

TRADITIONAL WRENCH CONTENTS



Dual flat drive technology on box end to maximize contact on fasteners.

TRADITIONAL

MECHANIC

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WARNING:

Always wear ANSI approved safety goggles when working with wrenches and equipment. Do not use the wrenches as striking tools. Never work on live electrical circuits.



TRADITIONAL

MECHANIC

**COLORFUL
PLATING SURFACE
COLOR ELECTRO-
DEPOSITION FINISH**



The color on the wrench may be scraped off after the wrench is used for a period of time, which is normal and inevitable. The wrench will still be protected with three layers of nickel to prevent from corrosion.

OPTIONAL FEATURE OF TRADITIONAL WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.

OPTIONAL BOX END



Spline Box End

6PT Box End

12PT Box End

OPTIONAL PANEL



Twist Panel

Flat Panel

OPTIONAL TYPING



Convex Font Typing

Concave Font Typing

Hollow Font Typing

Lined Font Typing

Black Laser Marking

Laser Marking

OPTIONAL SURFACE

- Mirror Finish
- Matt Finish
- Micro Satin Finish

OPTIONAL OPEN END



Metric & Inch Open End

Speedy Open End

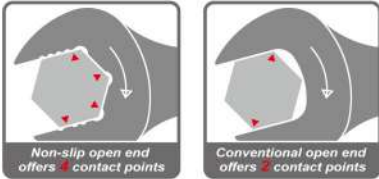
Non-slip Open End

Regular Open End



PR-TYPE COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.



15° offset box end for knuckle clearance.



PR-TYPE JUMBO COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I.
STANDARDS

12 POINT

PR

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin / Black Oxide Finish
Feature | Flat Panel
15° Offset Box End

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1-5/16	1080	470	33	1080	470
1-3/8	1080	470	34	1080	470
1-7/16	1300	510	36	1300	510
1-1/2	1300	510	38	1300	510
1-9/16	1620	550	40	1620	550
1-5/8	1620	550	41	1620	550
1-11/16	1620	550	42	1620	550
1-3/4	1810	612	43	1620	550
1-13/16	1810	612	45	1810	612
1-7/8	2500	650	46	1810	612
2"	2500	650	48	2500	650
2-1/16	4370	700	50	2500	650
2-1/8	4370	700	55	4370	700
2-3/16	4370	700	60	5640	760
2-1/4	4370	700	65	5640	760
2-5/16	4370	700			
2-3/8	5640	760			
2-7/16	5640	760			
2-1/2	5640	760			
2-9/16	5640	760			

PR-TYPE COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I.
STANDARDS

12 POINT

6 POINT

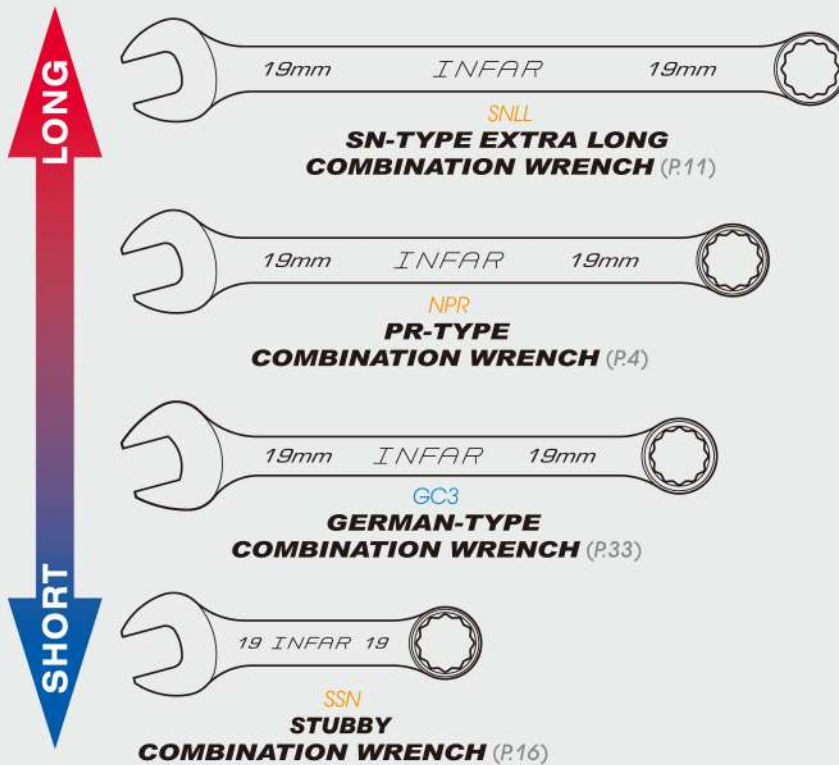
NPR

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin / Black Oxide Finish
Feature | Flat Panel
15° Offset Box End
12 Point / 6 Point Box
Regular / Non-slip Open End

Size (inch)	Wt. (g)	L (mm)	Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4	21	124	1"	485	339	5.5	21	124	19	230	250
9/32	21	129	1-1/16	635	360	6	21	124	20	246	260
5/16	27	136	1-1/8	705	394	7	21	129	21	280	271
3/8	41	149	1-3/16	740	394	8	28	136	22	340	295
7/16	57	168	1-1/4	880	427	9	43	149	23	340	295
1/2	79	180				10	54	161	24	410	317
9/16	101	193				11	58	168	25	485	339
5/8	136	207				12	71	174	26	485	339
11/16	166	228				13	79	180	27	640	360
3/4	230	250				14	104	193	28	740	394
25/32	246	260				15	124	200	29	740	394
13/16	280	271				16	135	207	30	740	394
7/8	340	295				17	169	228	32	880	427
15/16	420	317				18	207	239			

LENGTH WISE | FLAT PANEL COMBINATION WRENCH

• Choose appropriate length when using in different space.



	SNLL	NPR	GC3	SSN
Size (inch)	L (mm)	L (mm)	L (mm)	L (mm)
1/4	130 (+4.8%)	124	100 (-19.4%)	84 (-32.3%)
9/32		129	110 (-14.7%)	
5/16	148 (+8.8%)	136	120 (-11.8%)	91 (-33.3%)
11/32		130		
3/8	167 (+12.1%)	149	140 (-13.0%)	96 (-35.6%)
7/16	186 (+10.7%)	168	150 (-10.7%)	100 (-40.5%)
1/2	207 (+15.0%)	180	170 (-5.5%)	108 (-40.0%)
9/16	223 (+15.6%)	193	180 (-6.7%)	114 (-40.9%)
5/8	243 (+17.4%)	207	200 (-3.4%)	122 (-41.1%)
11/16	261 (+14.5%)	228	210 (-7.9%)	128 (-43.9%)
3/4	280 (+12.0%)	250	230 (-8.0%)	139 (-44.4%)
25/32		260	240 (-7.7%)	
13/16	301 (+11.1%)	271	250 (-7.7%)	146 (-46.1%)
7/8	318 (+8.0%)	295	260 (-11.9%)	156 (-47.1%)
15/16	338 (+6.6%)	317	280 (-11.7%)	165 (-47.9%)
1"	355 (+4.7%)	339	295 (-13.0%)	175 (-48.4%)
1-1/16	375 (+4.2%)	360	310 (-13.9%)	
1-1/8	414 (+5.1%)	394	340 (-13.7%)	
1-3/16	414 (+5.1%)	394		
1-1/4	435 (+1.9%)	427	360 (-15.7%)	

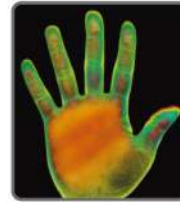
	SNLL	NPR	GC3	SSN
Size (mm)	L (mm)	L (mm)	L (mm)	L (mm)
5.5		124		
6	130 (+4.8%)	124	100 (-19.4%)	84 (-32.3%)
7	136 (+5.4%)	129	110 (-14.7%)	
8	148 (+8.8%)	136	120 (-11.8%)	91 (-33.3%)
9	167 (+12.1%)	149	130 (-12.8%)	96 (-35.6%)
10	172 (+6.8%)	161	140 (-13.0%)	96 (-40.4%)
11	186 (+10.7%)	168	150 (-10.7%)	100 (-40.5%)
12	197 (+13.2%)	174	160 (-8.0%)	104 (-40.2%)
13	207 (+15.0%)	180	170 (-5.5%)	108 (-40.0%)
14	223 (+15.5%)	193	180 (-6.7%)	114 (-40.9%)
15	233 (+16.5%)	200	190 (-5.0%)	118 (-41.0%)
16	243 (+17.4%)	207	200 (-3.4%)	122 (-41.1%)
17	261 (+14.5%)	228	210 (-7.9%)	128 (-43.9%)
18	270 (+13.0%)	239	220 (-7.9%)	132 (-44.8%)
19	280 (+12.0%)	250	230 (-8.0%)	139 (-44.4%)
20	290 (+11.5%)	260	240 (-7.7%)	146 (-43.8%)
21	301 (+11.1%)	271	250 (-7.7%)	146 (-46.1%)
22	318 (+8.0%)	295	260 (-11.9%)	156 (-47.1%)
23	318 (+8.0%)	295	260 (-11.9%)	156 (-47.1%)
24	338 (+6.6%)	317	280 (-11.7%)	165 (-47.9%)
25	355 (+4.7%)	339	295 (-13.0%)	175 (-48.4%)
26	355 (+4.7%)	339	295 (-13.0%)	175 (-48.4%)
27	375 (+4.2%)	360	310 (-13.9%)	
28	375 (+4.8%)	394	340 (-13.7%)	
29	414 (+5.1%)	394	340 (-13.7%)	
30	414 (+5.1%)	394	340 (-13.7%)	
32	435 (+1.9%)	427	360 (-15.7%)	

FLAT PANEL

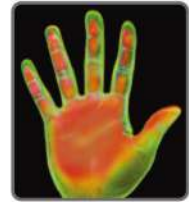
MECHANIC

PR-TYPE ERGONOMIC COMBINATION WRENCH

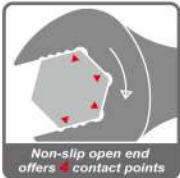
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Whole piece wrench is forged along with patented **Ergonomic Handle** to reduce user fatigue.
- Superior life-time test.



Heat spectrum diagram after using ergonomic wrench for two hours.



Heat spectrum diagram after using regular wrench for two hours.



Non-slip open end offers more contact points



Conventional open end offers fewer contact points



15° offset box end for knuckle clearance.

Specially designed open end gets better nut friction and minimizes slipperiness.



PR-TYPE ERGONOMIC COMBINATION WRENCH

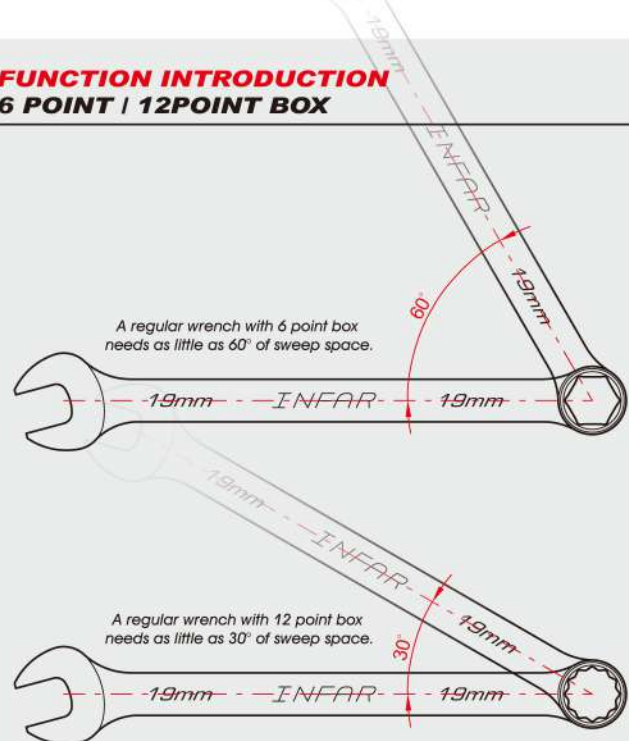


NPRTP

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Colorful TPR Ergonomic Handle
 15° Offset Box End
 12 Point / 6 Point / Spline Box
 Regular / Non-slip Open End

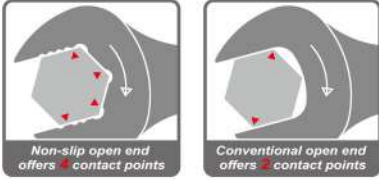
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4	24	124	6	24	124
5/16	32	136	7	26	129
11/32	39	143	8	32	136
3/8	44	149	9	44	149
7/16	64	168	10	64	161
1/2	89	180	11	69	168
9/16	121	193	12	85	174
5/8	153	207	13	89	180
11/16	185	228	14	125	193
3/4	241	250	15	138	200
			16	149	207
			17	185	228
			18	214	239
			19	242	250

FUNCTION INTRODUCTION 6 POINT | 12POINT BOX



PR-TYPE SPLINE BOX END WRENCH

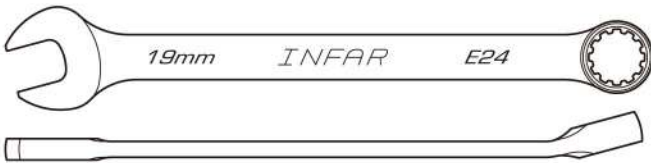
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Spline box** works on all fastener types.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.



15° offset box end for knuckle clearance.



PR-TYPE SPLINE BOX END WRENCH



NPRSP

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin / Black Oxide Finish
 Feature | Flat Panel
 15° Offset Box End
 Spline Box
 Regular / Non-slip Open End

Size (inch/star)	Wt. (g)	L (mm)	Size (mm/star)	Wt. (g)	L (mm)
5/16 E10	27	136	8 E10	28	136
3/8 E12	41	149	9 ×	43	149
7/16 E14	57	168	10 E12	54	161
1/2 E16	79	180	11 E14	58	168
9/16 E18	101	193	12 ×	71	174
5/8 E20	136	207	13 E16	79	180
11/16 E22	166	228	14 E18	104	193
3/4 E24	230	250	15 ×	124	200
13/16 ×	280	271	16 E20	135	207
7/8 E28	340	295	17 E22	169	228
			18 ×	207	239
			19 E24	230	250
			21 ×	280	271
			22 E28	340	295

COMPARATIVE TABLE AVAILABLE SIZES OF DIFFERENT FASTENERS

- Spline box works on all fastener types.



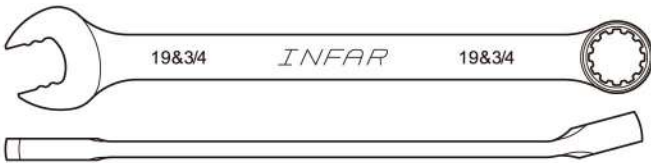
Size (mm/inch)	Size (mm/inch)	Size (mm)	Size (star)
8 5/16	7 9/32	8	E10
9 11/32	8 5/16	9	×
10 3/8	×	10 11/32	E12
11 7/16	9 3/8	11	E14
12 15/32	10 13/32	12	×
13 1/2	11 7/16	13	E16
14 9/16	12 15/32	14	E18
15 19/32	×	15 1/2	×
16 5/8	13 17/32	16	E20
17 11/16	14 9/16	17	E22
18 ×	15 19/32	18	×
19 3/4	16 5/8	19	E24
21 13/16	18 11/16	21	×
22 7/8	19 3/4	22	E28

PR-TYPE METRIC & INCH COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- One wrench fits **Metric & Inch Sizes** - double the value of the wrench.
- Superior life-time test.



15° offset box end for knuckle clearance.



PR-TYPE METRIC & INCH COMBINATION WRENCH



NPRSPSM

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Box End
 Spline Box
 Metric & Inch Open End

Size (inch/mm)	Wt. (g)	L (mm)
8	31	136
10	55	161
11	57	168
13	83	180
14	108	193
16	140	207
17	187	228
19	230	250
21	280	271
22	340	295



Each open end fits Metric & Inch Sizes.

COMPARATIVE TABLE

AVAILABLE SIZES OF DIFFERENT FASTENERS

- Spline box works on all fastener types.



