

PRESENTS

A PREMIUM HAND TOOL LINE

EQUIVELANT TO

PROTO SK ARMSTRONG

But WITHOUT THE HIGH PRICE







INTRODUCTION TO STRIKING TOOLS

URREA striking tools are used for direct striking (Hammers and Mallets) and indirect striking (Chisels, Punches and Nail Sets). In conjunction, they are particularly useful in industry (machinery, assembly lines, maintenance) and automotive service (engines, bodywork, tires).

Aside from traditional fitter's or ball hammers, striking tools include hammers specifically designed to avoid distorting, marking or damaging the parts subject to striking, or to avoid producing sparks, which are useful in explosive environments. The materials used in these types of hammers are brass, plastic and rubber.

There are also hammers designed specifically for the automotive laminating service, which are shaped to match automobile bodywork styles.

Striking tools include tools designed for cutting or breaking materials, for marking, for helping to center bits and for installing or removing bolts and rivets. The latter type includes tools made of steel or brass for when it is necessary to avoid marking or damaging the materials.

Also presented in this chapter are HOLLOW PUNCHES, useful tools for perforating or manufacturing rubber washers or any materials used for packing, and alignment bars designed to facilitate the alignment or disassembly of machinery components.

URREA striking tools

• Offer a wide variety of quality products including more than 140 items:

- Brass and steel hammers
- Mechanic's ball hammers
- Dead blow hammers
- Interchangeable cap hammers
- Special plastic or rubber cap hammers
- Engraver's hammers
- Chisels
- Punches, in steel or brass configuration
- Punches and nail sets
- HOLLOW PUNCHES
- Alignment bars

• They are grouped and combined in more than 23 sets presented in practical organizers such as plastic boxes and vinyl cases, which allow them to be transported and kept organized.

• Hammer heads are manufactured from various materials such as: high quality brass, plastic injection, high impact rubber, high strength micro-alloyed steel; hot forged, machined with high precision and heat treated to provide the best combination of hardness and resistance to blows. • All URREA striking tools have a natural lacquer or paint finish to protect them from corrosion, and in the case of FOD applications (Foreign Object Debris), we recommended using striking tools with blued finish to prevent the loss of coating particles.



• Comply with national and international, American and European standards.

• The image of quality is reinforced by stamping each tool permanently and indelibly with the country of origin. This country of origin stamp complies with the regulations of the Federal Trade Commission of the United States of America.

The information presented in this section is organized as follows:

- Technical standards
- Manufacturing process
- Quick selection guide
- Detailed product specifications
- Safety recommendations





TECHNICAL STANDARDS FOR STRIKING TOOLS



URREA manufactures tools in accordance with product technical standards.

A product technical standard is a document that specifies basic design and manufacturing guidelines to ensure the adequate performance of products under the conditions required by users, and which are issued by private or government organizations and associations.

The only organization to issue international standards is known as ISO (International Organization for Standardization), which develops the ISO 9000 series regarding quality systems, but it also issues product technical standards. In the United States, there are several organizations that issue or have issued standards, such as GSA/US FEDERAL, ASME and ANSI.

The Federal standards for hand tools are no longer being updated and are being taken over by ASME, and the same thing is occurring with standards that used to be issued by ANSI.

Currently, ASME standards for hand tools are initially reviewed by committees made up of different tool manufacturers, users and marketers, and subsequently approved and issued by ASME.

In Europe, the DIN (Deutsches Institut für Normung e.V. – German Standardization Institute) encompasses various organizations and commissions dedicated to promoting the standardization and quality of products marketed in Germany.

STANDARDS APPLICABLE TO SLEDGES, MALLETS AND HAMMERS





B107.53M, 1998 B173.2, 1985 "Ball Peen Hammers: Safety Requirements" "Ball Peen Hammers: Safety Requirements



"Hammer (Forged steel head)"

STANDARDS APPLICABLE TO CHISELS, PUNCHES AND NAIL SETS





B107.50M, 1998	"Brick chisels and brick sets: safety requirements"
B107.47M, 1998	"Metal chisels: safety requirements"
B107.45M; 1998	"Ripping chisels and flooring/electricians' chisels:
	safety Requirements"
B209.1, 1991	"Metal chisels: safety requirements"
B209.2, 1991	"Metal Punches and Drift Pins Safety
	Requirements"



GGG-C-313C	"Chisels, hand: cape, diamond point, cold, round nose and side Cutting"
GGG-C-330C	"Chisels. Tools blanks, Caltiking Tools and
GGG-B-101E	metal-forming Tools, Power Hammer" "Bars, Chisel, Pinch, Pry, Wrecking; digging;
	tamp-Ing, Digging, And Crowbars"
GGG-P-831E	"Punches; Center, coopers, drive pin, Aligning,
GGG-P-833A	and prick" "Punches, Cutting"
0001	r anonoo, o atting



DIN7462: 1970-05

DIN7482: 1966-11

DIN5130: 1974-02

Deutsches Institut für Normung e.V.

Deutsches Institut für Normung e.V.

"Wooden handles for eyed wood bits"

"Wooden hammers"

"Copper hammers"

I			
	DIN5138:	1973-03	"Chisel Handles"
	DIN5139:	1973-03	"Firmer chisels with tang"
	DIN5143:	1973-03	"Mortise chisel"
	DIN5154:	1973-03	"Chisels; technical specifications"
	DIN5155:	1973-03	"Chisels; denominations"
	DIN6450:	1984-11	"Pin punches"
	DIN6451:	1985-01	"Cape chisels" DIN6453: 1984-11 "Flat chisels"
	DIN6455:	1984-11	"Grooving chisels"
	DIN6458:	1984-11	"Drift punches"
	DIN7200:	1968-03	"Hollow punches"
	DIN7250:	1984-11	"Center punches"
	DIN7254:	1984-11	"Mason chisels"
	DIN7255:	1984-11	"Engineers' cold chisels and allied tools;
			technical specifications"
	DIN7256:	1984-11	"Pointed chisels"
I			



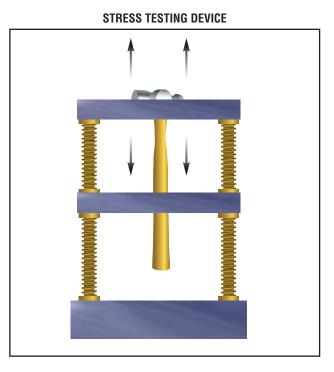


URREP TECHNICAL STANDARDS FOR STRIKING TOOLS

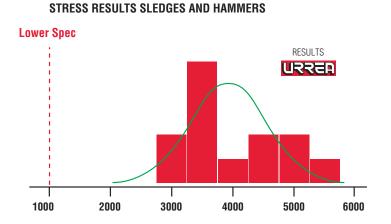
STRIKING AND STRESS TESTS FOR SLEDGES, MALLETS AND HAMMERS ASME/ANSI STANDARDS B 173.1, B 173.2, B 173.3 AND B 173.5



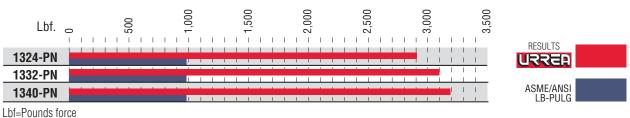
This test consists of using the sledge, mallet or hammer to strike a block of steel with a general hardness of 92 to 105° RC a predetermined number of times without the striking faces becoming marked, cracked, distorted or showing any indications of failure.



After the striking test, the stress test is performed, which consists of applying a specific parallel force to the handle without it separating from the head.



BALL HAMMER STRESS PERFORMANCE







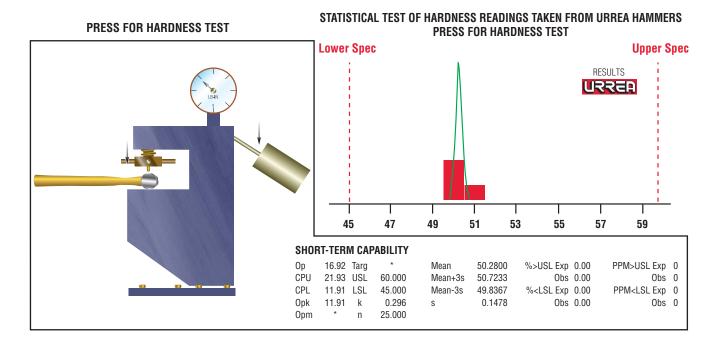


TECHNICAL STANDARDS FOR STRIKING TOOLS



HARDNESS TESTS FOR SLEDGES, MALLETS AND HAMMERS – ASTM STANDARD E18

A Rockwell hardness tester with a diamond point is used, wherein a load is applied perpendicular to the testing surface. The test result depends directly on penetration of the diamond point into the test piece (in accordance with ASTM E 18).



