

TECHNICAL SPECIFICATIONS OF NON SPARKING TOOLS

ITEM	BE-BRONZE	AL-BRONZE
COMPOSITION	Be : 1.8 - 2.3 %	Al:10 – 12 %
	Co + Ni: over 0.2 %	Ni : 4 - 6 %
	Co + Ni + Fe: below 1.2 %	Fe+Mn: below 4 %
	Cu +Be +Co +Ni +Fe:over 99.0 %	Cu +Al+ Ni+ Fe+Mn: ove99 %
HARDNESS	310 ~ 360	211 ~ 258
EXTENSIBILITY	$\delta \leq 1.0\%$	$\delta \geq 5\%$
BREAKING STRESS	1100N/mm ² ~ 1300 N/mm ²	750N/mm ² ~ 850N/mm ²
ELEASTICITY LIMIT	840 ~ 880	450 ~ 550
ELECTRICAL RESISTANCE	8 ~ 6	8 ~ 12
DILATATION COEFFICIENT	0.00%	0.00%
DENSITY WEIGHT	8.5	8.2
MAGNETIC	0	

Sept 1 Non Sparking Safety Tools

11001

Striking Box Wrench



No	S mm	L mm	Be-Cu g	Al-Cu g
01	17	165	210	190
02	19	165	200	180
03	22	165	245	220
04	24	165	235	210
05	27	175	350	315
06	30	185	475	430
07	32	185	465	420
08	36	200	580	520
09	41	225	755	680
10	46	235	990	890
11	50	250	1145	1030
12	55	265	1440	1300
13	60	274	1620	1450
14	65	298	1995	1800
15	70	320	2435	2200
16	75	326	3010	2720
17	80	350	3600	3250
18	85	355	4330	3915
19	90	390	5500	4970
20	95	390	5450	4920
21	100	420	7080	6400
22	105	420	7000	6320
23	110	450	9130	8250
24	120	480	11000	9930
25	130	510	12610	11400
26	140	520	13000	11750
27	150	565	14500	13100

11002

Striking Box Wrench 6 Point



N o	S mm	L mm	Be-Cu g	Al-Cu g
01	17	165	210	190
02	19	165	200	180
03	22	165	245	220
04	24	165	235	210
05	27	175	350	315
06	30	185	475	430
07	32	185	465	420
08	36	200	580	520
09	41	225	755	680
10	46	235	990	890
11	50	250	1145	1030
12	55	265	1440	1300
13	60	274	1620	1450
14	65	298	1995	1800
15	70	320	2435	2200
16	75	326	3010	2720
17	80	350	3600	3250
18	85	355	4330	3915
19	90	390	5500	4970
20	95	390	5450	4920
21	100	420	7080	6400
22	105	420	7000	6320
23	110	450	9130	8250
24	120	480	11000	9930
25	130	510	12610	11400
26	140	520	13000	11750
27	150	565	14500	13100

11003
Striking Convex Box Wrench



No.	S mm	L mm	Be-Cu g	Al-C ug
01	27	175	370	335
02	30	185	530	480
03	32	185	475	430
04	36	210	740	670
05	41	227	950	860
06	46	245	1270	1145
07	50	257	1590	1435
08	55	267	1800	1625
09	60	278	2115	1910
10	65	298	2320	2100
11	70	320	2960	2680
12	75	326	3170	2870

11004
Striking Box Bent Wrench



No	S mm	L mm	Be-Cu g	Al-Cu g
01	24	160	300	270
02	27	175	370	335
03	30	190	525	475
04	32	190	500	450
05	36	210	630	570
06	41	225	895	810
07	46	240	1160	1050
08	50	255	1375	1240
09	55	270	1580	1430
10	60	285	2115	1910
11	65	300	2645	2390
12	70	320	2960	2675

11005
Striking Box Bent Wrench 6 Points



No.	S mm	L mm	Be-Cu g	Al-C ug
01	24	160	300	270
02	27	175	370	335
03	30	190	525	475
04	32	190	500	450
05	36	210	630	570
06	41	225	895	810
07	46	240	1160	1050
08	50	255	1375	1240
09	55	270	1580	1430
10	60	285	2115	1910
11	65	300	2645	2390
12	70	320	2960	2675

11006
Construction Wrench



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	10	230	90	85
02	12	250	110	105
03	14	270	145	130
04	17	310	200	180
05	19	330	250	225
06	22	350	320	290
07	24	370	400	360
08	27	400	500	450
09	30	430	700	630
10	32	430	700	630
11	36	460	960	870
12	41	490	1250	1130
13	46	520	1650	1490
14	50	540	2000	1810
15	55	560	2350	2125
16	60	610	2820	2550

11007
Single Box Offset Wrench Single



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	8	110	40	35
02	10	120	50	45
03	12	130	65	60
04	14	140	90	80
05	17	155	130	120
06	19	170	150	140
07	22	190	180	160
08	24	215	220	200
09	27	230	270	245
10	30	255	390	355
11	32	265	460	415
12	36	295	630	570
13	41	330	880	795
14	46	365	1200	1085
15	50	400	1470	1330
16	55	445	1830	1655
17	60	474	2300	2080
18	65	510	2600	2350
19	70	555	3220	2910
20	75	590	3260	2945

11008
Box Bent Wrench

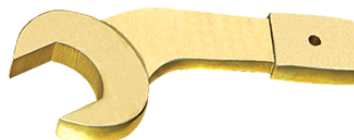


No.	S mm	L mm	Be-Cu g	Al-Cu g
01	10	119	65	57
02	12	151	90	82
03	14	151	95	85
04	16	174	160	145
05	17	174	160	145
06	19	207	230	205
07	22	207	230	205
08	24	207	350	315
09	27	207	350	315
10	30	250	560	520
11	32	250	585	550
12	34	295	650	580
13	36	295	650	580
14	38	307	860	770
15	41	307	860	770
16	46	340	1100	1000
17	50	340	1670	1500
18	55	370	2110	1900
19	60	400	2570	2320
20	65	430	2660	2400
21	70	450	3670	3310
22	75	470	4100	3700
23	80	490	4460	4030