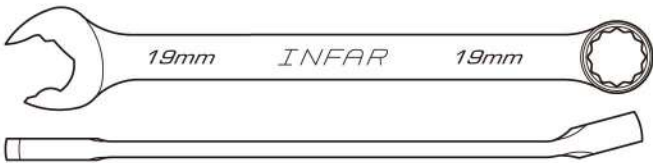
Size (mm/inch)	Size (mm/inch)	Size (mm)	Size (star)		
8	5/16	7	9/32	8	E10
10	3/8	×	11/32	10	E12
11	7/16	9	3/8	11	E14
13	1/2	11	7/16	13	E16
14	9/16	12	15/32	14	E18
16	5/8	13	17/32	16	E20
17	11/16	14	9/16	17	E22
19	3/4	16	5/8	19	E24
21	13/16	18	11/16	21	×
22	7/8	19	3/4	22	E28

PR-TYPE SPEEDY OPEN END WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Speedy open end** allows wrench to travel without removing from fastener.
- Superior life-time test.



15° offset box end for knuckle clearance.

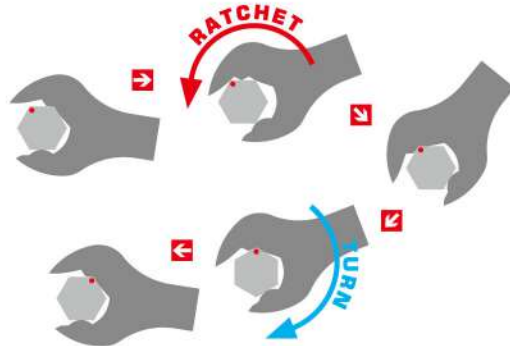


PR-TYPE SPEEDY OPEN END WRENCH



NPRQ2

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Box End
 12 Point / 6 Point / Spline Box
 Speedy Open End



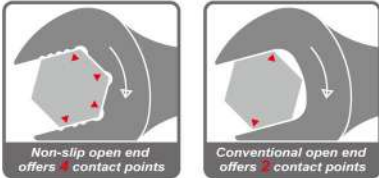
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
5/16	31	136	8	29	136
3/8	42	149	9	41	149
7/16	57	168	10	55	161
1/2	82	180	11	56	168
9/16	108	193	12	78	174
5/8	140	207	13	83	180
11/16	180	228	14	108	193
3/4	230	250	15	120	200
			16	140	207
			17	187	228
			18	196	239
			19	230	250



Speedy open end allows wrench to travel without removing from fastener.

PR-TYPE TWIST COMBINATION WRENCH

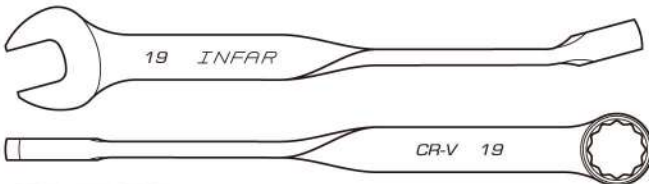
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- When performing the ratchet actions, the grip of twisting wrench allows more contact area of the palm, thus bearing less stress for the user.
- Superior life-time test.



Specially designed open end gets better nuf friction and minimizes slipperiness.



15° offset box end for knuckle clearance.



PR-TYPE TWIST COMBINATION WRENCH

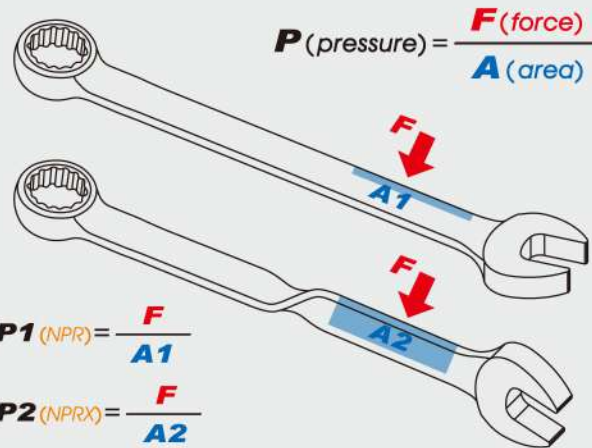


NPRX

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Twisted / Flat Panel
 15° Offset Box End
 12 Point / 6 Point / Spline Box
 Regular / Non-slip Open End

FUNCTION INTRODUCTION TWISTED PANEL

- When performing the ratchet actions, the grip of twisting wrench allows more contact area of the palm, thus bearing less stress for the user.



$$P1 (NPR) = \frac{F}{A1}$$

$$P2 (NPRX) = \frac{F}{A2}$$

$$F = P1 (NPR) \times A1 \quad F = P2 (NPRX) \times A2$$

$$P1 (NPR) \times A1 = P2 (NPRX) \times A2$$

$$A1 < A2 \Rightarrow P1 (NPR) < P2 (NPRX)$$

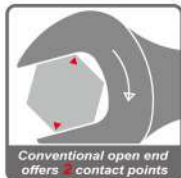
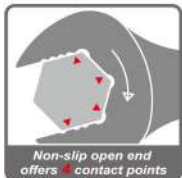
Size (inch)	Wt. (g)	L (mm)
1/4	21	124
9/32	-	129
5/16	27	136
3/8	41	149
7/16	57	168
1/2	79	180
9/16	101	193
5/8	136	207
11/16	166	228
3/4	230	250
25/32	-	260
13/16	280	271
7/8	340	295
15/16	415	317
1"	485	339

Size (mm)	Wt. (g)	L (mm)
6	21	124
7	21	129
8	28	136
9	43	149
10	54	161
11	58	168
12	71	174
13	79	180
14	104	193
15	124	200
16	135	207
17	169	228
18	207	239
19	230	250
20	-	260
21	280	271

Size (mm)	Wt. (g)	L (mm)
22	335	295
23	340	295
24	410	317
25	485	339
26	485	339

SN-TYPE EXTRA LONG COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.



15° offset box end for knuckle clearance.



SN-TYPE EXTRA LONG COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I. EXCEPT FOR
DELICATE NON-CHAMFER
STANDARDS BOX END



SNL

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin Finish
Feature | Flat Panel
15° Offset Box End
12 Point / 6 Point / Spline Box
Regular / Non-slip Open End



Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4	20	130	6	20	130
5/16	33	148	7	24	136
11/32	51	167	8	33	148
3/8	50	167	9	49	167
7/16	71	186	10	56	172
1/2	103	207	11	67	186
9/16	131	223	12	87	197
5/8	160	243	13	98	207
11/16	200	261	14	132	223
3/4	230	280	15	141	233
13/16	315	301	16	159	243
7/8	353	318	17	215	261
15/16	415	338	18	217	270
1"	505	355	19	235	280
1-1/16	591	375	20	288	290
1-1/8	739	414	21	312	301
1-3/16	739	414	22	347	318
1-1/4	873	435	23	349	318
			24	436	338
			25	515	355
			26	527	355
			27	576	375
			28	591	375
			29	727	414
			30	720	414
			32	869	435

FUNCTION INTRODUCTION BOX END WITHOUT CHAMFER

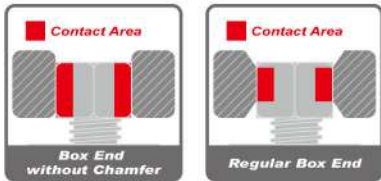
- Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



Box end without chamfer fits all types of corrupted nuts.

SN-TYPE EXTRA LONG SPLINE BOX END WRENCH

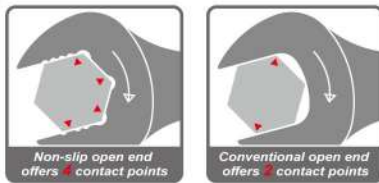
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- Superior life-time test.



Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



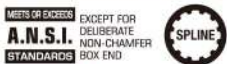
15° offset box end for knuckle clearance.



Specially designed open end gets better nut friction and minimizes slipperiness.



SN-TYPE EXTRA LONG SPLINE BOX END WRENCH



SNSP

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Box End
 Spline Box
 Regular / Non-slip Open End

Size (inch/star)	Wt. (g)	L (mm)	Size (mm/star)	Wt. (g)	L (mm)
5/16 E10	33	148	8 E10	33	148
3/8 E12	50	167	9 ×	49	167
7/16 E14	71	186	10 E12	56	172
1/2 E16	103	207	11 E14	67	186
9/16 E18	131	223	12 ×	87	197
5/8 E20	160	243	13 E16	98	207
11/16 E22	200	261	14 E18	132	223
3/4 E24	230	280	15 ×	141	233
13/16 ×	280	301	16 E20	159	243
7/8 E28	353	318	17 E22	215	261
			18 ×	217	270
			19 E24	235	280
			21 ×	312	301
			22 E28	347	318

COMPARATIVE TABLE AVAILABLE SIZES OF DIFFERENT FASTENERS

- Spline box works on all fastener types.



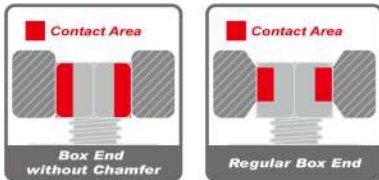
Size (mm/inch)	Size (mm/inch)	Size (mm)	Size (star)		
8	5/16	7	9/32	8	E10
9	11/32	8	5/16	9	×
10	3/8	×	11/32	10	E12
11	7/16	9	3/8	11	E14
12	15/32	10	13/32	12	×
13	1/2	11	7/16	13	E16
14	9/16	12	15/32	14	E18
15	19/32	×	1/2	15	×
16	5/8	13	17/32	16	E20
17	11/16	14	9/16	17	E22
18	×	15	19/32	18	×
19	3/4	16	5/8	19	E24
21	13/16	18	11/16	21	×
22	7/8	19	3/4	22	E28

SN-TYPE EXTRA LONG METRIC & INCH COMBINATION WRENCH

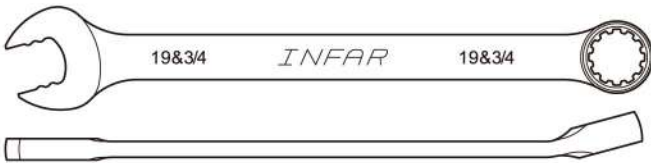
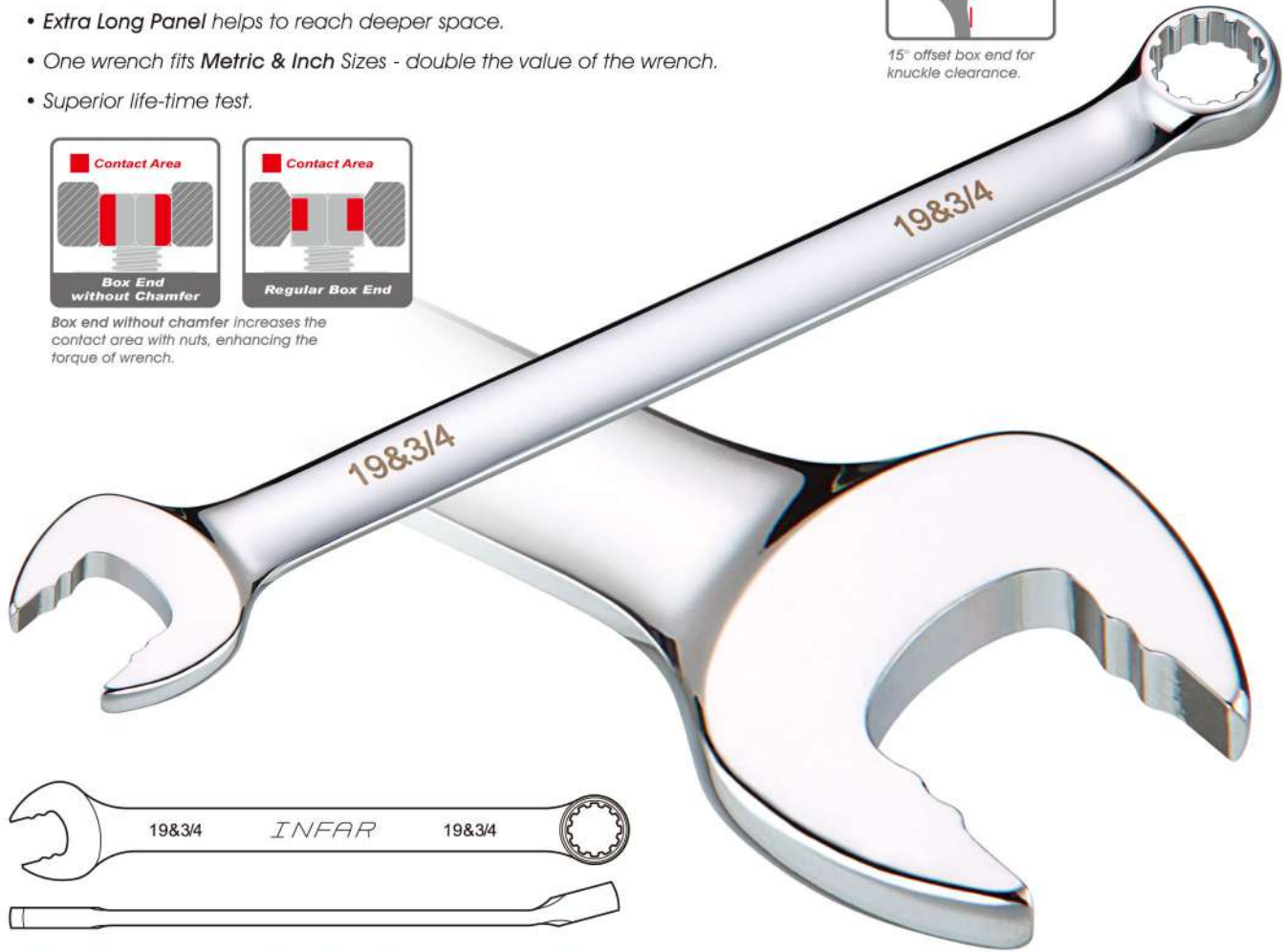
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- One wrench fits **Metric & Inch Sizes** - double the value of the wrench.
- Superior life-time test.



15° offset box end for knuckle clearance.



Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



SN-TYPE EXTRA LONG METRIC & INCH COMBINATION WRENCH



SNSPSM

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Box End
 Spline Box
 Metric & Inch Open End

Size (inch/mm)	Wt. (g)	L (mm)	
8	5/16	33	148
10	3/8	56	172
11	7/16	71	186
13	1/2	103	207
14	9/16	131	223
16	5/8	160	243
17	11/16	200	261
19	3/4	230	280
21	13/16	315	301
22	7/8	353	318



Each open end fits Metric & Inch Sizes.

COMPARATIVE TABLE

AVAILABLE SIZES OF DIFFERENT FASTENERS

- Spline box works on all fastener types.



