Catalog of Products in Chinese Market
February 2024

HOSHO®

Cordless Wrench
Electric Digital Torque Wrench
Electric Wrench Expert

Beijing-Shanghai High-speed Railway

Shanghai Huxiao Power Tools Co., Ltd. (hereinafter referred to as HOSHO) is located in the Xinzhuang Industrial Zone of Shanghai. HOSHO electric wrenches have become an excellent brand in the industry through decades of technological innovation and development. The HOSHO Brand has formed a series of products, including cordless wrenches, cordless shear wrenches, electric wrenches, electric torque wrenches (capable of setting and adjusting the torque), electric digital torque wrenches (with torque sensors and high-precision torque display), shear wrenches (for installation of shear high-strength bolts in steel structures), electric wrenches for railways and subways, wind power wrenches, etc. With its reliable quality and excellent service, HOSHO has become a popular brand among users. HOSHO products are widely used in the Beijing-Shanghai High-speed Railway, Shanghai Metro, Hong Kong-Zhuhai-Macao Bridge, National Convention and Exhibition Center (Shanghai), Shanghai Tower (the tallest building in China), wind power installation, construction machinery, petrochemical maintenance and installation, building tower cranes, railway bridges, locomotive and work units of China Railway Group and Railway Bureaus, high-rise and large steel structures, etc. HOSHO has always adhered to the principle of "good products for good users" and actively served the national key projects and the "Belt and Road" projects. Main users: China State Construction Engineering Corporation, China Railway Group Limited, China Railway Construction Corporation, State Grid Corporation of China, Sinopec, Air China, Sany Heavy Industry, Goldwind, etc.

Shanghai Huxiao Power Tools Co., Ltd.

Catalog of Products

Referrence Torque Values for Bolt Tightening (N.M)

Strength grade		**Grade 6.8**	**Grade 8.8**	**Grade 10.9**	**Grade 12.9**	Grade 10.9 steel structures adopt large hex high strength bolts, and the across flatsS (Socket size)	Note
Material		35# steel	Alloy steel	Alloy steel	Alloy steel		
Bolt size / M	Across flats (mm)	Torque value	Torque value	Torque value	Torque value		
		N.m	N.m	N.m	N.m		
M10	16	33	45	65	70		①Users can select appropriate tools according to the parameters in the table. For accurate torque values, please refer to relevant standards. ②Construction steel structures, railway bridges and heavy machinery are installed according to the standard torque on the construction drawings. ③The installation torque of the bolts is related to the torque coefficient.
M12	18	57	80	115	125		
M14	22	78	116	132	180		
M16	24	110	165	198	282	27	
M18	27	165	227	272	384		
M20	30	237	321	455	541	34	
M22	32	266	431	612	729	36	
M24	36	376	549	785	940	41	
M27	41	510	823	1177	1411	46	
M30	46	705	980	1570	1881	50	
M33	50	902	1176	1648	1960		
M36	55	1176	1400	1962	2352		
M39	60	1411	1725	2355	2900		
M42	65	1881	2195	3060	3685		
M45	70	2195	2508	3532	4312		
M48	75	2744	3136	4473	5331		
M52	80	3174	4224	5928	7080		
M56	85	3936	5226	7200	8880		
M60	90	4908	6510	9100	10980		
M64	95	5934	7860	11100	13380		

Cordless Wrench

C600

C1000

C1500

Item	Model	Power voltage V ⎓	Battery	Square drive size (mm)	Application scope	Maximum torque (N.m)	No-load speed (r/min)	Impact frequency /min	Net weight (kg)
			Classification and Capacity						
Cordless Wrench	C600	40	Lithium battery 4Ah	12.7 × 12.7	M12-M20	600	1800	2200	2.6
Cordless Wrench	C1000			19 × 19	M16-M24	1000	1700	2000	3.1
Cordless Wrench	C1500			25.4 × 25.4	M20-M30	1500	1600	1800	3.4

Cordless Shear Wrench

F24

F30

Power voltage V ⎓ 40 Lithium battery 4Ah

Model	Grade 10.9 high strength bolt	Maximum torque (N.m)	No-load speed	External dimension					Net weight (kg)
				A	B	C	D	E	
F24	M24 M22 M20 M16	900	14	235	120	75	58	320	5.5
F30	M30 M27 M24 M22 M20 M16	1700	9	220	145	85	68	335	6.5

Electric Impact Wrench

▣ A-12C
Impact Wrench

▣ E14
Impact Wrench

E16
Impact Wrench

P1B-DV-20C
Impact Wrench

S20
Impact Wrench

P1B-DV-22C
Impact Wrench

Item	Model	Applicable bolt		Torque range (N•m)	Square drive size (mm)	Net Weight (Kg)	Input power (W)
		Standard	High intensity				
Impact Wrench	A-12C	M8–M12	M10–M12	40–100	12.7×12.7	2.1	330
Impact Wrench	E14	M10–M14	M12–M14	40–110	12.7×12.7	2.2	330
Impact Wrench	E16	M10–M16	M12–M14	80–170	12.7×12.7	2.5	380
Impact Wrench	P1B-DV-20C	M12–M20	M12–M16	100–200	12.7×12.7	2.9	380
Impact Wrench	S20	M12–M20	M12–M16	100–250	12.7×12.7	3.1	380
Impact Wrench	P1B-DV-22C	M12–M22	M12–M18	100–300	12.7×12.7	3.4	600

Electric Impact Wrench

E24A (square drive 19X19)

▣ P1B-DV-24C

For initial fastening and installation of high strength bolts for steel structures

S1000

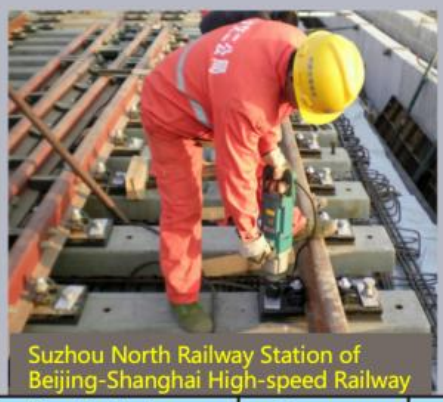
Grade 10.9 high strength bolts M22–M24 for installation of the steel structures