11009
Striking Open End Wrench



11010
Striking Open End Bent Wrench



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	17	130	133	120
02	19	140	172	155
03	22	155	252	230
04	24	165	305	275
05	27	175	385	350
06	30	185	515	470
07	32	195	585	535
08	36	210	851	780
09	41	225	1055	965
10	46	240	1245	1140
11	50	255	1580	1445
12	55	270	1865	1705
13	60	285	2205	2015
14	65	305	3060	2805
15	70	325	3620	3310
16	75	345	3905	3570
17	80	365	4845	4440
18	90	385	5370	4920

No.	S mm	L mm	Be-Cu g	Al-Cu g
01	17	130	133	120
02	19	140	172	155
03	22	155	252	230
04	24	165	305	275
05	27	175	385	350
06	30	185	515	470
07	32	195	585	535
08	36	210	851	780
09	41	225	1055	965
10	46	240	1245	1140
11	50	255	1580	1445
12	55	270	1865	1705
13	60	285	2205	2015
14	65	305	3060	2805
15	70	325	3620	3310
16	75	345	3905	3570
17	80	365	4845	4440
18	90	385	5370	4920

11011
 Contruction With Pin Wrench



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	8	95	40	35
02	10	100	50	45
03	12	110	65	60
04	14	140	95	85
05	17	160	105	95
06	19	170	130	115
07	22	195	170	152
08	24	220	190	170
09	27	240	285	260
10	30	260	320	290
11	32	275	400	365
12	34	290	455	410
13	36	310	530	480
14	41	345	615	555
15	46	375	950	860
16	50	410	1215	1100
17	55	450	1480	1335
18	60	490	2115	1910
19	65	530	2960	2675
20	70	570	3375	3050
21	75	610	3700	3345

11012
 Single Open End Wrench



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	8	95	40	35
02	10	100	50	45
03	12	110	65	60
04	14	140	95	85
05	17	160	105	95
06	19	170	130	115
07	22	195	170	152
08	24	220	190	170
09	27	240	285	260
10	30	260	320	290
11	32	275	400	365
12	34	290	455	410
13	36	310	530	480
14	41	345	615	555
15	46	375	950	860
16	50	410	1215	1100
17	55	450	1480	1335
18	60	490	2115	1910
19	65	530	2960	2675
20	70	570	3375	3050
21	75	610	3700	3345

11013

Double Open End Wrench



No.	S1*S2 mm	L mm	Be-Cu g	Al-Cu g
01	8*10	100	34	31
02	10*12	120	60	55
03	12*14	130	75	69
04	14*15	143	115	105
05	16*18	163	150	137
06	17*19	170	170	155
07	19*22	185	245	224
08	22*24	210	312	285
09	24*27	230	390	357
10	27*30	250	565	517
11	30*32	265	675	617
12	32*36	300	955	860
13	34*36	300	955	860
14	36*38	330	1350	1210
15	36*41	330	1350	1210
16	38*40	330	1350	1210
17	41*46	355	1395	1275
18	46*50	370	1820	1665
19	50*55	385	2185	1998
20	50*60	400	2488	2275
21	55*60	415	2790	2550
22	60*65	435	3950	3613

11014

Double Box Offset Wrench



No.	S1*S2 mm	L mm	Be-Cu g	Al-Cu g
01	8*10	130	55	50
02	10*12	140	85	78
03	12*14	160	151	140
04	14*17	220	205	180
05	16*18	220	220	202
06	17*19	250	225	205
07	19*22	280	310	280
08	22*24	310	455	415
09	24*27	340	520	475
10	27*30	360	705	645
11	30*32	380	805	736
12	32*34	398	1080	980
13	32*36	410	1145	1030
14	34*36	418	1165	1065
15	36*38	434	1530	1400
16	36*41	450	1600	1465
17	38*40	460	1803	1640
18	41*46	470	2077	1905
19	46*50	490	2530	2315
20	50*55	510	2580	2360
21	50*60	520	3002	2745
22	55*60	530	3203	2905
23	60*70	560	4105	3605

11015
Double Open End Wrench Set



No.	S1*S2 mm	Be-Cu g	Al-Cu g
9 Pcs	8*10,10*12,12*14,14*17,17*19,19*22,22*24,24*27,30*32	2810	3295
11 Pcs	8*10,9*11,10*12,12*14,14*17,17*19,19*22,22*24,24*27,27*30,30*32	3530	3230
13 Pcs	5.5*7,6*7,8*10,9*11,10*12,12*14,14*17,17*19,19*22,22*24,24*27,27*30,30*32	3610	3295

11016
Double Box Offset Wrench Set



No.	S1*S2 mm	Be-Cu g	Al-Cu g
9 Pcs	8*10,10*12,12*14,14*17,17*19,19*22,22*24,24*27,30*32	2815	2575
11 Pcs	8*10,9*11,10*12,12*14,14*17,17*19,19*22,22*24,24*27,27*30,30*32	3585	3275
11 Pcs	8*10,9*11,10*12,12*14,14*17,17*19,19*22,22*24,24*27,27*30,30*32	3585	3275

