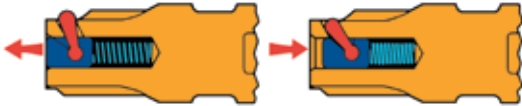


Cleco®

Telescopic Impact Wrenches



Positive Lock Socket Retainer

With the positive lock socket retainer, sockets snap on... and stay on until released. Offered on spline drives, the retainer can be serviced without disassembling the tool.

Exclusive through-bolt construction reduces replacement costs

Steel front end/motor housing/handle are clamped together by four high-strength steel bolts. This exclusive feature provides better tool performance, eliminates stripped threads and loose inserts in motor housing.



Positive oil-foam lubrication system reduces major cause of impact wrench maintenance.

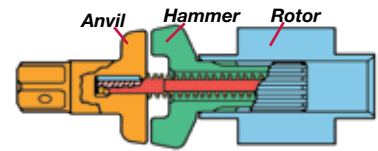
Cleco impact wrenches feature a unique oil-foam bath that provides positive lubrication for the hammer, anvil and other working parts.



The system is designed so that if the impact mechanism runs low on 30 wt. oil, the tool will stop running, thus eliminating one of the major causes of impact wrench failure ... lack of lubrication. By simply refilling the oil reservoir, the tool can be returned to service. Other impact wrenches soon throw off grease; run dry causing extra wear that shortens tool life and increases maintenance cost.

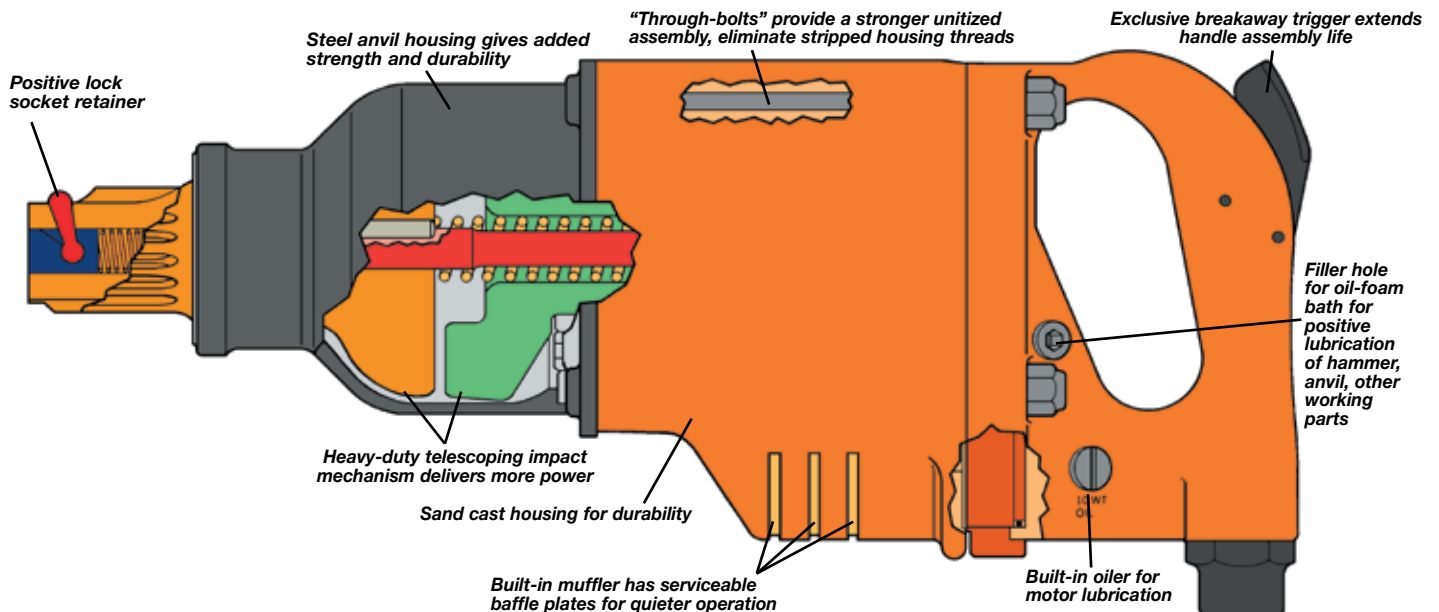
Proven heavy-duty telescopic impact mechanism adds power...cuts weight...reduces shock to the operator.