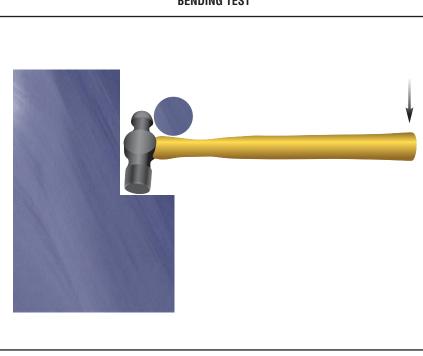
BENDING TESTS FOR SLEDGES, MALLETS AND HAMMERS - ASME/ANSI STANDARDS B 173.1, B 173.2, B 173.3 AND B 173.5



BENDING TEST

The bending test consists of firmly fastening the hammer by the side of the head, leaving the handle free and perpendicular to the fastened portion. In a specially designed device, one of the striking faces is pointed downward and a load is applied to the grip area of the handle 10" from the most distant portion of the head.

The sledge or hammer should resist this test without breaking or splintering.





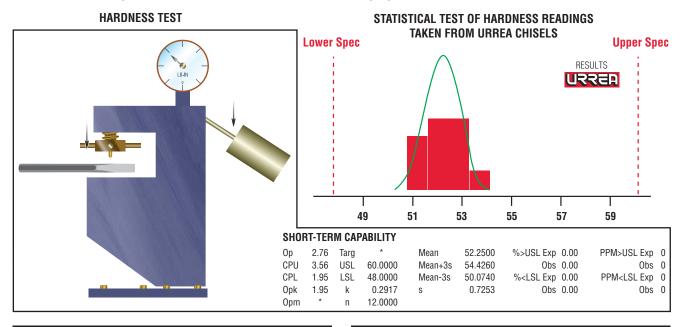


TECHNICAL STANDARDS FOR STRIKING TOOLS

HARDNESS TESTS FOR CHISELS, PUNCHES AND NAIL SETS – ASTME STANDARD 18

The hardness test should be performed on both the striking end and the cutting end. A Rockwell hardness tester with a diamond point is used for this purpose, wherein a load is applied perpendicular to the test surface. The results depend directly on penetration of the diamond point into the test piece (in accordance with ASTME 18).

The hardness of the cutting end should be measured no less than 1/4" from the cutting edge.

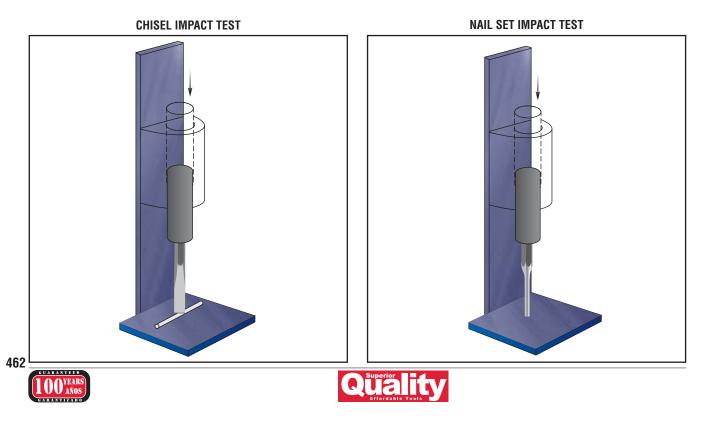


IMPACT TESTS FOR CHISELS

The chisel should be mounted vertically over a $1/4^{\circ}$ diameter bar and the chisel cutting line should be at a 90° angle to the centerline of the bar. The bar should rest on a block of steel weighing at least 200 lb (91 Kg) with a minimum hardness of 35° Rc. The chisel is struck with a weight determined by its size. The weight should be steel with a hardness of 45-60° Rc. After repeating the impact 20 times, the chisel should have no visible splintering, cracking or signs of failure.

IMPACT TESTS FOR NAIL SETS

The nail set should be mounted vertically over a steel plate 1/4" thick with a hardness of 45 to 50° Rc. The plate should rest on a block of steel weighing at least 200 lb (91 Kg) with a minimum hardness of 35° Rc. The nail set is struck with a weight determined by its size. The weight should be steel with a hardness of 45-60° Rc. After repeating the impact 20 times, the nail set should have no visible splintering, cracking or signs of failure.



MANUFACTURING PROCESS FOR STRIKING TOOLS





1.- Receiving steel



2.- Cutting



3.- Forging and cutting



4.- Heat treatment



5.- Marking



6.- Polishing



7.- Assembly of head and end



8.- Trimming excess from end



9.- Shaping the wedge



10.- End and edge polishing



11.- Varnish





10

MANUFACTURING PROCESS FOR CHISELS



1.- Raw material



2.- Cutting



3.- Beveling



4.- Shaping the blade



5.- Marking



6.- Hardening



7.- Annealing



8.- Cleaning



9.- Bluing



10.- Polishing sides



11.- Polishing edges



12.- Polishing blade





STRIKING TOOLS

(Dillo)		5	LEDGES H	IAMMER	s		DI	EAD BLO	W			PS	RUBBER		BALL HA	MMERS		
Colores and				BR/	ASS						PLASTIC	RUBBER						
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1							_								EEAVY DUTT LSO PESADO			
CODE	HEAD WEIGHT		468	469	469	470	470	470	471	471	472	472	473		474	475	475	476
		468	400	409	409	4/0	4/0		4/1		412	412	413	4/4	4/4	4/3	4/3	476
1433G	2 LBS																	
1434G 1435G	3 LBS 4 LBS																	
1435G	6 LBS																	
1437G	8 LBS																	
1438G	10 LBS	i ē i																
1439G	12 LBS	l ē																
1440G	16 LBS	1 •																
UH71FG	7.5 LBS																	
UH72FG	10 LBS																	
UH73FG	15 LBS																	
1430FV	29 OZ.																	
1432FV	62 OZ.				-													
1430	29 OZ.																	
1432	62 OZ.																	
*SF150HK	16 0Z. (SET)																	
SF150 1434PDB	16 0Z. 16 0Z.							•										
1434PDB 1435PDB	24 OZ.																	
1430DBX	32 OZ.																	
1430DB	38 OZ.								-									
1432DB	48 OZ.									Ō								
1383	13 OZ.																	
1364	13 OZ.																	
1366	8 OZ.																	
1367	16 OZ.																	
1368	22 OZ.																	
1308FV	8 OZ.																	
1312FV	12 OZ.																	
1316FV	16 OZ.																	
1324FV 1332FV	24 OZ. 32 OZ.																	
1332FV 1340FV	32 02. 40 0Z.																	
1340PV 1308P	40 02. 8 0Z.																	
1312P	12 OZ.														•			
1316P	16 OZ.														-			
1324P	24 OZ.																	
1332P	32 OZ.																	
1340P	40 OZ.																	
1324E	24 OZ.																	
1332E	32 OZ.																	
1308PN	8 OZ.																	
1312PN	12 OZ.																	
1316PN 1324PN	16 OZ. 24 OZ.																	
1324PN 1332PN	24 0Z. 32 0Z.																ĕ	
1340PN	40 OZ.																ě	
1421	40 02. 13 0Z.																	
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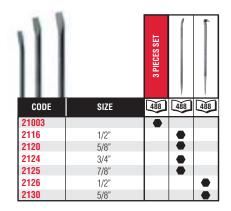


QUICK SELECTION GUIDE FOR STRIKING TOOLS

STRIKING TOOLS

m 0			PUN	CHES					CHISELS
			90° center punches						
V A									
						Ê			
12									
CODE	SIZE	483	483	484	484	485	486	486	487
49920		Ť							
49920	1/2" 3/4"								
41-1/4	1/4"	-							
41-5/16	5/16"								
41-3/8	3/8"		•						
41-7/16	7/16"								
41-1/2	1/2"								
41-5/8	5/8"			_					
44-1/4	1/4"								
44-5/16	5/16"								
44-3/8	3/8"								
47-1/4x1/16 47-1/4x3/32	1/4" x 1/16"								
47-1/4x3/32 47-5/16x1/8	1/4" x 3/32" 5/16" x 1/8"				•				
47-5/16x5/32	5/16" x 5/32"								
47-3/8x3/16	3/8" x 3/16"				•				
47-7/16x7/32	7/16" x 7/32"				ŏ				
47-1/2x1/4	1/2" x 1/4"								
48-3/8" x 5/32"	3/8" x 5/32"				_				
48-3/8" x 3/16"	3/8" x 3/16"								
48-7/16"x 7/32"	7/16" x 7/32"								
48-1/2" x 1/4"	1/2" x 1/4"								
48-1/2" x 5/16"	1/2" x 5/16"						-		
96-1/4	1/4"								
96-5/16 96-3/8	5/16" 3/8"						T		
96-7/16	7/16"						•		
96-1/2	1/2"						۰.		
96-5/8	5/8"								
96-3/4	3/4"								
50-3/16	3/16"								
50-1/4	1/4"								
50-5/16	5/16"								
50-3/8	3/8"								
50-7/16 50-1/2	7/16" 1/2"							-	
86A-3/16	3/16"								
86A-1/4	1/4"								
86A-5/16	5/16"								
86A-3/8	3/8"								
86A-7/16	7/16"								
86A-1/2	1/2"								
86A-5/8	5/8"								
86A-3/4X8	3/4" X 8"								•
86A-3/4X12 86A-7/8X8	3/4" X 12" 7/8" X 8"								
86A-7/8X12	7/8 X 8 7/8" X 12"								
86A-1X8	1" X 8"								•
86A-1X12	1" X 12"								
Contraction (1 // 16								_