11017

Combination Wrench



11018

Combination Wrench Set



No.	S mm	L mm	Be-Cu g	Al-Cu g
01	8	120	37	34
02	10	135	55	50
03	12	150	75	70
04	14	175	122	110
05	17	195	155	140
06	18	215	210	190
07	19	215	210	190
08	20	230	225	200
09	21	230	225	200
10	22	245	250	220
11	23	245	250	220
12	24	265	260	230
13	25	265	260	230
14	26	290	420	380
15	27	290	420	380
16	30	320	560	500
17	32	340	670	600
18	34	360	850	750
19	35	360	890	800
20	36	360	890	800
21	38	430	1440	1300
22	41	430	1440	1300
23	46	480	1890	1700
24	50	520	2220	2000
25	55	560	2780	2500
26	60	580	3230	2900
27	65	580	3680	3300
28	70	590	4770	4300

No.	S mm	Be-Cug	Al-Cug
9 Pcs	8,10,12,14,17,19,22,24,27	1815	1655
11 Pcs	8,10,12,14,17,19,22,24,27,30,32	3235	2955
13 Pcs	8,10,12,13,14,16,17,19,22,24,27,30,32	3485	3175

11019

Universal Wrench



No.	L mm	D mm	Be-Cu g	Al-Cu g
01	235	10 - 30	500	450
02	410	30 - 60	1880	1700

11020

Adjustable Hook Wrench



No.	D mm	L mm	Be-Cu g	Al-Cug
01	32-75	212	185	165
02	50-120	285	490	430
03	115-170	310	1000	800

11021
Hook Wrench



No.	D mm	L mm	Be-Cu g	Al-Cu g
01	30-32	140	63	57
02	34-36	170	95	85
03	40-42	176	105	95
04	45-50	209	160	145
05	52-55	212	170	150
06	58-62	144	225	200
07	68-75	250	265	240
08	80-90	284	390	355
09	95-100	288	435	390
10	110-115	337	740	690
11	120-130	343	790	715
12	135-145	388	1110	1000

11022
Adjustable Wrench



No.	L mm	Kmax mm	Be-Cu g	Al-Cu g
01	100	13	33	30
02	150	18	135	120
03	200	24	281	255
04	250	30	440	401
05	300	36	720	655
06	375	46	1410	1290
07	450	55	2261	2065
08	600	65	4705	4301

11023
Pipe Wrench American Type



No.	L mm	Km mm	Be-Cu g	Al-Cu g
01	200	25	510	465
02	250	30	845	770
03	300	40	1280	1170
04	350	50	1675	1530
05	450	60	2650	2420
06	600	75	3950	3610

11024
Pipe Wrench



No.	L mm	Kmax mm	Be-Cu g	Al-Cu g
01	200	25	420	380
02	250	30	615	560
03	300	40	880	801
04	350	50	1180	1080
05	450	60	1590	1450
06	600	75	3395	3105
07	900	85	6600	6005
08	1200	110	12500	11405

11025
Chain Pipe Light Wrench



No.	L mm	Dmax mm	Be-Cu g	Al-Cu g
01	600	100	2105	1910

11026
Belt Pipe Wrench



No.	L mm	L mm	B mm	Be-Cu g	Al-Cu g
01	300	425	30	810	735

11027
Bolt Chipper



No.	L mm	Be-Cu g	Al-Cu g
01	600	3350	3070

11028
Pincer



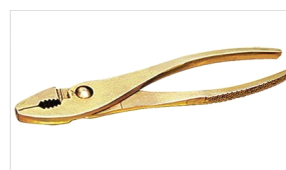
No.	L inch	L mm	Be-Cu g	Al-Cu g
01	8	200	325	300

11029
Slip Joint Pliers



No.	L inch	L mm	K max mm	Be-Cu g	Al-Cu g
01	10	250	32	325	310
02	12	300	52	665	610

11030
Adjustable Combination Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	8	200	323	295

11031
Lock Wire Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	8	200	323	295

11032
Snap Ring Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	8	200	290	265
02	10	250	415	380

11033
Lineman Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	6	150	165	151
02	8	200	281	257

11034
Diagonal Cutting Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	6	150	205	188

11035
Flat Nose Pliers



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	6	150	180	165
02	7	175	306	280
03	8	200	405	370

11036
Long Nose Pliers



No.	L inch	L mm	L1 mm	Be-Cu g	Al-Cu g
01	6	150	54	165	151
02	8	200	74	305	280

11037

Hammer Ball Pein



No.	H g	H p	L mm	Cu g
01	230	0.5	280	403
02	340	0.75	280	502
03	450	1	310	680
04	680	1.5	340	950
05	910	2	350	1205
06	1130	2.5	400	1470

11038

Hammer Cross Pein Engineers'



No.	H g	L mm	g
01	500	310	655
02	1000	340	1175
03	1500	400	1850
04	2000	450	2455
05	5000	900	6005

11039

Hammer Claw



No.	H g	L mm	g
01	230	280	405
02	450	300	652
03	680	330	953
04	910	390	1205

11040

Hammer Testing



No.	H g	L mm	g
01	150	300	206
02	250	335	345

11041
Hammer Scaling



No.	H g	L mm	g
01	150	280	205
02	300	280	370

11043
Hammer Sledge



No.	H g	L mm	g
01	450	310	610
02	1000	400	1300
03	1400	400	1700
04	1500	400	1800
05	1800	400	2100
06	2000	400	2300
07	2200	400	2500
08	2500	900	3410
09	2700	900	3610
10	3000	900	3910
11	3600	900	4510
12	4000	900	4910
13	4500	900	5410
14	5000	900	5910
15	5400	900	6310
16	6400	900	7310
17	7200	900	8110
18	8000	900	8910
19	8200	900	9110
20	9100	900	10010
21	9900	900	10810

