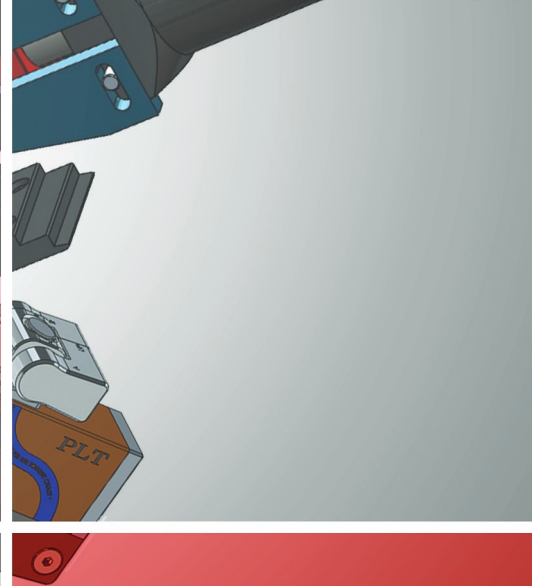
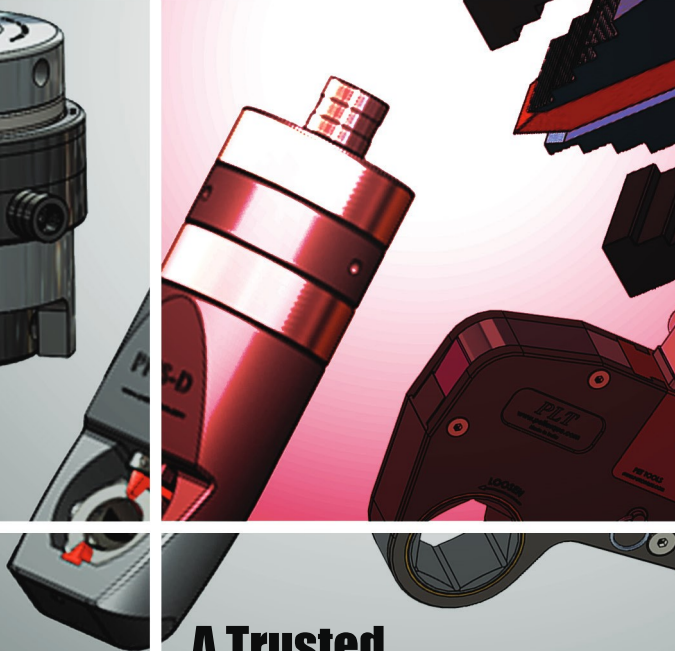
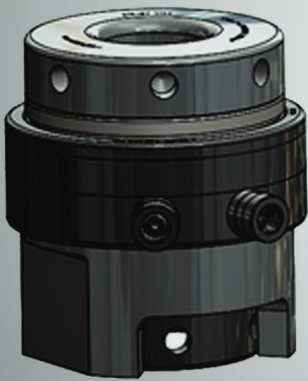
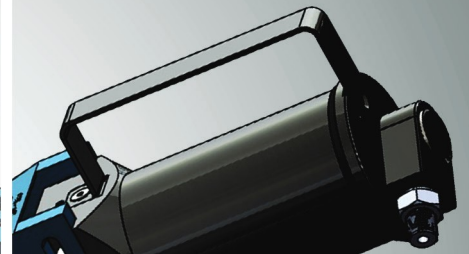
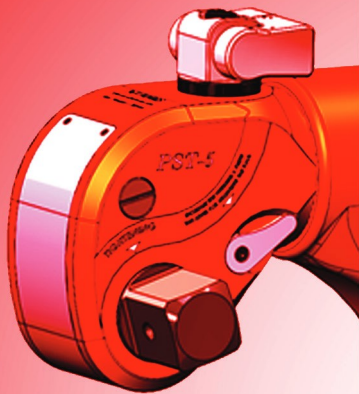