ALIGNMENT BARS



HOLLOW PUNCHES

0000	0000		IN INCHES	IN MILIMETERS
CODE	SIZE	PIECES	477	478
49902	1/8" to 2"	27		
49901	1/8" to 3/4"	11		
49900	1/8" to 1 3/16"	16		
49900M	8 to 30 MM	16		
50900	5/8" to 1 1/4"	7		





STRIKING TOOL SETS

		1									· · · · · · · · · · · · · · · · · · ·							
			49903	NO.46	NO.6	NO.5	NO.2	NO.4	NO.3	96A	47A	50A	99B	41A	86D	86B	86C	86A
	CODE	SIZE	478		479			480			481	481		481	**		•• 482	•• 482
	49920	1/2"		Ť	*	Ŧ	Ť	*	Ŧ	Ť	Ť	Ť	Ť	Ť	Ŧ	Ť	Ť	Ť
	49922	3/4"	1.															
	Without code	3/8"																
BRASS DRIVE PIN PUNCHES	86A-3/16	3/16"		•		•									•			
1000	86A-1/4	1/4"				-										•	•	
	86A-5/16	5/16"		•		•	-								•	•	•	•
1	86A-3/8	3/8"														•		
	86A-7/16	7/16"						•										•
	86A-1/2	1/2"				•		÷	•							•	•	•
	86A-5/8	5/8"		•		-		-								•		
	86A-3/4X8	3/4" X 8"		•												•		•
	86A-7/8X8	7/8" X 8"														-		-
CHISELS	86A-1X8	1" X 8"		•														
10	41-1/4	1/4"		-										•	-			
	41-5/16	5/16"												•				
1	41-3/8	3/8"			•	•	•	•	•					•				
	41-1/2	1/2"		•	•	-	-	-	-					•				
	41-5/8	5/8"		-	-									ē				
	44-5/16	5/16"												-				
CENTER PUNCH	44-3/8	3/8"		-	•													
	47-1/4X1/16	1/4""`X 1/16"			-													
	47-1/4X3/32	1/4" X 3/32"		•	•	•	•				•							
	47-5/16X1/8	5/16" X 1/8"		•	•	ě			•									
		5/16" X 5/32"			•	•		•			•							
	47-5/16X5/32 47-3/8X3/16	3/8" X 3/16"				•	•	-	•									
	47-7/16X7/32	7/16" X 7/32"			-	-	-		-		•							
DRIVE PIN PUNCHES	47-1/10X1/32 47-1/2X1/4	1/2" X 1/4"		•	•						•							
	47-1/2X1/4 96-1/4	1/2 × 1/4 1/4"								•								
	96-1/4 96-5/16	5/16"		•						•			•					
		3/8"								•								
	96-3/8 96-7/16	7/16"								_			•					
	96-1/2	1/2"		•	•					•			•					
	90-1/2 96-5/8	5/8"								•			•					
ONG DRIFT PUNCHES	96-3/4	3/4"				•				•								
1	50-3/16	3/16"			•	-				-		•						
		1/4"		•			-											
	50-1/4 50-5/16	5/16"		-								_						
	50-3/8	3/8"				•		•										
	50-3/8 50-7/16	5/6 7/16"			•			-				_						
	50-1/10 50-1/2	1/2"			-													



URREA





SLEDGE HAMMERS

OCTAGONAL SLEDGES HAMMERS

14XXG

CODE		572	2	HE/		HEA	-		TAL	5	\Box
		HEAD		DIAM	EIEK	LENG	IH		NGTH L	WE	IGHT
	lbs	OZ	grs	in	mm	in	mm	in	mm	grs	lbs
1433G	2	32	907	1 41/64"	41.7	4 35/64"	115.5	12"	304.8	1135	2.50
1434G	3	48	1,360	1 23/32"	43.7	5 9/64"	130.6	12"	304.8	1620	3.57
1435G	4	64	1,814	2 3/64"	52	5 39/64"	142.5	12"	304.8	2200	4.85
1436G	6	96	2,721	2 1/8"	53.9	6"	152.4	36"	914.4	3100	6.83
1437G	8	128	3,628	2 3/8"	60.3	6 3/8"	161.9	36"	914.4	4190	9.23
1438G	10	160	4,536	2 1/2"	63.5	7"	177.8	36"	914.4	5275	11.62
1439G	12	192	5,443	2 11/16"	68.2	7 3/8"	187.3	36"	914.4	6300	13.88
1440G	16	256	7,257	2 7/8"	73.0	8 1/8"	206.3	36"	914.4	8250	18.18
0									STANDARE)s: Ansi/As Federal	ME B173.3 GGG-H-86

Wood handle with compact structure providing high impact resistance.

Octagonal design that distributes the load and equalizes stress.

LPPPER-L-

Alloyed steel head, press forged and heat treated.

Beveled and machined striking face to prevent accidents due to metal shards.

NON SPARKING SLEDGE HAMMERS WITH FIBER GLASS HANDLES

UHXXFG

CODE		472	2		AD IETER	HEA LENG			TAL GTH	Δ	\Box
		HEAD		Dirit		22110				WEI	GHT
	lbs	0Z	grs	in	mm	in	mm	in	mm	grs	lbs
UH71FG	7.5	120	3,402	2.11	54	6 1/8	15.5	34 1/4	864	4400	9.7
UH72FG	10	160	4,536	2.20	56	7 3/16	18.2	34 1/4	864	5500	12.2
UH73FG	15	240	6,804	2.45	62	8 1/8	20.6	34 1/4	864	7800	17.2
-	_	-							STANDARDS: M B107.53	MIL-H- 1874 3M, B107.54	



Non sparking: Comply with all U.S. Government specifications for non sparking hand tools in hazardous or volatile work environments.

Non magnetic: Allows use in all such critical environments.

Corrosion resistance: Are resistant to industrial and hazardous chemicals and are easily cleaned of volatile residuals.

Fiberglass handles: Provides superior tolerance and breaking stress for adverse environmental conditions.

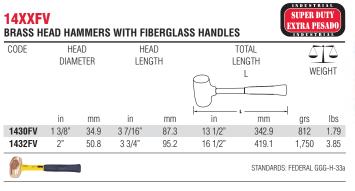






BRASS HEAD HAMMERS

Brass head prevents distortion of materials as well as impact sparking.





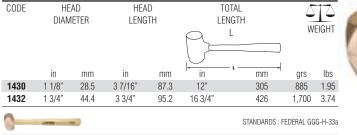
Fiberglass handles with cushion grip cover that minimizes hand vibration.



Code 1432FV URREA brass head hammer with fiberglass handle.

The brass head hammer with fiberglass handle will not produce sparks when striking other metals, making it a safe tool for use in explosive environments. Ideal for precision work such as axle housings, transmissions, etc.

143X Brass head hammers with wood handles





Wood handles with compact structure providing high impact resistance.

qualitystartswith

URREA tools are designed and manufactured to meet or exceed the most demanding industry standards, such as the SAE, (Society of Automotive Engineers), ASME/ANSI (American Society of Mechanical Engineers/American National Standards Institute), ISO (International Standardization Organization), GSA USA Federal (General Services Administration USA Federal Government), and NOM (Norma Oficial Mexicana - Official Mexican Standard).



Visit our website: www.urrea.com





URRED

DEAD BLOW HAMMERS

These hammers have two main characteristics. The first is that the distortion occurs on the cap and not on the part being struck. The second characteristic is that the head is hollow and contains a certain quantity of steel dust, which dissipates the vibration produced upon impact, preventing the hammer from rebounding and causing a "dead blow".

DEAD BLOW HAMMERS

SF150HK

DEAD BLOW HAMMER SET WITH 8 INTERCHANGEABLE CAPS 16 OZ HEAD HEAD TOTAL 510 474 DIAMETER LENGTH LENGTH HEAD WEIGHT L in in in lbs lbs 07 grs mm mm mm ars 1 16 454 1 1/2 38.1 4 101.6 11.5 292.1 1374 3.02

Includes 8 caps: Super soft (gray), soft (brown), medium (red), rugged use (green), medium hard (beige), hard (black), extra hard (yellow), steel cap, 1 Plastic case



Code SF150HK Dead blow hammer set with 8 interchangeable caps 16 oz.

