RAMMER TOOLS

RAMMER HITS HARDER

US

HOW TO CHOOSE THE RIGHT TOOL FOR

TRENCHING; BENCHING; DEMOLITION

In these common applications, the material is broken by a combination of impact energy and a "wedging" effect that forces the material to separate as the tool penetrates.

Tool type required:

Chisel

Moil point

Suitable for most jobs. Chisel is preferred in some trenching applications. Moil point causes less burring in tool retainer pin area.

Limestone chisel

Pyramid

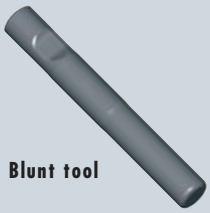
Increases production where penetration rate is high.

Effective especially in concrete.

BOULDER BREAKING

In secondary breaking and boulder reduction applications, the tool is not required to penetrate the material. Instead, the material is broken by stress waves generated by the hammer passing through the tool and into the material.

Tool type required:



Blunt tool

Super Blunt

For most boulder breaking applications, the standard blunt tool provides an excellent combination of productivity and resistance to wear. For additional wear resistance in particularly abrasive conditions, a Super Blunt tool may be specified.

YOUR APPLICATION

PRIMARY BREAKING OF HARD ROCK

Hard rock chisel is designed for quarrying and trenching in hard, abrasive, fractured rock.

Tool type required:

Hard rock chisel

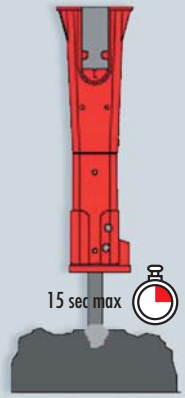
UTILITY APPLICATIONS

Tool type required:

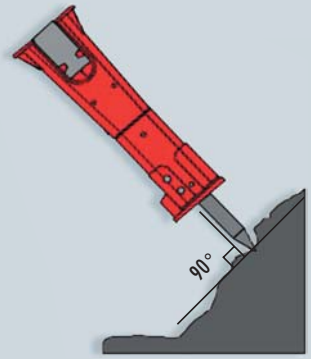
Asphalt cutting tool
(parallel and transverse)

Compacting tool

USE YOUR HAMMER CORRECTLY AND EXTEND TOOL LIFE



Do not use breaker in one spot more than 10-15 seconds.



Keep hammer at 90° degree angle.

For optimum tool life, it is vital that the hammer is used correctly and that all maintenance and lubrication schedules are followed:

- Do not use hammer in one spot more than 10-15 seconds. This will prevent overheating which leads to premature wear.
- Stop breaking before material collapses to avoid blank firing that will cause stresses.
- Keep hammer at a 90-degree angle to the material to be broken and do not pry with the tool. Operating at the correct angle will reduce tool stress and fatigue.
- Reposition the tool as the penetration slows for optimum production.

in-SERIES

HAMMER			in6		in8		in9		in11		in12		in15		in22	
Diameter	mm	in	104	4.1	104	4.1	119	4.7	119	4.7	131	5.2	131	5.2	150	5.9
PYRAMID																
Part number	No.		N6351		N6351		N9351		N9351		N12351		N12351		N22351	
Total length	mm	in	420	16.6	420	16.6	470	18.5	470	18.5	520	20.5	520	20.5	590	23.2
Working length	mm	in	270	10.6	270	10.6	300	11.8	300	11.8	330	13.0	330	13.0	380	15.0
Weight	kg	lbs	9	20	9	20	14	31	14	31	19	42	19	42	27	60