The Bolting Solutions



**A Trusted
Name in
The Arena of
Manufacturing of
High Quality Hydraulic
Operated Tools**



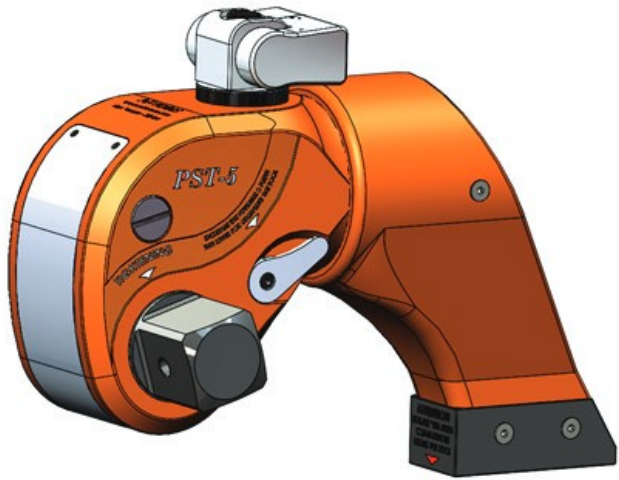
PET TORQUE (I)

Our motto is to provide premium quality Hydraulic tools to achieve customer satisfaction.

Pet tools launched technologically advanced high pressure hydraulic tools. The company started its operation in year 1991 in various type of manufacturing. Professionalism & uncompromised commitment to excellence & willingness to work hard is what defines us. We have our own designing, manufacturing, assembling & testing team. We are dedicated to deliver quality services, quick response on time with the ability to fulfill our customer.

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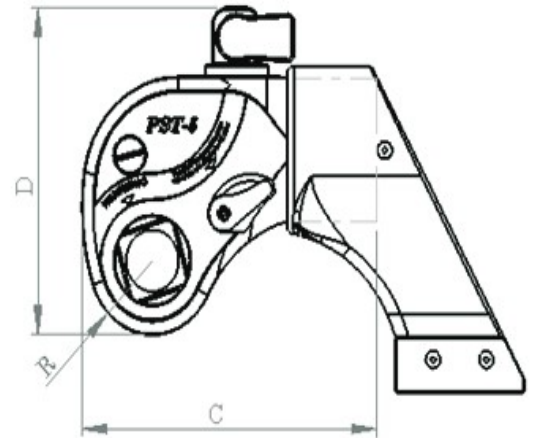
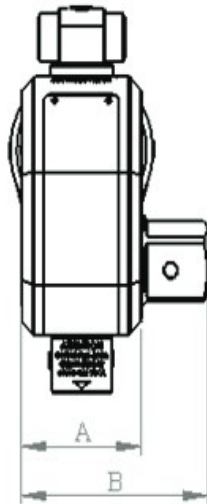
1.	Hydraulic Torque Wrenches <ul style="list-style-type: none">• Square Drive• Low Profile (Hex Drive)• Front Reaction	----- Page No. 4 - 6
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SQUARE DRIVE SERIES (PST)

- Highest quality material grade for strength & durability with anti-rust effect.
- Unibody tools.
- 360° adjustable reaction arm
- Anti-lock torque release lever.
- Torque ranging from 270 to 51,000 Nm with accuracy $\pm 3\%$.
- 360/180° adjustable uniswivel assembly.
- Fitted with High pressure hose coupling system.
- 1 year warranty