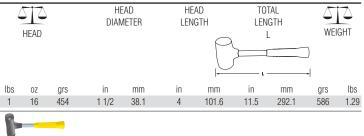
The dead blow hammer with interchangeable caps is mainly used for assembling machinery parts where it is necessary to prevent damage to the surface being struck.





SF150

DEAD BLOW HAMMER 16 OZ (NOT INCLUDING INTERCHANGEABLE CAPS)



Fiberglass handle with rubber cover minimizes hand vibration.

SF15M

SF15H

SF16B



SF15ST

SF15MH

SF16S

SF1XXX

INTERCHANGEABLE CAPS FOR 1 1/2" DEAD BLOW HAMMERS

CODE	STRIKING TYPE	CAP COLOR	SIZE	
SF15SS	SUPER SOFT	LIGHT GRAY	1 1/2"	
SF15ST	SOFT	BROWN	1 1/2"	
SF15M	MEDIUM	RED	1 1/2"	
SF15T	RUGGED USE	GREEN	1 1/2"	
SF15MH	MEDIUM HARD	IVORY	1 1/2"	
SF15H	HARD	BLACK	1 1/2"	
SF15XH	EXTRA HARD	YELLOW	1 1/2"	
SF16S	SOLID	STEEL CAP	1 1/2"	
SF16B	SOLID	BRASS CAP	1 1/2"	







Uses any of 9 inter-

changeable caps, each with a different Rockwell "b" hardness. This unit of measurement is used to designate a hardness value to soft materials

such as plastic, rubber, non-tempered

etc.

steel,

SF15SS

SF15T

SF15XH

DEAD BLOW HAMMERS



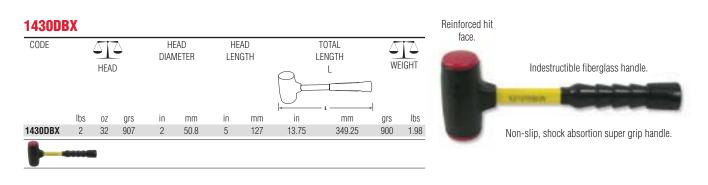
CODE		HEAD	$\sum_{n=1}^{\infty}$		ad Meter	HE. LEN			OTAL ENGTH L		IGHT
									l) -	
	lbs	0Z	grs	in	mm	in	mm	in	mm	grs	lbs
1434PDB	1	16	454	1.8	45.7	5 1/8	130.1	12.25	311.1	454	1.00
1435PDB	1.5	24	680	1.8	45.7	5 1/8	130.1	12.25	311.1	680	1.50

Uses a "dead blow" system to prevent the hammer from rebounding upon impact. Caps are soft and fixed.



The head is made of a steel body and two cellulose acetate caps designed for use with metals and other materials susceptible to marking or distortion. The distortion occurs in the cap and not in the object being struck.

HIGH IMPACT DEAD BLOW MALLET



143XDB

CODE	HEAD				ad Ieter	HE/ LEN(TOT LENG		Δ	\Box
									wi 	WEIGHT	
	lbs	0Z	grs	in	mm	in	mm	in	mm	grs	lbs
1430DB	2	38	907	2	50.8	4 3/8	111.1	13 3/4	349.2	907	2.00
1432DB	3	48	1360	2 3/4	69.8	4 3/4	120.6	14 11/16	373.0	1360	3.00





Code 1432DB High impact dead blow mallet.

Aside from the steel dust system in the head providing it with extra weight, the high impact dead blow mallet has a large contact area, making it useful for assembling machinery parts that require a great deal of force.



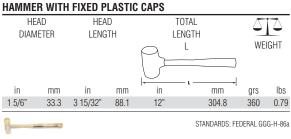


URRED

SPECIAL HAMMERS

HAMMERS WITH FIXED PLASTIC CAPS

1383



Wood handles with compact structure providing high impact resistance.



Translucent acetate plastic caps that prevent hammer rebound.



	DATA SHEET FOR HAMMERS WITH PLASTIC CAPS								
STANDARI) FEDERAL G	GG-H-20a		CHARACTER	ISTICS				
CODE	SHORE A HARDNESS	STRIKING	TYPE	512	573				
				HEAD OZ.	HEAD WEIGHT				
1383	78 30 SEC.	25	PLASTIC CAPS	13	360				

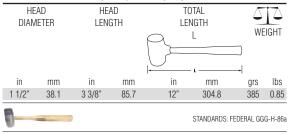
Code 1383 Hammer with fixed plastic caps.

Hammers with fixed plastic caps are used to strike materials that are soft and do not require much force.

HAMMERS WITH INTERCHANGEABLE RUBBER CAPS

1364

HAMMER WITH INTERCHANGEABLE CAPS



Extra soft gray cap.

Wood handle with compact structure providing high impact resistance.



1364XX

INTERCHANGEABLE CAPS FOR HAMMER 1364

CODE	STRIKING TYPE	SHORE HARDNESS	CAP COLOR	SIZE
1364XS	EXTRA SOFT	60	DARK GRAY	1 1/2"
1364T	RUGGED USE	95	BEIGE	1 1/2"
6 - 0-				

These caps may be used with the SF150 and 1364 hammers.





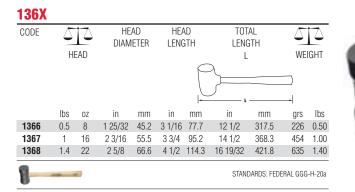




SPECIAL HAMMERS



HANDLE WITH RUBBER HEAD



Wood handle with compact structure providing high impact resistance.



The head is manufactured from neoprene rubber and is primarily used to prevent damage to volume-type objects.

	DATA SHEET FOR RUBBER MALLETS								
STANDARD FEDERAL GGG-H-20a				CHARACTERISTICS					
CODE	SHORE A HARDNESS	SHEAR LB/IN (THICKNESS)	WEIGHT IMPACT	TYPE	HEAD OZ.	HEAD WEIGHT			
1368	90-100 SEC.	200	10 LBS	RUBBER HEAD	22	635 grs 1.39 lbs			



Code 1368 Mallet with rubber head

The rubber head is very useful for striking parts that are large, but require special care.



foreverstartswith



CONTACT US

URREA Tools are designed to offer precision, quality, and

strength. They are made by highly skilled and trained personnel,

using the most sophisticated equipment, the best materials

available and under the strictest specifications.



email: customerservice@urrea.com FAX: (210) 734-8715 Phone: (210) 734-8703 / (800) 366-6911





BALL PEIN HAMMERS

BALL HAMMERS, SUPER HEAVY DUTY INDUSTRIAL, POLISHED HEAD FIBERGLASS HANDLE

INDUSTRIAL

13XXF	V							TRA PESADO
CODE	Ч	IEAD	LEN	TAL IGTH L	HEAD DIAMETER	WEIG	ант	STRESS RESISTANCE ASME/ANSI B173.2 Ib-in.
	OZ	grs	in	mm	in	grs	lbs	lbf
1308FV	8	226.8	11 1/4"	285.7	1.00	226.8	1.65	750
1312FV	12	340.2	12"	304.8	1.15	340.2	1.65	750
1316FV	16	454	12 3/4"	323.8	1.31	454	4.96	2250
1324FV	24	681	14 1/4"	361.9	1.43	681.8	4.96	2250
1332FV	32	908	14 1/2"	368.3	1.62	908	4.96	2250
1340FV	40	1,135	16 1/2"	419.1	1.68	1135	4.96	2250
<u>}</u>					S			DERAL:GGG-H-86C 3173.2 NOM-0-103

DATA SHEET FOR BALL PEIN HAMMERS								
	STAN	IDARD A	NSI B 173	.2				
CODE	°RC HARDNESS	LBF STRESS	LBF BENDING	STRIKING	TYPE			
1308FV	45-60	750	40	20	PLUS			
1312FV	45-60	750	60	20	PLUS			
1316FV	45-60	2250	80	20	PLUS			
1324FV	45-60	2250	150	20	PLUS			
1332FV	45-60	2250	150	20	PLUS			
1340FV	45-60	2250	175	20	PLUS			

Fiberglass handle with rubber cover minimizes hand vibration.



Forged steel alloy head, tempered and annealed to prevent fractures and distortion of the striking faces, polished finish.