11042
Nylon Hammer



No.	H g	L mm	g
01	800	400	800
02	1000	400	1000

11044
Hammer Sledge German Type



No.	H g	L mm	g
01	450	310	610
02	1000	400	1300
03	1400	400	1700
04	1500	400	1800
05	1800	400	2100
06	2000	400	2300
07	2200	400	2500
08	2500	900	3410
09	2700	900	3610
10	3000	900	3910
11	3600	900	4510
12	4000	900	4910
13	4500	900	5410
14	5000	900	5910
15	5400	900	6310
16	6400	900	7310
17	7200	900	8110
18	8000	900	8910
19	8200	900	9110
20	9100	900	10010
21	9900	900	10810

11045
Pick Axe



No	L mm	H mm	B mm	Be-Cu g	Al-Cu g
01	340	230	98	1525	1400

11046
Fireman Axe



No	L mm	H mm	B mm	Be-Cu g	Al-Cu g
01	340	200	98	1425	1300

11047
Safety Axe



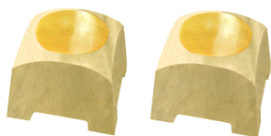
No	L mm	H mm	B mm	Be-Cu g	Al-Cu g
01	340	145	82	980	890

11048
Pick Railroad



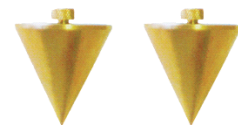
No.	L mm	H mm	B mm	Be-Cu g	Al-Cu g
01	1050	360	53	1200	1075
02	1050	385	55	1885	1690
03	1050	410	56	2173	1970
04	1050	470	56	2685	2420

11049
Anvil Block



No.	Size g	H mm	K mm
01	3000	63	92
02	5000	75	111
03	16000	114	160

11050
Hammer Plumb



No.	H mm	Φ mm	Be-Cu g	Al-Cu g
01	59	50	275	247

11051
Bung Wrench



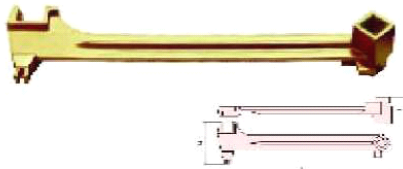
No	L mm	H mm	Be-Cu g	Al-Cu g
01	300	70	630	580

11052
Hammer Testing Flat Tail



No.	L mm	H1 mm	H2 mm	Be-Cu g	Al-Cu g
01	350	70	95	1165	1070

11053
Bung Wrench



No.	L mm	H1 mm	H2 mm	Al-Cu g	Al-Cu g
01	385	93	61	1250	1150

11054
Universal Wrench, Special-type



No.	Size
01	3-15*15-27

11055
Slotted Screwdriver



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	2	50	35	33
02	3	75	35	32
03	4	100	45	42
04	5	125	100	95
05	6	150	110	105
06	8	200	165	155
07	10	250	185	175
08	12	300	245	230
09	14	350	320	300
10	16	400	450	430

11056
Phillips Screwdriver



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	2	50	35	32
02	3	75	70	63
03	4	100	75	70
04	5	125	100	95
05	6	150	110	105
06	8	200	165	155
07	10	250	185	170
08	12	300	245	230
09	14	350	270	255
10	16	400	295	280

11057
Slotted Offset Screwdriver



No.	L mm	H mm	K mm	Be-Cu g	Al-Cu g
01	72	1	6	25	23
02	125	1.5	8	55	50
03	196	1.5	10	135	124

11058
Screwdriver



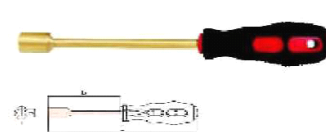
No.	L mm	L1 mm	B mm	Be-Cu g	Al-Cu g
01	200	100	8	135	125
02	250	110	8	220	204
03	300	160	10	305	275
04	500	350	11	505	461

11059
Phillips Offset Screwdriver



No.	L mm	Size	Be-Cu g	Al-Cu g
01	120	1#*2#	50	45

11060
Driver Hex Nut



No.	L1 mm	L mm	S mm	Be-Cu g	Al-Cu g
01	90	190	6	85	81
02	100	210	8	100	85
03	110	220	10	140	130
04	110	230	13	185	172
05	120	240	16	220	205
06	120	240	17	230	218

11061
Awl



No.	L inch	L mm	Be-Cu g	Al-Cu g
01	4	200	50	45

11062
Hearing Needle



No.	L mm	Φ mm	Be-Cu g	Al-Cu g
01	250	6	85	75
02	300	8	150	135
03	400	7	160	145
04	500	10	335	305

11063
Marking Tool



No.	L mm	H mm	Φ mm	Be-Cu g	Al-Cu g
01	400	40	12	502	445
02	600	50	16	1152	1036

11064
Hacksaw Frame



No	L mm	D mm	H mm	Be-Cu g	Al-Cu g
01	500	300	110	645	590

11065
Hacksaw Blade



No	L mm	B mm	Be-Cu g
01	300	12	32

11066
Hack Saw



No	L mm	H mm	Be-Cu g	Al-Cu g
01	370	114	125	265

11067
Round File



No.	L inch	L mm	Φ mm	Be-Cu g
01	6	150	6.5	45
02	8	200	7.5	91
03	10	250	8.5	122
04	12	300	9.5	180
05	14	350	10.5	250

11068
Square File



No.	L inch	L mm	B mm	Be-Cu g
01	8	200	8	130
02	10	250	10	155
03	12	300	11	202
04	14	350	12	303

11069
Triangle File



No.	L inch	L mm	B mm	Be-Cu g
01	8	200	12	115
02	10	250	13	125
03	12	300	14	160
04	14	350	14	205

11070
Half Round File



No.	L inch	L mm	B mm	H mm	Be-Cu g
01	6	150	22	6	105
02	8	200	23	7	190
03	10	250	26	8	255
04	12	300	28	9	375
05	14	350	30	10	565

