mechanical transmission system guarantees accurate horizontal, vertical, and inclined installations.
- The external card-type multi-angle support system provides greater stability during operation.
- A rotatable tool holder enables adaptability to different processing requirements.



### Specification

| MODEL     |           |           | CLAMPING RANGE | WORKING RANGE | TOOL TRAVEL | ROTATION |
|-----------|-----------|-----------|----------------|---------------|-------------|----------|
| WFDP-610  | WFDG-610  | WFDH-610  | Ø 150-610      | Ø 0-610       | 95          | 0-24     |
| WFDP-1000 | WFDG-1000 | WFDH-1000 | Ø 500-1000     | Ø 0-1000      | 95          | 0-20     |
| WFDP-1500 | WFDG-1500 | WFDH-1500 | Ø 1000-1500    | Ø 0-1500      | 95          | 0-15     |
| WFDP-2000 | WFDG-2000 | WFDH-2000 | Ø 1500-2000    | Ø 0-2000      | 95          | 0-13     |
| WFDP-2500 | WFDG-2500 | WFDH-2500 | Ø 2000-2500    | Ø 0-2500      | 95          | 0-10     |
| WFDP-3000 | WFDG-3000 | WFDH-3000 | Ø 2500-3000    | Ø 0-3000      | 95          | 0-8      |

Note: Non-Standard machines are available according to customer's requirement

## ID MOUNTED FLANGE FACING AND SERRATION MACHINES

### Main Performance:

- The flange facer is a multifunctional series machine composed of three parts and supported by four clamps. It features an internally mounted small working radius and a novel tool holder design that can rotate 360 degrees, providing high efficiency. This machine is suitable for various types of flange facing, seal groove machining, weld preparation, and counter boring. It is specially designed for pipe, valve, and pump flanges.



WFS-610

### Feature:

- Compact and lightweight structure, making it easy to transport and operate.
- Equipped with a feed handwheel featuring a scale for improved feed accuracy.
- Automatic feeding in both axial and radial directions for enhanced efficiency.
- Capable of processing in multiple orientations including horizontal, vertical, inverted, and tilted.
- Can handle flat faces, water lines, continuous grooves, RTJ grooves, and more.
- Available with pneumatic, hydraulic, or CNC drives.



WFP-1000



WFS-2000

### Specification

| MODEL | SPEC. | FACING RANGE (O.D) | MOUNTING RANGE (I.D) | TOOL FEED STROKE | TOOL HOLDER SWIVEL ANGLE | ROTATION SPEED |
|-------|-------|--------------------|----------------------|------------------|--------------------------|----------------|
| WFP   | 610   | 50-610 mm          | 50-508 mm            | 50 mm            | +30°                     | 0-42r/min      |
|       | 1000  | 160-1000 mm        | 158-820 mm           | 102 mm           | +360°                    | 0-33r/min      |
| WFH   | 1650  | 500-1650 mm        | 500-1500 mm          | 102 mm           | +360°                    | 0-22r/min      |
| WFS   | 2000  | 690-2200 mm        | 690-2000 mm          | 102 mm           | +360°                    | 0-20r/min      |
|       | 3000  | 1150-3000 mm       | 1120-2800 mm         | 102 mm           | +360°                    | 3-12r/min      |

Note: Non-Standard machines are available according to customer's requirement

## SOCKETS

We offer a wide impact sockets with square drives of 1/2" to 2-1/2" with multiple types of 6 point, 12 point, standard length and deep length.

Sockets available in METRIC sizes ranging with A/F sizes from 8mm to 225mm whereas IMPERIAL range starts from A/F size of 9/16" which goes all the way up to 9-1/4".

Allen key sockets available with square drives of 1/2" to 1-1/2" with A/F sizes as per standard and customer specific requirements.

We can provide customized solutions in all types of sockets to meet the customer's application.



| SQ. DRIVE | IMPACT SOCKETS (A/F) |                  | DEEP IMPACT SOCKETS (A/F) |                 |
|-----------|----------------------|------------------|---------------------------|-----------------|
|           | mm                   | inch             | mm                        | inch            |
| 1/2"      | 8 - 36               | 5/16" - 1 3/8"   | -                         | -               |
| 3/4"      | 17 - 50              | 9/16" - 1 13/16" | 17 - 50                   | 9/16" - 2"      |
| 1"        | 17 - 115             | 1 1/16" - 4 1/2" | 17 - 115                  | 1 1/8" - 4 1/2" |
| 1 1/2"    | 30 - 130             | 1 3/8" - 5 1/8"  | 30 - 130                  | 1 3/8" - 5 1/8" |
| 2 1/2"    | 43 - 225             | 1 5/8" - 9 1/4"  | 43 - 225                  | 1 5/8" - 9 1/4" |

\* Bi-hexagon socket available in all sizes.

