

# DSX-SERIES SQUARE DRIVE ALUMINUM TORQUE WRENCHES

SETTING INDUSTRY-FIRST SAFETY STANDARDS  
ATEX CERTIFIED

 II 2G c T6



**ENERPAC** 

▼ Shown: DSX3000



## Setting Industry-First Safety Standards



### Work-at-Height Connection

Built-in, work-at-height safety tether.



### Fully Retained Reaction Arm

Patented, fully retained reaction arm with easy-to-use quick release, helps prevent injuries when working-at-height.



### Secured Square Drive

Retained quick release push-button.



### Ergonomic Tool Handle

Robust ergonomic positioning handle comes standard with every DSX tool.

SWH10EA is an eyebolt handle.

Compatible DSX-Series wrenches	Ergonomic Handle (Standard)
DSX1500, 3000, 5000	<b>SWH6A</b>
DSX11000	<b>SWH10A</b>
DSX25000	<b>SWH10EA</b>



### Bolting Integrity Software

Enerpac Bolting Integrity Software Solutions play a key role in implementing and managing an Integrity Program for bolted connections. The software offers Tool selection, Bolt Load calculations and Tool pressure settings, as well as, a combined Application Data Sheet and Joint Completion Report. Custom Joint information can also be entered.

### Safety and Performance

- High-strength, lightweight aluminum, slimline design suited for complete operator safety
- Fully enclosed drive for maximum safety
- Built-in, work-at-height safety tether connection
- Retained quick release push-button
- Patented, easy-to-use, quick release, retained reaction arm
- Fine-tooth ratchet prevents the tool 'locking on'
- High-cycle design with fewer moving parts making it a more efficient tool to operate, maintain, or repair
- 35° rotation angle and rapid return stroke for fast operation

### Simplicity

- Robust handle which mounts on either side of the tool for extra maneuverability and safer operation
- Push-button square drive and reaction arm for fast changes and adjustments
- Easily accessible work-at-height connection point

### Accuracy

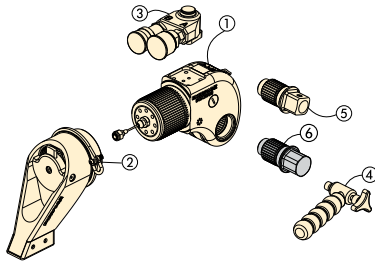
- Constant torque outputs with an accuracy of +/- 3%

### ATEX certified

- All DSX tools are CE - ATEX certified

# Square Drive Hydraulic Torque Wrenches

Standard are ① ② ③ ④ ⑤.  
⑥ is optional.



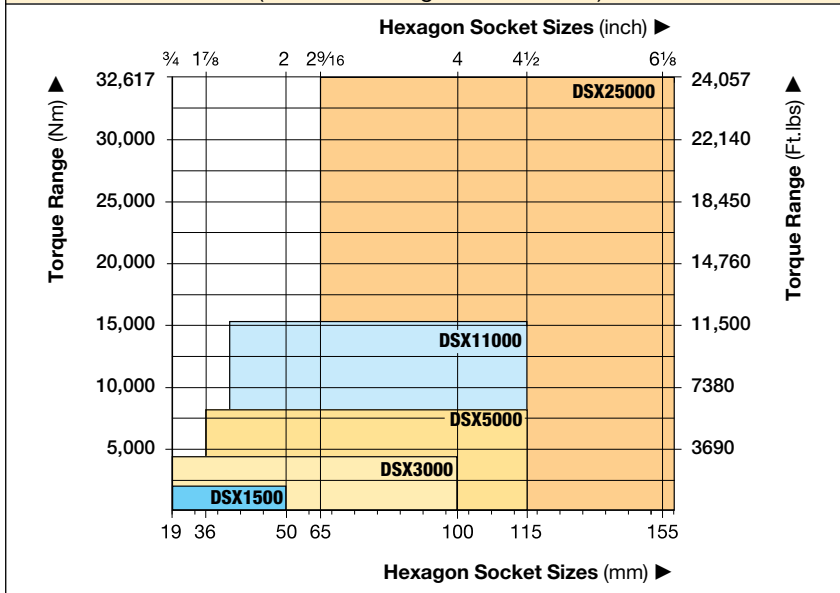
- ① Drive Unit
- ② Reaction Arm
- ③ Aluminum Swivel
- ④ Ergonomic Tool Handle
- ⑤ Square Drive
- ⑥ Allen® Drive (optional)




## Select the Right Torque

Choose your Enerpac Torque Wrench using the untightening rule of thumb: Loosening torque equals about 250% of tightening torque.