11071
Flat File



No.	L inch	L mm	B mm	H mm	Be-Cu g
01	6	150	16	4	75
02	8	200	21	4.5	160
03	10	250	25	6	282
04	12	300	30	6.5	455
05	14	350	32	8	675
06	16	400	32	9.5	925

11072
Folding Spade



No.	L mm	B mm	H mm	Be-Cu g	Al-Cu g
01	320	180	130	1427	1305

11073
Square Shovel



No.	L mm	B mm	H mm	Be-Cu g	Al-Cu g
01	940	175	340	1410	1290
02	990	240	418	1804	1650

11074
Round Point Shovel



No.	L mm	B mm	H mm	Be-Cu g	Al-Cu g
01	990	240	420	1553	1420

11075
Dust Pan



No.	L mm	B mm	H mm	Be-Cu g	Al-Cu g
01	990	270	520	2330	2130

11076
Center Punch



No.	L mm	Φ mm	Be-Cu g	Al-Cu g
01	100	16	45	125
02	150	16	230	205
03	200	18	392	340
04	300	18	615	540
05	400	18	820	740
06	500	20	1230	1102
07	500	30	2740	2480

11077
Machinists' Punch



No.	L mm	Φ mm	Be-Cu g	Al-Cu g
01	160	18	290	265
02	250	18	470	425
03	300	18	600	545
04	300	20	700	635
05	300	25	1100	995
06	400	18	800	725
07	400	20	1000	885

11078
Flat Chisel



No.	L mm	Φ mm	B mm	Be-Cu g	Al-Cu g
01	160	14	14	175	160
02	160	16	16	231	210
03	200	20	20	473	430
04	250	24	24	822	751
05	300	24	24	1025	942
06	300	25	25	1302	1002
07	400	25	25	1502	1360
08	500	25	25	1903	1730
09	500	30	30	2730	2481

11079
Bar



No.	L mm	Φ mm	B mm	Be-Cu g	Al-Cu g
01	500	15	15	738	675
02	500	19	19	1150	1050
03	500	20	20	1295	1185
04	500	25	25	1975	1805
05	500	30	30	2925	2675
06	600	25	25	2380	2175
07	600	30	30	3450	3155
08	800	23	23	2290	2095
09	800	25	25	3175	2905
10	800	30	30	4490	4105
11	850	30	30	4870	4455
12	1000	25	25	3985	3645
13	1000	28	28	4710	4305
14	1000	30	30	5595	5115
15	1200	25	25	4795	4385
16	1200	30	30	6970	6375
17	1500	30	30	8665	7925

11080
Pinch Bar



No.	L mm	Φ mm	B mm	Be-Cu g	Al-Cu g
01	500	15	16	672	615
02	500	19	20	1093	1001
03	500	20	20	1148	1052
04	500	23	23	1481	1355
05	600	25	25	2132	1950
06	800	23	23	2530	2293
07	1000	30	28	5193	4752

11081
Bar(Hex) Pinch



No.	L mm	S mm	B mm	Be-Cu g	Al-Cu g
01	500	18	20	1200	1090
02	500	20	22	1450	1320
03	600	20	22	1750	1600
04	1000	22	24	3500	3200
05	1000	25	27	4500	4080
06	1500	25	27	6750	6120
07	1000	35	37	8800	8000

11082
Bar With Valve Handle



No.	S mm	L mm	H mm	Be-Cu g	Al-Cu g
01	30	200	44	280	250
02	32	300	50	540	490
03	35	250	47	364	325
04	40	300	50	470	422
05	45	350	58	610	540
06	48	375	62	660	595
07	50	400	67	705	615
08	55	450	73	960	870
09	60	500	79	1205	1105
10	65	550	82	1370	1250
11	70	600	85	1540	1360
12	75	650	88	1705	1540
13	80	700	91	1910	1650
14	85	750	97	2250	2015
15	90	800	103	2380	2130

11083
Wrecking Bar



No.	L mm	Φ mm	B mm	H mm	Be-Cu g	Al-Cu g
01	250	13	15	1.5	235	215

11084
Wrecking Bar



No.	L mm	Φ mm	Be-Cu g	Al-Cu g
01	400	16	752	685
02	600	16	1102	1002
03	800	19	2200	2011
04	1200	20	3570	3266

11085
Chisel Cross



No.	L mm	Φ mm	B mm	Be-Cu g	Al-Cu g
01	160	14	14	175	160
02	160	16	16	231	210
03	200	20	20	473	430
04	250	24	24	822	751
05	300	24	24	1025	942
06	300	25	25	1302	1002
07	400	25	25	1502	1360
08	500	25	25	1903	1730
09	500	30	30	2730	2481

11086
Flat Chisel



No.	L mm	B mm	Be-Cu g	Al-Cu g
01	22	150	235	205
02	22	200	320	280
03	24	250	490	440
04	25	300	770	700
05	27	400	1220	1100

11087
Valve Handle



No.	S mm	L mm	H mm	Be-Cu g	Al-Cu g
01	30	200	44	280	250
02	32	300	50	540	490
03	35	250	47	364	325
04	40	300	50	470	422
05	45	350	58	610	540
06	48	375	62	660	595
07	50	400	67	705	615
08	55	450	73	960	870
09	60	500	79	1205	1105
10	65	550	82	1370	1250
11	70	600	85	1540	1360
12	75	650	88	1705	1540
13	80	700	91	1910	1650
14	85	750	97	2250	2015
15	90	800	103	2380	2130

11088
Cross Cutting Chisel



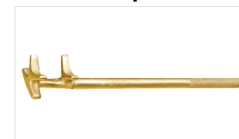
No.	L mm	B mm	H mm	Be-Cu g	Al-Cu g
01	140	4	4	280	255
02	200	4	4	480	435
03	300	5	5	840	760