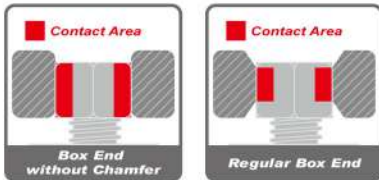
Size (mm/inch)	Size (mm/inch)	Size (mm)	Size (star)		
8	5/16	7	9/32	8	E10
10	3/8	×	11/32	10	E12
11	7/16	9	3/8	11	E14
13	1/2	11	7/16	13	E16
14	9/16	12	15/32	14	E18
16	5/8	13	17/32	16	E20
17	11/16	14	9/16	17	E22
19	3/4	16	5/8	19	E24
21	13/16	18	11/16	21	×
22	7/8	19	3/4	22	E28

SN-TYPE EXTRA LONG SPEEDY OPEN END WRENCH

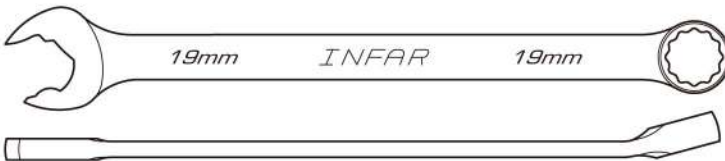
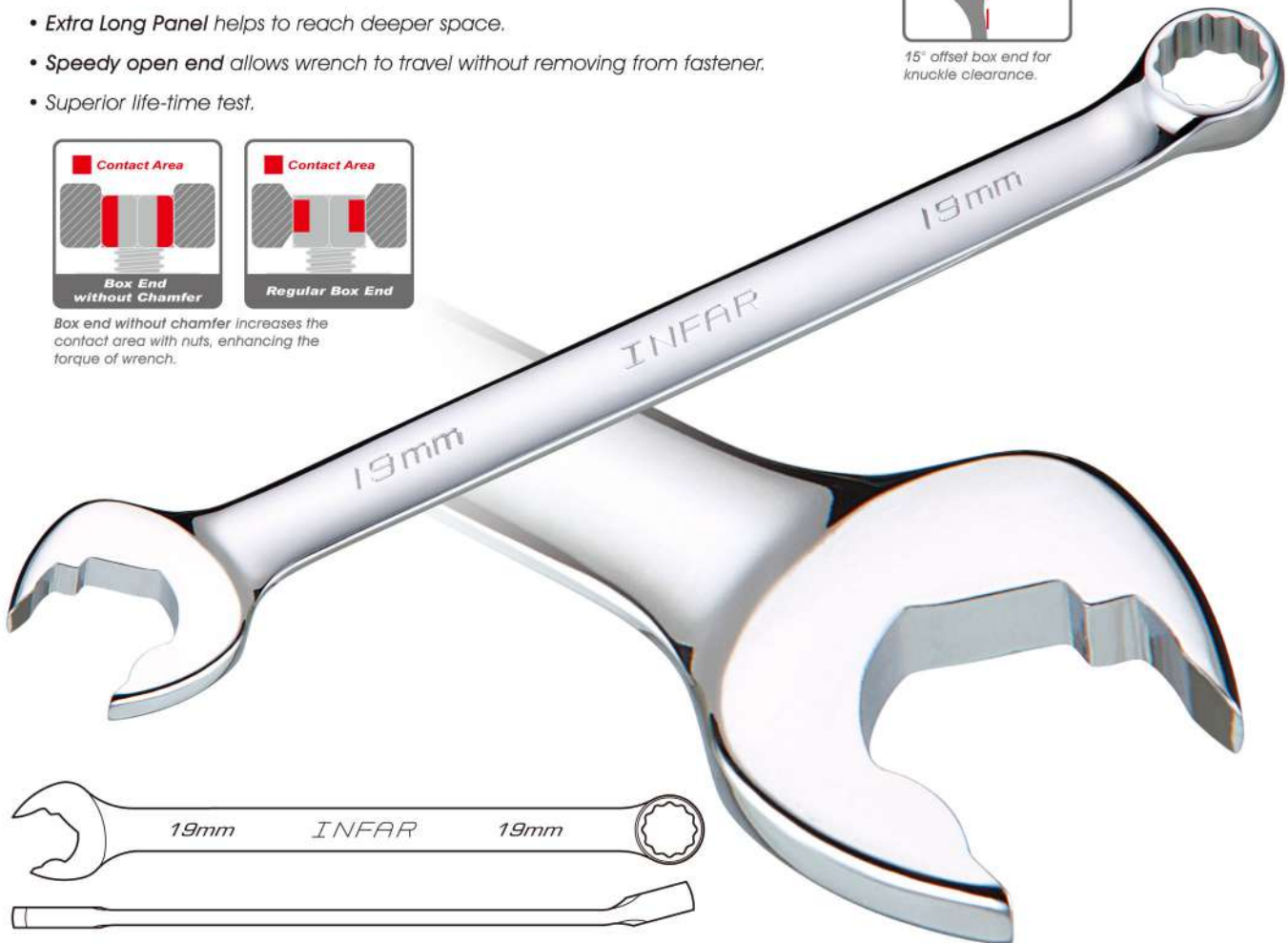
- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- **Speedy open end** allows wrench to travel without removing from fastener.
- Superior life-time test.



15° offset box end for knuckle clearance.



Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



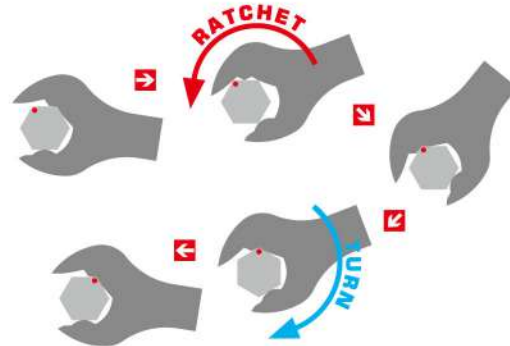
SN-TYPE EXTRA LONG SPEEDY OPEN END WRENCH



SNQ2

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Box End
 12 Point / 6 Point / Spline Box
 Speedy Open End

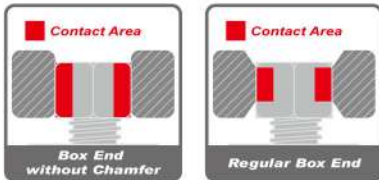
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
5/16	33	148	8	33	148
3/8	50	167	9	49	167
7/16	71	186	10	56	172
1/2	103	207	11	67	186
9/16	131	223	12	87	197
5/8	160	243	13	98	207
11/16	200	261	14	132	223
3/4	230	280	15	141	233
			16	159	243
			17	215	261
			18	217	270
			19	235	280



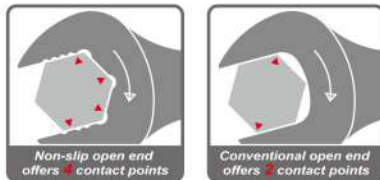
Speedy open end allows wrench to travel without removing from fastener.

SN-TYPE EXTRA LONG TWIST COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- When performing the ratchet actions, the grip of twisting wrench allows more contact area of the palm, thus bearing less stress for the user.
- Superior life-time test.



Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



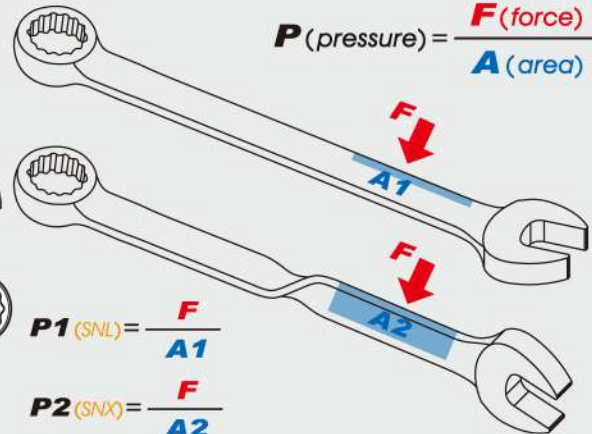
Specially designed open end gets better nut friction and minimizes slipperiness.



FUNCTION INTRODUCTION TWISTED PANEL

- When performing the ratchet actions, the grip of twisting wrench allows more contact area of the palm, thus bearing less stress for the user.

$$P \text{ (pressure)} = \frac{F \text{ (force)}}{A \text{ (area)}}$$



$$P1 \text{ (SNL)} = \frac{F}{A1}$$

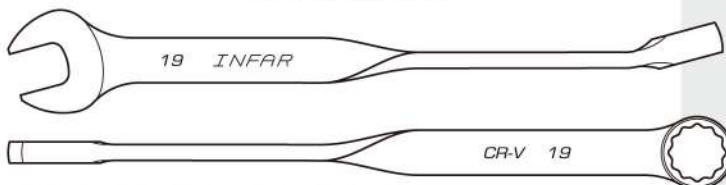
$$P2 \text{ (SNX)} = \frac{F}{A2}$$

$$F = P1 \text{ (SNL)} \times A1$$

$$F = P2 \text{ (SNX)} \times A2$$

$$P1 \text{ (SNL)} \times A1 = P2 \text{ (SNX)} \times A2$$

$$A1 < A2 \Rightarrow P1 \text{ (SNL)} > P2 \text{ (SNX)}$$



SN-TYPE EXTRA LONG TWIST COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I. EXCEPT FOR
DELIBERATE
NON-CHAMFER
BOX END
STANDARDS



SNX

- Material | Chrome Vanadium Steel
- Surface | Mirror / Matt / Micro Satin Finish
- Feature | Twisted / Flat Panel
- 15° Offset Box End
- 12 Point / 6 Point / Spline Box
- Regular / Non-slip Open End

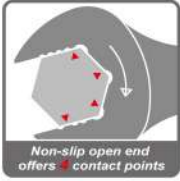
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4	20	130	6	20	130	22	347	318
5/16	33	148	7	24	136	23	349	318
11/32	51	167	8	33	148	24	436	338
3/8	50	167	9	49	167	25	515	355
7/16	71	186	10	56	172	26	527	355
1/2	103	207	11	67	186			
9/16	131	223	12	87	197			
5/8	160	243	13	98	207			
11/16	200	261	14	132	223			
3/4	230	280	15	141	233			
13/16	315	301	16	159	243			
7/8	353	318	17	215	261			
15/16	415	338	18	217	270			
1"	505	355	19	235	280			
			20	288	290			
			21	312	301			



15° offset box end for knuckle clearance.

PR-TYPE DOUBLE OPEN WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



Non-slip open end offers **3** contact points



Conventional open end offers **2** contact points

Specially designed open end gets better nut friction and minimizes slipperiness.



PR-TYPE DOUBLE OPEN WRENCH

MEETS OR EXCEEDS
A.N.S.I.
STANDARDS

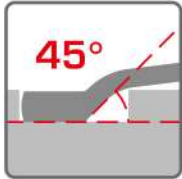
NPRO

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin / Black Oxide Finish
Feature | Flat Panel
Regular / Non-slip Open End

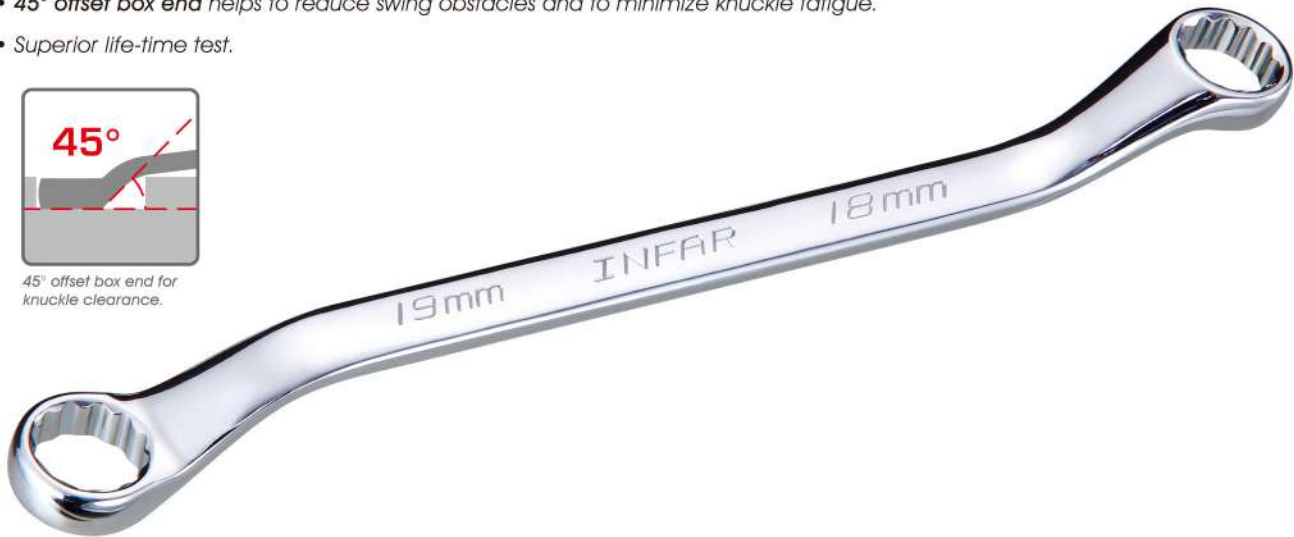
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4x5/16	23	126	6x7	23	124	19x21	-	240
5/16x3/8	-	135	6x8	26	124	20x22	273	255
3/8x7/16	48	146	8x9	35	135	21x23	267	255
7/16x1/2	-	156	8x10	36	135	22x24	-	293
1/2x9/16	81	165	10x11	47	146	24x26	-	293
9/16x5/8	-	185	10x12	52	146	24x27	386	293
19/32x5/8	-	185	11x12	-	156	24x30	-	334
5/8x11/16	135	185	11x13	-	165	25x27	-	334
5/8x3/4	-	210	12x13	81	165	25x28	-	334
11/16x3/4	-	227	12x14	83	165	26x29	-	334
11/16x13/16	-	240	13x15	-	185	27x30	-	368
3/4x13/16	-	240	14x15	107	185	27x32	-	368
13/16x7/8	-	255	14x17	135	185	28x30	-	368
15/16x1"	395	293	15x17	-	185	29x30	-	368
1"x1-1/16	-	334	16x17	140	185	29x32	-	368
1"x1-1/8	-	334	16x18	-	210	30x32	744	368
1-1/16x1-1/8	-	334	17x19	-	228			
1-1/8x1-1/4	-	368	18x19	197	228			
1-3/16x1-1/4	-	368	17x21	-	240			
			18x21	-	240			

PR-TYPE 45° OFFSET DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **45° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



45° offset box end for knuckle clearance.



PR-TYPE 45° OFFSET DOUBLE BOX WRENCH



PRBXV

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin / Black Oxide Finish
 Feature | Flat Panel
 45° Offset Box End
 12 Point / Spline Box

PR-type 45° Offset Double Box Wrench Set

PS Tray + Card + POF

8pc MM 8x10, 10x12, 11x13, 12x14, 14x17, 17x19, 19x21, 22x24mm

7pc MM 6x7, 8x9, 10x12, 11x13, 12x14, 17x19, 19x21mm

6pc MM 8x10, 10x12, 12x14, 14x17, 17x19, 22x24mm

Size (inch)	Wt. (g)	L (mm)
1/4x5/16	50	165
3/8x7/16	61	182
7/16x1/2	71	195
1/2x9/16	98	206
9/16x5/8	127	232
19/32x5/8	127	232
5/8x11/16	163	237
3/4x25/32	235	270
3/4x13/16	290	292
3/4x7/8	285	292
13/16x7/8	285	292
13/16x15/16	395	346
15/16x1"	435	362
1"x1-1/8	-	410
1-1/16x1-1/8	-	410
1-1/16x1-1/4	-	465
1-1/8x1-1/4	-	465
1-3/16x1-1/4	-	465

Size (mm)	Wt. (g)	L (mm)
6x7	50	165
6x8	47	165
8x9	47	170
8x10	47	170
9x11	62	182
10x11	61	182
10x12	71	195
11x13	108	206
12x13	108	206
12x14	108	206
13x14	130	232
13x15	127	232
14x15	127	232
14x17	153	237
15x16	163	237
15x17	163	237
16x17	158	237
16x18	158	237
17x19	265	270
18x19	265	270

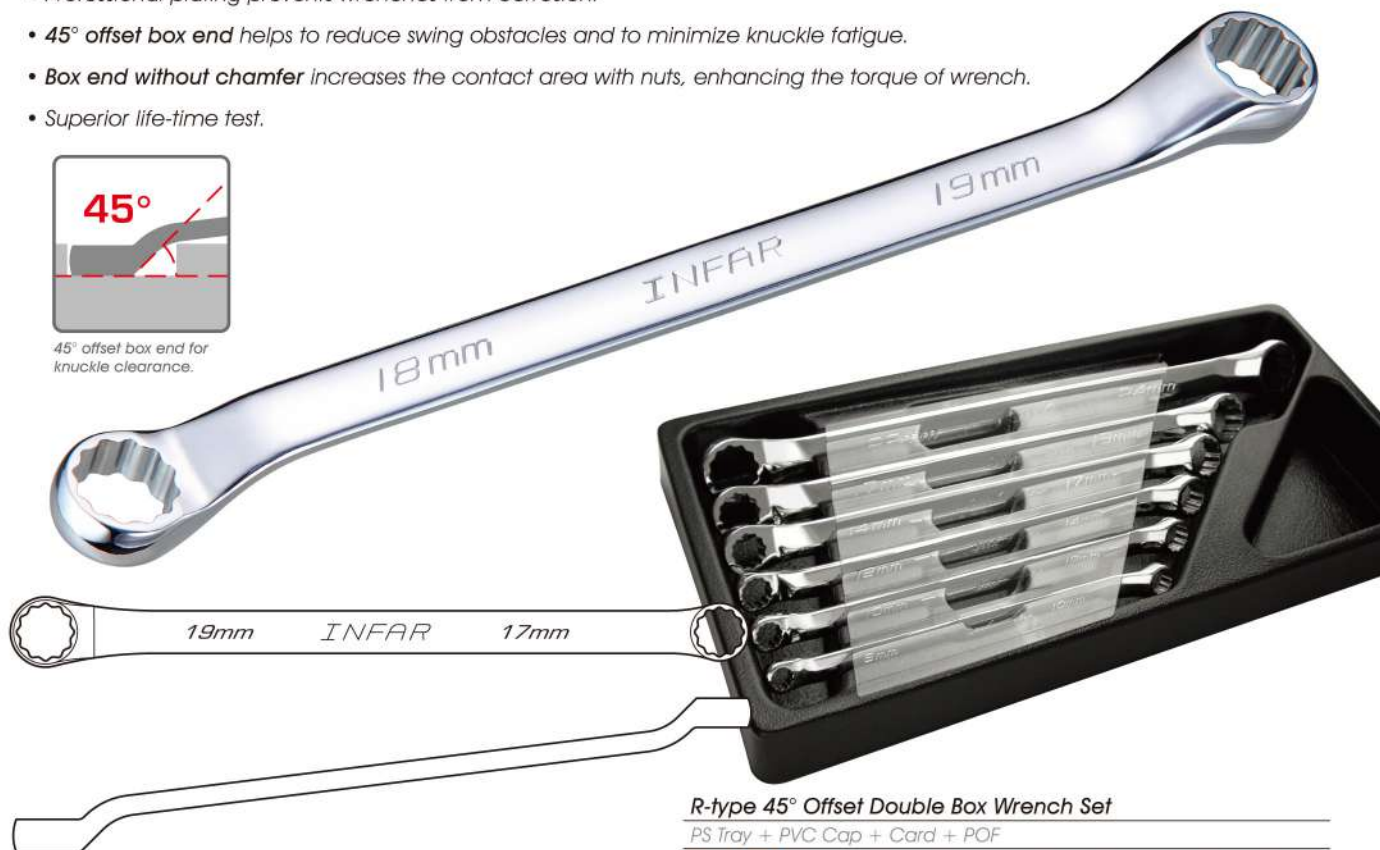
Size (mm)	Wt. (g)	L (mm)
19x21	290	292
19x22	290	292
20x22	285	292
21x23	380	346
22x24	395	346
23x26	435	362
24x26	435	362
24x27	664	410
24x30	-	410
25x28	656	410
26x29	-	410
26x30	-	410
27x30	-	465
27x32	-	465
29x30	-	465
30x32	916	465

R-TYPE 45° OFFSET DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **45° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Box end without chamfer** increases the contact area with nuts, enhancing the torque of wrench.
- Superior life-time test.