BALL HAMMERS, EXTRA HEAVY DUTY INDUSTRIAL, POLISHED HEAD

13XXP								INDUSTRIAL IEAVY DUTY ISO PESADO INDUSTRIAL
CODE	∆ ⊢	IEAD		GTH	HEAD DIAMETER	WEI	GHT	STRESS RESISTANCE ASME/ANSI B173.2 LB-In.
	0Z	grs	in	mm	in	grs	lbs	lbf
1308P	8	226.8	11 5/8"	295.2	1.00	327	0.72	750
1312P	12	340.2	13 5/8"	346.0	1.15	422	0.93	750
1316P	16	454	13 3/4"	349.2	1.31	630	1.38	2250
1324P	24	681	15 5/8"	396.8	1.43	828	1.82	2250
1332P	32	908	15 7/8"	403.2	1.62	1,050	2.31	2250
1340P	40	1,135	17 1/4"	438.1	1.68	1,210	2.66	2250
1348P	48	1,361	17 1/4"	438.1	1.87	2,231	4.91	1000
§ -	-							EDERAL GGG-H-86C B173.2 NOM-0-103

DATA SHEET FOR BALL PEIN HAMMERS Standard Ansi B 173.2								
	STAN	IDARD A	NSI B 173	.2				
CODE	°RC HARDNESS	LBF STRESS	LBF BENDING	STRIKING	TYPE			
1308P	45-60	400	40	20	PLUS			
1312P	45-60	400	60	20	PLUS			
1316P	45-60	400	80	20	PLUS			
1324P	45-60	1000	150	20	PLUS			
1332P	45-60	1000	150	20	PLUS			
1340P	45-60	1000	175	20	PLUS			

474

OOYEARS



Wood handle with compact structure providing high impact resistance.



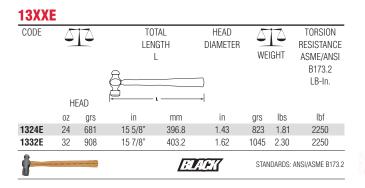
Forged and tempered steel alloy head, polished and varnished.



BALL PEIN HAMMERS



BLACK HEAD BALL HAMMER WITH ERGONOMIC HANDLE



DATA SHEET FOR BALL PEIN HAMMERS								
STANDARD ANSI B 173.2								
CODE	⁰ RC HARDNESS	LBF STRESS	LBF BENDING	STRIKING	TYPE			
1324E	45-60	1000	150	20	BLACK			
1332E	45-60	1000	175	20	BLACK			

Ergonomic oak handle prevents slipping.

Forged steel alloy head, tempered and annealed with blued finish and varnish. Striking face hardness of 49 to 55° RC, flash annealed.

BLACK HEAD BALL HAMMER

13XXPN

CODE	⊥ H	TOTAL LENGTH		GTH	HEAD DIAMETER	WEIG	<u>С</u> Энт	TORSION RESISTANCE ASME/ANSI
				ι —				B173.2 LB-In.
	0Z	grs	in	mm	in	grs	lbs	lbf
1308PN	8	226.8	11 5/8"	295.2	1.00	327	0.72	750
1312PN	12	340.2	13 5/8"	346.0	1.15	422	0.93	750
1316PN	16	454	13 3/4"	349.2	1.31	630	1.39	2250
1324PN	24	681	15 5/8"	396.8	1.43	828	1.83	2250
1332PN	32	908	15 7/8"	403.2	1.62	1,050	2.31	2250
1340PN	40	1,135	17 1/4"	438.1	1.68	1,210	2.67	2250
1348PN	48	1,361	17 1/4"	438.1	1.87	2,231	4.91	1000
ŧ -				BLACK	7			ERAL GGG-H-86C 173.2 NOM-0-103

D	DATA SHEET FOR BALL PEIN HAMMERS								
	STANDARD ANSI B 173.2								
CODE	⁰RC HARDNESS	LBF STRESS	LBF BENDING	STRIKING	TYPE				
1308PN	45-60	400	40	20	BLACK				
1312PN	45-60	400	60	20	BLACK				
1316PN	45-60	400	80	20	BLACK				
1324PN	45-60	1000	150	20	BLACK				
1332PN	45-60	1000	150	20	BLACK				
1340PN	45-60	1000	175	20	BLACK				



Double heat-treated forged steel alloy head. Assembled with metallic wedge to secure head and handle.







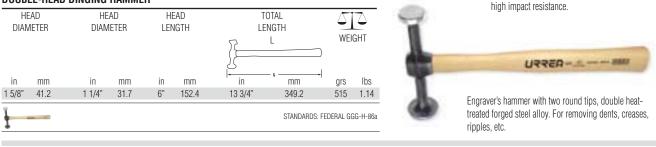
AUTO BODY HAMMERS

ENGRAVER'S HAMMERS

Used for removing dents in the bodywork repair process, the heads have small radii and shapes that allow easy matching with the various types of automobile bodywork.

	DATA SHEET FOR ENGRAVER'S HAMMERS									
	STANDARD ANSI B 173.5					TERISTICS				
CODE	⁰ RC HARDNESS	LBF STRESS	LBF BENDING	STRIKING	573	573				
					HEAD OZ.	HEAD GRS.				
1421	45-60	400	25	20	13	515				
1424	45-60	400	25	20	16	350				
1427	45-60	400	25	20	16	322				
1428	45-60	400	25	20	16	326				

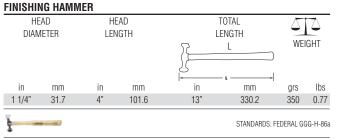
1421 **DOUBLE-HEAD DINGING HAMMER**



1428



1424



Wood handle with compact structure providing high impact resistance.

U2220-____

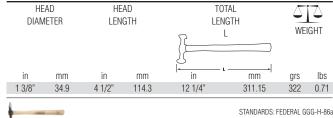
- 100

Wood handle with compact structure providing

Hammer with round and square tips, tempered and annealed, hardness 43-45° Rc. For softening damaged metal surfaces, especially corner areas.



FINISHING HAMMER



Wood handle with compact structure providing high impact resistance. U222A ---- ####

Hammer with round flat tip and special narrow head for finishing edges and moldings.





HOLLOW PUNCH SETS



Manufactured from high carbon steel, hardness of 53 to 66° Rc, handle made of strike resistant alloyed steel, polypropylene case. System for using 2 or more HOLLOW PUNCHES at a time.

49902 27 PIECES SET OF 27 HOLLOW PUNCHES FROM	1/8" TO 2" IN	PLAS	FIC BOX	
DESCRIPTION	ACCESSORIES	ے Wei	GHT	
in	Adaptor handle	grs	lbs	
1/8", 3/16", 1/4", 5/16", 3/8",	Plastic box	2748	6.06	-
7/16", 1/2", 9/16", 5/8", 3/4", 7/8", 1",				
1 1/16", 1 1/8", 1 3/16", 1 1/4", 1 5/16", 1 3/8"				- 69, 6
1 7/16", 1 1/2", 1 5/8", 1 11/16", 1 3/4", 1 7/8",	2"			-
0.				999





Code 49902 Set of 27 hollow punches from 1/8" to 2" in plastic box.

Hollow punches are used to cut round sections from the interior of different materials. Specific uses and applications vary widely. For example: seals can be made for an automobile oil pan drain, for hydraulic or sanitary installations, etc. Materials that can be cut include polyurethane foam, rubber, cardboard, leather, hide and gasket material.



HOLLOW PUNCH SETS

49900M



50900 7 PIECES

0)-

SET OF 7 HOLLOW PUNCHES FROM 5/8" TO 1 1/14" INCH IN PLASTIC BOX

OLI UI	THOLLO		DIILO	11101	10/0	10 1	1/14	11101	I IIV I L
STRIKER	MATRIX			TORNI	llos			Δ	<u>T</u>
PIN Ø	HEX	l	ſ	L RO	SCA	HE	Х	WE	EIGHT
in	in	in	mm	in	mm	in	mm	grs	lbs
5/8	9/16	5/16	8	1	25.4	1/2	13	800	1.76
3/4	19/32	25/64	10	1 1/2	38.1	39/59	17		
1	51/64	15/32	12	1 3/4	44.4	14/19	19		
1 1/4	1 1/32								

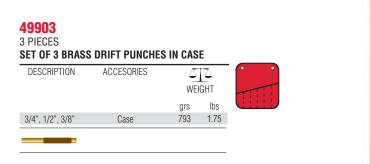


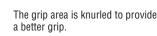




CHISELS, PUNCHES AND NAIL SETS

BRASS DRIFT PUNCH SET









COMBINATION SETS OF PUNCHES, NAIL SETS AND CHISELS

NO. 46 26 PIECES

SET OF 26 PUNCHES, CHISELS AND NAIL SETS IN CASE

CODE	SIZE		CODE	SI	ZE
	in	mm	1	in	mm
41-3/8"	3/8"	3.1	86A-3/16"	3/16"	6.35
41-1/2"	1/2"	4.7	86A-1/4"	1/4"	7.94
44-5/16"	5/16"	2.7	86A-5/16"	5/16"	9.53
			86A-7/16"	7/16"	12.70
47-1/4"X3/32"	1/4"X3/32"	2.38	86A-1/2"	1/2"	15.88
47-5/16"X1/8"	5/16"X1/8"	3.18	86A-5/8"	5/8"	19.05
47-5/16"X5/32"	5/16"X5/32"	3.97	86A-3/4"X8"	3/4"	22.23
47-3/8"X3/16"	3/8"X3/16"	4.76	86A-7/8"X8"	7/8"	25.40
47-7/16"X7/32"	7/16"X7/32"	5.56	86A-1"X8"	1"	30.16
47-1/2"X1/4"	1/2"X1/4"	6.35			
			96-5/16"	5/16"	3.1
50-1/4"	1/4"	2.3	96-3/8"	3/8"	4.7
50-5/16"	5/16"	3.1	96-1/2"	1/2"	6.3
50-3/8"	3/8"	4.7			
50-7/16"	7/16"	5.5	E516	Case	
50-1/2"	1/2"	6.3			