### \*TORQUE WRENCH SELECTION (based on hexagon socket sizes)

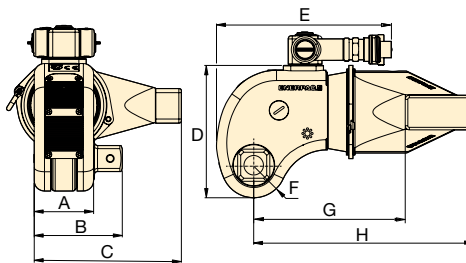




**Use only Heavy-Duty Impact Sockets**

For power driven torquing equipment, according to ISO2725 and ISO1174; DIN 3129 and DIN 3121 or ASME-B107.2/1995.

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## DSX Series



Nominal Torque Output:  
**24,057 Ft.lbs**

Square Drive Range:  
**3/4 - 2 1/2 inches**

Nose Radius:  
**0.94 - 2.50 inches**

Maximum Operating Pressure:  
**10,000 psi**




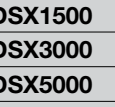
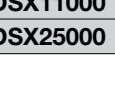

**Back-Up Spanners**

Hands free tool to be used to stop back nut from turning during make up or break out.

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▼ *The rigid design of the DSX-Series torque wrenches provides durability, reliability and safety.*



Nominal Torque at 10,000 psi / 690 bar		Minimum Torque at 1000 psi / 69 bar		Square Drive		Torque Wrench Model No.	Dimensions (in)								Wt.
(Ft.lbs)	(Nm)	(Ft.lbs)	(Nm)	Size (inch)	Model No. (included with wrench)		A	B	C	D	E	F	G	H	(lbs)
1411	1913	141	191	3/4	DSX1500-08		1.7	2.6	4.2	3.7	5.7	0.94	4.4	6.4	4.8
3233	4383	323	438	1	DSX3000-08		2.3	3.4	5.7	5.1	6.7	1.25	5.8	8.5	10.6
5635	7640	563	764	1 1/2	DSX5000-08		2.7	4.4	6.8	5.8	7.6	1.50	7.1	10.2	17.9
11,524	15,624	1152	1562	1 1/2	DSX11000-08		3.4	5.1	8.5	7.2	8.7	1.88	8.94	12.8	31.7
24,057	32,617	2406	3262	2 1/2	DSX25000-08		4.6	6.9	11.3	9.6	10.5	2.50	11.1	18.2	71.7

Maximum Torque Output:

**24,057 Ft.lbs**

Hexagon Size Allen® Drive:

**1/2 - 2¼ inch**

Hexagon Size Allen® Drive:

**14 - 85 mm**

**For  
DSX  
Series**



Torque Wrench	Optional Allen® Drives, Imperial				Optional Allen® Drives, Metric			
	Hexagon Size	Maximum Torque	Model Number	Dim. B1	Hexagon Size	Maximum Torque	Model Number	Dim. B1
(max. torque)	(in)	(Ft.lbs)		(in)	(mm)	(Ft.lbs)		(in)
<b>DSX1500</b> (1411 Ft.lbs) (1913 Nm)	1/2	350	DDA15008	2.64	14	475	DDA1514	2.64
	5/8	690	DDA15010	2.64	17	850	DDA1517	2.64
	3/4	1200	DDA15012	2.64	19	1200	DDA1519	2.64
	7/8	1411	DDA15014	2.64	22	1412	DDA1522	2.64
	1	1411	DDA15100	2.64	24	1412	DDA1524	2.64
<b>DSX3000</b> (3233 Ft.lbs) (4383 Nm)	5/8	690	DDA30010	3.39	17	850	DDA3017	3.39
	3/4	1200	DDA30012	3.39	19	1200	DDA3019	3.39
	7/8	1900	DDA30014	3.39	22	1841	DDA3022	3.39
	1	2830	DDA30100	3.39	24	2491	DDA3024	3.39
	1 1/8	3233	DDA30102	3.39	27	3235	DDA3027	3.39
	1 1/4	3233	DDA30104	3.39	30	3235	DDA3030	3.39
	-	-	-	3.39	32	3235	DDA3032	3.39
<b>DSX5000</b> (5635 Ft.lbs) (7640 Nm)	5/8	690	DDA50010	4.41	17	850	DDA5017	4.41
	3/4	1200	DDA50012	4.41	19	1200	DDA5019	4.41
	7/8	1900	DDA50014	4.41	22	1841	DDA5022	4.41
	1	2830	DDA50100	4.41	24	2491	DDA5024	4.41
	1 1/8	5325	DDA50102	4.41	27	3402	DDA5027	4.41
	1 1/4	5635	DDA50104	4.41	30	5638	DDA5030	4.41
	-	-	-	-	32	5638	DDA5032	4.41
<b>DSX11000</b> (11,524 Ft.lbs) (15.624 Nm)	1 1/4	5635	DDA110104	5.08	30	5638	DDA11030	5.08
	1 3/8	9958	DDA110106	5.08	32	5638	DDA11032	5.08
	1 1/2	9958	DDA110108	5.08	36	8004	DDA11036	5.08
	1 5/8	11,524	DDA110110	5.08	41	11,530	DDA11041	5.08
	1 3/4	11,524	DDA110112	5.08	46	11,530	DDA11046	5.08
<b>DSX25000</b> (24,057 Ft.lbs) (32.617 Nm)	1 1/2	9958	DDA250104	6.93	36	8004	DDA25036	6.93
	1 5/8	16,433	DDA250106	6.93	41	11,887	DDA25041	6.93
	1 3/4	15,200	DDA250112	6.93	46	16,809	DDA25046	6.93
	1 7/8	22,777	DDA250114	6.93	50	21,558	DDA25050	6.93
	2	24,057	DDA250200	6.93	55	24,071	DDA25055	6.93
	2 1/4	24,057	DDA250204	6.93	60	24,071	DDA25060	6.93
	-	-	-	-	65	24,071	DDA25065	6.93
	-	-	-	-	70	24,071	DDA25070	6.93
	-	-	-	-	75	24,071	DDA25075	6.93
	-	-	-	-	85	24,071	DDA25085	6.93

# Back-Up Spanner for Torque Wrenches

## ▼ BUS03 Back-Up Spanner (safety cable not shown)



- Hands free solution – improves operator safety
- Eliminates the need for flogging spanners
- Speeds up the bolting process
- Includes safety cable with quick-connect carabiner's, stainless steel tethers and secure Allen-key fixings
- Won't lock on during operations
- Lightweight, spark-free and non-impact for improved safety and ease of use
- Two hexagon sizes in one tool

## ▼ SELECTION CHART BACK-UP SPANNERS

Hexagon Sizes (A/F)		Model Number	Dimensions (in)				Wt. (lb)
S1 to S2 (in)	S1 to S2 (mm)		A	B	C	D	
1 1/16 - 1 1/4"	27 - 32	<b>BUS 01</b>	2.0	3.9	0.6	M8	0.7
1 7/16 - 1 5/8"	36 - 41	<b>BUS 02</b>	2.4	4.7	0.6	M8	0.9
1 13/16 - 2"	46 - 50	<b>BUS 03</b>	3.0	5.6	0.8	M8	1.3
2 3/16 - 2 3/8"	55 - 60	<b>BUS 04</b>	3.5	6.5	0.8	M12	1.8
2 9/16 - 2 3/4"	65 - 70	<b>BUS 05</b>	3.9	7.5	1.0	M16	2.2
2 15/16 - 3 1/8"	75 - 80	<b>BUS 06</b>	4.4	8.4	1.0	M16	2.9
3 1/2 - 3 7/8"	–	<b>BUS 07</b>	5.3	10.1	1.2	M20	4.9
4 1/4 - 4 5/8"	–	<b>BUS 08</b>	6.4	12.2	1.2	M20	7.3
–	85 - 90	<b>BUS 09</b>	5.0	9.5	1.0	M16	3.7
3 3/4 - 3 15/16"	95 - 100	<b>BUS 10</b>	5.4	10.5	1.2	M20	5.1
4 1/8 - 4 15/16"	105 - 110	<b>BUS 11</b>	6.0	11.7	1.2	M20	6.8
–	115 - 120	<b>BUS 12</b>	6.5	12.6	1.2	M20	7.7

## BUS Series

Hexagon Sizes (A/F):

**1 1/16 - 4 15/16 inch**

Hexagon Sizes (A/F):

**27 - 120 mm**

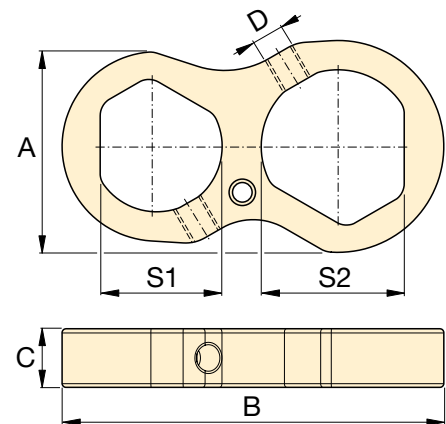


### Back-Up Spanners

Hands free operation of a hydraulic torque wrench improves the safety of the operator significantly.