▣ P1B-DV-30C

Impact wrench
(the most powerful of its kind)

▣ P1B-DV-32C Impact wrench

Shanghai Metro



Suzhou North Railway Station of Beijing-Shanghai High-speed Railway

Item	Model	Applicable bolt		Torque range (N•m)	Square drive size(mm)	Net Weight (Kg)	Input power(W)
		Standard	High intensity				
Impact Wrench	E24A	M16–M24	M16–M20	150–450	19×19	4.1	600
Impact Wrench	PIB-DV-24C	M16–M24	M16–M20	200–450	19×19	4.8	600
Impact Wrench	S1000	M20–M30	M22–M24	300–1000	25.4×25.4	8.5	1050
Impact Wrench	P1B-DV-30C	M22–M30	M22–M24	300–1000	25.4×25.4	9.0	1050
Impact Wrench	P1B-DV-32C	M24–M33	M20–M24	300–1050	25.4×25.4	9.5	1050

Electric Impact Wrench

S1500 Impact wrench

P1B-DV-36C Impact wrench

(Large torque)

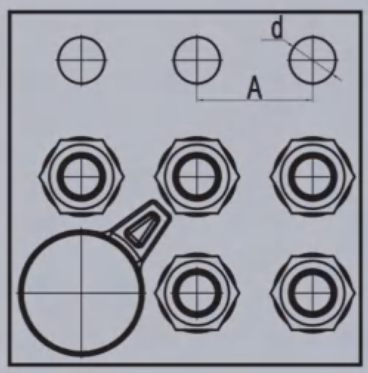
S2000 Impact wrench
Applied to installation of engineering machinery and tower cranes

S2000L Impact wrench

Item	Model	Applicable bolt		Torque range (N•m)	Square drive size(mm)	Net Weight (Kg)	Input power (W)
		Standard	High intensity				
Impact Wrench	S1500	M24–M36	M20–M24	500–1500	25.4×25.4	9.5	1100
Impact Wrench	P1B-DV-36C	M24–M36	M20–M24	500–1500	25.4×25.4	10	1050
Impact Wrench	S2000L、S2000	M22–M42	M27–M30	800–2000	25.4×25.4	13	1600

Electric Torque Wrench (T Series, Z Type Reaction Arm, Applicable to Pitch A≥3.5d Diameter)

- Characteristics and applications: The wrench will stop working automatically after the preset torque is reached, with the repeatability of ±5%. It is used in installation of steel structures, railway steel bridges and construction machinery.




T130/T180


T300


T500


T700A

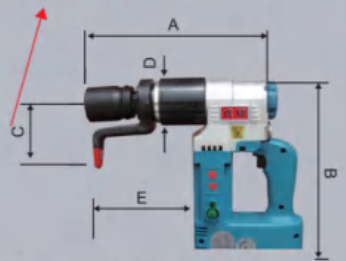

T1000A


T1700

Shanghai Tower

Shanghai-Nantong Railway Yangtze River Bridge

Length of the Reaction Arm



External dimensions

Model	Torque control range N•M	Applied to Grade 10.9 bolts	No-load speed r/min	Size of square drive	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
T130	50–130	M12.M10	25	12.7	290	250	90			2.9	260
T180	90–180	M12.M14	20	12.7	290	250	90			2.9	260
T300	150–400	M16.M18	18	19	250	290	110	60	130	4.3	350
T500	250–600	M20.M18	18	19	260	290	110	68	140	4.9	450
T700A	350–800	M22.M20.M24	15	25.4	285	295	110	75	170	6.8	710
T1000A	600–1200	M24.M22.M27	9	25.4	300	310	135	85	180	7.9	
T1700	700–1700	M30.M27.M24	6	25.4	340	315	135	70	200	8.3	

Electric Torque Wrench
(T series and Z Type Reaction Arm)

- Characteristics and applications: The wrench will stop working automatically after reaching the preset torque value, with the repeatability of ±5%. Applied to wind power installation, petrochemical engineering, construction machinery, etc.


T2000NA


T3000A

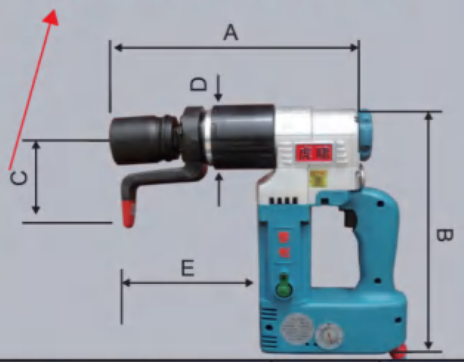

T4000A


T5000A


T7000A


T10000A/T12000

Length of the Reaction Arm



Model	Torque control range N•M	Applied to Grade 10.9 bolts	No-load speed r/min	Size of square drive	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
T2000NA	1000–2100	M30.M27	5	25.4	320	315	135	100	100	8.3	710
T3000A	1000–3000	M36.M33.M30	4	38.1	330	310	150	98	260	9.7	
T4000A	1600–4000	M39.M36.M33	3	38.1	340	310	150	90	260	8.3	600
T5000A	2000–5000	M42.M39.M36	2.5	38.1	340	325	165	115	275	12.5	710
T7000A	3500–7000	M48.M45.M42	2.0	38.1	365	325	180	115	275	13.5	600
T10000A	4000–10000	M56.M52.M48	1	44.4	440	350	180	140	310	17	710
T12000	5000–12000	M64.M60.M56	1	58 (hexagonal)	440	350	180	140	310	17	

Electric Digital Torque Wrench (TD Series, with Torque Display)

- Characteristics and applications: The wrench will stop working automatically after reaching the pre-set torque value, with the repeatability of ±5%. It can replace the hydraulic wrench and manual digital torque wrench, which improves the installation efficiency and shortens the production cycle greatly. It is widely used in occasions requiring high torque accuracy, such as railway locomotives and bogies.