URREA

NO. 6

16 PIECES SI

SET	OF 16	PUNCHES	AND	NAIL	SETS	IN	CASE	
		0005					0175	

CODE	SIZE	Ē		CODE		SIZE
1	in	mm			in	mm
47-1/4" X 3/32"	1/4" X 3/32"	2.3		96-3/8"	3/8"	4.7
47-5/16" X 1/8"	5/16" X 1/8"	3.1		96-1/2"	1/2"	6.3
47-5/16" X 5/32"	5/16" X 5/32"	3.9	L			
47-3/8" X 3/16"	3/8" X 3/16"	4.7		41-3/8"	3/8"	3.1
47-1/2" X 1/4"	1/2" X 1/4"	6.3	' I	41-1/2"	1/2"	4.7
			1	44-3/8"	3/8"	3.1
50-3/16"	3/16"	1.5				
50-1/4"	1/4"	1.5		E514	Case	
50-5/16"	5/16"	3.1	1			
50-3/8"	3/8"	4.7				
50-7/16"	7/16"	5.5				
50-1/2"	1/2"	6.3				





NO. 5

12 PIECES

SET OF 12 CHISELS, PUNCHES AND NAIL SETS IN CASE

1	CODE	SIZE		ſ
		in	mm	
	47-1/4" X 3/32"	1/4" X 3/32"	2.38	
	47-5/16" X 1/8"	5/16" X 1/8"	3.18	
	47-5/16" X 5/32"	5/16" X 5/32"	3.97	
	47-3/8" X 3/16"	3/8" X 3/16"	4.76	
1	50-5/16"	5/16"	3.1	
	50-3/8"	3/8"	4.7	
	96-3/4"	3/4"	9.5	
	41-3/8"	3/8"	3.1	
1.1				
	86A-3/16"	3/16"	6.35	
	86A-5/16"	5/16"	9.53	
	86A-7/16"	7/16"	12.70	
	86A-1/2"	1/2"	15.88	
	E519	Case		







10

CHISELS, PUNCHES AND NAIL SETS

NO. 2 10 PIECES Set of 10 Punches and chisels in case

	CODE	SIZ	E	
		in	mm	
	41-3/8"	3/8"	3.1	UH
L				
	47-1/4" X 3/32"	1/4" X 3/32"	2.3	
	47-5/16" X 1/8"	5/16" X 1/8"	3.1	
	47-3/8" X 3/16"	3/8" X 3/16"	4.7	
_	50-3/16"	3/16"	1.5	
	50-5/16"	5/16"	3.1	
	50-3/8"	3/8"	4.7	
	86A-1/4"	1/4"	7.9	
	86A-3/8"	3/8"	11.1	
	86A-7/16"	7/16"	12.7	
-				
	E307	Case		_



NO. 4

5 PIECES

SET OF 5 CHISELS, PUNCHES AND NAIL SETS IN CASE

		CODE	SIZ	Έ	
			in	mm	(*
		47-5/16" X 5/32"	5/16" X 5/32"	3.97	
		50-3/8"	3/8"	9.5	
	11.	41-3/8"	3/8"	9.5	
н	I	86A-7/16"	7/16"	11.1	
		86A-1/2"	1/2"	12.7	
		E518	Case		

NO. 3 5 PIECES

SET OF 5 PUNCHES AND CHISELS IN CASE

			.0 IN OAGE		
		CODE	SIZE		\mathbf{C}
			in	mm	
		41-3/8"	3/8"	9.5	
	111	47-5/16" X 1/8"	5/16" X 1/8"	3.1	
		47-3/8" X 3/16"	3/8" X 3/16"	4.7	
	1	50-5/16"	5/16"	7.9	
I.					
I.		86A-1/2"	1/2"	12.7	
		E300	Case		

SETS OF PUNCHES AND NAIL SETS

96A

7 PIECES SET OF 7 LONG DRIFT PUNCHES IN CASE

CODE	SIZE		••••
	in	mm	
96-1/4"	1/4"	6.3	
96-5/16"	5/16"	7.9	
96-3/8"	3/8"	9.5	
96-7/16"	7/16"	11.1	
96-1/2"	1/2"	12.7	
96-5/8"	5/8"	15.8	
96-3/4"	3/4"	19	

Case



480



E303



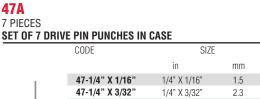


URREA





CHISELS, PUNCHES AND NAIL SETS



1	T/T/T A 1/10	1/4 / 1/10	1.0	
	47-1/4" X 3/32"	1/4" X 3/32"	2.3	
	47-5/16" X 1/8"	5/16" X 1/8"	3.1	
	47-5/16" X 5/32"	5/16" X 5/32"	3.9	
	47-3/8" X 3/16"	3/8" X 3/16"	4.7	
	47-7/16" X 7/32"	7/16" X 7/32"	5.5	
•	47-1/2" X 1/4"	1/2" X 1/4"	6.3	
	E307	Case		



50A

SET OF 6 SHORT DRIFT PUNCHES IN CASE

	CODE	SIZ	E	
		in	mm	
	50-3/16"	3/16"	1.5	
1	50-1/4"	1/4"	2.3	
	50-5/16"	5/16"	3.1	
	50-3/8"	3/8"	4.7	
	50-7/16"	7/16"	5.5	
1	50-1/2"	1/2"	6.3	
	E515	Case		

99B

5 PIECES SET OF 5 LONG DRIFT PUNCHES IN CASE

UI J LUI		S IN GASE		_
1	CODE	SIZ	E	
		in	mm	
	96-5/16"	5/16"	3.1	
	96-3/8"	3/8"	4.7	
	96-7/16"	7/16"	5.5	
	96-1/2"	1/2"	6.3	
	96-5/8"	5/8"	7.9	
	E517	Case		

CENTER AND PRICK PUNCH SETS

41A

5 PIECES Set of 5 Cent	ER AND PRICK P	UNCHES IN CAS	SE	
	CODE	SIZ	-	
		in	mm	
	41-1/4"	1/4"	1.9	
l l	41-5/16"	5/16"	2.3	
	41-3/8"	3/8"	3.1	
	41-1/2"	1/2"	4.7	
	41-5/8"	5/8"	5.9	
1				
	F518	Case		

















CHISELS, PUNCHES AND NAIL SETS

CHISEL SETS

86D

10 PIECES SET OF 10 CHISELS IN CASE

CODE	S	IZE	CODE	SI	ZE
	in	mm		in	mm
86A-3/16"	3/16"	7.0	86A-1/2"	1/2"	15.8
86A-1/4"	1/4"	7.9	86A-5/8"	5/8"	19.0
86A-5/16"	5/16"	9.5	86A-3/4"X8"	3/4" X 8"	22.2
86A-3/8"	3/8"	11.1	86A-7/8"X8"	7/8" X 8"	22.2
86A-7/16"	7/16"	12.7	86A-1"X8"	1" X 8"	22.2
			_		
			E513	Case	
	CODE 86A-3/16" 86A-1/4" 86A-5/16" 86A-3/8"	in 86A-3/16" 3/16" 86A-1/4" 1/4" 86A-5/16" 5/16" 86A-3/8" 3/8"	CODE SIZE in mm 86A-3/16" 3/16" 7.0 86A-1/4" 1/4" 7.9 86A-5/16" 5/16" 9.5 86A-3/8" 3/8" 11.1	CODE SIZE CODE in mm mm 86A-3/16" 3/16" 7.0 86A-1/4" 1/4" 7.9 86A-5/16" 5/16" 9.5 86A-3/8" 3/8" 11.1 86A-7/16" 7/16" 12.7	CODE SIZE CODE SIZE in mm in in 86A-3/16" 3/16" 7.0 86A-1/2" 1/2" 86A-5/16" 5/16" 9.5 86A-3/8" 3/4" X 8" 86A-3/8" 3/8" 11.1 86A-7/8"X 8" 7/8" X 8" 86A-7/16" 7/16" 12.7 86A-1"X8" 1" X 8"