45° offset box end for knuckle clearance.



R-TYPE 45° OFFSET DOUBLE BOX WRENCH

MEETS OR EXCEEDS
A.N.S.I. EXCEPT FOR
STANDARDS DELIBERATE
NON-CHAMFER
BOX END



JAPAN EXCLUSIVE RBXV

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin Finish
Feature | Flat Panel
45° Offset Box End without Chamfer
12 Point / Spline Box

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
5/16x3/8	71	185	6x7	72	185
3/8x7/16	103	207	8x9	72	185
7/16x1/2	126	230	8x10	71	185
1/2x9/16	169	249	10x11	95	207
9/16x5/8	195	250	10x12	98	207
5/8x11/16	202	265	11x13	124	230
11/16x3/4	239	285	12x13	132	230
3/4x7/8	355	303	12x14	123	230
7/8x15/16	458	343	13x14	184	249
			13x15	150	249
			14x15	153	249
			14x17	185	250
			15x17	201	265
			16x17	206	265
			16x18	201	265
			17x19	242	285
			18x19	250	285
			19x21	358	303
			19x22	370	303
			20x22	370	303
			21x22	370	303
			22x24	455	343

R-type 45° Offset Double Box Wrench Set

PS Tray + PVC Cap + Card + POF

10pc MM 8x10, 10x12, 11x13, 12x14, 13x15, 14x17, 16x18, 17x19, 19x21, 22x24mm

9pc SAE 5/16"x3/8", 3/8"x7/16", 7/16"x1/2", 1/2"x9/16", 9/16"x5/8", 5/8"x11/16", 11/16"x3/4", 3/4"x7/8", 7/8"x15/16"

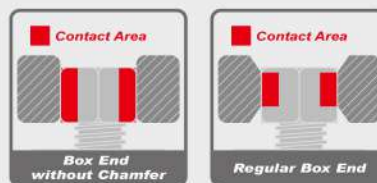
9pc MM 8x10, 10x12, 12x14, 13x15, 14x17, 16x18, 17x19, 19x21, 22x24mm

6pc SAE 5/16"x3/8", 3/8"x7/16", 7/16"x1/2", 1/2"x9/16", 5/8"x11/16", 11/16"x3/4"

6pc MM 8x10, 10x12, 12x14, 14x17, 17x19, 22x24mm

FUNCTION INTRODUCTION BOX END WITHOUT CHAMFER

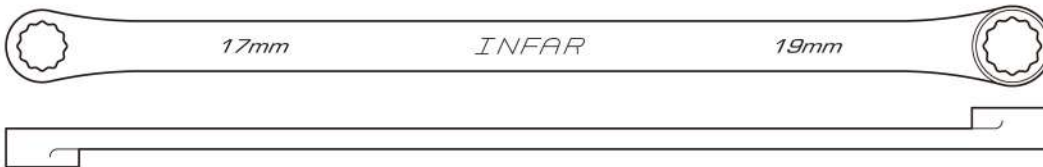
- **Box end without chamfer** increases the contact area with nuts, enhancing the torque of wrench.



Box end without chamfer fits all types of corrupted nuts.

L-TYPE EXTRA LONG DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **Extra Long Panel** helps to reach deeper space.
- Specially designed for working on automotive engines and in confined spaces.
- Superior life-time test.



L-TYPE EXTRA LONG DOUBLE BOX WRENCH

MEETS OR EXCEEDS
A.N.S.I. EXCEPT FOR DELICATE NON-CHAMFER BOX END
STANDARDS



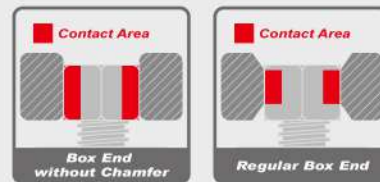
JAPAN EXCLUSIVE LBXV

Material | Chrome Vanadium Steel
Surface | Mirror / Micro Satin Finish
Feature | Super Flat Panel
Flat Offset Box End without Chamfer
12 Point Box

Size (Inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
5/16x3/8	68	235	8x9	64	235
7/16x1/2	143	327	8x10	65	235
9/16x5/8	222	367	10x11	119	290
11/16x3/4	292	404	10x12	119	290
13/16x7/8	540	434	11x12	119	290
			11x13	160	327
			12x13	159	238
			12x14	144	328
			13x14	158	328
			13x15	141	329
			14x15	-	366
			14x17	242	367
			16x18	345	404
			17x19	345	404
			19x21	540	432
			19x22	540	432
			20x22	540	432
			21x23	-	434
			22x24	507	435

FUNCTION INTRODUCTION BOX END WITHOUT CHAMFER

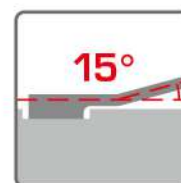
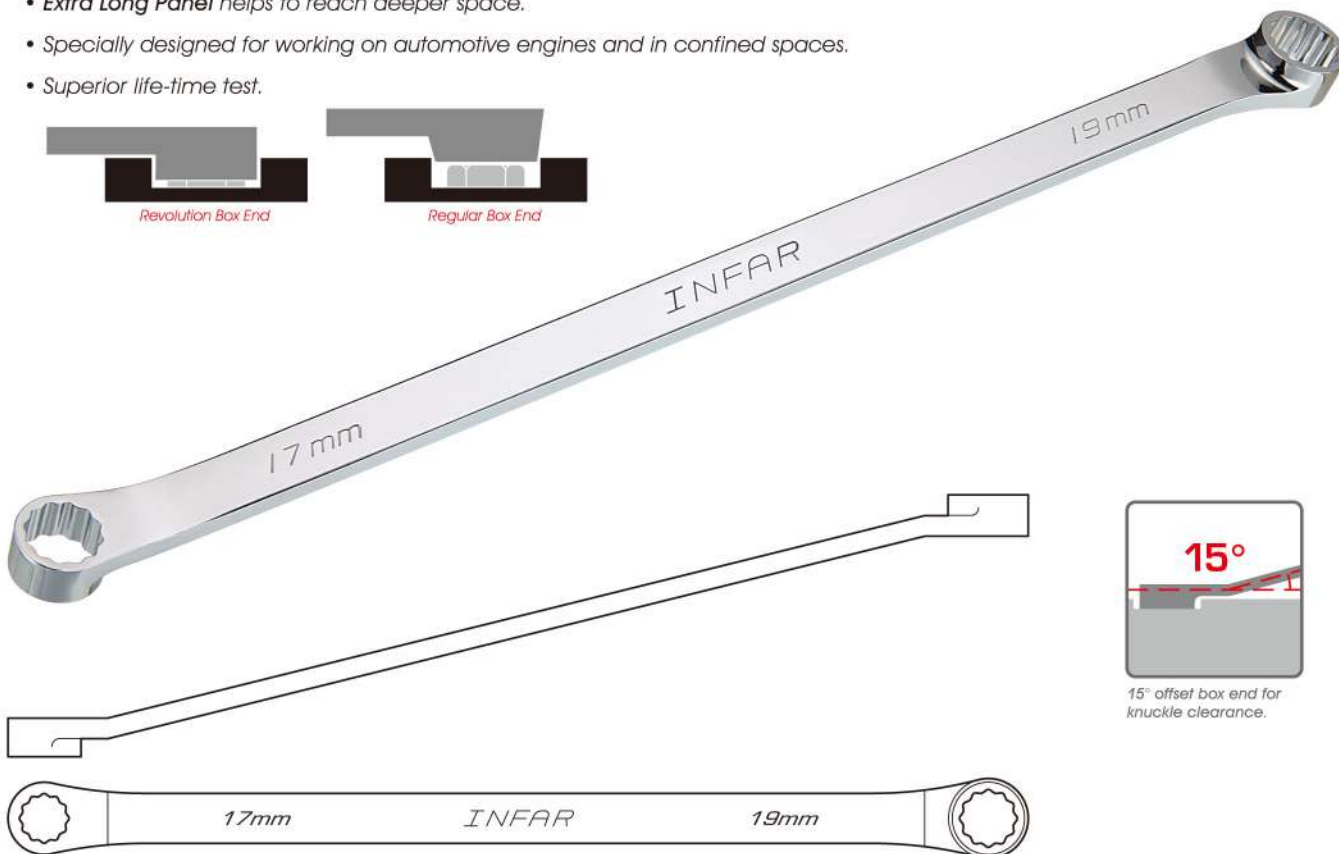
- Box end without chamfer increases the contact area with nuts, enhancing the torque of wrench.



Box end without chamfer fits all types of corrupted nuts.

L-TYPE EXTRA LONG 15° OFFSET DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **5° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- **Extra Long Panel** helps to reach deeper space.
- Specially designed for working on automotive engines and in confined spaces.
- Superior life-time test.



15° offset box end for knuckle clearance.

L-TYPE EXTRA LONG 15° OFFSET DOUBLE BOX WRENCH

MEETS OR EXCEEDS
A.N.S.I. EXCEPT FOR
STANDARDS DELIBERATE
NON-CHAMFER
BOX END



JAPAN EXCLUSIVE LBXWV

Material | Chrome Vanadium Steel
Surface | Mirror / Micro Satin Finish
Feature | Super Flat Panel
15° Offset Box End without Chamfer
12 Point Box

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
5/16x3/8	67	230	8x10	64	230	17x19	345	394
7/16x1/2	161	320	10x12	119	283	22x24	534	424
9/16x5/8	244	358	11x12	119	283			
11/16x3/4	338	395	12x14	159	320			
13/16x7/8	540	423	14x17	242	358			
			16x19	345	394			

L-type Extra Long Double Box Wrench Set

PS Tray + Card + POF

5pc MM 8x10, 12x14, 16x18, 17x19, 22x24mm

5pc MM 10x12, 13x15, 14x17, 16x18, 19x22mm

4pc SAE 5/16"x3/8", 7/16"x1/2", 9/16"x5/8", 11/16"x3/4"

4pc MM 8x10, 12x14, 17x19, 22x24mm

3pc MM 12x14, 14x17, 17x19mm

L-type Extra Long 15° Offset Double Box Wrench Set

PS Tray + Card + POF

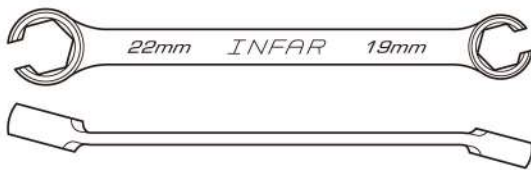
6pc MM 8x10, 12x14, 13x15, 16x18, 17x19, 22x24mm

4pc SAE 5/16"x3/8", 7/16"x1/2", 9/16"x5/8", 11/16"x3/4"



R-TYPE FLARE NUT WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **6 point** double end flare nut wrench.
- Designed to work on a variety of fittings, such as fuel, brake, and air conditioning lines.
- **15° offset flare nut drive** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



R-TYPE FLARE NUT WRENCH



RFV6

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 15° Offset Flare Nut Drive
 6 Point Box

5pc R-type Flare Nut Wrench Set

PP Rack (PAT.P) + Label

5pc SAE 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 5/8"x11/16", 3/4"x7/8"

5pc MM 9x11, 10x12, 13x14, 15x17, 16x18mm

Size (inch)	Wt. (g)	L (mm)
1/4x5/16	53	135
5/16x3/8	47	145
3/8x7/16	64	155
1/2x9/16	87	175
5/8x11/16	130	200
5/8x3/4	165	210
3/4x7/8	184	225

Size (mm)	Wt. (g)	L (mm)
7x9	46	145
8x9	46	145
8x10	47	145
9x10	46	145
9x11	45	145
10x11	66	155
10x12	65	155
11x12	65	155
11x13	88	175
12x13	86	175
12x14	84	175
13x14	87	175
13x15	82	175
14x16	130	200
14x17	131	200
15x16	130	200

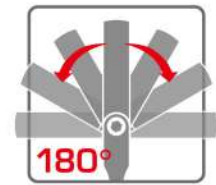
Size (mm)	Wt. (g)	L (mm)
15x17	127	200
16x17	130	200
16x18	165	210
17x19	165	210
18x20	186	225
19x21	186	225
19x22	184	225
20x22	189	225



15° offset flare nut drive for knuckle clearance.

FLEXIBLE FLARE NUT WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **6 point** double end flare nut wrench.
- Designed to work on a variety of fittings, such as fuel, brake, and air conditioning lines.
- **Flexible head** tilts **180°** at any interval with continuous head tension.
- Superior life-time test.



Flexible head tilts 180° at any interval with continuous head tension.