11089
Valve Spanner



No.	B mm	R mm	L mm	Be-Cu g	Al-C ug
01	30	15	250	415	375
02	40	20	300	540	485
03	50	25	400	1050	950
04	60	30	550	1800	1630
05	130	65	750	4900	4430

11090
Valve Spanner



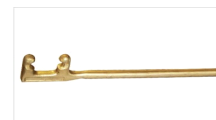
No.	S mm	H mm	L mm	Be-Cu g	Al-Cu g
01	40	50	300	590	540
02	55	74	450	1165	1050
03	70	80	600	1950	1700
04	90	100	800	2800	2600

11091
Valve Handle



No.	S mm	L mm	H mm	Be-C u g	Al-C u g
01	30	200	44	405	340
02	35	250	49	465	410
03	40	300	50	595	540
04	45	350	61	835	762
05	48	375	62	865	790
06	50	400	67	892	815
07	55	450	73	1270	1110
08	60	500	79	1570	1435
09	65	550	80	1920	1755
10	70	600	80	1945	1775
11	75	650	85	2245	2055
12	80	700	91	2405	2190
13	85	750	97	3050	2770
14	90	800	103	3360	3060
15	93	850	107	3553	3250
16	96	900	110	3870	3515
17	100	1000	114	4170	3795
18	103	1200	120	6330	5765

11092
Valve Handle



No.	S mm	L mm	H mm	Be-Cu g	Al-Cu g
01	22	200	50	390	345
02	28	250	53	550	475
03	34	300	56	722	615
04	39	350	60	905	780
05	44	400	64	1050	910
06	48	450	69	1260	1130
07	53	500	74	1405	1250
08	58	550	79	1890	1720
09	63	600	84	2220	2005

11093
Valve Square Driver



No	C mm	L mm	H mm	Be-Cu g	Al-C ug
01	6	110	9	65	55
02	8	120	10	75	61
03	9	140	11	90	75
04	10	140	12	105	85
05	11	160	13	130	102
06	12	190	14	180	145
07	13	200	15	185	151
08	14	250	16	300	261
09	16	250	18	335	285
10	17	300	19	420	366
11	19	350	20	740	662
12	22	400	22	1000	896

11094
Oxygen Bottle Wrench



No.	C inch	L mm	H mm	Be-Cu g	Al-C ug
01	3/8	154	40	185	170

11095
Wrench C



No	L mm	S1 mm	S2 mm	Be-Cu g	Al-Cu g
01	200	20	15	392	360

11096
Wrench C



No	L mm	Φ mm	S2 mm	Be-Cu g	Al-Cu g
01	600	32	32	4500	4115

11097
Portable Oil Pump



No.	Φmm*L(mm)
01	165*1100

11098
Manual Portable Oil Pump



No.	L(mm)
01	1090

11099
Oil Dipper



No.	Φmm*L(mm)
01	85*350
02	55*280

11100
Oil Funnel



No.	Φmm*L(mm)
01	160*130
02	160*150

11101
Oil Kettle



No.	V(L)
01	10
02	20

11102
Bucket



No.	Φmm*H(mm)
01	270*248
02	270*285

11103
Bucket



No.	Φmm*H(mm)
01	270*270

11104
Aluminum Bucket



No.	Φmm*H(mm)
01	280*290

11105
Sugar Scoop



No.	Φmm*L(mm)
01	160*350

11106
Basin



No.	Φmm*H(mm)
01	350*140

11107
Dustpan



No.	L(mm)*B(mm)
01	150*130
02	200*200
03	270*250

11108
Scoop Dustpan



No. **L(mm)*B(mm)**
01 300*200

11109
Scoop



No. **L(mm)*B(mm)**
01 220*160
02 275*190

11110
Four Prong Fork



No. **L(mm)**
01 327

11111
Three Prong Fork



No. **L*B*H(mm)**
01 208*200*125

11112
Cleaning Rust Rake



No. **L(mm)**
01 350
02 500

11113
Brush



No. **SIZE**
01 Row4
02 Row6

11114
Brush



No. **L*B(mm)**
01 205*48

11115
Tweezers Neat Tips



No. **L(mm)**
01 150
02 200

11116
Shearing Cutting



No. **L(mm)**
01 150

11117
Shearing Tin



No.	L(mm)
01	12"
02	14"

11120
Plane's Blade



No.	L(mm)
01	175*43

11123
Knife Putty



No.	L*B(mm)
01	200*25
02	200*50
03	200*75
04	200*100

11118
Scraper Tile Cleaver



No.	L(mm)
01	350*55

11121
Knife Common



No.	L(mm)
01	250

11124
Scraper Arched



No.	B(mm)
01	50
02	100
03	150

11119
Opener Carbide Drum



No.	L(mm)
01	280*53
02	285*53

11122
Scraper Flat



No.	L(mm)
01	250
02	300
03	350

11125
Cleaning Rust Hoe



No.	L(mm)
01	75
02	100
03	125

11126
Scraper



No.	B(mm)
01	50
02	75
03	100
04	125
05	150

11127
Scraper Deck



No.	L(mm)
01	250
02	300
03	350
04	400
05	450

11128
Wedge



No.	H1*H2*L(mm)
01	10*50*100
02	15*50*135
03	20*40*230
04	30*40*250
05	40*50*250
06	40*50*300
07	50*50*300