HYDRAULIC TORQUE WRENCHES



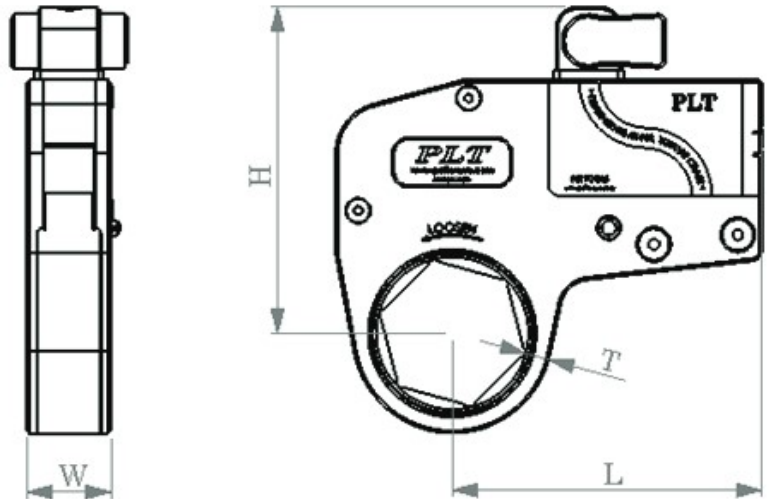
MODEL	SQUARE DRIVE	DIMENSIONS (MM)					WEIGHT (KG)	TORQUE			
		A	B	C	D	R		Ft. lbs.		Nm	
								Min	Max	Min	Max
PST-1	3/4"	50	75	125	120	25	2	200	1328	270	1800
PST-3	1"	67	96	163	160	33	4	468	3158	634	4281
PST-5	1 1/2"	80	125	197	186	42	6.35	842	5579	1142	7564
PST-10	1 1/2"	98	144	240	227	50	11.1	1700	11295	2305	15314
PST-15	2 1/2"	110	178	266	245	55	16	2220	15194	3010	20600
PST-20	2 1/2"	120	188	282	258	59	20.5	2989	19545	4053	26500
PST-25	2 1/2"	128	196	300	272	63	28.4	3725	24340	5050	33000
PST-30	2 1/2"	150	218	355	308	77	36	5274	37616	7150	51000



LOW PROFILE TORQUE WRENCH SERIES (PLT)

- Compact design & Unibody housing.
- Designed with high strength & low weight.
- Torque ranging from 300 to 46,500 Nm with accuracy $\pm 3\%$.
- Anti-lock torque release lever.
- 360/180° rotary Uni-swivel assembly for twin line hose joint.
- Fitted with High pressure hose coupling system.
- 1 year warranty.

HYDRAULIC TORQUE WRENCHES



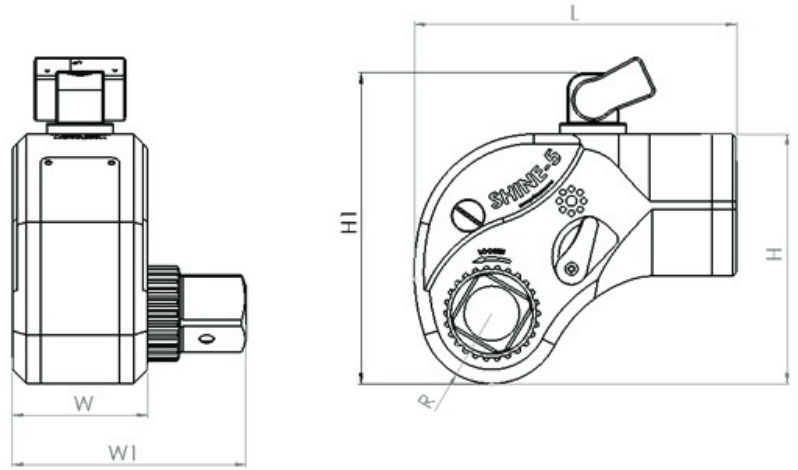
MODEL	HEX LINK RANGE	DIMENSIONS (mm)				WEIGHT (kg)	TORQUE			
		W	L	H	T		Ft. lbs.		Nm	
							Min	Max	Min	Max
PLT-2	30-60	32	124	128	9.5	0.8	177	1770	240	2400
PLT-4	46-75	42	155	163	12	1.75	373	3732	506	5060
PLT-8	55-100	52	216	228	14.5	3.5	862	8619	1168.7	11687
PLT-16	70-110	62	258	272	18	5.2	1401	14012	1900	19000
PLT-22	80-120	72	300	316	21	7.3	2006	20059	2720	27200
PLT-32	115-165	92	384	404	27	11	3429	34292	4650	46500



FRONT REACTION TORQUE WRENCH SERIES (SHINE)

- Compact design & Unibody housing.
- Designed with high strength & low weight.
- Torque ranging from 243 to 24,132 Nm with accuracy $\pm 3\%$.
- Anti-lock torque release lever.
- 360/180° adjustable Uni-swivel assembly for twin line hose joint.
- Fitted with High pressure hose coupling system.
- 1 year warranty.