## BOLTING ACCESSORIES

### REACTION ARMS

\* As per requirement



### REDUCERS

\* As per requirement



### ALLEN KEY SOCKETS

1/2", 3/4", 1", 1 1/2"



### STACK SOCKETS

\* As per requirement



### ADAPTER

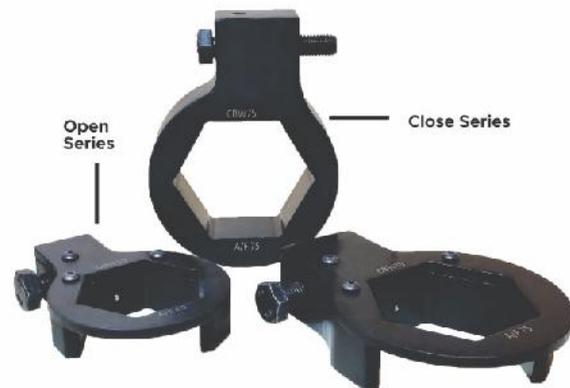
1/2", 3/4", 1", 1 1/2"



## HFBW SERIES BACKUP WRENCHES

### FEATURES

- Mechanical and hands free operation
- Eliminate sparks caused by the use of slugging/striking wrenches



| MODEL NO.<br>(OPEN/CLOSE) | ACROSS FLAT |          | LOAD LIMITS |       |
|---------------------------|-------------|----------|-------------|-------|
|                           | mm          | inch     | ft. lbs.    | Nm    |
| HFBW104                   | 30          | 1-1/4"   | 2400        | 3254  |
| HFBW107                   | 36          | 1-7/16"  | 2500        | 3390  |
| HFBW110                   | 41          | 1-5/8"   | 3500        | 4745  |
| HFBW113                   | 46          | 1-13/16" | 3500        | 4745  |
| HFBW200                   | 50          | 2"       | 4100        | 5559  |
| HFBW203                   | 55          | 2-3/16"  | 4200        | 5694  |
| HFBW204                   | 57          | 2-1/4"   | 4300        | 5830  |
| HFBW206                   | 60          | 2-3/8"   | 4300        | 5830  |
| HFBW209                   | 65          | 2-9/16"  | 4550        | 6169  |
| HFBW212                   | 70          | 2-3/4"   | 5600        | 7592  |
| HFBW218                   | 75          | 2-15/16" | 6300        | 8542  |
| HFBW302                   | 80          | 3-1/8"   | 7000        | 9491  |
| HFBW306                   | 85          | 3-1/2"   | 7200        | 9702  |
| HFBW311                   | 90          | 3-11/16" | 7300        | 9897  |
| HFBW314                   | 95          | 3-7/8"   | 8000        | 12202 |
| HFBW400                   | 100         | 4"       | 24000       | 32539 |
| HFBW402                   | 105         | 4-1/8"   | 24000       | 32539 |
| HFBW404                   | 110         | 4-1/4"   | 24000       | 32539 |
| HFBW408                   | 115         | 4-1/2"   | 25000       | 33885 |
| HFBW410                   | 120         | 4-5/8"   | 27000       | 36607 |
| HFBW500                   | 130         | 5"       | 27000       | 36607 |
| HFBW506                   | 135         | 5-3/8"   | 27000       | 36607 |
| HFBW512                   | 145         | 5-3/4"   | 28000       | 37962 |

Our robust Slugging wrenches, also known as striking wrenches or podger wrenches, are designed to withstand the impact of a hammer blow for loosening or tightening stubborn nuts and bolts. Unlike standard wrenches, they are built with thicker walls and heavier materials to handle the added stress of being struck.

**Key features of slugging wrenches:**

- Heavy-duty construction: Made from high-strength steel or forged iron for superior durability.
- Open-ended design: Provides access to nuts and bolts from various angles.
- Larger size: Compared to standard wrenches, they offer increased leverage and torque.
- Variety of sizes: Available in various sizes to fit different nut and bolt diameters.