SEPT 2 SOCKET

11130
Heavy Duty Socket 1/2"



11131
Heavy Duty Socket 3/4"



No	S(mm)	S(inch)	No	S(mm)	S(inch)	No	S(mm)	S(inch)	No	S(mm)	S(inch)
01	6	1/4"	11	16	7/8"	01	17	5/8	11	34	1.1/4
02	7	5/16"	12	17	15/16"	02	18	11/16	12	36	1.5/16
03	8	3/8"	13	18	1"	03	19	3/4	13	38	1.3/8
04	9	7/16"	14	19	1.1/16"	04	20	13/16	14	41	1.7/16
05	10	1/2"	15	20	1.8/8"	05	21	7/8	15	46	1.1/2
06	11	9/16"	16	21	1.3/16"	06	22	15/16	16	50	1.5/8
07	12	5/8"	17	22	1.1/4"	07	24	1	17	55	1.11/16
08	13	11/16"	18	24	1.5/16"	08	27	1.1/16	18	60	1.3/4
09	14	3/4"	19	27	1.3/8"	09	30	1.1/8	19	65	1.13/16
10	15	13/16"	20	30	1.7/16"	10	32	1.3/6			

11130
Heavy Duty Socket 1"



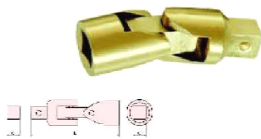
11132
Impact Socket 1"



11141
Impact Socket 1-3/16"



11143
Universal Joint



11131
Impact Socket 1-1/2"



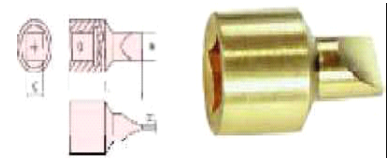
11133
Socket 1/2"



11142
Impact Socket 3/4"



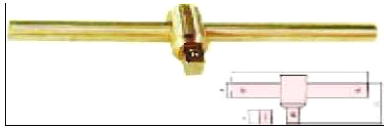
11144
Screwdriver Socket



No.	C inch	L mm	Be-Cu g	Al-Cu g
01	1/2	80	186	170
02	3/4	110	500	450
03	1	125	1000	900

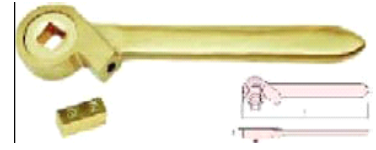
No	C inch	L mm	H mm	Be-Cu g	Al-Cu g
01	1/4	200	16.5	350	305
02	3/8	175	16.5	335	302
03	3/8	200	16.5	370	313
04	1/2	250	16.5	460	410
05	3/4	300	22	1080	1002
06	1	300	22	1405	1275

11145
Sliding T Handle



No .	C inch	L mm	H mm	B mm	Be-C ug	Al-C ug
1	2-Jan	52	2	13	102	91

11146
Ratchet Wrench

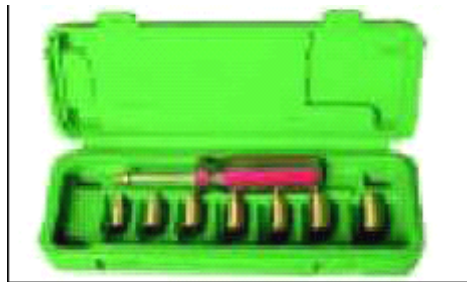


No	C inch	L mm	H mm	Φ mm	Be-Cu g	Al-Cu g
01	1/2	250	39	13	330	302
02	3/4	350	54	19	1070	978
03	3/4	400	56	21	1335	1221
04	1	400	62	21	1620	1481

SEPT1 SOCKET SET

11129

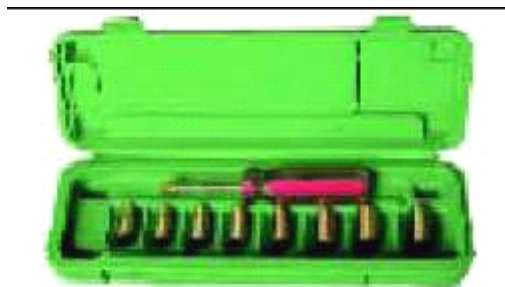
3/4 " Dr Socket Set – 8Pcs



No.	Contents
01	Socket 4mm,4.5mm,5mm,5.5mm,6mm,7mm,8mm Driver Type Handle 55mm

11130

3/4 " Dr Socket Set – 9Pcs

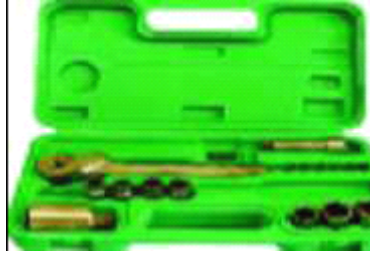


No.	Contents
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01	Socket 4mm,5mm,6mm,7mm,8mm,9mm,10mm,11mm Driver Type Handle 55mm
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11131

3/8 " Dr Socket Set – 11Pcs



Number	Contents
01	Socket 10mm,11mm,12mm,13mm,14mm,17mm,19mm, 13/16" Spark Plug Ratchet Wrench 200mm Straight Joint

11132

1/4" 3/8" Dr Socket Set – 21pcs



Number	Contents
01	1/4"Socket 4mm,4.5mm,5mm, 5.5mm,6mm,7mm,8mm Ratchet Wrench 200mm Straight Joint Driver Extension 75mm,150mm 3/8"Socket 10mm,11mm,12mm,13mm,14mm,17mm,19mm 13/16"Spark Plug Adaptor Driver Type Handle 55mm

11133

1/2 " Dr Socket Set – 9pcs



Number	Contents
01	Socket 10mm,11mm,12mm,14mm,17mm,19mm,22mm,24mm Offset Handle 230mm