HYDRAULIC TORQUE WRENCHES



MODEL	SQUARE DRIVE	DIMENSIONS (mm)						WEIGHT (kg)	TORQUE			
		L	W	W1	H	H1	R		Ft. lbs.		Nm	
									Min	Max	Min	Max
SHINE-1	3/4"	135	56	93	103	134	28	2.15	180	1252	243	1698
SHINE-3	1"	173	72	116	130	170	38	4.65	450	3026	609	4103
SHINE-5	1 1/2"	205	86	148.5	160	199	45	7.65	755	5319	1024	7212
SHINE-10	1 1/2"	259.5	110	178.5	206	252.5	58	13.8	1777	11722	2409	15893
SHINE-20	2 1/2"	300	127	223	238	285	67	22.25	2741	17799	3716	24132

TORQUE PUMP (PTEP)

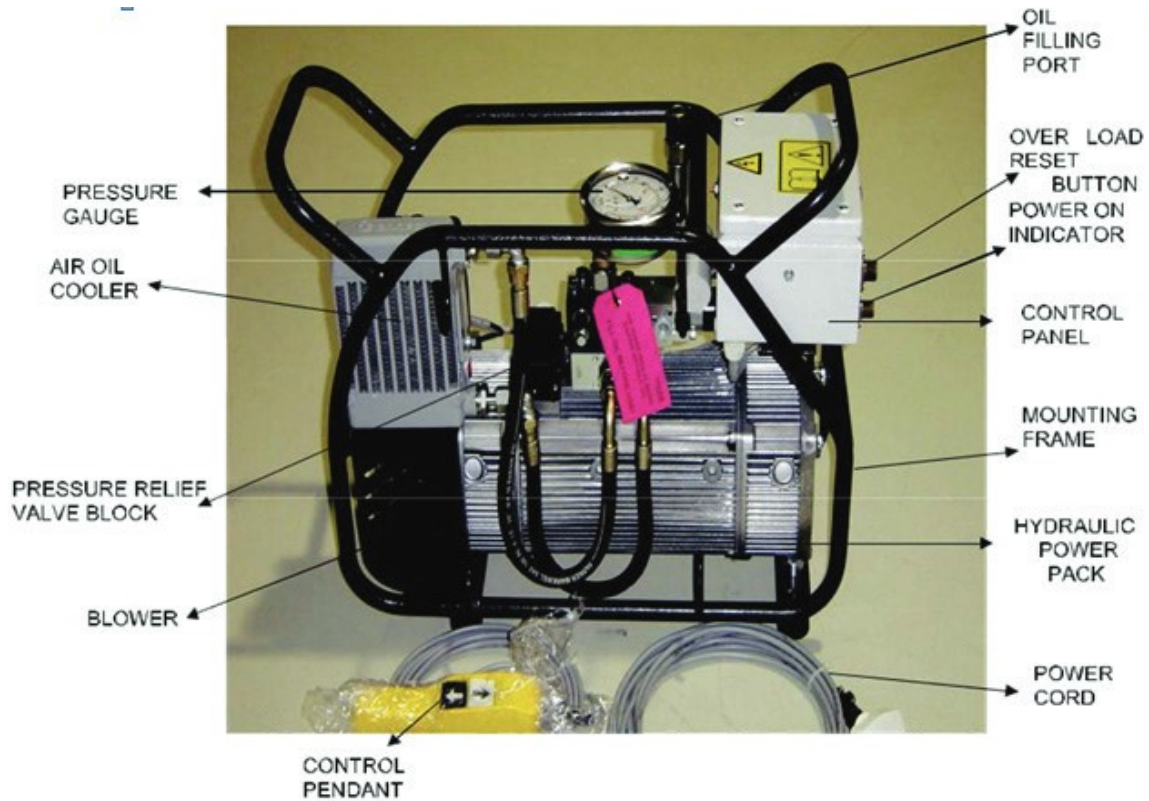
- Hydraulic power unit are engineered specifically for both medium & heavy duty operations with a high degree of reliability; operate a variety of hydraulically power tools at pressures up to 700bar/10,000psi.
- The directly mounted pressure & direction control valves eliminate additional plumbing & potential leak points while keeping the unit compact with reduced weight. The HPU is supplied with pressure gauge for ease of reading from long distance.
- The control pendant is designed for better ergonomics. The two button pendant is supplied with manual version of the HPU.