The smooth-hitting Cleco telescopic impact mechanism has only three major parts - hammer, anvil and rotor... providing more power directly to the fastener. The hammer is splined to the inside of the motor, which then impacts directly on the anvil, delivering more power per blow.



Other important features include:

- Comfortable grip handle
- Outside, inside triggers and pistol grip models
- Multiposition dead handle, and spade type "D" handle available
- Throttle can be feathered for speed control
- Simple face-type reversing valve simplifies maintenance
- Forged hammer and anvil for greater durability
- Rotor bearings and steel motor end plates fit either end of motor, reducing spare parts inventory and repair time.

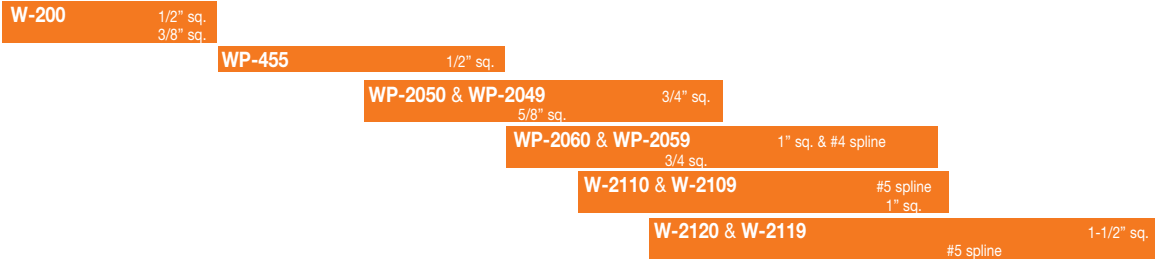


Bolt Selection Chart

The Impact Wrench Bolt Selection Chart will assist you in selecting impact wrenches for specific applications. Torque and tension figures are based on 70% of the proof load of a given size and grade UNC bolt. Torque values are based on non-lubricated (dry) conditions. Bolt grades and sizes are those which are the most commonly secured with impact wrenches.

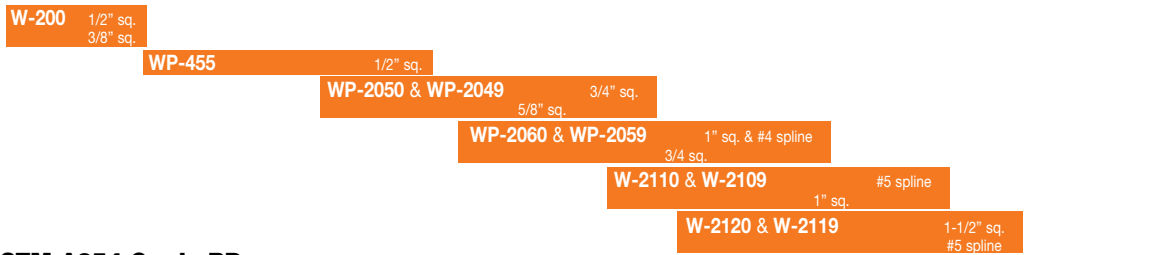
SAE Grade 1

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"
Torque	Ft.-lb.	3	6	11	18	28	43	55	97	155	230	340	480	660	860	-	-
	Nm	4.1	8.1	15	24	38	58	75	132	210	312	460	650	900	1,170	-	-
Tension	lb.	730	1,210	1,800	2,460	3,280	4,200	5,200	7,000	10,000	14,000	18,200	23,000	28,000	34,600	-	-
	kN	3.24	5.38	8.0	10.9	14.6	18.7	23.1	31.1	47.1	62.3	81	102	126	154	-	-