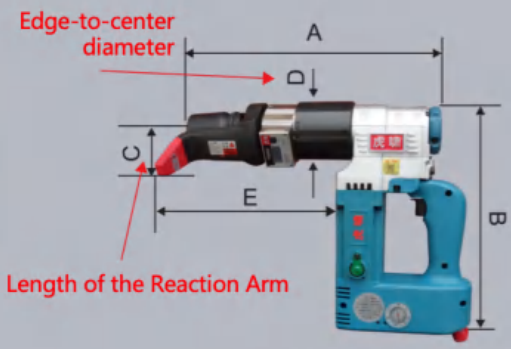
TD130/TD180

TD400

TD600

TD800/TD1000

TD1200



External dimensions

TD series, electric digital display torque wrench with torque sensor, display accuracy is ±2%

Model	Torque control range N•M	Applied to Grade 10.9 bolts	No-load speed r/min	Size of square drive	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
TD130	50–130	M12.M10	25	12.7	290	250	90			2.9	260
TD180	90–180	M12.M14	20	12.7	290	250	90			2.9	260
TD400	150–400	M16.M18	18	19	280	290	110	62	130	4.3	350
TD600	250–600	M20.M18	18	19	290	290	110	68	130	4.9	450
TD800	350–800	M22.M20.M24	15	25.4	315	295	110	75	170	6.8	710
TD1000	400–1000	M22.M20.M24	15	25.4	315	295	135	75	170	6.8	
TD1200	600–1200	M24.M22.M27	9	25.4	330	310	135	85	180	7.9	

Electric Digital Torque Wrench (TD Series, with Torque Display)

- Characteristics and applications: The wrench will stop working automatically after reaching the pre-set torque value, with the repeatability of ±5%. It can replace the hydraulic wrench and manual digital torque wrench, which improves the installation efficiency and shortens the production cycle greatly. It is widely used in construction and measurement with high requirements for bolt torque accuracy.

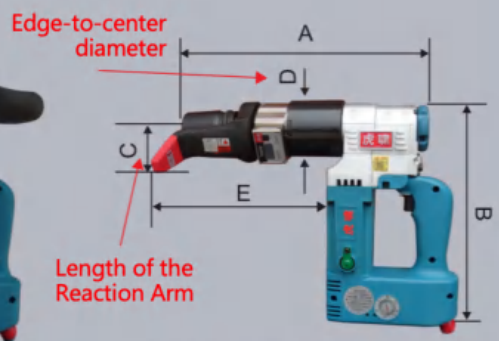

TD2000


TD3000


TD5000


TD7000


TD12000/
TD10000



External dimensions

Wind power equipment installation

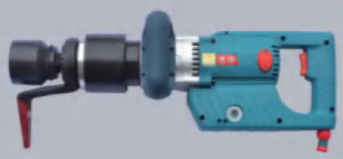
Model	Torque control range N•M	Applied to Grade 10.9 bolts	No-load speed r/min	Size of square drive	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
TD2000	1000–2100	M30.M27	5	25.4	345	315	135	100	200	8.3	710
TD3000	1000–3000	M36.M33.M30	4	38.1	355	310	150	98	260	9.7	
TD5000	2000–5000	M42.M39.M36	2.5	38.1	365	325	165	115	275	12.5	710
TD7000	3500–7000	M48.M45.M42	2.0	38.1	390	325	180	115	275	13.5	600
TD10000	4000–10000	M56.M52.M48	1	44.4	465	350	180	140	310	17	710
TD12000	5000–12000	M64.M60.M56	1	58 (hexagonal)	465	350	180	140	310	17	

Electric Digital Torque Wrench
(TC Series: Vertical design, Dual-handle Grip, Easy to Operate.)

- Characteristics and applications: The wrench will stop working automatically after reaching the pre-set torque value, with the repeatability of ±5%. It is widely used in railway maintenance and works as well as installation of tower crane foundation bolts, breaker hammers, large electromechanical equipment and oil and gas pipelines.

TC1000

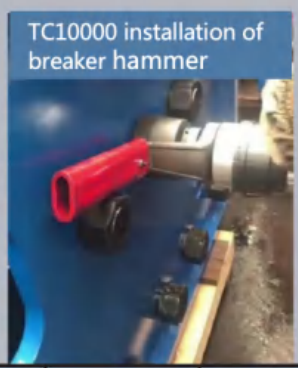
TC1200



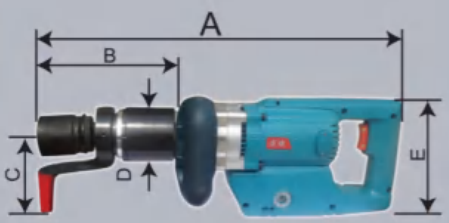
TC2000/TC3000

TC5000/TC7000

TC10000/TC12000



TC10000 installation of breaker hammer



TC series

Model	Torque control range N·M	Applied to Grade 10.9 bolts	No-load speed r/min	Square drive size	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
TC1000	400–1000	M22.M20.M24	16	25.4	500	180	110	75	160	6.5	800
TC1200	600–1200	M24.M27.M22	10	25.4	515	200	135	85	160	8.4	
TC2000	1000–2100	M30.M27.M33	6	25.4	530	205	135	100	160	8.7	
TC3000	1000–3000	M36.M33.M30	5	38.1	560	235	150	98	160	10.2	
TC5000	2000–5000	M42.M39.M36	4	38.1	600	270	180	117	160	13.5	
TC7000	3500–7000	M48.M45.M42	3	38.1	600	270	180	117	160	13.8	
TC10000	4000–10000	M56.M52.M48	2	44.4	640	310	180	140	160	17	
TC12000	5000–12000	M64.M60.M56	1.5	58 (hexagonal)	640	310	180	140	160	17.5	

Electric Digital Torque Wrench
(TCD Series: Vertical design, Dual-handle Grip, Easy to Operate.)

- Characteristics and applications: The wrench will stop working automatically after reaching the pre-set torque value, with the repeatability of ±5%. It is widely used in wind power installation, railway works and installation of breaker hammers, large electromechanical equipment and oil and gas pipelines.