Enerpac Back-Up Spanners are a hands-free tool that eliminates the need to use a flogging spanner as a backing tool.

The Back-Up Spanners have been specifically designed to prevent them from locking onto the nut during bolt torquing operations. They fit easily onto the back nut and prevent it from turning during make up or break out of bolted joints.



▼ Enerpac Back-Up Spanners to be used to stop back nut from turning during make up or break out.





- Heavy-duty impact sockets
- Supplied with "Pin and Ring"

## BSH Series



Hexagon Sizes:

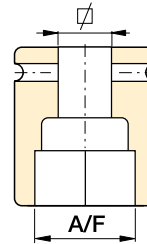
**3/4 - 6 1/8 in | 19 - 155 mm**



### Select the Right Torque

Choose your Enerpac Torque Wrench using the untightening rule of thumb:

Loosening torque equals about 250% of tightening torque.



### Hexagon Bolt and Nut Sizes

See the table of hexagon sizes of bolts, nuts and related thread diameters.

METRIC SOCKETS							
3/4" Square Drive		1" Square Drive		1 1/2" Square Drive		2 1/2" Square Drive	
A/F (mm)	Model Number	A/F (mm)	Model Number	A/F (mm)	Model Number	A/F (mm)	Model Number
19	BSH7519	19	BSH1019	36	BSH1536	65	BSH2565
24	BSH7524	24	BSH1024	41	BSH15163	70	BSH2570
27	BSH7527	27	BSH1027	46	BSH1546	75	BSH2575
30	BSH7530	30	BSH1030	50	BSH1550	80	BSH2580
32	BSH7532	32	BSH1032	55	BSH1555	85	BSH2585
36	BSH7536	36	BSH1036	60	BSH1560	90	BSH2590
41	BSH75163	41	BSH10163	65	BSH1565	95	BSH2595
46	BSH7546	46	BSH1046	70	BSH1570	100	BSH25100
50	BSH7550	50	BSH1050	75	BSH1575	105	BSH25105
-	-	55	BSH1055	80	BSH1580	110	BSH25110
-	-	60	BSH1060	85	BSH1585	115	BSH25115
-	-	65	BSH1065	90	BSH1590	120	BSH25120
-	-	70	BSH1070	95	BSH1595	125	BSH25125
-	-	75	BSH1075	100	BSH15100	135	BSH25135
-	-	80	BSH1080	105	BSH15105	140	BSH25140
-	-	85	BSH1085	110	BSH15110	145	BSH25145
-	-	90	BSH1090	115	BSH15115	150	BSH25150
-	-	95	BSH1095	-	-	155	BSH25155
-	-	100	BSH10100	-	-	-	-