**RING TYPE  
SLUGGING WRENCH**

22 mm - 230 mm A/F



**OFFSET  
SLUGGING WRENCH**

24 mm - 130 mm A/F



**OPEN JAW  
SLUGGING WRENCH**

24 mm - 230 mm A/F

**STANDARD  
SLUGGING WRENCHES**

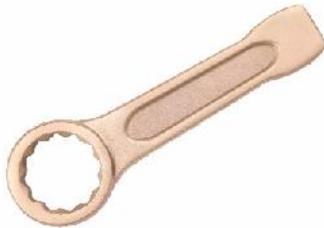
Within industries where flammable materials pose safety concerns, standard tools can present significant risks. ABS non-sparking slugging wrenches provide a vital solution, offering both the requisite safety and the robust performance demanded by demanding applications.

**Crafted with Safety in Mind:**

Constructed from non-ferrous metals, such as beryllium copper or aluminum bronze, ABS slugging wrenches eliminate the potential for sparking, mitigating the risk of ignition in hazardous environments.- Their heavy-duty design enables them to withstand the forceful impact of hammer blows, making them ideal for loosening stubborn nuts and bolts.

**Engineered for Optimal Performance:**

Open-ended construction allows for versatile access from various angles, ensuring maneuverability even in tight spaces.- Available in a diverse range of sizes, non-sparking slugging wrenches can adapt to a wide variety of fastening needs.



**RING TYPE  
SLUGGING WRENCH**

22 mm - 230 mm A/F



**OFFSET  
SLUGGING WRENCH**

24 mm - 130 mm A/F



**OPEN JAW  
SLUGGING WRENCH**

24 mm - 230 mm A/F

**NON-SPARKING  
SLUGGING WRENCHES**

ABS tools are indispensable in environments with flammable materials, vapors, or dust, as the sparks generated by traditional metal tools can pose severe safety risks, leading to fires or explosions.

These specialized tools, crafted from non-ferrous metals like beryllium copper, aluminum bronze, or special alloys, do not produce sparks when struck, ensuring safety in various applications such as chemical plants, refineries, oil and gas rigs, mining operations, paint booths, aerospace manufacturing, and military settings.



## NON-SPARKING SAFETY TOOLS

### SOCKET & IMPACT SOCKET

#### Sockets:

$\frac{1}{4}''$ ,  $\frac{3}{8}''$ ,  $\frac{1}{2}''$ ,  $\frac{3}{4}''$

#### Impact Sockets:

$\frac{3}{8}''$ ,  $\frac{1}{2}''$ ,  $\frac{3}{4}''$ ,  $1''$

### SLEDGE HAMMER

\*Sizes available as per requirement

### BALL PEEN HAMMER

\*Sizes available as per requirement

### DOUBLE ENDED RING SPANNER

#### Metric:

5.5 mm x 7 mm - 60 mm x 70 mm

#### Imperial:

$\frac{1}{4}''$  x  $\frac{5}{8}''$  -  $2\frac{3}{8}''$  x  $2\frac{3}{4}''$

### DOUBLE ENDED OPEN SPANNER

#### Metric:

5.5 mm x 7 mm - 65 mm x 70 mm

#### Imperial:

$\frac{1}{4}''$  x  $\frac{5}{8}''$  -  $2\frac{3}{8}''$  x  $2\frac{3}{4}''$

### COMBINATION SPANNER

#### Metric:

6 mm - 70 mm

#### Imperial:

$\frac{1}{4}''$  -  $1\frac{3}{8}''$

and more...

# Empowering Saudi Industry with Advanced Bolting Expertise

At ABS Saudi Arabia, we recognize that the reliability, safety, and efficiency of your critical assets depend on the skills of your workforce. Our dedicated training centre in Dammam advances Saudi professionals with up-to-date knowledge and industry best practices in precision bolting and flange management.

Our assessment and training courses are delivered by ECITB-accredited trainers and customized to support the fast-growing petrochemical, oil & gas, and industrial sectors in the Kingdom of Saudi Arabia.



## Why Train with ABS in Saudi Arabia?

- **ECITB Recognized Joint Integrity Training** : Earn regionally recognized Mechanical Joint Integrity credentials vital for your career progression.
- **Regional Expertise** : Courses are delivered by instructors with extensive experience in Saudi Arabia's operational environments and industry standards.
- **Locally Relevant Content** : Training curricula and case studies are tailored to GCC specifications and regional safety requirements.

## Our Key Courses:

- **MJI 10** : Hand Torqued Bolted Connections
- **MJI 19** : Hydraulically Torqued Bolted Connections
- **MJI 18** : Hydraulically Tensioned Bolted Connections
- **MJI 20** : Hydraulically Torqued Clamp Connectors

## Ideal Trainees:

- Field Technicians and Supervisors in oil & gas, petrochemicals, power generation, water treatment, and heavy industry
- Maintenance teams dedicated to operational safety and uptime
- Quality, inspection, and reliability personnel seeking accredited credentials

## Contact Our Dammam Training Facility:

Enhance your team's performance and compliance with ABS Arabia's expert training. Contact us to discuss schedules, group packages, or to design custom workshops tailored to your organizational needs.