TCD1000

TCD1200

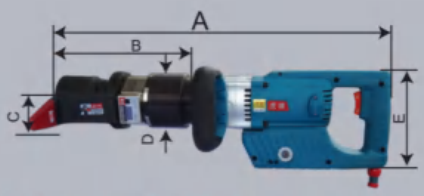
TCD2000/TCD3000

TCD5000

TCD10000

Wind power equipment installation

TCD10000 installation of breaker hammer

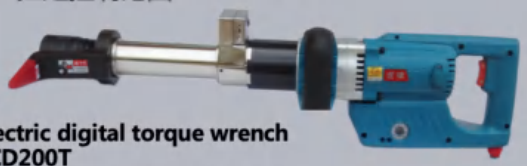


TCD series (with torque sensor, display accuracy ±2%)

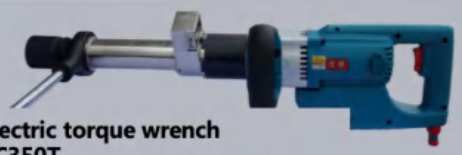
Model	Torque control range N•M	Applied to Grade 10.9 bolts	No-load speed r/min	Square drive size	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
TCD1000	400–1000	M22.M20.M24	16	25.4	525	205	110	75	160	6.8	800
TCD1200	600–1200	M24.M27.M22	10	25.4	540	225	135	85	160	8.7	
TCD2000	1000–2100	M30.M27.M33	6	25.4	555	230	135	100	160	9.0	
TCD3000	1000–3000	M36.M33.M30	5	38.1	585	260	150	98	160	10.5	
TCD5000	2000–5000	M42.M39.M36	4	38.1	625	295	165	117	160	13.8	
TCD10000	4000–10000	M56.M52.M48	2	44.4	665	335	180	140	160	17.3	

Electric Torque Wrench for Railways and Subways (Set Torque)

Electric torque wrench
TC200T
Fastener bolt (with elastic bar)
Torque control range 60–170N.M



Electric digital torque wrench
TCD200T
Fastener bolt (with elastic bar)
Torque control range 60–170N.M



Electric torque wrench
TC350T
(Embedded plastic screw sleeve)
Torque control range 300–500N.M

Electric digital display torque wrench
TCD350T
(Embedded plastic screw sleeve)
Torque control range 300–500N.M

Model	Torque control range N•M	Right conditions	No-load speed r/min	Square drive size	Net weight (Kg)	Input power (W)
TC200T/TCD200T	60–170	With elastic bar	70	25.4	6.5	800
TC350T/TCD350T	300–500	Embedded plastic screw sleeve	25	25.4	6.5	800

Dual-Speed Impact Wrench for Railways

S30 railway impact wrench

S32L railway impact wrench

Characteristics of S30 and S32L :

1. By switch, users can select high or low speed torque control during forward rotation. Low speed gear can prevent excessive torque and damage to bolt connections.

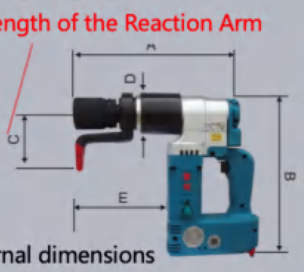
2. By switch, users can select the high speed gear to achieve the maximum torque in reverse rotation, and can loosen various rusty bolt connections easily.

Item	Model	Applicable bolt		Torque range (N•m)	Square drive size(mm)	Net Weight (Kg)	Input power(W)
		Standard	High intensity				
Impact wrench	S30、S32L	M24–M33	M20–M24	250–950	25.4×25.4	9.5	1050

Electric Torque Wrench for Tower Crane Installation

T1700T

T3000T



External dimensions

Model	Torque control range N•M	Grade 10.9 bolt	No-load speed r/min	Square drive size	External dimensions mm					Net weight (Kg)	Input power (W)
					A	B	C	D	E		
T1700T	700–1700	M30 (standard joint)	6	25.4	340	315	110	70	200	8.3	710
T3000T	1000–3000	M36 (standard joint)	4	38.1	330	310	150	98	260	9.7	

Electric Torque Wrench for Tire Installation (Set Torque)

(The wrench will stop automatically after reaching the pre-set torque value, with the repeatability of ±5%)

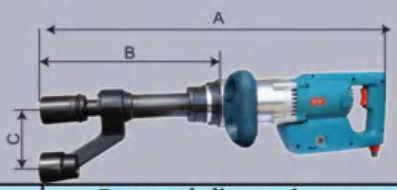
Widely used in correct control of tire bolt torque for large buses, buses and large trucks.

TC1000L

Electric torque wrench

TCD1000L

Electric digital torque wrench



Model	Torque control range N•M	Grade 10.9 bolt	Matched socket	No-load speed r/min	Square drive size	External dimensions mm						Net weight (Kg)	Input power (W)
						A	B	C (4 sizes available)					
TC1000L	400–1000	M22	32.33	16	25.4	700	320	100	103.5	110	113.5	9.8	800
TCD1000L	400–1000	M22	32.33	16	25.4	700	320					9.8	800

Electric Tapper

Universal link

GM12

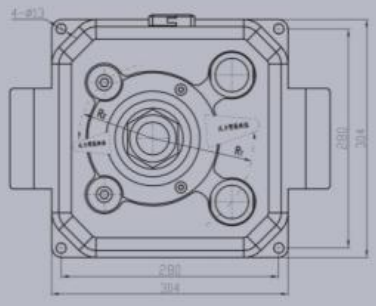
Item	Model	Input power	Load speed	Tapping range		Weight	Voltage
Electric tapper	GM12	500W	Forward rotation 0–350min^{-1}	Steel	M4–M10	2.65KG	220V
			Reverse rotation 0–600min^{-1}	Aluminum bronze	M4–M12		
				Cast iron	M4–M12		

Electric Torque Wrench Torque Calibrator

With bolt simulator and used for calibrating the electric torque wrench

A5000 torque calibration range: 1000-5000 N·M

A2000 torque calibration range: 400-2000N.M



Model	Reaction Arm Length	Column	Maximum testing torque	Precision
A5000	$R_1 \geq 130$	$D_1 42$	≤5000N/M	± 2%
A2000	$R_2 \geq 95$	$D_1 36$	≤2000N/M	± 2%

Extended Shear Sleeve

Extended shear sleeve
(replacing the extended socket)