IMPERIAL SOCKETS													
3/4" Square Drive		1" Square Drive				1 1/2" Square Drive				2 1/2" Square Drive			
A/F (in)	Model Number	A/F (in)	Model Number	A/F (in)	Model Number	Model Number	A/F (in)	A/F (in)	Model Number	A/F (in)	Model Number	A/F (in)	Model Number
3/4"	BSH7519	3/4"	BSH1019	2 5/16"	BSH10231	1 7/16"	BSH15144	2 13/16"	BSH15281	2 7/16"	BSH25244	4 3/16"	BSH25419
7/8"	BSH75088	7/8"	BSH10088	2 3/8"	BSH10238	1 1/2"	BSH1538	2 7/8"	BSH15288	2 1/2"	BSH25250	4 1/4"	BSH25425
15/16"	BSH75094	15/16"	BSH10094	2 7/16"	BSH10244	1 9/16"	BSH15156	2 15/16"	BSH1575	2 9/16"	BSH25265	4 5/16"	BSH25110
1 1/16"	BSH7527	1 1/16"	BSH1027	2 1/2"	BSH10250	1 5/8"	BSH15163	3"	BSH15300	2 5/8"	BSH25263	4 3/8"	BSH25438
1 3/16"	BSH7530	1 3/16"	BSH1030	2 9/16"	BSH1065	1 11/16"	BSH1543	3 1/16"	BSH15306	2 11/16"	BSH25269	4 1/2"	BSH25450
1 1/4"	BSH75125	1 1/4"	BSH10125	2 5/8"	BSH10263	1 3/4"	BSH15175	3 1/8"	BSH15313	2 3/4"	BSH2570	4 5/8"	BSH25463
1 5/16"	BSH75131	1 5/16"	BSH10131	2 11/16"	BSH10269	1 13/16"	BSH1546	3 3/16"	BSH15319	2 13/16"	BSH25281	4 3/4"	BSH25475
1 3/8"	BSH7535	1 3/8"	BSH1035	2 3/4"	BSH1070	1 7/8"	BSH15188	3 1/4"	BSH15325	2 7/8"	BSH25288	4 7/8"	BSH25488
1 7/16"	BSH75144	1 7/16"	BSH10144	2 13/16"	BSH10281	1 15/16"	BSH15194	3 3/8"	BSH15338	2 15/16"	BSH2575	5"	BSH25500
1 1/2"	BSH7538	1 1/2"	BSH1038	2 7/8"	BSH10288	2"	BSH15200	3 1/2"	BSH15350	3"	BSH25300	5 1/8"	BSH25513
1 9/16"	BSH75156	1 9/16"	BSH10156	2 15/16"	BSH1075	2 1/16"	BSH15206	3 5/8"	BSH15363	3 1/16"	BSH25306	5 3/16"	BSH25519
1 5/8"	BSH75163	1 5/8"	BSH10163	3"	BSH10300	2 1/8"	BSH15213	3 3/4"	BSH1595	3 1/8"	BSH25313	5 1/4"	BSH25525
1 11/16"	BSH7543	1 11/16"	BSH1043	3 1/16"	BSH10306	2 3/16"	BSH15219	3 7/8"	BSH15388	3 3/16"	BSH25319	5 3/8"	BSH25538
1 3/4"	BSH75175	1 3/4"	BSH10175	3 1/8"	BSH10313	2 1/4"	BSH15225	3 15/16"	BSH15100	3 1/4"	BSH25325	5 1/2"	BSH25140
1 13/16"	BSH7546	1 13/16"	BSH1046	3 3/16"	BSH10319	2 5/16"	BSH15231	4"	BSH15400	3 3/8"	BSH25338	5 3/4"	BSH25575
1 7/8"	BSH75188	1 7/8"	BSH10188	3 1/4"	BSH10325	2 3/8"	BSH15238	4 1/8"	BSH15105	3 1/2"	BSH25350	5 7/8"	BSH25150
1 15/16"	BSH75194	1 15/16"	BSH10194	3 3/8"	BSH10338	2 7/16"	BSH15244	4 3/16"	BSH15419	3 5/8"	BSH25363	6"	BSH25600
2"	BSH75200	2"	BSH10200	3 1/2"	BSH10350	2 1/2"	BSH15250	4 1/4"	BSH15425	3 3/4"	BSH2595	6 1/8"	BSH25613
-	-	2 1/16"	BSH10206	3 5/8"	BSH10363	2 9/16"	BSH1565	4 5/16"	BSH15110	3 7/8"	BSH25388	-	-
-	-	2 1/8"	BSH10213	3 3/4"	BSH1095	2 5/8"	BSH15263	4 3/8"	BSH15438	3 15/16"	BSH25100	-	-
-	-	2 3/16"	BSH10219	3 7/8"	BSH10388	2 11/16"	BSH15269	4 1/2"	BSH15450	4"	BSH25400	-	-
-	-	2 1/4"	BSH10225	-	-	2 3/4"	BSH1570	4 5/8"	BSH15463	4 1/8"	BSH25105	-	-

# Selection Matrix – Optimum Wrench-Pump Combinations

		ELECTRIC PUMPS					AIR DRIVEN PUMPS	
		Cordless XC-Series	E-Pulse™ E-Series	TQ-Series	ZU4-Series	ZE-T-Series	LAT-Series	ZA4-Series
<p>For optimum speed and performance Enerpac recommends the following system set-up with wrench-pump-hose combinations. For other combinations, consult your Enerpac bolting expert or your authorized Enerpac distributor.</p> <p><b>Speed:</b> </p> <p><b>Oil Flow at 10,000 psi:</b></p> <p><b>Reservoir Capacity:</b></p> <p><b>Duty Cycle:</b></p> <p><b>Weight:</b></p> <p><b>Field/Factory Work:</b></p>								
		15 in <sup>3</sup> /min	32 in <sup>3</sup> /min	30 in <sup>3</sup> /min	60 in <sup>3</sup> /min	60-120 in <sup>3</sup> /min	25 in <sup>3</sup> /min	60 in <sup>3</sup> /min
		0.5 gallon	0.8 gallon	1 gallon	1.2 - 1.8 gal.	1.2 - 5.2 gal.	0.8 gal.	1.2 - 1.8 gal.
		Intermittent	Heavy-Duty	Standard	Standard	Heavy-Duty	Standard	Heavy-Duty
		Field	Field/Factory	Field/Factory	Field	Factory	Field	Field
			DSX1500	Optimal	Optimal	Optimal	Optimal	Optimal
DSX3000								
DSX5000	-		Acceptable	Acceptable	Optimal	Optimal		
DSX11000								
DSX25000								