Power Pack Components

- Pressure gauge – 100mm Dial-1/2” NPT – 700 bar.
- Male/female adapter (high pressure) 700 bar.
- Male coupler 1/4” NPT 700 bar.
- Female coupler 1/4” NPT 700 bar.
- 15ft Twin line hose.

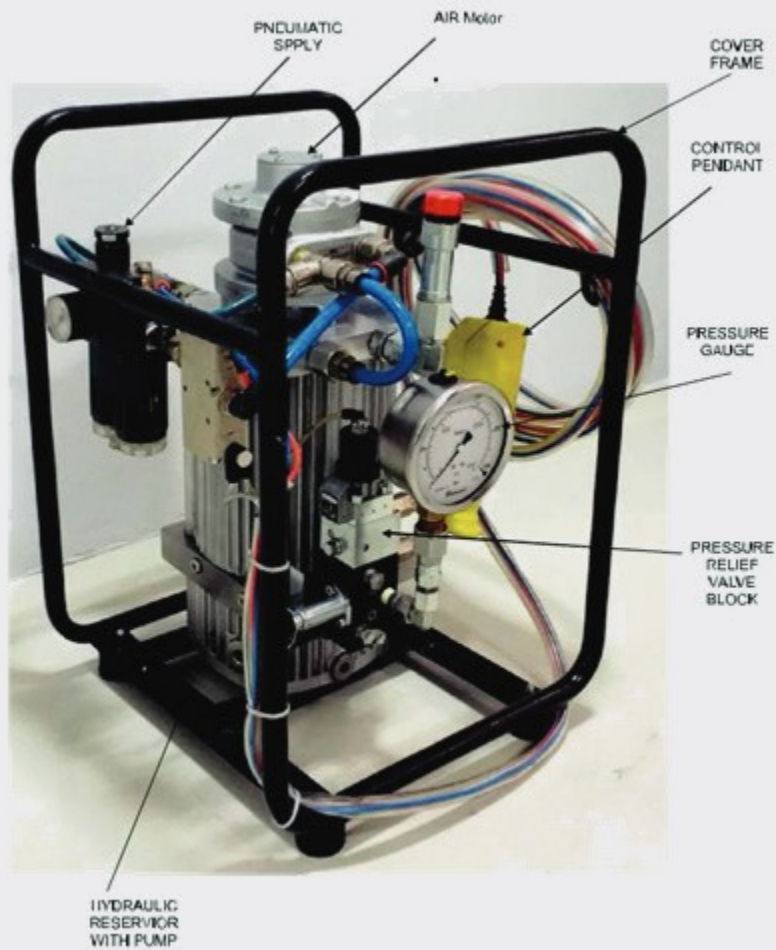
Additional Features

- Remote control pendant with tow push buttons of 24V DC supply, visual temperature strips (60°-90° C), visual oil level gauge.
- Safety interlock: - If the power pack is kept running idle without pressurizing for more than 60sec. the power pack is switched OFF automatically. To start the power pack again, the STOP button (push button 2) has to be pressed once before the START button (push button 1) is pressed.
- Temperature interlock: - If the temperature of the hydraulic oil rises above 80°C, power pack switches OFF automatically.
- Components
 1. Digital Pressure Gauge.
 2. Customized Manifolds.
 3. Hose up to 30ft.