Model	Compatible models	Extended length
JT-100-H22	H22	100
JT-100-H24	H24	100

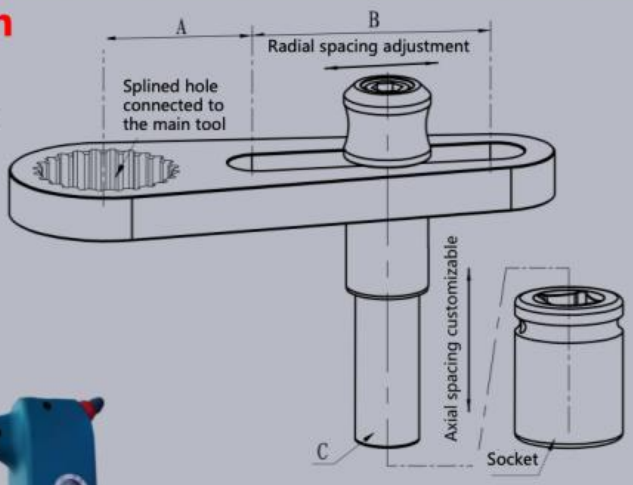
Shear Wrench Torque Meter

Model	Torque range N•m	Compatible models	
		Initial tightening shear wrench	Shear wrench
AH1000	200–1000	HC-24A HC-30A HC30Q	HS22 H22

Special Reaction Arm

Extended adjustable Reaction Arm

Note Characteristics of extended Reaction Arm: The distance can be adjusted radially.
The extended connecting rod can be customized axially to meet the requirements under the occasions. If the countersunk nut serves as the pivot, the shown sleeve can be added at the C end of the connecting rod.



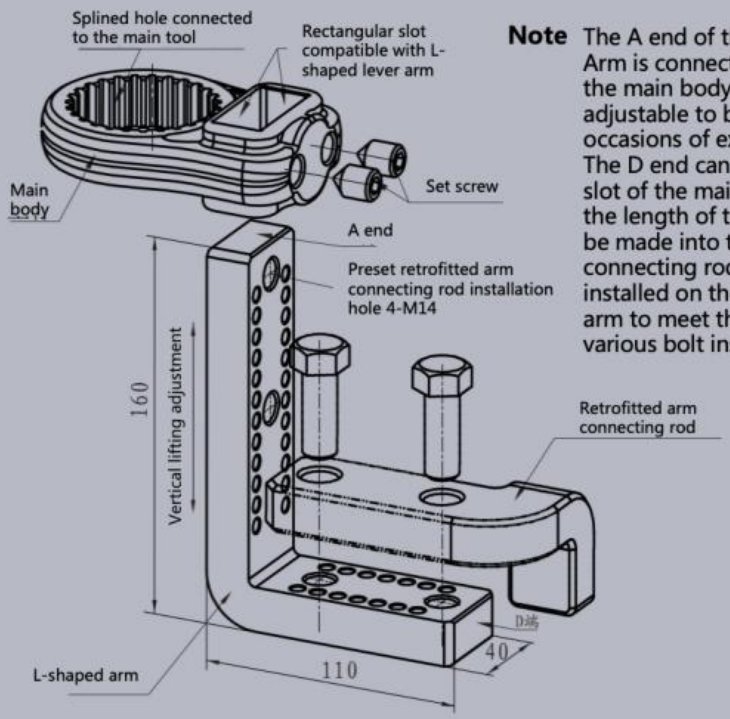
Model	Compatible models					A(mm)	B(mm)
FTC500	T300	T500	TD400	TD600		57	86
FTC700	T700A	TD800	TD1000	TCD1000	TCD1000	67	106
FTC1000	T1000A	TD1200	T2000NA	TD2000		67	106
FTC5000	T3000A	T5000A	TD5000	TD2000		130	150
FTC10000	T10000A	TD10000	TC10000			170	210

Straight-line-shaped Reaction Arm

Model	Compatible models
FY500	T300、T500、TD400、TD600
FY700	T700A、TD800、TD1000、TC1000、TCD1000

Special Reaction Arm

Height Adjustable Reaction Arm (Used in Extended Socket)



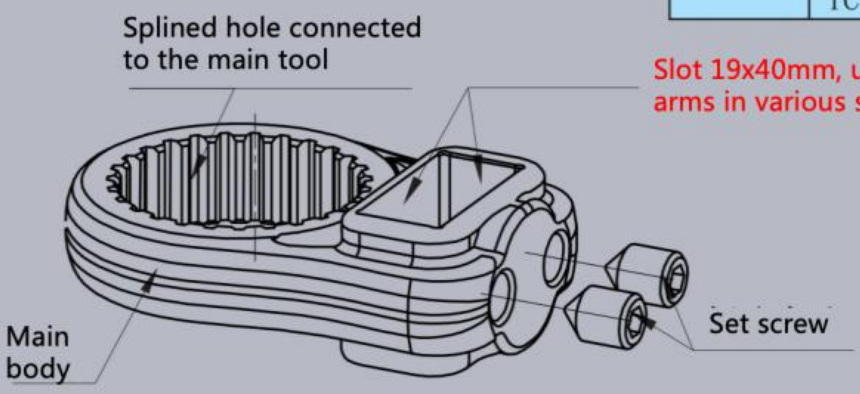
Note The A end of the lifting Reaction Arm is connected to the slot of the main body with the height adjustable to be used under the occasions of extended sleeve. The D end can be installed in the slot of the main body to extend the length of the arm. It can also be made into the irregular arm connecting rod shape to be installed on the long and short arm to meet the requirements of various bolt installation occasions.

Model	Compatible models
FSG500	T300 T500
	TD400 TD600
FSG700	T700A TD800
	TC1000 TD1000 TCD1000

Reaction Arm Sleeve

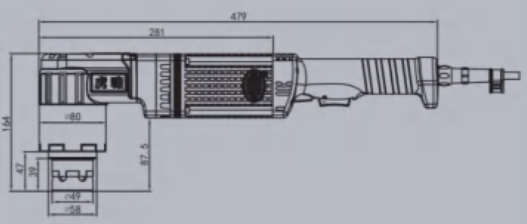
Model	Compatible models
FSG500A	T300 T500
	TD400 TD600
FSG700A	T700A TD800
	TC1000 TD1000 TCD1000

Slot 19x40mm, users can make reaction arms in various shapes to connect the slot.