## XC-Series, Portable Cordless Pumps

The XC battery torque wrench pump is ideal for maintenance bolting applications at sites that do not have access to power or where having extension cords or air hoses could cause trip hazards.

## TQ-700 Series, Electric Torque Wrench Pumps

Designed for both portability and production, the TQ-700 features optimized flow technology to deliver superior bolting speed.

## E-Series, E-Pulse Electric Torque Wrench Pumps

The E-Pulse has a high-efficiency permanent magnet, direct drive motor for continuous use and long service life. It is ideal for high volume fastening applications where weight is critical and it also features a rugged roll-cage design. E-Pulse pumps include an interactive pendant for operation, programming and diagnostics.

## ZU4T-Series, Electric Torque Wrench Pumps

Utilizing a universal motor, the ZU4-Series works well with long extension

cords or generator driven electrical power supplies. ZU4-pumps are available in Pro and Classic formats.

**ZU4T Pro Pumps** have an LCD feature to display torque or pressure, selectable torque wrench, and self-diagnostics – premium features not available on any other pump.

**ZU4T Classic Pumps** feature an analog gauge and a basic electrical package to deliver durable, safe and efficient hydraulic power.

## ZE4T, ZE5T-Series, Electric Torque Wrench Pumps

The ZE-Series features premium options, such as the LCD to display torque or pressure values, and self-diagnostics. These pumps utilize an induction motor, making the ZE-Series the coolest and quietest pumps in their class.

## ZA4T-Series, Air Driven Torque Wrench Pumps

Utilizing the highly efficient design of the Z-Class pumping element, this air driven pump is best suited to power medium to large size torque wrenches.



## Torque Wrench Hoses

Use Enerpac THQ-700 Series hoses with DSX-Series torque wrenches to ensure the integrity of your hydraulic system.

6 feet long, 2 hoses	<b>THQ-702T</b>
19.5 feet long, 2 hoses	<b>THQ-706T</b>
39 feet long, 2 hoses	<b>THQ-712T</b>



# THE RIGHT TOOL MAKES ALL THE DIFFERENCE

Enerpac bolting tools are put to work under the most intense and demanding conditions. That's why we never compromise! So you can rely on quality and precision every time for your controlled tightening and joint integrity applications

As a global market leader in high-pressure hydraulic tools, controlled force products and solutions for the precision positioning of heavy loads, Enerpac products have moved and maintained some of the largest structures on earth. They are the industry standard in aerospace, infrastructure, manufacturing, mining, oil & gas, power generation and much more.

**ELITE TOOLS. FOR ELITE PROFESSIONALS.**

## Controlled Tightening and Loosening



S-, W-, RSL-, DSX-, RSL- and HMT-Series Hydraulic Torque Wrenches



STTL-Series Safe T™ Torque Lock



Manual Torque Multipliers



Pneumatic and Electric Torque Wrenches



Cordless Torque Pumps



Electric Torque Pumps



Pneumatic Torque Pumps

## Tensioning Tools



Power Generation Bolt Tensioners



HydraMax, General Purpose and Aquajack® Subsea Tensioners



Electric Tensioning Pumps



Pneumatic Tensioning Pumps



High-Pressure Hand Pumps

## Joint Assembly & Joint Separation



Hydraulic Nut Cutters and Nut Splitters



Flange Alignment Tools



Mechanical Flange Face Tool



Step-Type Flange Spreaders



Valve Change-Out Tool Sets



Flange Puller Sets



### Enerpac Worldwide Locations

For a complete list of addresses see: [www.enerpac.com/en/enerpac-locations](http://www.enerpac.com/en/enerpac-locations)  
User Inquiries: 800-433-2766 Distributor Inquiries: 800-558-0530

[www.enerpac.com](http://www.enerpac.com)