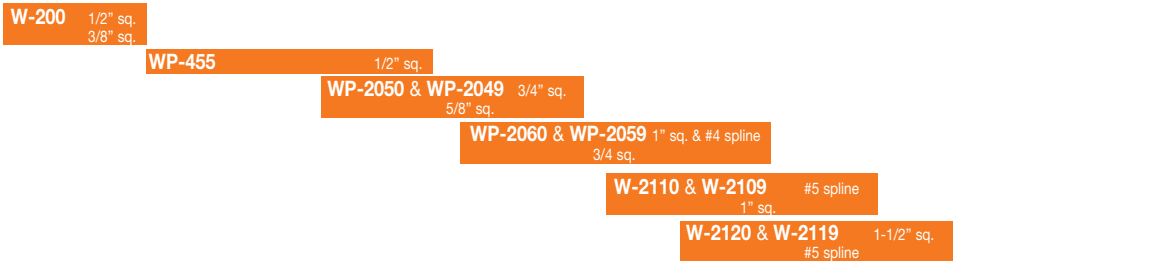
SAE Grade 5

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"
Torque	Ft.-lb.	8	16	28	46	70	110	140	250	405	600	770	1,080	1,470	1,950	-	-
	Nm	10.8	21.7	38	62	95	149	190	340	550	810	1,040	1,460	1,930	2,640	-	-
Tension	lb.	1,900	3,100	4,600	6,350	8,450	10,900	13,500	20,000	27,400	36,000	41,000	52,000	64,000	77,000	-	-
	kN	8.4	13.8	20.4	28.2	37.6	48.5	60	89	122	160	182	231	285	342	-	-



SAE Grade 8 / ASTM-A354 Grade BD

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"
Torque	Ft.-lb.	11	23	40	65	99	159	198	350	566	848	1,245	1,750	2,375	3,135	-	-
	Nm	14.9	31.2	54.2	88	134	216	268	475	767	1,150	1,690	2,370	3,220	4,250	-	-
Tension	lb.	2,740	4,400	6,510	8,930	11,920	15,290	18,980	28,050	38,800	50,900	66,360	84,000	103,570	125,330	-	-
	kN	12.2	19.6	28.9	39.7	53	68	84.4	125	172	226	295	374	461	557	-	-



ASTM A325*

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"
Torque	Ft.-lb.	1						200	355	570	850	1,060	1,495	1,960	2,600	-	-
	Nm							271	481	773	1,150	1,440	2,030	2,660	3,530	-	-
Tension	lb.							10,000	28,000	39,000	51,000	56,000	71,000	85,000	103,000	-	-
	kN							44.5	124	173	227	249	316	378	458	-	-



ASTM A490*

Bolt Diameter		1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"	7/8"	1"	1-1/8"	1-1/4"	1-3/8"	1-1/2"	1-5/8"	1-3/4"
Torque	Ft.-lb.	1						250	435	715	1,070	1,580	2,125	2,780	3,700	-	-
	Nm							339	590	970	1,451	2,125	2,882	3,770	5,020	-	-
Tension	lb.							24,000	35,000	49,000	64,000	80,000	102,000	121,000	148,000	-	-
	kN							107	156	218	285	356	454	538	658	-	-



*Note: ASTM-325 and ASTM A490 bolts are used on structural steel applications. Torque and tension values are based on running the nut beyond the proof load of the bolt by the turn-of-the-nut method. For detailed information, consult the bolt manufacturer.

Impact Wrenches

Inline, Pistol Grip & Spade Handle

Cleco®

WL & WP Series

Torque Range:	Bolt Size:
20 - 2450 Nm	M10 - M30
15 - 1800 Ft. Lbs	7/16" - 1 1/2"

- Lever and trigger start
- Reverse or forward bias
- 6" extended and spline drives available



WT Series Spade Handle

Torque Range:	Bolt Size:
1000 - 4000 Nm	M30 - M36
750 - 3000 Ft. Lbs	1 3/8" - 1 1/2"

- Inside or outside lever
- Positive lock socket retainer (spline drive)
- Multiposition dead handle
- Oil foam bath
- Reverse or forward bias