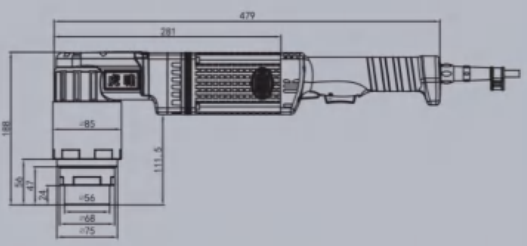


Angular Shear Wrench (HM Series used in Narrow Space)

HM24

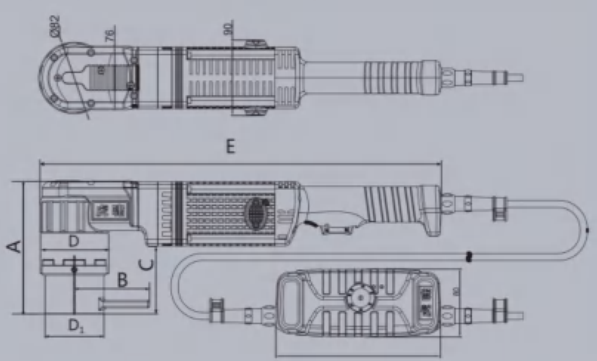


HM30



Model	Applied to Grade 10.9 bolt	Input power(W)	Maximum torque N.M	No-load speed r/min	Net weight (kg)
HM24	M16.M20.M22.M24	600	805	17	5.3
HM30	M27.M30.M24	600	1700	6	6.2

Angular Electric Torque Wrench (TM Series Used in Narrow Space)



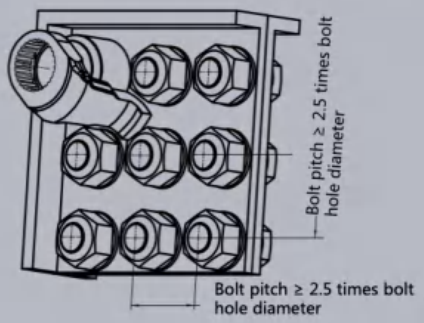
Model	Torque range N•m	No-load speed (r/min)	Net weight (kg)	Power (W)	Matched sleeve size mm	Grade 10.9 bolts	External dimensions					
							A	B	C	D	D1	E
TM500	200–500	21	5.1	600	24.27.30.32.34	M16.M20	148	83	70	Φ80	Φ71	479
TM800	350–800	16	5.7	600	32.34.36.41	M24.M22.M20	157	90	80	Φ80	Φ71	479
TM1000	400–1000	18	5.7	600	32.34.36.41	M24.M22.M20	157	90	80	Φ80	Φ71	479
TM1700	700–1700	7	6.9	600	41.46.50	M30.M27.M24	183	125	106	Φ85	Φ85	479
TM2000	1000–2100	9	6.9	600	41.46.50	M30.M27.M24	183	125	106	Φ85	Φ85	479

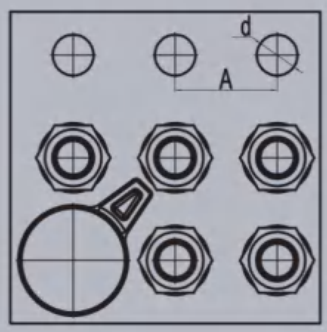
Electric torque wrench TR Series (2.5d ≤ Pitch A ≤ 3.5d Dameter)

(Used forIinstallation of Grade 10.9 Large Hexagon Bolts M16, M20, M22, M24, M27 and M30 of Steel Structures)

- Characteristics： Advantages of the TR series-The socket and the reaction arm are integrated, thereby being light in weight and compact in structure. Multiple ultra short Reaction Arms can be selected. Please refer to the table in the electric torque wrench manual for the specification of the combined sleeve.
- Control torque: Users can set the torque. The wrench will stop working automatically after the set torque is reached. Forward and reverse operation can be performed. The repeatability is +5%, and the wrench is stable in work with limited vibration and noise.

TR500

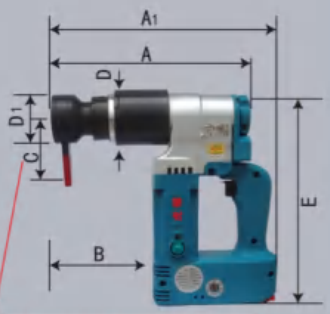




TR800

TR1200

TR2000



See the table on the electric torque wrench manual for the size and specification of the ultra short reaction arm.

Shanghai Tower

TR torque meter

Install it on the wrench during measurement and remove it after measurement

Model	Torque measurement range N.m	Applicable to the model below	
		Electric torque wrench	Initial tightening electric torque wrench
ATR1000	200–1000	TR500 TR800	TRC24 TRC30 TRC30Q

Model	Torque rangeN·m	No-load speed r/min	Net weight (kg)	Power (W)	Matched socket size mm	Grade 10.9 bolts applicable	External dimension						C Standard size
							A	A1	B	D	D1	E	
TR500	200–500	21	4.9	710	34.32.30.27	M20.M16	250	305	126	68	65	296	77
TR800	350–800	16	5.7	710	36.34.32.41	M22.M20.M24	260	315	126	75	65	296	82.5
TR1200	600–1200	10	7.1	710	41.36.46	M24.M22.M27	275	330	142	85	77	310	90
TR2000	1000–2100	5	7.8	710	50.46.55	M30.M27	288	345	158	98	87	315	120

Initial Tightening Electric Torque Wrench TRC Series

Used for initial tightening installation of Grade 10.9 large hexagon bolts M16, M20, M22, M24, M27 and M30 of steel structures. According to the industry standard *JGJ82 Technical Specification for High Strength Bolt Connections of Steel Structures*, the tightening of the large hexagon high strength bolt is divided into initial tightening and final tightening. The purpose of the initial tightening is to make the connected steel plates clinging to each other closely and to improve the consistency of the final tightening force.
Characteristics: High effciency of installation. The wrench can also be used for installation of bolts require high accuracy of torque.