FLEXIBLE FLARE NUT WRENCH



DFXRFV

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Flat Panel
 180° Flexible Flare Nut Drive
 6 Point Box

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
3/8x7/16	74	152	10x11	74	152
1/2x9/16	116	168	12x13	116	168
5/8x11/16	206	212	14x17	206	212
3/4x7/8	314	233	19x22	314	233

FLAT PANEL WRENCH ASSORTMENT

PR-type Combination Wrench Set

PP Rack (PAT.P.) + Label

13pc SAE (XL) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4",
13/16", 7/8", 15/16", 1"

12pc MM (XL) 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

11pc SAE (XL) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4",
13/16", 7/8"

11pc MM (XL) 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19mm

10pc MM (L) 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

9pc SAE (L) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

9pc MM (L) 10, 11, 12, 13, 14, 15, 16, 17, 19mm

8pc SAE (L) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

8pc MM (L) 8, 10, 12, 13, 14, 15, 17, 19mm

7pc SAE (M) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"

7pc MM (M) 8, 10, 12, 13, 14, 17, 19mm

6pc SAE (M) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8"

6pc MM (M) 8, 10, 12, 13, 14, 17mm

5pc SAE (M) 3/8", 7/16", 1/2", 9/16", 5/8"

5pc MM (M) 10, 12, 13, 14, 15mm

5pc MM (S) 8, 10, 13, 17, 19mm

4pc SAE (S) 3/8", 7/16", 1/2", 9/16"

4pc MM (S) 10, 12, 13, 14mm



8pc PR-type Double Open Wrench Set

PP Rack (PAT.P.) + Label

8pc MM (L) 6x7, 8x9, 10x11, 12x13, 14x15, 16x17,
18x19, 20x22mm



5pc Metric Offset Box End Wrench Set

PP Rack (PAT.P.) + Label

5pc SAE (M) 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 5/8"x11/16",
3/4"x7/8", 13/16"x15/16"

PR-type 45° Offset Double Box Wrench Set

PP Rack (PAT.P.) + Label

6pc SAE (M) 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 5/8"x11/16",
3/4"x7/8", 13/16"x15/16"

5pc MM (S) 10x11, 12x13, 14x15, 16x18, 17x19mm



FLAT PANEL WRENCH ASSORTMENT



20pc SAE/Metric PR-type Combination Wrench Set

Blow Mould Case + Label

Content 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 7/8"
8, 9, 10, 11, 12, 13, 14, 15, 17, 18mm

PR-type Combination Wrench Set

PP Try Me Tray + Cardboard + Label

8pc SAE (L) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

8pc MM (L) 8, 10, 12, 13, 14, 15, 17, 19mm (L)

7pc SAE (L) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"

7pc MM (L) 10, 12, 13, 14, 15, 17, 19mm

5pc SAE (S) 5/16", 3/8", 7/16", 1/2", 9/16"

5pc MM (S) 10, 12, 13, 14, 15mm

5pc MM (L) 8, 10, 13, 17, 19mm

4pc SAE (S) 3/8", 7/16", 1/2", 9/16"

4pc MM (S) 10, 12, 13, 14mm



7pc PR-type Twist Combination Wrench Set

PP Try Me Tray + Cardboard + Label

7pc SAE (L) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"

7pc MM (L) 8, 10, 12, 13, 14, 17,

19mm



FLAT PANEL WRENCH ASSORTMENT

PR-type Combination Wrench Set

PP Cell Holder + Label

11pc SAE 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"

11pc MM 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19mm

6pc SAE 1/4", 5/16", 3/8", 7/16", 1/2", 9/16"

6pc MM 8, 10, 11, 12, 13, 14mm

5pc SAE 5/16", 3/8", 7/16", 1/2", 9/16"

5pc MM 10, 11, 12, 13, 14mm



5pc PR-type Double Open Wrench Set

PP Cell Holder + Label

5pc SAE 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 9/16"x5/8", 11/16"x3/4"

5pc MM 6x7, 8x9, 10x11, 12x13, 14x15mm



5pc PR-type 45° Offset Double Box Wrench Set

PP Cell Holder + Label

5pc SAE 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 5/8"x11/16", 3/4"x7/8"

5pc MM 8x9, 10x12, 13x14, 15x17, 19x22mm



FLAT PANEL WRENCH ASSORTMENT



PR-type Combination Wrench Set

PP Holder + Label

11pc SAE 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"

11pc MM 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19mm

9pc SAE 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

9pc MM 8, 9, 10, 11, 12, 13, 14, 15, 16mm

8pc MM 8, 9, 10, 11, 12, 13, 17, 19mm

7pc SAE 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

7pc MM 10, 12, 13, 14, 15, 17, 19mm

6pc SAE 1/4", 5/16", 3/8", 7/16", 1/2", 9/16"

6pc MM 8, 10, 11, 12, 13, 14mm



PR-type Double Box Wrench Set

PP Holder + Label

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm

6pc SAE 1/4"x5/16", 3/8"x7/16", 1/2"x9/16", 9/16"x5/8", 11/16"x3/4", 13/16"x7/8"

6pc MM 6x8, 10x11, 12x13, 14x15, 17x19, 20x22mm



5pc PR-type Ergonomic Combination Wrench Set

PP Holder + Label

5pc SAE 3/8", 7/16", 1/2", 9/16", 5/8"

5pc MM 10, 12, 13, 15, 17mm

FLAT PANEL WRENCH ASSORTMENT

Stubby Combination Wrench Set

PP Try Me Tray + Cardboard + Label

8pc SAE (LS) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

8pc MM (LS) 8, 10, 12, 13, 14, 15, 17, 19mm

7pc SAE (LS) 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"

7pc MM (LS) 10, 12, 13, 14, 15, 17, 19mm

5pc MM (LS) 8, 10, 13, 17, 19mm



7pc Stubby Combination Wrench Set

PP Holder + Label

7pc SAE 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

7pc MM 10, 12, 13, 14, 15, 17, 19mm



Stubby Combination Wrench Set

PVC Double Bilster + Label

12pc SAE 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1"

12pc MM 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

10pc MM 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm



7pc Stubby Combination Wrench Set

PP Cell Holder + Label

7pc SAE 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

7pc MM 10, 12, 13, 14, 15, 17, 19mm

A-TYPE COMBINATION WRENCH

- Made by heat-treated **Forged Alloy Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **15° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



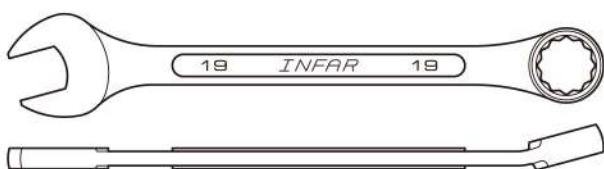
A-TYPE JUMBO COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I. 12 POINT
STANDARDS

JB

Material | Medium Carbon Steel
Surface | Matt / Black Oxide Finish
Feature | Raised Panel
15° Offset Box End

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1-5/16	1010	460	33	1020	460
1-3/8	1010	460	34	1010	460
1-7/16	1270	485	35	990	460
1-1/2	1260	485	36	1270	485
1-5/8	1680	539	38	1210	485
1-11/16	1660	539	40	1710	539
1-3/4	1960	610	41	1750	539
1-13/16	1940	610	42	1720	539
1-7/8	2490	610	45	1860	610
2"	2400	610	46	1900	610
2-1/16	4460	665	50	2420	610
2-1/8	4340	665	55	3900	665
2-3/16	4340	665	60	5530	760
2-1/4	3870	665	65	5330	760
2-5/16	3800	665			
2-3/8	5660	760			
2-7/16	5530	760			
2-1/2	5600	760			
2-9/16	5530	760			



A-TYPE COMBINATION WRENCH

MEETS OR EXCEEDS
A.N.S.I. 12 POINT 6 POINT SPLINE
STANDARDS

CV

Material | Chrome Vanadium Steel
Surface | Matt Finish
Feature | Raised Panel
15° Offset Box End
12 Point / 6 Point / Spline Box

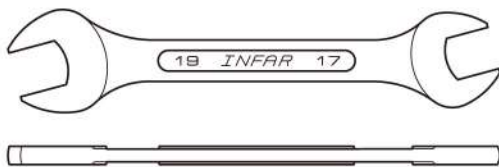
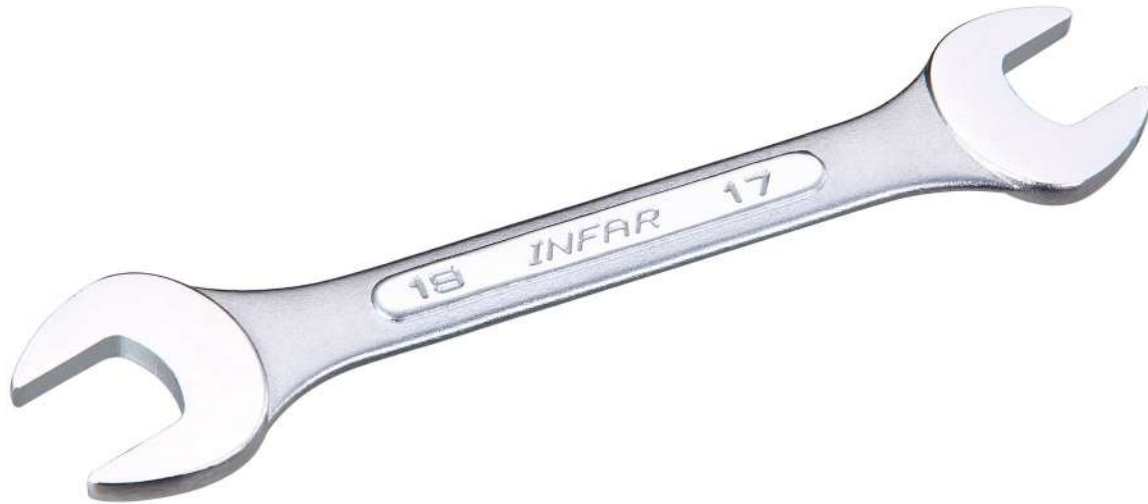
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4	16	93	5.5	16	93	21	205	242
5/16	23	103	6	16	93	22	245	260
3/8	30	116	7	19	98	23	280	280
7/16	41	131	8	26	103	24	365	309
1/2	55	147	9	31	116	25	420	332
9/16	87	168	10	39	123	26	415	332
5/8	118	189	11	41	131	27	525	358
11/16	142	207	12	54	143	28	650	380
3/4	182	230	13	56	147	29	650	380
13/16	245	260	14	89	168	30	650	380
7/8	280	280	15	119	189	32	810	418
15/16	365	309	16	133	196			
1"	420	332	17	146	207			
1-1/16	525	358	18	154	220			
1-1/8	650	380	19	184	230			
1-1/4	810	418	20	174	230			



15° offset box end for knuckle clearance.

A-TYPE DOUBLE OPEN WRENCH

- Made by heat-treated **Forged Alloy Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



A-TYPE DOUBLE OPEN WRENCH

MEETS OR EXCEEDS
A.N.S.I.
STANDARDS

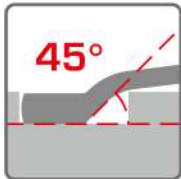
OV

Material | Chrome Vanadium Steel
Surface | Matt Finish
Feature | Raised Panel

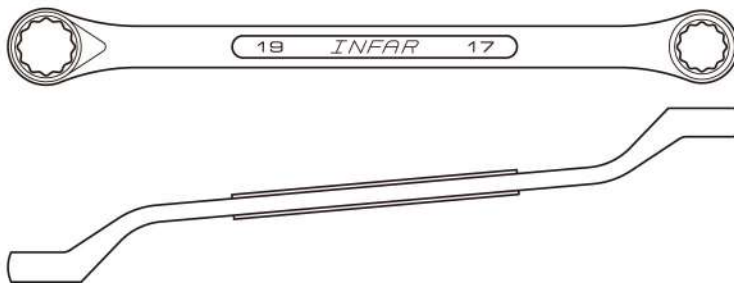
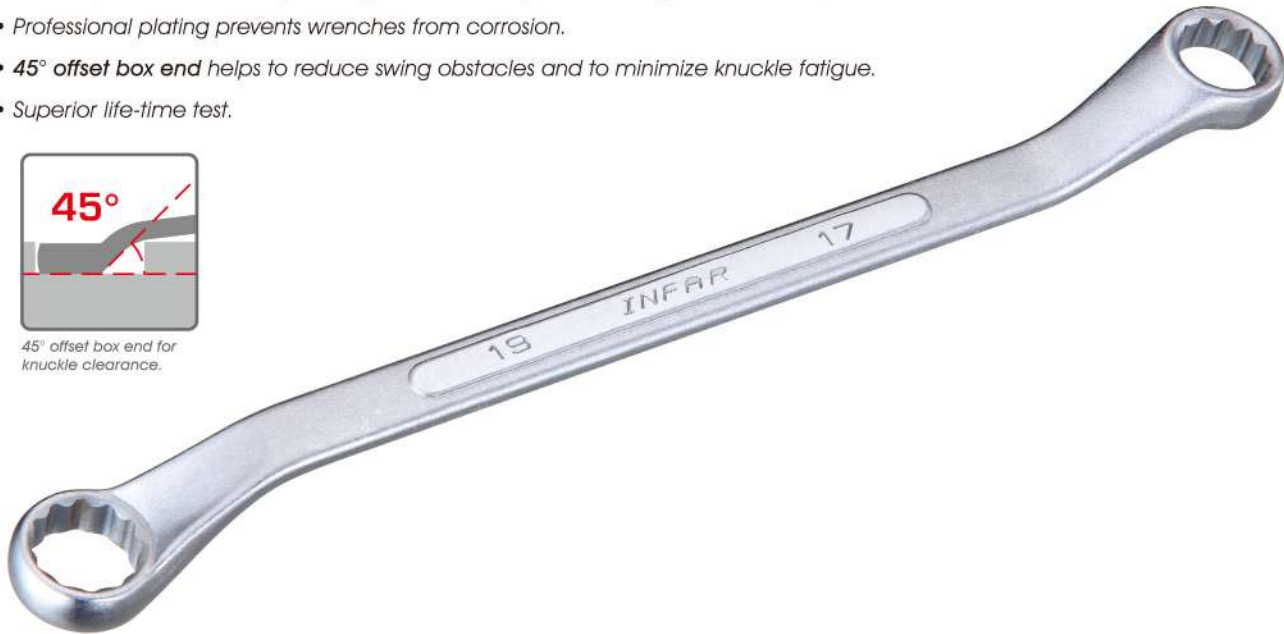
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1/4x5/16	19	102	1-13/16x2"	2290	495	5.5x7	21	102	19x22	230	210
3/8x7/16	44	126				6x7	20	102	19x24	230	210
7/16x1/2	54	135				6x8	19	102	20x22	230	210
1/2x9/16	82	152				7x8	20	102	21x23	210	210
9/16x5/8	105	157				8x9	26	110	22x24	210	210
19/32x11/16	106	157				8x10	28	110	23x26	330	257
5/8x11/16	136	180				9x10	42	110	24x25	330	257
5/8x3/4	136	180				10x11	43	126	24x26	330	257
11/16x3/4	149	190				10x12	42	126	24x27	330	257
11/16x13/16	220	210				10x13	54	135	24x30	510	285
3/4x7/8	220	210				11x12	54	135	25x27	510	285
13/16x7/8	220	210				11x13	53	135	25x28	500	285
15/16x1"	330	257				12x13	83	152	26x29	500	285
1"x1-1/16	330	285				12x14	81	152	27x30	700	340
1"x1-1/8	330	285				13x14	104	157	27x32	700	340
1-1/16x1-1/8	700	340				13x17	109	157	28x30	700	340
1-1/8x1-1/4	700	340				14x15	116	157	29x32	700	340
1-3/16x1-1/4	700	340				14x17	115	157	30x32	700	340
1-7/16x1-5/8	1310	434				15x17	146	180	36x41	1310	434
1-1/2x1-5/8	1310	434				16x17	134	180	41x46	1790	465
1-5/8x1-3/4	1790	465				16x18	138	180	46x50	2290	495
1-11/16x1-7/8	1790	465				17x19	151	190			
1-3/4x2"	2290	495				18x19	151	190			
						19x21	230	210			

A-TYPE 45° OFFSET DOUBLE BOX WRENCH

- Made by heat-treated **Forged Alloy Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **45° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



45° offset box end for knuckle clearance.