**Empowering Industry. Ensuring Integrity. ABS Saudi Arabia – Your Partner for Bolting Excellence**



## Value Added Services

ABS provides a comprehensive suite of value-added services, including repair and maintenance, NABL accredited tool calibration. Our commitment to customer satisfaction is reflected in our state-of-the-art service centres and thorough RCA analysis, ensuring timely support and proactive maintenance. Additionally, through our ATA training academy, we empower industry professionals with essential knowledge and practical skills in joint integrity and safety practices, tailored to meet specific industry needs and delivered through flexible, customizable programs.



## REPAIR AND TOOL MAINTENANCE

- ABS Saudi Arabia provides top-quality service support from our state-of-the-art service center in Dammam.
- We perform detailed root cause analysis (RCA) for defects and share clear reports with Practical tips to prevent tool failures.
- Annual Maintenance Contracts (AMC) are available to maximize tool performance and ROI.
- Skilled technicians ensure fast, reliable repair and maintenance, minimizing downtime.



## TOOL CALIBRATION

- Reliable tools ensure high-quality work and safety.
- Calibration is done in-house at Dammam by certified technicians for hydraulic, pneumatic, electric, battery, and manual torque tools up to 50,000 Nm and pressure gauges up to 700 bar.

## CALIBRATION RANGE

- Hydraulic torque wrench: 0 - 27,000 Nm.
- Pneumatic torque wrench: 0 - 15,000 Nm
- Battery torque wrench: 0 - 15,000 Nm
- Manual torque wrench: 0 - 2,700 Nm
- Pressure gauges: 0 - 10,000 PSI



## RENTALS

- Dry Rental: Rent premium bolting and machining tools for your skilled team to operate independently and reduce costs.
- Supervised Rental: Includes an expert on-site supervisor to ensure proper setup, efficient operation, and smooth project progress.
- Enables projects to run with autonomy or expert guidance, according to your needs.
- Suitable for shutdowns, turnarounds, and long-term maintenance contracts.
- Flexible rental solutions designed to empower your team and meet project goals.



# BOLT LOAD TORQUE CHART

(TORQUE IN FT.LBS) (50 PERCENT YIELD)