ELECTRIC TORQUE PUMP

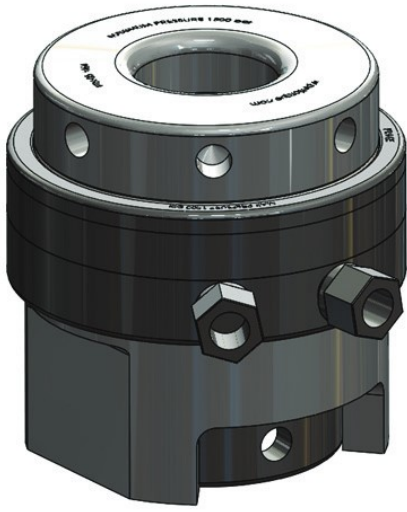
TECHNICAL SPECIFICATION	
Main voltage	1~230V50Hz
Solenoid voltage	230VAC
Main consumption	7.20 A
Motor capacity	1.10 KW
Protected according to	IP 54
Nominal pressure	10-700 bar
Flow	1 st stage:~9.7 lpm (70bar)
	2 nd stage:~1 lpm (700bar)
Tank volume	6 litres
Useable volume	3 litres
Oil type	ISO VG 68
Weight ready for use	38 kg without oil
VENTILATOR FAN	
Main voltage	1~230V50Hz
Rotation speed	2800/min



PNEUMATIC TORQUE PUMP

TECHNICAL SPECIFICATION

Pneumatic supply	Clean air from air compressor
Direction control valve	Pneumatically operated
Motor capacity	4 HP
Protected according to	Explosion proof
Nominal pressure	20-700 bar
Flow	1st stage:~8 lpm (70bar)
	2nd stage:~0.98 lpm (700bar)
Tank volume	5 litres
Useable volume	4 litres
Ambient temperature	45°c Or max oil temperature 60°c.
Oil type	ISO VG 68
Weight ready for use	28 kg without oil



BOLT TENSIONERS (PTN)

- Bolt /Stud size M22 to M100 bolt tensioner available.
- Tightening & loosening of multiple bolts at a time.
- Compact design for easy to fit in confined spaces.
- Working pressure max 1500bar.
- Operate with air or manual hydraulic pump.
- Fitted with latest high pressure coupling system.

FLANGE SPREADER (PFS)



- Min. required access gap 6 mm.
- Max. opening gap 90 mm.
- Low maintenance due to few moving parts.
- Safety block included each flange spreader.
- Easy to operate.
- Max. Working pressure up to 700 bar

NUT SPLITTER (PNS)

- High quality steel used for better performance.
- High carbon steel cutting edge for smooth cut.
- Max working pressure: - 700bar.



MODEL	HEX SIZE	THREAD SIZE
PET-NS 1924	19-24	M12-M16
PET-NS 2432	24-32	M16-M22
PET-NS 3241	32-41	M22-M27
PET-NS 4150	41-50	M27-M33
PET-NS 5060	50-60	M33-M39
PET-NS 6075	60-75	M39-M48
PET-NS 7590	75-90	M48-M60

TENSIONING PUMP & HOSE



Hand operated hydraulic pump

- Max working pressure: - 1800bar
- Tank volume: - 2.2 litres.

Ultra high pressure air driven hydraulic pump unit

- Max working pressure: - 1750bar
- Automatic pressure stop: - 2000bar
- Tank capacity: - 4 litres.



HOSE

High pressure thermoplastic hose

- Max working pressure: - 1800bar
- Burst pressure: - 4500bar
- One end quick release 1/4" BSP coupling & other end 1/4" BSP nipple

SOCKETS (PIS)

Heavy duty impact sockets available in various square drive size, 3/4", 1", 1 1/2", 2 1/2" suitable for A/F size – 19mm to 135mm.