86B

7 PIECES

SET OF 7 CHISELS IN CASE

CODE	SIZ	E	
	in	mm	
86A-1/4"	1/4"	7.9	
86A-5/16"	5/16"	9.5	<u>Linn</u>
86A-3/8"	3/8"	1.1	
86A-7/16"	7/16"	12.7	
86A-1/2"	5/8"	15.8	
86A-5/8"	5/8"	19.0	
86A-3/4" X 8"	3/4" X 8"	22.2	
E302	Case		



86C

5 PIECES Set of 5 Chisels in Case

ISLLS IN CASE			_
CODE	S	IZE	• • • •
	in	mm	
86A-1/4"	1/4"	7.94	
86A-5/16"	5/16"	9.53	
 86A-3/8"	3/8"	11.11	
 86A-7/16"	7/16"	12.70	
 86A-1/2"	1/2"	15.88	
E520	Case		
			-

86A

5 PIECES Set of 5 Chisels

5 5 CHI	SELS IN CASE			
	CODE	SIZE		-
		in	mm	
	86A-5/16"	5/16"	9.5	
	86A-7/16"	7/16"	12.7	
	86A-1/2"	1/2"	15.8	
	86A-5/8"	5/8"	19.0	
	86A-3/4" X 8"	3/4" X 8"	22.2	
1				
	E520	Case		









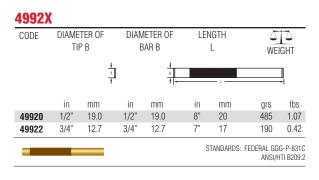


CHISELS, PUNCHES AND NAIL SETS



Drift punches are used to install or remove bolts and rivets. There are three types of drift punches: short, long and drive pin punches. The length is important for the specific working conditions in each case. Drive pin punches can also be used to align holes in the assembly of parts. Brass drive pin punches are used in cases where the part being struck must not be marked or sparking must be avoided.

BASS DRIVE PIN PUNCHES



Code 49903 Brass drive pin punch set.

Brass drive pin punches are specially made to prevent marking the objects being struck. The soft materials from which these products are manufactured provide the same results as steel punches, but better preserve the integrity of the objects being installed or removed. In addition, they do not cause sparking when striking other metals.



Will not mark or produce sparks when struck. Designed to prevent damage to objects being struck. The end opposite the tip is designed for striking.



90° CENTER PUNCHES

Center punches are mainly used to identify parts during the processes of manufacturing, assembly or repair of machinery. A 90-degree angle at the tip allows them to leave a visible mark on the surface to which they are applied.

41-X/X

CODE	1	A		В	LEN	LENGTH		573	
	2	A the second sec				-	WEIGHT		⇒ <u>+</u> +
	in	mm	in	mm	in	mm	grs	lbs	
41-1/4"	5/64"	1.9	1/4"	6.3	4 1/4"	107.9	24	0.05	
41-5/16"	3/32"	2.3	5/16"	7.9	4 5/8"	117.4	39	0.09	
41-3/8"	1/8"	3.1	3/8"	9.5	4 7/8"	123.8	62	0.14	
41-7/16"	5/32"	3.9	7/16"	11.1	5 1/4"	133.3	87	0.19	
41-1/2"	3/16"	4.7	1/2"	12.7	5 5/8"	142.8	163	0.36	
41-5/8"	5/16"	5.9	5/8"	15.8	6 1/4"	158.7	222	0.49	
STANDARDS: FEDERALGGG-P-831C 90° STANDARDS: FEDERALGGG-P-831C ANSI/ASME B209.2									

STANDARDS FOR CENTER PUNCHES									
	(ASME B107.48M)								
CODE	CUTTING AREA HARDNESS °RC	STRIKING AREA HARDNESS °RC	HEIGHT IMPACT/IN.	WEIGHT IMPACT/LB					
41-1/4"	48-60	45 max.	5	5					
41-5/16"	48-60	45 max.	5	5					
41-3/8"	48-60	45 max.	5	5					
41-7/16"	48-60	45 max.	5	5					
41-1/2"	48-60	45 max.	5	5					
41-5/8"	48-60	45 max.	5	5					



For drawing lines on metal plates or sheets. Marking or punching drill holes. Starting holes for self-tapping screws. The end opposite the tip is designed for striking.

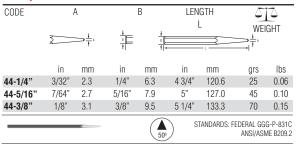




50° PRICK PUNCHES

Prick punches are used to help center and locate during drilling processes. A 50-degree angle at the tip permits exact marking and prevents the drill bit from slipping on the surface to be drilled.

44-X/XX





Useful for starting drill holes. The end opposite the tip is designed for striking.

	STANDARDS FOR PRICK PUNCHES								
(ASME B107.48M)									
CODE CUTTING AREA STRIKING AREA HEIGHT WEIGHT HARDNESS °RC HARDNESS °RC IMPACT/IN. IMPACT/LB									
44-1/4"	48-60	45 max.	15	5					
44-5/16"	48-60	45 max.	15	5					
44-3/8"	48-60	45 max.	15	5					

DRIVE PIN PUNCHES

47-X/XX

CODE	A		E	3	LEN	GTH	573		
	1	+	<u>+</u> +€		î	-	WE	IGHT	
	in	mm	in	mm	in	mm	grs	lbs	
47-1/4" X 1/16"	1/16"	1.59	1/4"	6.35	4 3/8"	111.13	24	0.05	
47-1/4" X 3/32"	3/32"	2.38	1/4"	6.35	4 3/4"	120.65	28	0.06	
47-5/16" X 1/8"	1/8"	3.18	5/16"	7.94	5 1/4"	133.35	40	0.09	
47-5/16" X 5/32"	5/32"	3.97	5/16"	7.94	5 5/8"	142.88	45	0.10	
47-3/8" X 3/16"	3/16"	4.76	3/8"	9.53	6 1/8"	155.58	68	0.15	
47-7/16" X 7/32"	7/32"	5.56	7/16"	11.11	6 1/2"	165.10	49	0.11	
47-1/2" X 1/4"	1/4"	6.35	1/2"	12.70	6 3/4"	171.45	127	0.28	
STANDARDS: FEDERAL GGG-P-8310 ANSI/ASME B209.2									

STANDARDS FOR DRIVE PIN PUNCHES (ASME B107.48M) CUTTING AREA STRIKING AREA HEIGHT WEIGHT CODE HARDNESS °RC HARDNESS °RC IMPACT/IN. IMPACT/LB 47-1/4" X 1/16" 48-60 45 max. 5 1 47-1/4" X 3/32" 48-60 45 max. 7 1 47-5/16" X 1/8" 48-60 45 max. 10 2 1/2 47-5/16" X 5/32' 48-60 10 45 max. 5 47-3/8" X 3/16" 48-60 45 max. 20 5 47-7/16" X 7/32" 48-60 45 max. 30 5 47-1/2" X 1/4" 48-60 45 max. 25 10

For installing and removing guide pins in die work. For installing and removing center guides and pins. Aligning bolts to center two or more parts. The end opposite the tip is designed for striking.







LONG DRIVE PUNCH 8"

48-X/XX

CODE	А		E	3	LEN	GTH	573	
			<u>+</u> + +	* *	ـــــــــــــــــــــــــــــــــــــ		WEIGHT	
	in	mm	in	mm	in	mm	grs	lbs
48-3/8" X 5/32"	5/32	3.97	3/8	9.53	8	203	388	0.85
48-3/8" X 3/16"	3/16	4.7	3/8	9.53	8	203	357	0.78
48-7/16" X 7/32"	7/32	5.5	7/16	11.11	8	203	617	1.36
48-1/2" X 1/4"	1/4	6.3	1/2	12.7	8	203	826	1.82
48-1/2" X 5/16"	5/16	7.94	1/2	12.7	8	203	830	1.83
STANDARDS: FEDERAL GGG-P83 ASME B107.4								

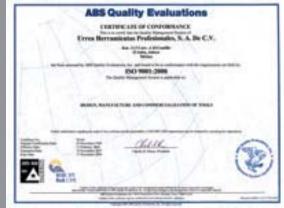
ALL OCAL STREET,

Made of 1060 steel for higher resistance. Installs and removes axles. Bolt alignment. Special treatment on top.

STANDARDS FOR LONG DRIVE PUNCHES									
	(ASME B107.48M)								
CODE	CUTTING AREA HARDNESS °RC	STRIKING AREA HARDNESS °RC	HEIGHT IMPACT/IN.	WEIGHT IMPACT/LB					
48-3/8" X 5/32"	48-60	45 max.	10	5					
48-3/8" X 3/16"	48-60	45 max.	10	5					
48-7/16" X 7/32"	48-60	45 max.	20	5					
48-1/2" X 1/4"	48-60	45 max.	30	5					
48-1/2" X 5/16"	48-60	45 max.	25	10					

qualitystartswith

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URREA Professional Tools received the ISO 9000 certification in November 1998 and updated to ISO 9001: 2000 certification in February 2004. This certification represents our constant commitment to maintain our operating and product manufacturing standards.