A-TYPE 45° OFFSET DOUBLE BOX WRENCH



BXV

Material | Chrome Vanadium Steel
 Surface | Matt Finish
 Feature | Raised Panel
 45° Offset Box End
 12 Point / Spline Box

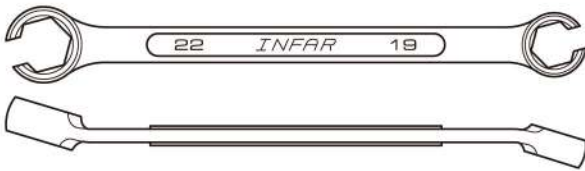
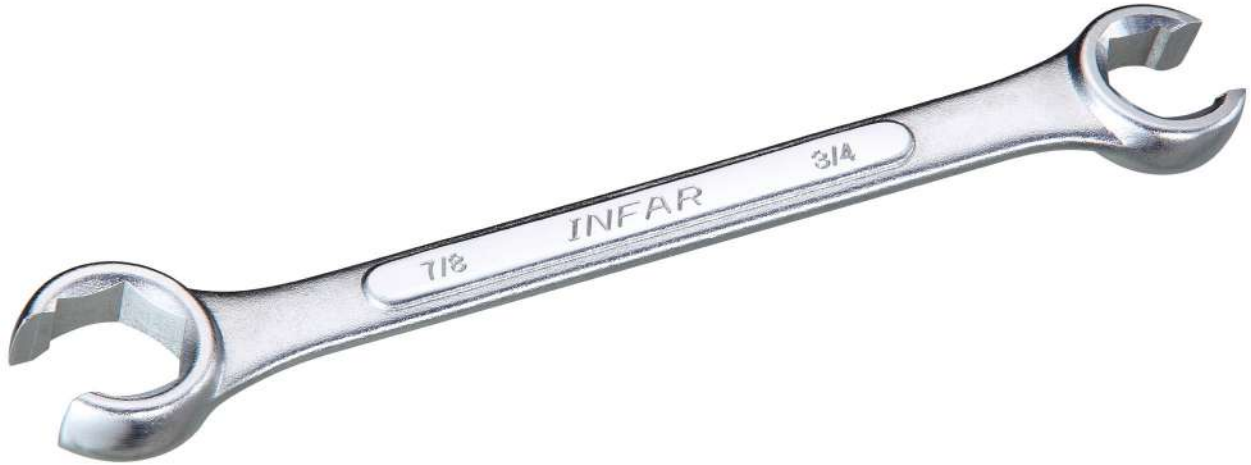
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4x5/16	47	164	6x7	50	164	18x19	260	282
1/4x3/8	47	164	6x8	47	164	19x21	260	288
3/8x7/16	62	180	7x9	47	164	19x22	260	288
7/16x1/2	108	206	8x9	44	164	20x22	330	315
1/2x9/16	108	206	8x10	47	164	21x22	330	315
9/16x5/8	130	232	9x10	47	164	21x23	330	315
5/8x11/16	155	237	9x11	62	180	22x24	510	362
5/8x3/4	201	254	10x11	61	180	23x24	510	362
11/16x13/16	260	282	10x12	57	180	23x26	500	362
3/4x25/32	260	282	11x13	108	206	24x26	500	362
3/4x7/8	260	288	12x13	108	206	24x27	680	410
13/16x7/8	330	315	12x14	108	206	24x30	680	410
7/8x15/16	490	362	13x14	130	232	25x28	680	410
15/16x1"	490	362	13x15	130	232	26x29	680	410
1"x1-1/8	680	410	14x15	127	232	26x30	950	410
1-1/16x1-1/8	680	410	14x17	153	237	27x30	950	465
1-1/16x1-1/4	950	465	15x17	163	237	27x32	950	465
1-1/8x1-1/4	950	465	16x17	158	237	29x32	950	465
1-3/16x1-1/4	950	465	16x18	201	254	30x32	950	465
			17x19	260	282			

A-TYPE FLARE NUT WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **6 point** double end flare nut wrench.
- Designed to work on a variety of fittings, such as fuel, brake, and air conditioning lines.
- **15° offset flare nut drive** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



15° offset flare nut drive for knuckle clearance.



A-TYPE FLARE NUT WRENCH



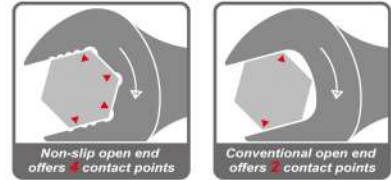
FV6

Material | Chrome Vanadium Steel
 Surface | Matt Finish
 Feature | Raised Panel
 15° Offset Flare Nut Drive
 6 Point Box

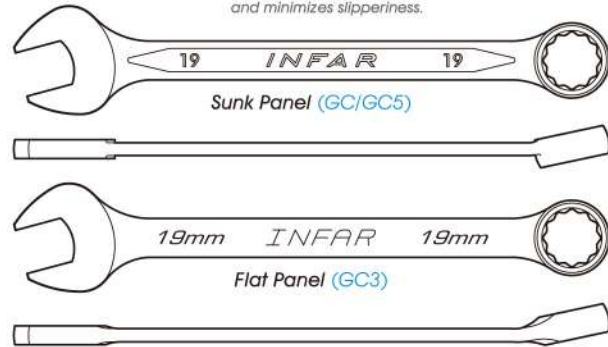
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4x5/16	37	135	6x8	38	135
3/8x7/16	64	154	8x9	37	135
1/2x9/16	97	174	8x10	36	135
5/8x11/16	133	199	9x10	35	135
3/4x7/8	193	224	9x11	64	154
			10x11	65	154
			10x12	66	154
			11x12	62	154
			12x13	97	174
			12x14	93	174
			13x14	96	174
			14x17	134	199
			15x17	133	199
			16x18	130	199
			19x21	190	224
			19x22	190	224
			20x22	186	224

GERMAN-TYPE COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **13° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.



GERMAN-TYPE COMBINATION WRENCH



GC/GC3/GC5

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | **Meets or Exceeds DIN3113 Standards**
 Sunk / Flat Panel
 13° Offset Box End
 12 Point / Spline Box
 Regular / Non-slip Open End

Size (inch)	Wt. (g)	L (mm)
1/4	15	100
5/32	18	110
5/16	26	120
11/32	30	130
3/8	38	140
7/16	46	150
1/2	68	170
9/16	79	180
5/8	110	200
11/16	141	210
3/4	150	230
25/32	168	240
13/16	194	250
7/8	225	260
15/16	295	280
1"	330	295
1-1/16	385	310
1-1/8	505	340
1-1/4	600	360
1-5/16	635	380
1-3/8	810	410
1-7/16	805	410
1-1/2	995	430
1-5/8	1265	460
1-11/16	1260	460
1-3/4	1635	500
1-13/16	1625	500
1-7/8	2110	540
2"	2075	540

Size (mm)	Wt. (g)	L (mm)
5	11	93
5.5	11	93
6	15	100
7	18	110
8	23	120
9	31	130
10	34	140
11	47	150
12	53	160
13	65	170
14	82	180
15	92	190
16	103	200
17	123	210
18	137	220
19	158	230
20	169	240
21	196	250
22	220	260
23	215	260
24	280	280
25	320	295
26	310	295
27	385	310
28	495	340
29	495	340
30	495	340
32	550	360
33	670	380
34	640	380

Size (mm)	Wt. (g)	L (mm)
35	805	410
36	810	410
38	965	430
41	1260	460
43	1260	460
45	1655	500
46	1630	500
48	2075	540
50	2075	540
51	2075	540
55	2985	560
60	4100	600
65	-	675
70	-	675
75	-	720
80	-	720
85	-	780
90	-	780
95	-	780
100	-	855
105	-	855



13° offset box end for knuckle clearance.

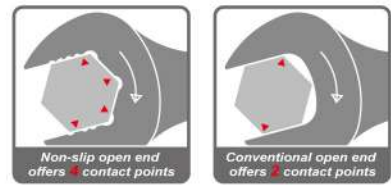
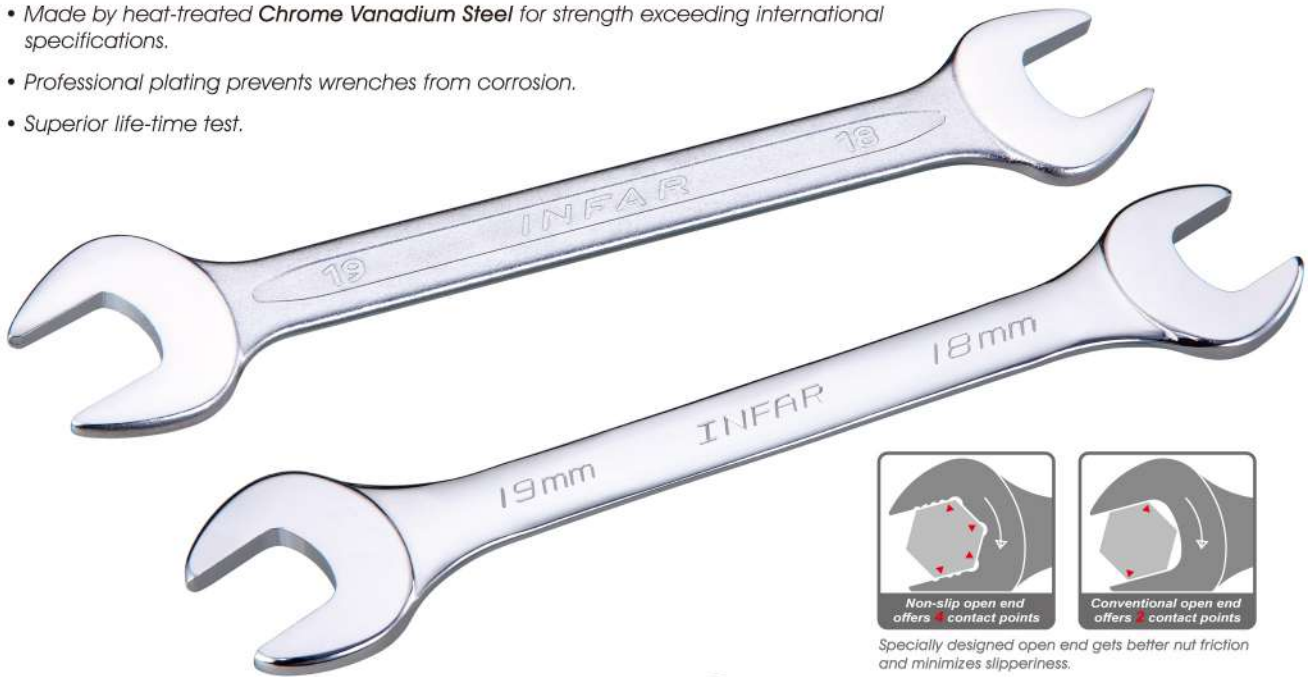


Material | Chrome Vanadium Steel (WG)
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | **Meets or Exceeds Whitworth Standards**
 Sunk / Flat Panel
 13° Offset Box End

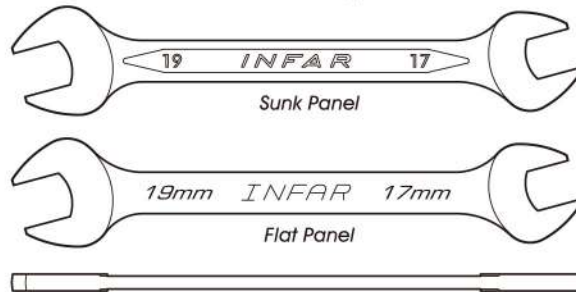
Size (ww inch)	Wt. (g)	L (mm)
ww1/8	39	140
ww3/16	54	160
ww1/4	85	180
ww5/16	106	200
ww3/8	133	220
ww7/16	195	250
ww1/2	295	280
ww9/16	330	295
ww5/8	510	340
ww11/16	600	360
ww3/4	640	380
ww7/8	970	410

GERMAN-TYPE DOUBLE OPEN WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.



GERMAN-TYPE DOUBLE OPEN WRENCH

MEETS OR EXCEEDS
DIN
STANDARDS

GOC

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin Finish
Feature | **Meets or Exceeds DIN3110 Standards**
Sunk / Flat Panel
Regular / Non-slip Open End

Size (Inch)	Wt. (g)	L (mm)
1/4x5/16	20	122
5/16x11/32	32	140
5/16x3/8	32	140
11/32x13/32	32	140
3/8x7/16	47	156
7/16x1/2	62	172
7/16x17/32	62	172
1/2x9/16	72	180
9/16x5/8	90	188
5/8x11/16	134	204
5/8x3/4	120	204
11/16x3/4	147	220
3/4x13/16	196	234
25/32x13/16	196	234
3/4x7/8	196	234
13/16x7/8	225	247
13/16x15/16	225	247
7/8x15/16	225	247
15/16x1"	330	266
1"x1-1/16	380	285
1"x1-1/8	380	285
1-1/16x1-1/4	485	302
1-1/8x1-5/16	485	302
1-3/16x1-5/16	485	302
1-1/4x1-3/8	620	319
1-5/16x1-1/2	615	319
1-3/8x1-1/2	615	319
1-7/16x1-5/8	920	380
1-11/16x1-7/8	1450	415
1-13/16x2"	1770	465

Size (mm)	Wt. (g)	L (mm)
4x5	-	112
5x5.5	-	112
5.5x7	20	122
6x7	20	122
7x8	20	122
8x9	32	140
8x10	32	140
10x11	47	156
10x12	47	156
10x13	62	172
11x13	61	172
12x13	63	172
12x14	72	180
13x14	71	180
13x15	90	188
13x17	88	188
14x15	92	188
14x17	90	188
16x17	118	204
16x18	120	204
17x19	158	220
18x19	146	220
18x21	192	234
19x21	192	234
19x22	192	234
19x24	200	234
20x21	200	234
20x22	200	234
21x23	220	247
21x24	225	247

Size (mm)	Wt. (g)	L (mm)
22x23	225	247
22x24	235	247
23x26	315	266
24x26	315	266
24x27	320	266
24x30	380	285
25x28	375	285
26x27	380	285
26x28	380	285
27x29	460	302
27x30	460	302
27x32	490	302
28x29	485	302
30x32	480	302
30x36	620	319
32x36	600	319
33x35	600	319
34x36	615	319
36x41	920	380
38x42	920	380
41x46	1450	415
46x50	1770	465

MEETS OR EXCEEDS
W.W.
STANDARDS

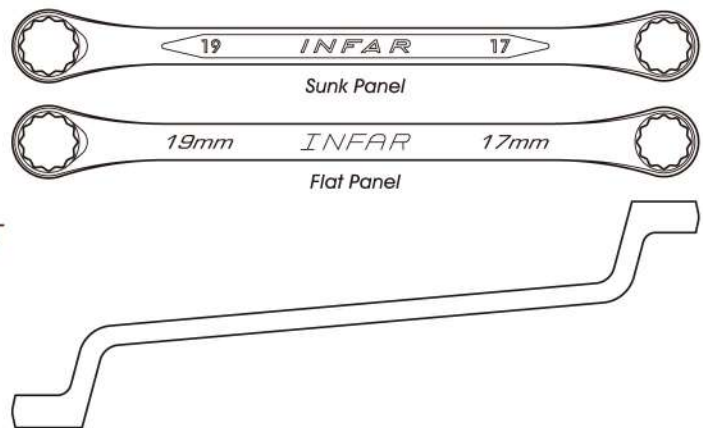
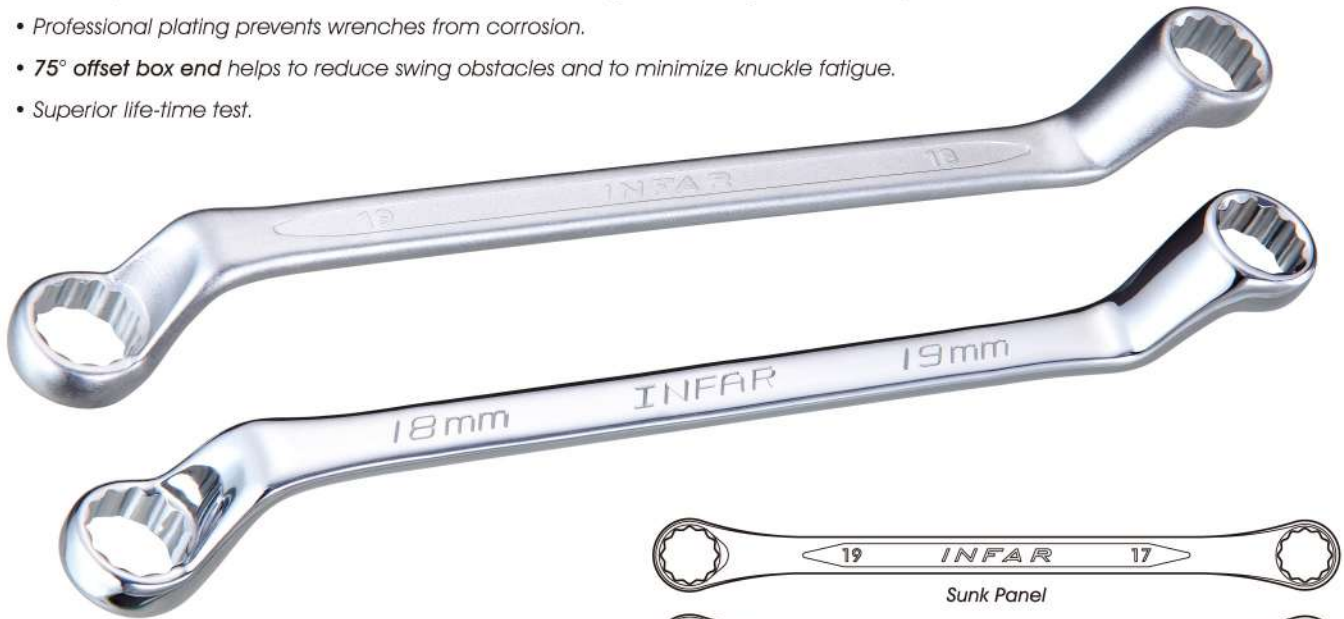