3/4" SQUARE DRIVE				1" SQUARE DRIVE			
METRIC		INCHES		METRIC		INCHES	
MODEL	HEX (A/F)	MODEL	HEX (A/F)	MODEL	HEX (A/F)	MODEL	HEX (A/F)
PM 75	19	PI 75	3/4"	PM 100	27	PI 100	1.1/16"
PM 75	22	PI 75	7/8"	PM 100	30	PI 100	
PM 75	24	PI 75	15/16"	PM 100	32	PI 100	1.1/4"
PM 75	27	PI 75	1.1/16"	PM 100	36	PI 100	1.7/16"
PM 75	30	PI 75		PM 100	41	PI 100	1.5/8"
PM 75	32	PI 75	1.1/4"	PM 100	46	PI 100	1.13/16"
PM 75	36	PI 75	1.7/16"	PM 100	50	PI 100	2"
PM 75	41	PI 75	1.5/8"	PM 100	55	PI 100	2.3/16"
PM 75	46	PI 75	1.13/16"	PM 100	60	PI 100	2.3/8"
PM 75	50	PI 75	2"	PM 100	65	PI 100	2.9/16"
PM 75	55	PI 75	2.3/16"	PM 100	70	PI 100	2.3/4"
PM 75	60	PI 75	2.3/8"	PM 100	75	PI 100	2.15/16"
1 1/2" SQUARE DRIVE				2 1/2" SQUARE DRIVE			
METRIC		INCHES		METRIC		INCHES	
MODEL	HEX (A/F)	MODEL	HEX (A/F)	MODEL	HEX (A/F)	MODEL	HEX (A/F)
PM 150	46	PI 150	1.13/16"	PM 250	70	PI 250	2.3/4"
PM 150	50	PI 150	2"	PM 250	75	PI 250	2.15/16"
PM 150	55	PI 150	2.3/16"	PM 250	80	PI 250	3.1/8"
PM 150	60	PI 150	2.3/8"	PM 250	85	PI 250	3.5/16"
PM 150	65	PI 150	2.9/16"	PM 250	90	PI 250	3.1/2"
PM 150	70	PI 150	2.3/4"	PM 250	95	PI 250	3.11/16"
PM 150	75	PI 150	2.15/16"	PM 250	100	PI 250	3.7/8"
PM 150	80	PI 150	3.1/8"	PM 250	110	PI 250	4.1/4"
PM 150	85	PI 150	3.5/16"	PM 250	115	PI 250	4.5/8"
PM 150	90	PI 150	3.1/2"	PM 250	120	PI 250	
PM 150	95	PI 150	3.11/16"	PM 250	135	PI 250	

Reducer Inserts, Deep sockets, Stack sockets, 12 point sockets, Allen socket, Backup wrenches & **Special reaction arm also available in varies range.**



TEST LAB

PET Tools has well equipped NABL certified lab for calibration of Hydraulic & Manual Torque Wrenches up to 50,000 Nm.

Importance of Torque Tool Calibration

- Controlling torque of a torque tool is important for companies to ensure proper torque being applied for their products quality, safety & reliability & also to maintain gauge requirements associated with ISO9001 quality standard.
- By regular calibration, one can assure the accuracy of a torque tool with specified tolerances & maintain consistent quality standards in the assembly process.
- The calibration ensures the performance of a torque tool & indicates the need for any change. Also the potential tooling problems can be identified before they arise, either due to wear & tear or broken components.
- The torque tool calibration equipment plays an important role along with traceability to assure that all measuring results are in accordance to the National/International standards.



RENTAL BOLTING SERVICE

We provide various ranges of tested & certified torque wrenches, pumps & sockets with skilled technicians on rental basis to execute the job at site. It ensures the completion of job reducing downtime with optimum uniform accuracy. We supply tools on rental basis on daily, weekly, monthly or as per job scope. (Conditions apply)

TECHNICAL GUIDANCE & PRODUCT TRAINING

Our technical team will guide with proper tool selection, Hands-on training and commissioning as per customer requirements.