CHISELS, PUNCHES AND NAIL SETS

LONG DRIFT PUNCHES

96-X/XX

CODE		A B		В	LE	LENGTH		573	
	han		± ↑	± ÷€	+ = + +	L	WE	IGHT	
	in	mm	in	mm	in	mm	grs	lbs	
96-1/4"	3/32"	2.3	1/4"	6.3	10"	254.0	52	0.11	
96-5/16"	1/8"	3.1	5/16"	7.9	10"	254.0	80	0.18	
96-3/8"	3/16"	4.7	3/8"	9.5	10"	254.0	117	0.26	
96-7/16"	7/32"	5.5	7/16"	11.1	10"	254.0	172	0.38	
96-1/2"	1/4"	6.3	1/2"	12.7	10"	254.0	224	0.49	
96-5/8"	5/16"	7.9	5/8"	15.8	10"	254.0	354	0.78	
96-3/4"	3/8"	9.5	3/4"	19.0	10"	254.0	503	1.11	
					0711				

STANDARDS: FEDERAL GGG-P-831C ANSI/ASME B209.2



For installing and removing guide pins in die and mold work. For installing and removing center guides and pins in deep openings. Aligning bolts to center two or more parts. The end opposite the tip is designed for striking.

STANDARDS FOR LONG DRIFT PUNCHES							
(ASME B107.48M)							
CODE	CUTTING AREA HARDNESS °RC	STRIKING AREA HARDNESS °RC	HEIGHT IMPACT/IN.	WEIGHT IMPACT/LB			
96-1/4"	46-80	45 max.	20	5			
96-5/16"	46-80	45 max.	20	10			
96-3/8"	46-80	45 max.	20	10			
96-7/16"	46-80	45 max.	NS	NS			
96-1/2"	46-80	45 max.	NS	NS			
96-5/8"	46-80	45 max.	NS	NS			
96-3/4"	46-80	45 max.	NS	NS			

NS: NOT SPECIFIED IN STANDARD

SHORT DRIFT PUNCHES

50-X/XX								
CODE	А		В		LENGTH		573	
	1	+ +	÷E	+ 			WEI	GHT
	in	mm	in	mm	in	mm	grs	lbs
50-3/16"	1/16"	1.5	3/16"	4.7	4 1/8"	104.7	21	0.05
50-1/4"	3/32"	2.3	1/4"	6.3	4 5/8"	117.4	24	0.05
50-5/16"	1/8"	3.1	5/16"	7.9	5 1/8"	130.1	42	0.09
50-3/8"	1/16"	4.7	3/8"	9.5	5 5/8"	142.8	75	0.17
50-7/16"	7/32"	5.5	7/16"	11.1	6"	152.4	112	0.25
50-1/2"	1/4"	6.3	1/2"	12.7	6 4"	165.1	153	0.34
					CTANDA			D 0040

STANDARDS: FEDERAL GGG-P-831C ANSI/ASME B209.2



For installing and removing guide pins in die and mold work. For installing and removing center guides and pins in deep openings. Aligning bolts to center two or more parts. The end opposite the tip is designed for striking.

STANDARDS FOR SHORT DRIFT PUNCHES						
(ASME B107.48M)						
CODE	CUTTING AREA HARDNESS °RC	STRIKING AREA HARDNESS °RC	HEIGHT IMPACT/IN.	WEIGHT IMPACT/LB		
50-3/16"	46-80	45 max.	20	5		
50-1/4"	46-80	45 max.	20	5		
50-5/16"	46-80	45 max.	20	10		
50-3/8"	46-80	45 max.	20	10		
50-7/16"	46-80	45 max.	NS	NS		
50-1/2"	46-80	45 max.	NS	NS		

NS: NOT SPECIFIED IN STANDARD







Chisels are tools specially designed for removing, cutting or breaking materials softer than the chisel tip, such as concrete, stone, welding slag, brass, untreated steel, nuts, bolts, studs, etc. They are very widely used in the construction industry, and in installation and maintenance operations for fixed equipment and piping within the chemical and food industries.

The width of the tip determines the application of the chisel, depending upon the accuracy or roughness of the work to be performed.

STANDARDS FOR CHISELS							
(ASME B107.48M)							
CODE	CUTTING AREA		HEIGHT				
	HARDNESS °RC	HARDNESS °RC	IMPACT/IN.				
86A-3/16"	56-60	45 max.	6				
86A-1/4"	45-60	45 max.	6				
86A-5/16"	45-60	45 max.	6				
86A-3/8"	45-60	45 max.	20				
86A-7/16"	45-60	45 max.	20				
86A-1/2"	45-60	45 max.	20				
86A-5/8"	45-60	45 max.	30				
86A-3/4" X 8"	45-60	45 max.	30				
86A-3/4 X 12"	45-60	45 max.	30				
86A-7/8" X 8"	45-60	45 max.	30				
86A-7/8" X 12"	45-60	45 max.	30				
86A-1" X 8"	45-60	45 max.	30				
86A-1" X 12"	45-60	45 max.	30				

86A-X/XX

CHISELS

CODE		A	В		LENGTH L			
	5	II Å †	÷ t		+ * (- L		ыпі
	in	mm	in	mm	in	mm	grs	lbs
86A-3/16"	1/4"	6.35	3/16"	4.76	4 7/8"	123.83	17	0.04
86A-1/4"	5/16"	7.94	1/4"	6.35	5 1/8"	130.18	32	0.07
86A-5/16"	2/8"	9.53	5/16"	7.94	5 3/8"	136.53	51	0.11
86A-3/8"	7/16"	11.11	3/8"	9.53	5 1/2"	139.70	78	0.17
86A-7/16"	1/2"	12.70	7/16"	11.11	6"	152.40	114	0.25
86A-1/2"	5/8"	15.88	1/2"	12.70	6 5/8"	168.28	165	0.36
86A-5/8"	3/4"	19.05	5/8"	15.88	7"	177.80	270	0.60
86A-3/4" X 8"	7/8"	22.23	3/4"	19.05	8"	203.20	469	1.03
86A-3/4" X 12"	7/8"	22.23	3/4"	19.05	12"	304.80	695	1.53
86A-7/8" X 8"	1"	25.40	13/16"	20.64	8"	203.20	500	1.10
86A-7/8" X 12"	1"	25.40	13/16"	20.64	12"	304.80	773	1.70
86A-1" X 8"	1 3/16"	30.16	15/16"	23.81	8 1/4"	209.55	670	1.48
86A-1" X 12"	1 3/16"	30.16	15/16"	23.81	12"	304.80	1085	2.39
STANDARDS: FEDERAL GGG-P-831C ANSI/ASME B209.2								



For removing, cutting or breaking materials softer than the chisel. Designed for removing cold materials such as iron, brass, bronze and steel. The end opposite the tip is designed for striking.



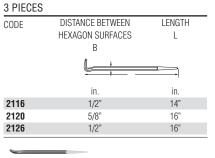


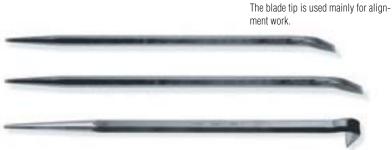
THE TOTAL SOLUTION IN TOOLS

ALIGNMENT BARS

SET OF 3 ALIGNMENT BARS

21003

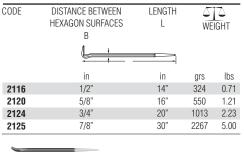




The angled and chisel tips provide better leverage when used for disassembling wood packing or machinery components.

ALIGNMENT BARS

21XX



Useful tool for prying. Aligning and positioning mechanical parts or pipe flanges.

HEAD ALIGNMENT PRY BARS

21XX DISTANCE BETWEEN LENGTH 573 CODE HEXAGON SURFACES L WEIGHT В in in lbs grs 2126 419 0.92 1/2" 16" 2130 5/8" 18" 702 1.55

Code 2126 Head alignment pry bars.

Alignment bars have a wide variety of uses, including aligning, adjusting, moving or dismantling metal or wooden parts.











Never use a hammer on a wrench unless it is designed for such use.



Never strike one hammer with another.



Never use soft-face hammers to strike nails, screws or sharp metal objects.



Never strike with the side of a hammer.



The head of a hammer for striking a chisel should be approximately 75% larger than the chisel.



Never use a hammer with a damaged handle.



Always strike the heads of punches, chisels and nail sets squarely. Always strike so that the face of the hammer is perpendicular to the striking surface. Avoid grazing blows.



Always use safety glasses when working with tools.







10