Material | Chrome Vanadium Steel (WGO)
Surface | Mirror / Matt / Micro Satin Finish
Feature | **Meets or Exceeds Whitworth Standards**
Sunk / Flat Panel

Size (ww Inch)	Wt. (g)	L (mm)
ww1/8x ww3/16	48	156
ww3/16x ww1/4	62	172
ww1/4x ww5/16	90	188
ww5/16x ww3/8	121	204
ww3/8x ww7/16	143	220
ww7/16x ww1/2	220	247
ww1/2x ww9/16	325	266
ww9/16x ww5/8	380	285
ww9/16x ww11/16	370	285
ww5/8x ww11/16	460	302
ww5/8x ww3/4	455	302
ww11/16x ww3/4	450	302
ww3/4x ww7/8	615	319

GERMAN-TYPE 75° OFFSET DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **75° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



GERMAN-TYPE 75° OFFSET DOUBLE BOX WRENCH



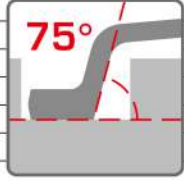
GBXC

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Meets or Exceeds DIN838 Standards
 Sunk / Flat Panel
 75° Offset Box End
 12 Point / Spline Box

Size (inch)	Wt. (g)	L (mm)
1/4x5/16	42	170
5/16x3/8	82	190
3/8x7/16	92	199
7/16x1/2	129	213
1/2x9/16	158	228
9/16x5/8	200	246
5/8x11/16	200	246
11/16x3/4	265	265
3/4x7/8	315	288
13/16x7/8	345	310
13/16x15/16	345	310
15/16x1"	475	330
1"x1-1/8	550	348
1-1/16x1-1/4	655	372
1-1/8x1-1/4	635	372
1-1/4x1-3/8	965	417

Size (mm)	Wt. (g)	L (mm)
5x5.5	28	160
6x7	45	170
8x9	70	182
8x10	79	190
9x11	90	199
10x11	90	199
10x12	92	199
10x13	126	213
11x13	126	213
12x13	126	213
13x17	195	245
14x15	155	228
14x17	193	246
16x17	193	246
16x18	193	246
17x19	245	265
18x19	240	265
19x21	315	288
19x22	315	288
19x24	-	295
20x21	315	288
20x22	315	288
21x22	345	310
21x23	345	310
22x23	345	310
22x24	345	310
24x25	480	330
24x26	480	330
24x27	475	330
24x30	-	340

Size (mm)	Wt. (g)	L (mm)
25x28	550	348
26x27	550	348
27x29	665	372
27x30	665	372
27x32	665	372
28x29	665	372
30x32	660	372
30x36	-	410
32x36	965	417
34x36	965	417
36x41	1040	430
41x46	-	505
46x50	-	520



75° offset box end for knuckle clearance.

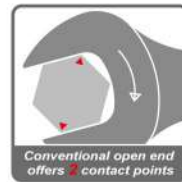
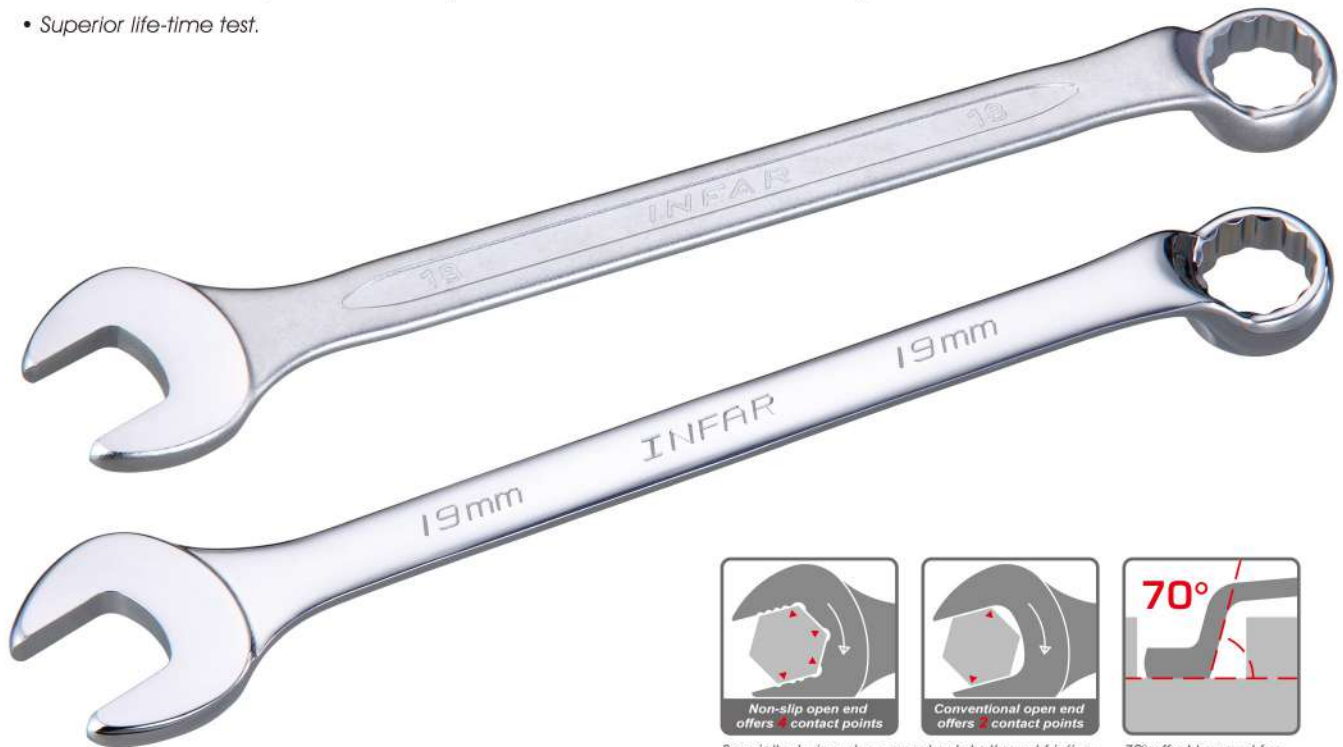


Material | Chrome Vanadium Steel (WGBX)
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Meets or Exceeds Whitworth Standards
 Sunk / Flat Panel
 75° Offset Box End

Size (ww inch)	Wt. (g)	L (mm)
ww1/8x ww3/16	92	199
ww3/16x ww1/4	133	213
ww1/4x ww5/16	161	228
ww5/16x ww3/8	194	246
ww3/8x ww7/16	330	288
ww7/16x ww1/2	355	310
ww1/2x ww9/16	480	330
ww9/16x ww5/8	665	372
ww9/16x ww11/16	660	372
ww11/16x ww3/4	965	417
ww7/8x ww1"	1040	430

GERMAN-TYPE 70° OFFSET COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **70° offset box end** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



Specially designed open end gets better nut friction and minimizes slipperiness.

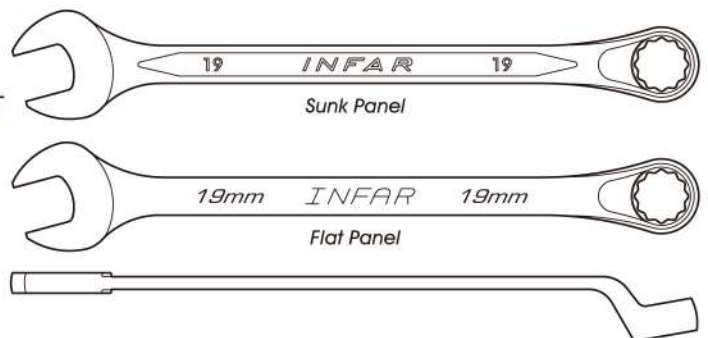
70° offset box end for knuckle clearance.

GERMAN-TYPE 70° OFFSET COMBINATION WRENCH



GRC

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Meets or Exceeds DIN31138 Standards
 Sunk / Flat Panel
 70° Offset Box End
 12 Point / Spline Box
 Regular / Non-slip Open End



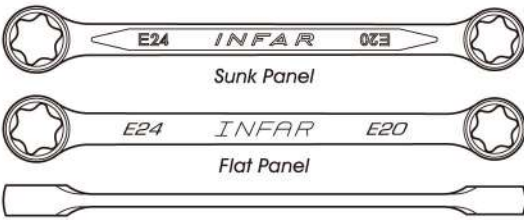
Size (inch)	Wt. (g)	L (mm)
1/4	17	125
5/16	32	145
3/8	44	165
7/16	56	172
1/2	77	195
9/16	89	210
5/8	132	230
11/16	150	240
3/4	191	265
13/16	240	280
7/8	275	300
15/16	340	320
1"	455	348
1-1/16	570	370
1-1/8	665	390
1-1/4	815	412

Size (mm)	Wt. (g)	L (mm)
6	17	125
7	21	135
8	32	145
9	41	155
10	44	165
11	56	172
12	67	180
13	77	195
14	89	210
15	107	215
16	132	230
17	150	240
18	167	255
19	191	265
20	245	280
21	240	280
22	275	300
23	350	320
24	340	320
25	455	348

Size (mm)	Wt. (g)	L (mm)
26	450	348
27	570	370
28	555	370
29	665	390
30	650	390
32	815	412

STAR E-TYPE DOUBLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



STAR E-TYPE DOUBLE BOX WRENCH



Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Sunk / Flat Panel
 Flat Offset Box End
 Star Box

★ Size (star)	Wt. (g)	L (mm)
E6xE7	18	112
E6xE8	18	112
E7xE11	40	140
E8xE10	42	140
E10xE12	42	140
E11xE12	42	140
E14xE16	76	180
E14xE18	74	180
E16xE22	182	224
E18xE20	177	224
E20xE24	169	224
E22xE24	161	224

5pc Star E-type Double Box Wrench Set

PVC Single Blister + Cardboard

5pc Star E6xE8, E10xE12, E14xE16, E18xE20, E22xE24



16pc Star Wrench & Socket Set

PS Tray + PVC Single Blister + Cardboard

Content 4pc Star E-type Double Box Wrenches:

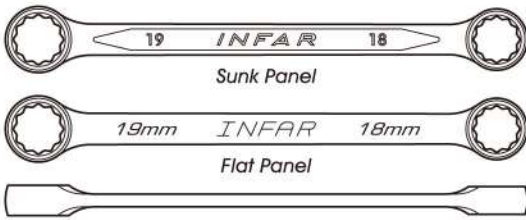
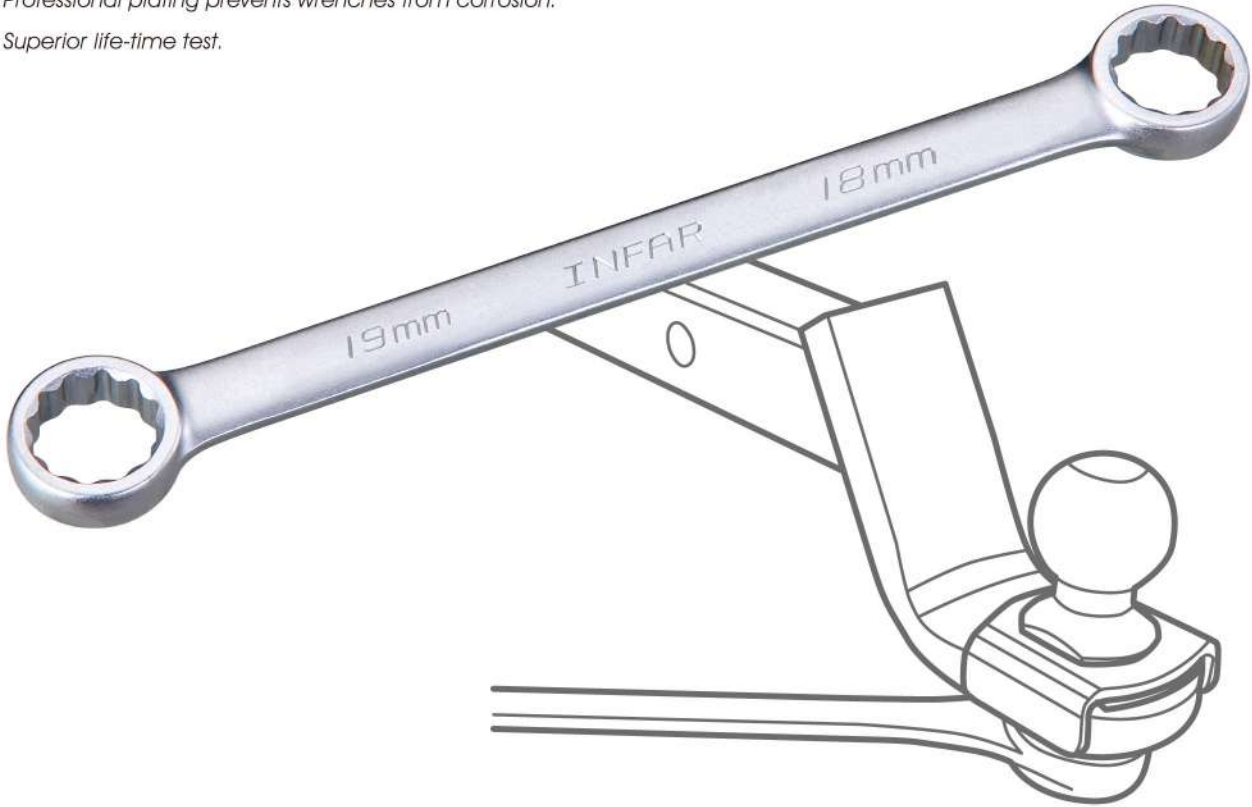
E6xE8, E10xE12, E14xE16, E18xE20

12pc 3/8" Dr Star Sockets:

E4, E5, E6, E7, E8, E10, E11, E12, E14, E16, E18, E20

E-TYPE HITCH BALL WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



E-TYPE HITCH BALL WRENCH



Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Sunk / Flat Panel
 Flat Offset Box End
 12 Point Box

Size (mm)	Wt. (g)	L (mm)
6x7	16	120
8x9	28	140
10x11	46	155
12x13	64	163
14x15	90	180
16x17	116	212
18x19	152	224
20x22	236	255
21x23	236	255
24x26	410	318
25x28	410	318
30x32	490	336

EBXV



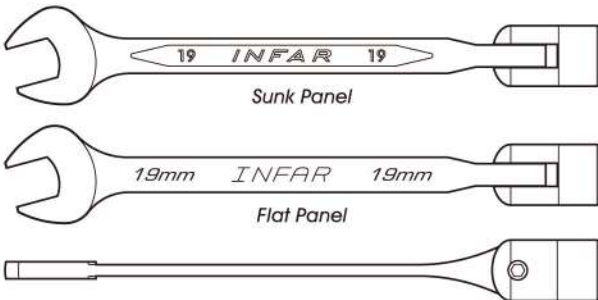
8pc E-type Hitch Ball Wrench Set

PP Rack + Label

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm

FLEXIBLE SOCKET COMBINATION WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **Flexible socket** tilts 180° at any interval with continuous socket tension.
- Superior life-time test.



FLEXIBLE SOCKET COMBINATION WRENCH



SWFX

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Sunk / Flat Panel
 180° Flexible Socket
 12 Point Box

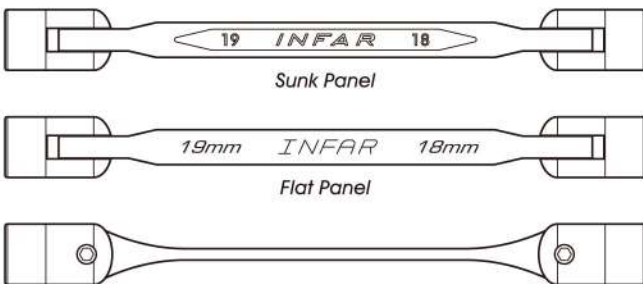
Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
3/8	75	180	8	65	170
7/16	105	190	9	65	170
1/2	186	210	10	75	180
9/16	195	230	11	105	190
5/8	234	235	12	115	195
11/16	234	235	13	186	210
3/4	310	255	14	195	230
			15	195	230
			16	234	235
			17	234	235
			18	310	255
			19	310	255



Flexible socket tilts 180° at any interval with continuous socket tension.