TORQUING FORCE RECOMMENDED CHART

Bolt Size	Nut Size		50% Yield (Torque in Nm)						65% Yield (Torque in Nm)					
			B-7			B-16			B-7			B-16		
	mm	inches	Molykote	Mech Oil	Dry	Molykote	Mech Oil	Dry	Molykote	Mech Oil	Dry	Molykote	Mech Oil	Dry
3/4"	32	1 1/4"	207	295	326	184	295	326	270	384	423	240	384	423
7/4"	36	1 7/16"	333	476	524	298	476	524	434	619	682	387	619	682
1"	41	1 5/8"	500	715	786	446	715	786	650	930	1022	580	930	1022
1 1/8"	46	1 13/16"	734	1050	1154	656	1050	1154	650	1346	1501	853	1346	1501
1 1/4"	50	2"	1032	1475	1622	992	1475	1622	955	1918	2110	1198	1918	2110
1 3/8"	55	2 3/16"	1401	2002	2202	1251	2002	2202	1343	2602	2863	1626	2602	2863
1 1/2"	60	2 3/8"	1849	2641	2906	1651	2641	2906	1822	3434	3777	2146	334	3777
1 5/8"	65	2 9/16"	2384	3404	3745	2127	3404	3745	2404	4426	4868	2766	4426	4868
1 3/4"	70	2 3/4"	3011	4302	4732	2689	4302	4732	3098	5593	6151	3495	5593	6151
1 7/8"	75	2 15/16"	3740	5344	5878	3339	5344	5878	3915	6947	7642	4373	6947	7642
2"	80	3 1/8"	4579	6542	7196	4089	6542	7196	4862	8505	9355	5314	8505	9355
2 1/8"	85	3 5/16"	5535	7906	8698	4942	7906	8698	5953	10278	11307	6424	10278	11307
2 1/4"	90	3 1/2"	6615	9450	10395	5906	9450	10395	7195	12285	13513	7677	12285	13513
2 3/8"	95	3 11/16"	7827	11180	12299	6987	11180	12299	8599	14535	15988	9084	14535	15988
2 1/2"	100	3 7/8"	8303	11862	13049	7414	11862	13049	10174	15421	16964	9635	15421	16964
2 3/4"	110	4 1/4"	11155	15936	17530	9960	15936	17530	10794	20717	22789	12949	20717	22789
3"	120	4 5/8"	14594	20850	22935	13031	20850	22935	14503	27105	29816	16941	27105	29816
3 1/4"	125	5"	18677	26682	29350	16676	26682	29350	18974	35051	38155	21679	35051	38155
3 1/2"	135	5 3/8"	23457	33511	36862	20943	33511	36862	24281	43564	47920	27228	43564	47920
3 3/4"	145	5 3/4"	28991	41415	45557	25884	41415	45557	30495	53840	59223	33650	53840	59223
4"	155	6 1/8"	33581	47973	52770	31546	47973	55521	37687	62364	68601	41010	65616	72177
4 1/4"	165	6 1/2"	35332	50473	55521	33980	50473	59806	45931	65616	72177	44174	70680	77747

The above chart is for reference purpose only. Always check with the bolt manufacturer / equipment designer for exact Torque requirement.

TORQUE CONVERSION FACTORS

Unit to be converted	International system – S.I. Nm	Imperial Lbf.ft	Metric kgf.m
1 Ft.lbs	1.356	1.000	0.138
1 Nm	1.000	0.738	0.102
1 kgf.m	9.807	7.233	1.000

BOLTING ORDER

No. of Bolt	Torquing sequence
4	1,3,2,4,
8	1,5,3,7,2,6,4,8,
12	1,9,5,3,11,7,2,10,6,4,12,8,
16	1,9,5,13,3,11,7,15,2,10,6,14,4,12,8,16,
20	1,13,5,9,17,3,15,7,11,19,2,14,6,10,18,4,16,8,12,20,
24	1,17,9,5,13,21,3,19,11,7,15,23,2,18,10,6,14,22,4,20,12,8,16,24,
28	1,21,13,5,9,17,25,3,23,15,7,11,19,27,2,22,14,6,10,18,26,4,24,16,8,12,20,28,
32	1,17,9,25,5,21,13,29,3,19,11,27,7,23,15,31,2,18,10,26,6,22,14,30,8,24,16,32,4,20,12,28,
36	1,33,17,25,9,5,29,13,21,3,35,19,27,11,7,31,15,23,2,34,18,26,10,6,30,14,22,4,36,20,28,12,8,32,16,24
40	1,25,33,9,17,5,21,37,13,29,3,27,35,11,19,7,23,39,15,31,2,26,34,10,18,6,22,38,14,30,4,28,36,12,20,8,24,40,16,32