| STUD SIZE | M.M.   | NUT SIZE | M.M. | B-7     |          |       | B-16      |           |          | SS-660   |          |          |
|-----------|--------|----------|------|---------|----------|-------|-----------|-----------|----------|----------|----------|----------|
|           |        |          |      | MOLYKOT | MECH OIL | DRY   | MOLYKOT   | MECH OIL  | DRY      | MOLYKOT  | MECH OIL | DRY      |
| 3/4"      | 19.05  | 1 1/4"   | 32   | 153     | 217      | 240   | 135.24    | 217.14    | 240.32   | 112.66   | 180.86   | 199.31   |
| 7/4"      | 44.45  | 1 7/16"  | 36   | 246     | 352      | 387   | 277.2     | 352.29    | 386.93   | 201.4    | 346.02   | 388.92   |
| 1"        | 25.40  | 1 5/8"   | 41   | 309     | 527      | 579   | 329.48    | 527.14    | 579.43   | 437.44   | 577.58   | 600.49   |
| 1 1/8"    | 28.58  | 1 13/16" | 46   | 541     | 774      | 850   | 434.66    | 774.23    | 850.89   | 689.41   | 810.51   | 748.16   |
| 1 1/4"    | 31.75  | 2"       | 50   | 761     | 1089     | 1200  | 730.17    | 1089.43   | 1198.39  | 899.83   | 1142.24  | 791.31   |
| 1 3/8"    | 34.93  | 2 3/16"  | 55   | 1034    | 1355     | 1821  | 1833.87   | 1655.36   | 1820.52  | 1228.03  | 1527.73  | 13434.88 |
| 1 1/2"    | 38.10  | 2 3/8"   | 60   | 1365    | 1953     | 2150  | 1948.71   | 1952.94   | 2144.62  | 1560.66  | 1971.35  | 16311.26 |
| 1 5/8"    | 41.28  | 2 9/16"  | 65   | 1760    | 2513     | 2762  | 2510.87   | 2513.05   | 2762.23  | 1664.31  | 2108.31  | 2284.25  |
| 1 3/4"    | 44.45  | 2 3/4"   | 70   | 2221    | 3176     | 3503  | 3173.43   | 3175.8    | 3503.06  | 2353.43  | 2849.59  | 2895.58  |
| 1 7/8"    | 47.63  | 2 15/16" | 75   | 2750    | 3932     | 4325  | 3932.53   | 3932.59   | 4325.26  | 2599.89  | 3273.9   | 3598.48  |
| 2"        | 50.80  | 3 1/8"   | 80   | 3380    | 4690     | 5154  | 4690.29   | 4690.29   | 5153.65  | 2914.78  | 3901.05  | 4395.45  |
| 2 1/8"    | 53.98  | 3 5/16"  | 85   | 4091    | 5836     | 6384  | 5836.17   | 5835.92   | 6383.87  | 3643.54  | 4752.24  | 5318.46  |
| 2 1/4"    | 57.15  | 3 1/2"   | 90   | 4873    | 6956     | 7107  | 6956.33   | 6956.33   | 7106.5   | 4190.76  | 5317.59  | 5670.03  |
| 2 3/8"    | 60.33  | 3 11/16" | 95   | 5762    | 8207     | 8931  | 8207.2    | 8207.2    | 8930.86  | 4889.84  | 6269.41  | 5804.34  |
| 2 1/2"    | 63.50  | 3 7/8"   | 100  | 6107    | 8741     | 7001  | 8741.3    | 8741.3    | 7000.92  | 5050.44  | 6485.3   | 5794.15  |
| 2 3/4"    | 69.85  | 4 1/4"   | 110  | 8221    | 11761    | 7988  | 11760.87  | 11761.3   | 7987.84  | 5970.35  | 7155.21  | 8221.75  |
| 3"        | 76.20  | 4 5/8"   | 120  | 10764   | 15369    | 8917  | 15368.48  | 15368.48  | 8917.01  | 6548.03  | 7585.48  | 8515.69  |
| 3 1/4"    | 82.55  | 5"       | 125  | 13780   | 19702    | 9925  | 19701.73  | 19701.73  | 9925.09  | 7187.44  | 7726.83  | 6837.22  |
| 3 1/2"    | 88.90  | 5 3/8"   | 135  | 17321   | 24738    | 11090 | 24737.88  | 24737.88  | 11090.28 | 8252.59  | 8432.94  | 7066.47  |
| 3 3/4"    | 95.25  | 5 3/4"   | 145  | 21384   | 30923    | 11714 | 30822.99  | 30823.57  | 11714.45 | 8356.17  | 8533.04  | 7129.7   |
| 4"        | 101.60 | 6 1/8"   | 155  | 26052   | 37538    | 13412 | 37538.43  | 37538.43  | 13411.66 | 8537.76  | 9111.11  | 7256.05  |
| 4 1/4"    | 107.95 | 6 1/2"   | 165  | 24764   | 35619    | 12675 | 35618.6   | 35618.6   | 12674.5  | 10053.23 | 9992.63  | 7931.81  |
| 4 1/2"    | 114.30 | 6 7/8"   | 175  | 29297   | 42486    | 14056 | 42485.51  | 42486.02  | 14056.23 | 11187    | 10520.97 | 8125.52  |
| 4 3/4"    | 120.65 | 7 1/4"   | 185  | 34851   | 50185    | 15417 | 50185.51  | 50185.51  | 15417.2  | 11528.53 | 10718.43 | 8218.05  |
| 5"        | 127.00 | 7 5/8"   | 195  | 40744   | 58614    | 16087 | 58614.23  | 58614.23  | 16086.71 | 11915.61 | 11108.76 | 8351.25  |
| 5 1/4"    | 133.35 | 8"       | 200  | 47247   | 68024    | 17194 | 68023.97  | 68023.97  | 17194.01 | 12534.72 | 11682.35 | 8584.87  |
| 5 1/2"    | 139.70 | 8 3/8"   | 210  | 54372   | 74716    | 17606 | 74716.66  | 74715.58  | 17605.51 | 13576.38 | 12331.96 | 8747.41  |
| 5 3/4"    | 146.05 | 8 3/4"   | 220  | 62226   | 89357    | 18165 | 89356.52  | 89356.52  | 18165.37 | 13996.3  | 13014.95 | 8859.64  |
| 6"        | 152.40 | 9 1/8"   | 230  | 70787   | 101381   | 19289 | 101381.86 | 101381.86 | 19289.1  | 14388.09 | 13085.36 | 8833.41  |

Data is subject to change with change in design

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**ADVANCED BOLTING SOLUTIONS PVT. LTD**

**C/o Diversified Lines Petroleum Services (DLPS)**

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