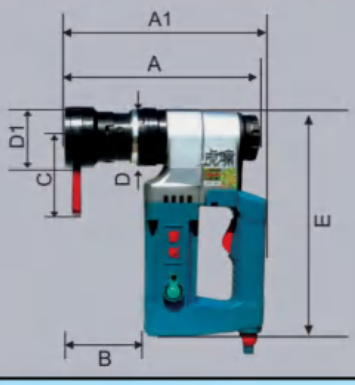
Initial tightening electric torque wrenches for large hexagon high strength bolts

Initial tightening electric torque wrench model	Grade 10.9 large hexagon high strength bolt										
	Applicable scene	Building steel structure						Bridge steel structure				
	Applicable bolt	M16	M20	M22	M24	M27	M30	M20	M22	M24	M27	M30
	Initial tightening torque about (Nm)	120	150	200	250	370	500	270	380	480	700	900
TRC24	• Represents the applicable machine	•	•	•	•			•				
TRC30						•	•		•	•		
TRC30Q											•	•

TRC24

TRC30

TRC30Q



Model	Applicable bolt	Torque range (Nm)	No-load speed (r/min)	Input power (W)	Net weight (kg)	External dimensions (mm)					
						A	A1	B	D	D1	E
TRC24	M16 M20 M22 M24	120–350	110	600	4.7	235	245	95	68	70	260
TRC30	M27 M30	250–600	32	600	5.3	275	290	140	68	81	260
TRC30Q	M27 M30	550–1000	18	600	6	280	335	145	75	81	300

Socket Selection

Model	Applicable bolt	Reaction Arm length C (TR series: TR800 combined socket, TRC series combined socket)											
TRC24	M16 M20 M22 M24	M16 (27 socket)			M20 (34 socket)			M22 (36 socket)			M24 (41 socket)		
		C1	C2	C3	C1	C2	C3	C1	C2	C3	C1	C2	C3
		64*	54	45	78*	66	56	82.5*	73	61	90*	77	65
TRC30	M27 M30 M24	M27 (46 socket)			M30 (50 socket)								
		C1	C2	C3	C1	C2	C3						
		105*	90	75	120*	100	83						
TRC30Q	M27 M30	M27 (46 socket)			M30 (50 socket)								
		C1	C2	C3	C1	C2	C3						
		105*	90	75	120*	100	83						

Note
1. Determine the reaction arm length C according to the pitch A.
2. "*" marks the delivery standard specification.
3. See the combined socket specification in the electric torque wrench manual for the specific selection.

Initial tightening Shear Wrench HC Series

Initial tightening shear wrench HC series (Used for initial tightening installation of Grade 10.9 shear high strength bolts M16, M20, M22, M24, M27 and M30 of steel structures) According to the industry standard JGJ82 Technical Specification for High Strength Bolt Connections of Steel Structures, the tightening of the shear high strength bolt connections is divided into initial tightening and final tightening. The purpose of the initial tightening is to make the connected steel plates clinging to each other closely and improve the consistency of the final tightening force. Tool characteristics: High effciency of installation.

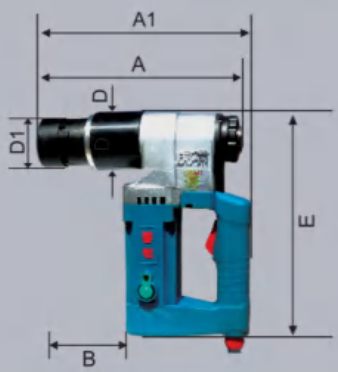
Initial tightening shear wrenches for shear high strength bolts

Initial tightening shear wrench	Grade 10.9 shear high strength bolt										
	Applicable scene	Building steel structure						Bridge steel structure				
	Applicable bolt	M16	M20	M22	M24	M27	M30	M20	M22	M24	M27	M30
	Initial tightening torque range (N.m)	120	150	200	250	370	500	270	380	480	700	900
HC-24A	• Represents the applicable machine	•	•	•	•			•				
HC-30A						•	•	•	•	•		
HC30Q											•	•

HC-24A

HC-30A

HC-30Q



Model	Applicable bolt	Torque range (N.m)	No-load speed (r/min)	Input power (W)	Net weight (kg)	Outline dimension					
						A	A1	B	D	D1	E
HC-24A	M16 M20 M22 M24	120–350	110	600	4.7	215	230	80	68	59	260
HC-30A	M27 M30	250–600	32	600	5.3	245	255	105	58	64	260
HC30Q	M27 M30	550–1000	18	600	6	250	295	110	75	64	290

China Pavilion of the Shanghai World Expo

Shanghai Tower, the tallest building of China

FAST project

Shear Wrench

(Used for Installation of Grade 10.9 Shear High Strength Bolts M16, M20, M22, M24, M27 and M30 of Steel Structures)

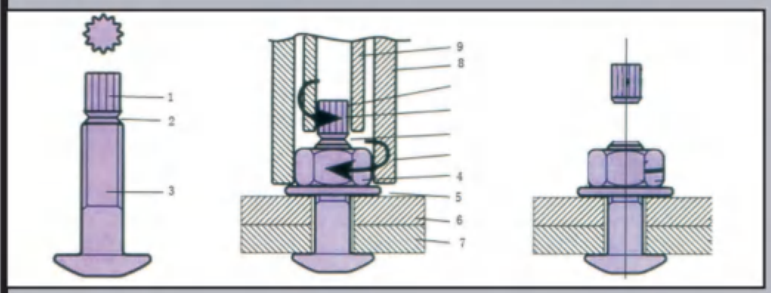
Characteristics and applications: The shear wrench is a necessary tool for tightening of the shear bolts to ensure high axial tension and torque accuracy for the bolt and can complete fastening by shearing the tail. It is simple and convenient to operate.
It is widely used in construction of large building steel structures and bridges.