DOUBLE FLEXIBLE SOCKET WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **Flexible socket** tilts 180° at any interval with continuous socket tension.
- Superior life-time test.



DOUBLE FLEXIBLE SOCKET WRENCH



SWDFX

Material | Chrome Vanadium Steel
 Surface | Mirror / Matt / Micro Satin Finish
 Feature | Sunk / Flat Panel
 180° Flexible Socket
 12 Point Box

7pc Double Flexible Socket Wrench Set

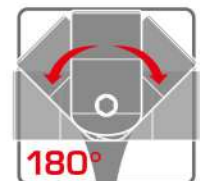
PS Tray + Card + POF

7pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19mm

Size (inch)	Wt. (g)	L (mm)
3/8x7/16	108	200
1/2x9/16	195	225
5/8x11/16	330	260
11/16x3/4	335	260
3/4x7/8	520	300

Size (mm)	Wt. (g)	L (mm)
6x7	75	180
8x9	75	180
8x10	90	185
10x11	115	200
10x12	125	205
10x13	127	205
11x13	130	205
12x13	155	220
12x14	170	225
13x17	240	242
14x15	240	242
14x17	250	244

Size (mm)	Wt. (g)	L (mm)
15x18	-	265
16x17	330	254
17x19	330	260
18x19	410	275
19x22	410	300
20x21	640	305
20x22	640	305
21x22	640	305
21x23	640	305
24x27	780	335
30x32	980	340



Flexible socket tilts 180° at any interval with continuous socket tension.

GERMAN-TYPE FLARE NUT WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- **6/12 point** double end flare nut wrench.
- Designed to work on a variety of fittings, such as fuel, brake, and air conditioning lines.
- **13° offset flare nut drive** helps to reduce swing obstacles and to minimize knuckle fatigue.
- Superior life-time test.



13° offset flare nut drive for knuckle clearance.



GERMAN-TYPE FLARE NUT WRENCH

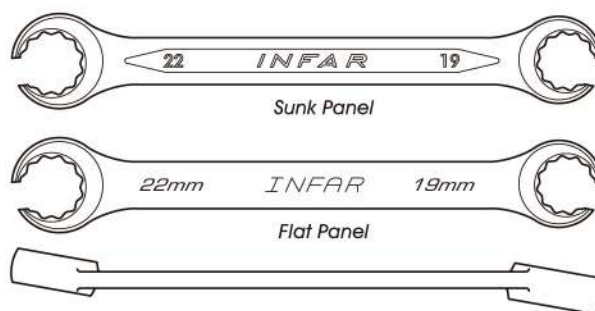
MEETS OR EXCEEDS
DIN
STANDARDS

6 POINT

12 POINT

GFV6/GFV

Material | Chrome Vanadium Steel
Surface | Mirror / Matt / Micro Satin Finish
Feature | Meets or Exceeds DIN3118 Standards
Sunk / Flat Panel
13° Offset Flare Nut Drive
6 Point(GFV6) / 12 Point(GFV) Box



Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
1/4x5/16	42	139	7x9	42	139	16x18	187	213
5/16x3/8	42	139	8x9	44	139	17x19	182	213
3/8x7/16	56	153	8x10	41	139	18x19	184	213
7/16x1/2	82	174	9x10	42	139	19x21	230	228
1/2x9/16	74	174	9x11	57	153	19x22	230	228
9/16x5/8	145	195	10x11	57	153	21x23	330	243
5/8x11/16	145	195	10x12	56	153	22x24	320	243
11/16x3/4	183	213	11x12	56	153	24x26	415	258
3/4x7/8	230	228	11x13	82	174	24x27	415	258
7/8x15/16	320	243	12x13	81	174	24x32	-	287
15/16x1"	415	258	12x14	77	174	25x28	595	297
1"x1-1/8	595	297	13x14	79	174	30x32	595	297
1-1/8x1-1/4	595	297	13x15	96	175	36x41	1020	317
			14x15	94	175			
			14x17	142	195			
			15x17	139	195			

SUNK PANEL WRENCH ASSORTMENT

German-type Combination Wrench Set

PP Rack + Color Sleeve / PP Rack + Color Box

12pc MM 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 19mm

8pc MM 8, 9, 10, 11, 13, 14, 17, 19mm

7pc MM 8, 10, 12, 13, 14, 17, 19mm



German-type Double Open Wrench Set

PP Rack + Color Sleeve / PP Rack + Color Box

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm

7pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19mm

6pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17mm



German-type 75° Offset Double Box Wrench Set

PP Rack + Color Box

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm

6pc MM 8x9, 10x11, 12x13, 14x15, 16x17, 18x19mm



5pc German-type Flare Nut Wrench Set

ABS Rack + Label

5pc MM 7x9, 8x10, 11x13, 12x14, 17x19mm



SUNK PANEL WRENCH ASSORTMENT



German-type Combination Wrench Set

PP Rack (PAT.P) + Label

12pc SAE (XL) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16"

12pc MM (XL) 7, 8, 10, 11, 12, 13, 16, 17, 18, 19, 22, 24mm

10pc MM (L) 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

9pc SAE (L) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

9pc MM (L) 8, 10, 11, 12, 13, 14, 15, 17, 19mm



German-type 70° Offset Combination Wrench Set

PP Rack (PAT.P) + Label

10pc MM (L) 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

9pc SAE (L) 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

9pc MM (L) 8, 10, 11, 12, 13, 14, 15, 17, 19mm



German-type Double Open Wrench Set

PP Rack (PAT.P) + Label

12pc MM (XL) 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22, 21x23, 24x27, 25x28, 30x32mm

8pc MM (L) 4x5, 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19mm



5pc German-type Flare Nut Wrench Set

PP Rack (PAT.P) + Label

5pc MM (S) 7x9, 8x10, 11x13, 12x14, 17x19mm

SUNK PANEL WRENCH ASSORTMENT



7pc German-type 70° Offset Combination Wrench Set
 PS Tray + Card + POF
7pc MM 8, 10, 12, 13, 14, 17, 19mm

8pc German-type Combination Wrench Set
 PP Rack + Label
8pc SAE 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
8pc MM 8, 10, 11, 12, 13, 14, 17, 19mm



8pc German-type Double Open Wrench Set
 PP Rack + Label
8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm



8pc Metric Double Open Wrench Set
 Item No.: 80CMB
 Size 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm



6pc Metric Offset Double Box Wrench Set
 Item No.: 68XOLMB
 Size 8x9, 10x11, 12x13, 14x15, 16x17, 17x19mm

6pc German-type 75° Offset Double Box Wrench Set
 PP Rack (PAT.P) + Label
6pc MM (M) 8x9, 10x11, 12x13, 14x15, 16x17, 18x19mm

SUNK PANEL WRENCH ASSORTMENT



8pc German-type Combination Wrench Set

PP Holder + Label

8pc MM 8, 10, 12, 13, 14, 17, 19, 22mm

8pc German-type 70° Offset Combination Wrench Set

PP Holder + Label

8pc MM 8, 10, 12, 13, 14, 17, 19, 22mm



8pc German-type Double Open Wrench Set

PP Holder + Label

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm



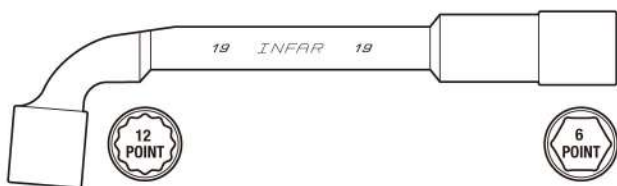
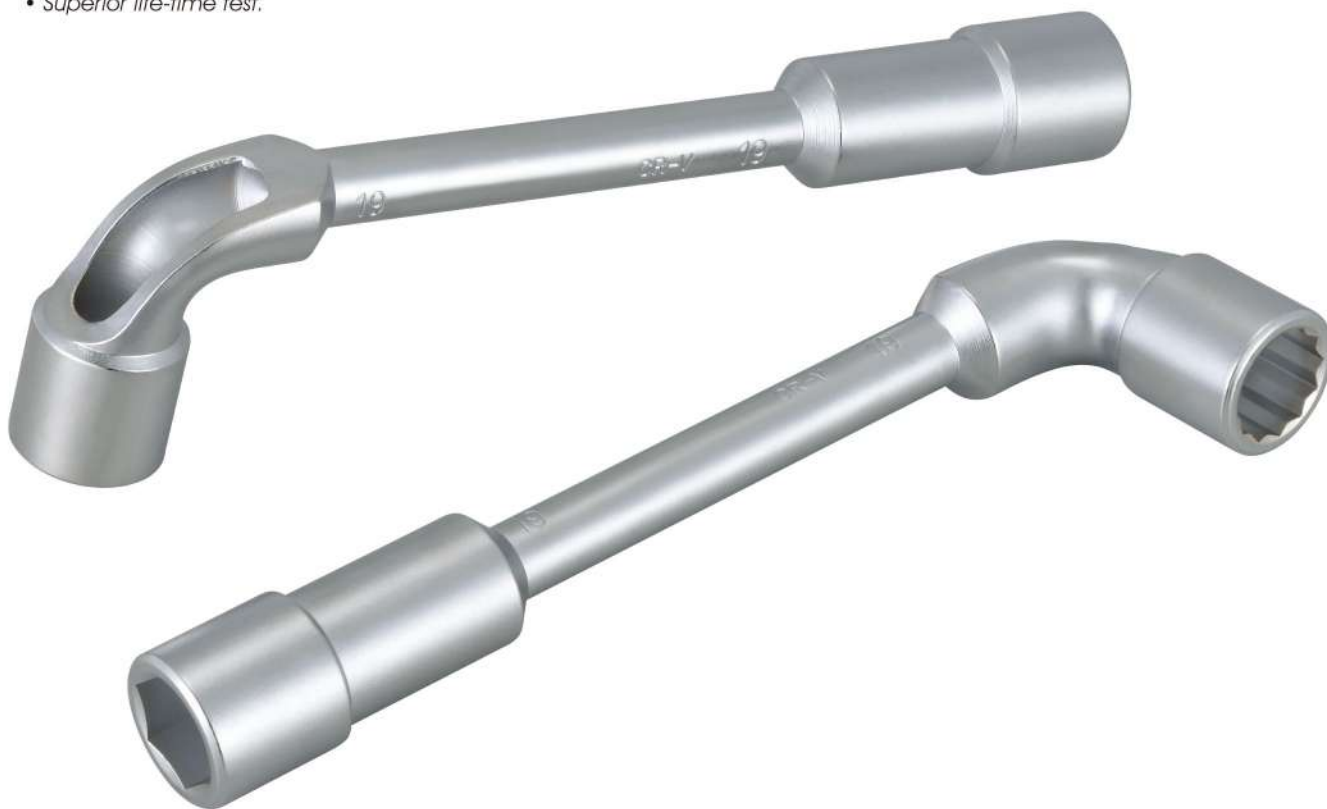
8pc German-type 75° Offset Double Box Wrench Set

PP Holder + Label

8pc MM 6x7, 8x9, 10x11, 12x13, 14x15, 16x17, 18x19, 20x22mm

ANGLE WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



ANGLE WRENCH

WL001



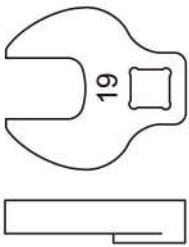
Material | Chrome Vanadium Steel
 Surface | Mirror / Matt Finish
 Feature | 6 & 12 Point Box

Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
6	36	105	27	853	285
7	38	105	30	1252	320
8	66	118	32	1376	338
9	71	130			
10	113	145			
11	116	145			
12	150	150			
13	173	155			
14	212	175			
15	230	180			
16	338	200			
17	355	200			
18	387	215			
19	437	215			
22	567	245			
24	680	250			

3/8" DRIVE CROWFOOT WRENCH



- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Crowfoot wrenches can be used with 3/8" drive accessories.
- Superior life-time test.



3/8" DRIVE CROWFOOT WRENCH

3/8

OH

Material | Chrome Vanadium Steel
 Surface | Mirror | Matt | Micro Satin Finish
 Feature | Open End

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
3/8	26	33.4	10	26	33.4
7/16	25	33.4	11	26	33.4
1/2	28	36.5	12	32	36.5
9/16	35	39.1	13	30	36.5
5/8	43	41.7	14	34	39.1
11/16	51	44.2	15	42	41.7
3/4	62	46.3	16	40	41.7
13/16	80	50.5	17	48	44.2
7/8	99	54.1	18	60	46.3
1	121	62.2	19	62	46.3



10pc 3/8" Dr Crowfoot Wrench Set

Metal Rail + PVC Single Blister + Cardboard

10pc SAE 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 1"

10pc MM 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

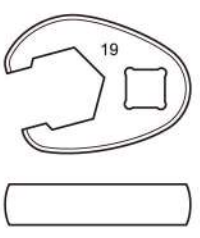
OTHER

MECHANIC

3/8" DRIVE FLARE NUT CROWFOOT WRENCH



- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Designed to work on a variety of fittings, such as fuel, brake, and air conditioning lines.
- Crowfoot wrenches can be used with 3/8" drive accessories.
- Superior life-time test.



3/8" DRIVE FLARE NUT CROWFOOT WRENCH

3/8

CFV

Material | Chrome Vanadium Steel
 Surface | Mirror | Matt | Micro Satin Finish
 Feature | Flare Nut Drive

Size (inch)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
3/8	38	36.8	10	37	36.8
7/16	36	36.8	11	36	36.8
1/2	34	36.8	12	34	36.8
9/16	51	42.4	13	33	36.8
5/8	49	42.4	14	51	42.4
11/16	66	47.7	15	50	42.4
3/4	65	47.7	16	48	42.4
			17	68	47.7
			18	66	47.7
			19	64	47.7



3/8" Dr Flare Nut Crowfoot Wrench Set

Metal Rail + PVC Single Blister + Cardboard

10pc MM 10, 11, 12, 13, 14, 15, 16, 17, 18, 19mm

7pc SAE 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

OTHER

MECHANIC

SINGLE OPEN STRIKING WRENCH

- Made by heat-treated **Chrome Molybdenum Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Striking wrench have a heavy-duty design for efficient transmittal of force.
- **Heavy open end** provides greater torque transmission.
- Superior life-time test.



SINGLE OPEN STRIKING WRENCH

MEETS OR EXCEEDS
DIN
STANDARDS

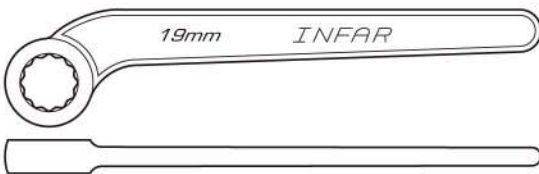
ISO

Material | Chrome Molybdenum Steel
Surface | Black Oxide Finish
Feature | Meets or Exceeds DIN894 Standards
Sunk Panel
Heavy Open End

Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
16	100	160	34	467	270
17	100	160	36	700	296
18	100	160	38	700	296
19	120	175	41	1015	335
20	120	175	43	1015	335
21	120	175	44	1230	370
22	177	195	45	1230	370
23	177	195	46	1230	370
24	177	195	48	1810	410
25	266	215	50	1810	410
26	266	215	55	2690	488
27	266	215	60	2690	488
28	352	240	65	2690	488
29	352	240	70	4770	595
30	352	240	75	4770	595
32	467	270			

SINGLE BOX WRENCH

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Superior life-time test.



SINGLE BOX WRENCH



ILR

Material | Chrome Vanadium Steel
 Surface | Matt / Micro Satin Finish
 Feature | Sunk Panel
 Flat Offset Box End
 12 Point Box

Size (mm)	Wt. (g)	L (mm)	Size (mm)	Wt. (g)	L (mm)
10	32	119	27	364	270
11	30	119	30	488	295
12	80	150	32	462	295
13	76	150	35	612	307
14	74	150	36	612	307
15	118	174	38	806	341
16	118	174	41	792	341
17	112	174			
18	182	207			
19	178	207			
20	176	207			
21	174	207			
22	284	250			
23	282	250			
24	276	250			
26	368	270			

BOTTLE OPENER

- Made by heat-treated **Chrome Vanadium Steel** for strength exceeding international specifications.
- Professional plating prevents wrenches from corrosion.
- Fitted on 8mm open end of **all types**.
- Superior life-time test.