11134

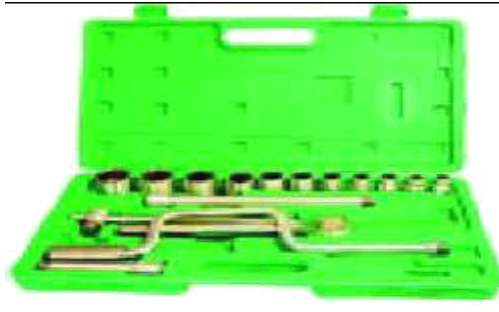
1/2 "Dr Socket Set – 13pcs



Number	Contents
01	Socket 8mm,10mm,11mm,12mm,14mm, 17mm,19mm,22mm,24mm,27mm Ratchet Wrench 250mm Hinged Handle 250mm Socket Case

11135

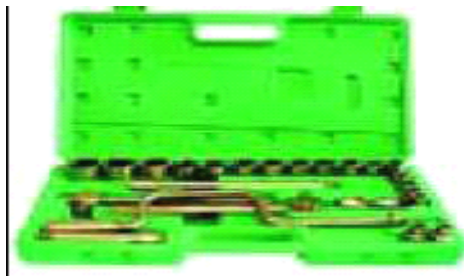
1/2 "Dr Socket Set -17pcs



Number	Contents
01	Socket 10mm,11mm,12mm,14mm,17mm, 19mm,22mm,24mm,27mm,30mm,32mm Ratchet Wrench 250mm Sliding T-Handle 250mm Speed Handle 400mm Driver Extension 125mm,250mm Socket Case

11136

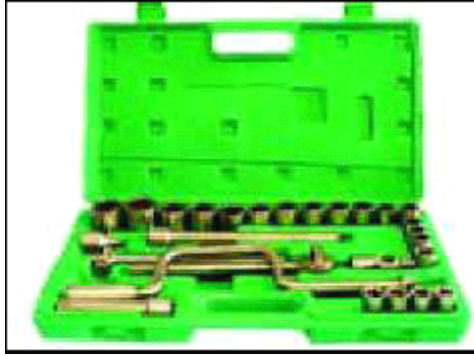
1/2 "Dr Socket Set - 24pcs



Number	Contents
01	Socket 10mm,11mm,12mm,13mm,14mm,15mm, 16mm,17mm,18mm,19mm,20mm, 21mm, 22mm,23mm,24mm,27mm,30mm,32mm Ratchet Wrench 250mm Sliding T-Handle 250mm Speed Handle 400mm Driver Extension 125mm,250mm Universal Joint 80mm

11137

1/2 "Dr Socket Set - 28pcs



Number	Contents
01	Socket 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm 17mm, 18mm, 19mm, 20mm, 21mm, 22mm, 23mm, 24mm, 26mm, 27mm, 28mm, 30mm, 32mm Ratchet Wrench 250mm Sliding T-Handle 250mm Speed Handle 400mm Driver Extension 125mm, 250mm Universal Joint 80mm Screwdriver Socket 52mm Socket Case

11138

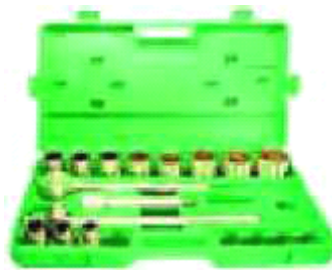
1/2 "Dr Socket Set - 32pcs



Number	Contents
01	Socket 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm, 20mm, 21mm, 22mm, 23mm, 24mm, 26mm, 27mm, 28mm, 30mm, 32mm 13/16" Spark Plug Ratchet Wrench 250mm Sliding T-Handle 250mm Speed Handle 400mm Driver Extension 125mm, 250mm Universal Joint 80mm Screwdriver Socket 52mm Offset Handle 230mm Socket Case

11139

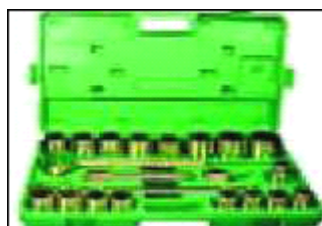
3/4 "Dr Socket Set – 14pcs



Number	Contents
01	Socket 21mm,24mm,27mm,30mm,32mm, 34mm,36mm,38mm,41mm,46mm,50mm Ratchet Wrench 320mm Sliding T-Handle 3/4"*400 Driver Extension 200mm

11140

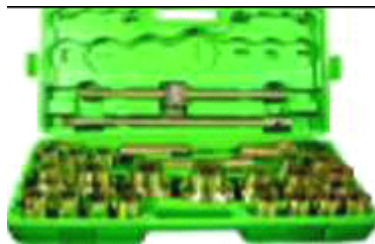
3/4 "Dr Socket Set – 21pcs



Number	Contents
01	Socket 21mm,22mm,23mm,24mm,26mm, 27mm,28mm,29mm,30mm,31mm,32mm, 34mm,36mm,38mm,41mm,46mm,50mm Ratchet Wrench 320mm Sliding T-Handle 3/4"*400 Driver Extension 200mm Socket Case

11141

3/4 "1" Dr Socket Set – 28pcs



Number	Contents
01	Socket 21mm,22mm,23mm,24mm,26mm,27mm, 28mm,29mm,30mm,31mm,32mm, 34mm,36mm,38mm,41mm,46mm,50mm, 55mm,60mm,65mm Ratchet Wrench 160mm Sliding T-Handle 3/4"*400 Driver Extension 200mm,430mm 3/4"*120mm Flex Ball Joint 3/4"*1" Sliding T-Handle

11142

1 "Dr Socket Set – 18pcs



Number	Contents
01	Socket 30mm ,31mm ,32mm ,34mm ,36mm, 38mm ,41mm ,46mm ,50mm ,55mm ,60mm, 65mm ,70mm ,75mm ,80mm Sliding T-Handle 3/4" *1" Driver Extension 200mm Flex Ball Joint 1" *120mm