Before Operation

During Operation

After Operation

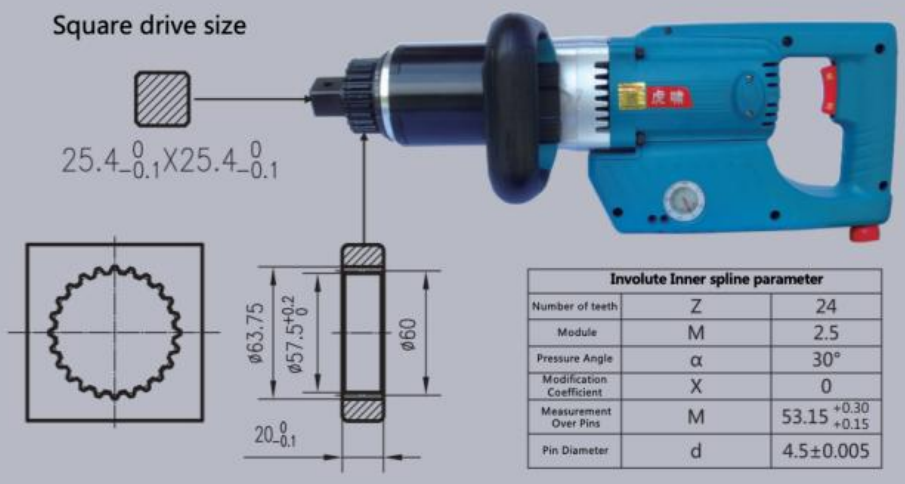
National Convention and Exhibition Center (Shanghai)



1. Bolt tail
2. Groove
3. Thread
4. Nut
5. Washer
6. Clamped part
7. Clamped part
8. Outer sleeve
9. Inner sleeve

Model	Applied to Grade 10.9 bolt	Input power (W)	Maximum torque N.M	No-load speed	External dimensions					Net weight (kg)
					A	B	C	D	E	
HS22	M22 M20 M16	650	720	22	235	105	68	58	250	4.3
H22	M22 M20 M16 M24	650	805	18	250	120	75	58	250	4.9
HS24	M24 M22 M20 M16	710	900	15	255	125	77	58	252	5.3
H24	M24 M22 M20 M16	1200	1300	19	300	135	85	68	250	7.2
H30	M30 M27 M24	650	2000	5	275	130	98	85	260	7.3

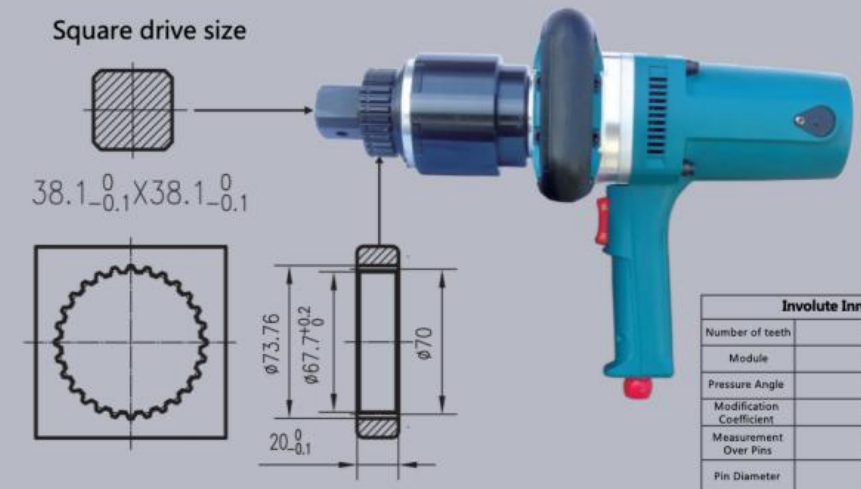
Wind Power Turning Wrench



Involute Inner spline parameter		
Number of teeth	Z	24
Module	M	2.5
Pressure Angle	α	30°
Modification Coefficient	X	0
Measurement Over Pins	M	53.15 +0.30 +0.15
Pin Diameter	d	4.5±0.005

Model: TC2000A
Maximum torque: 2000N.m
Maximum power: 1800W
No-load speed: 10r/min

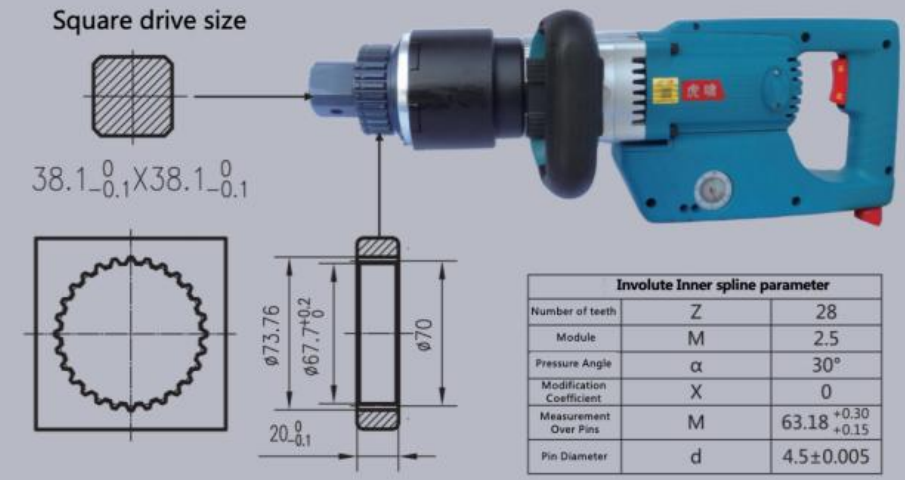
Size and parameter of matched wrench fixing plate inner spline



Involute Inner spline parameter		
Number of teeth	Z	28
Module	M	2.5
Pressure Angle	α	30°
Modification Coefficient	X	0
Measurement Over Pins	M	63.18 +0.30 +0.15
Pin Diameter	d	4.5±0.005

Model: TC3000A
Maximum torque: 3000N.m
Maximum power: 3800W
No-load speed: 7r/min

Size and parameter of matched wrench fixing plate inner spline



Involute Inner spline parameter		
Number of teeth	Z	28
Module	M	2.5
Pressure Angle	α	30°
Modification Coefficient	X	0
Measurement Over Pins	M	63.18 +0.30 +0.15
Pin Diameter	d	4.5±0.005

Model: TC4000A
Maximum torque: 4000N.m
Maximum power: 4000W
No-load speed 7r/min

Size and parameter of matched wrench fixing plate inner spline

虎啸®

Cordless Shear Wrench
Shear Wrench and Electric Torque Wrench

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