S 20-SERIES

HAMMER			PICCOLO		S 21		S 22		S 23 N		S 25 N		S 26		S 27		S 29	
Diameter	mm	in	40	1.6	45	1.8	50	2.0	63	3.5	70	2.8	90	3.5	84	3.3	95	3.7
CHISEL																		
Part number	No.		181		211		2201		231		251		261		271		291	
Total length	mm	in	400	15.8	480	18.9	530	20.9	680	26.8	730	28.7	850	33.5	840	33.1	900	35.4
Working length	mm	in	230	9.1	270	10.6	260	10.2	365	14.4	355	14.0	410	16.1	420	16.5	460	18.1
Weight	kg	lbs	4	8	5	12	8	17	15	33	20	44	36	79	34	74	46	79
LONG CHISEL																		
Part number	No.				212		2202		232		252		262		272		292	
Total length	mm	in			560	22.1	620	24.4	780	30.7	830	32.7	1000	39.4	950	37.4	1050	41.3
Working length	mm	in			350	13.8	350	13.8	465	18.3	455	17.9	560	22.1	530	20.9	610	24.0
Weight	kg	lbs			6	14	8	19	18	40	23	51	45	99	37	82	55	121
MOIL POINT																		
Part number	No.		183		213		2203		233		253		263		273		293	
Total length	mm	in	400	15.8	480	18.9	530	20.9	680	26.8	730	28.7	850	33.5	840	33.1	900	35.4
Working length	mm	in	230	9.1	270	10.6	260	10.2	365	14.4	355	14.0	410	16.1	420	16.5	460	18.1
Weight	kg	lbs	4	8	5	12	7	15	15	33	20	44	36	79	33	73	43	95
LONG MOIL POINT																		
Part number	No.				218		2208		238		258		268		278		298	
Total length	mm	in			560	22.1	620	24.4	780	30.7	830	32.7	1000	39.4	950	37.4	1050	41.3
Working length	mm	in			350	13.8	350	13.8	465	18.3	455	17.9	560	22.1	530	20.9	610	24.0
Weight	kg	lbs			6	14	8	19	18	40	23	51	48	105	37	82	53	117
BLUNT																		
Part number	No.																294	
Total length	mm	in															800	31.5
Working length	mm	in															360	14.1
Weight	kg	lbs															39	86
ASPHALT CUTTING																		
Parallel	No.		185		215		2205		235		255		265		275		295	
Transverse	No.		186		216		2206		236		256		266		276		296	
Total length	mm	in	380	15.0	450	17.7	490	19.3	570	22.4	720	28.4	850	33.5	880	34.7	830	32.7
Tool width	mm	in	100	3.9	100	3.9	115	4.5	130	5.1	150	5.9	280	11.0	200	7.9	200	7.9
Weight	kg	lbs	4	8	5	11	7	15	13	28	19	41	55	121	34	76	39	85
COMPACTING																		
Part number	No.				217		2207		237		257		267		277		297	
Total length	mm	in			400	15.8	460	18.1	570	22.4	610	24.0	860	33.9	800	31.5	800	31.5
Plate diameter	mm	in			250	9.8	250	9.8	250	9.8	330	13.0	330	13.0	330	13.0	350	13.8
Weight	kg	lbs			21	46	23	50	30	66	54	119	82	180	74	163	95	210

TOOLS

E 60- and S 50-SERIES

HAMMER			S 54		S 55		S 56		E 63		E 64		E 65		E 66		E 68	
Diameter	mm	in	115	4.5	115	4.5	130	5.2	115	4.5	106	4.2	125	4.9	115	4.5	130	5.1
CHISEL																		
Part number	No.		541		661		561		631		641		651		661		681	
Total length	mm	in	1050	41.3	1050	41.3	1100	43.3	1000	39.4	1050	41.3	1050	41.3	1050	41.3	1100	43.3
Working length	mm	in	655	25.8	575	22.6	675	26.6	560	22.1	610	24.0	575	22.6	575	22.6	620	24.4
Weight	kg	lbs	79	174	78	174	103	226	68	150	67	147	85	187	78	172	104	229
LONG CHISEL																		
Part number	No.		542		662		562				642		652		662		682	
Total length	mm	in	1150	45.3	1150	45.3	1250	49.2			1150	45.3	1150	45.3	1150	45.3	1250	49.2
Working length	mm	in	755	29.7	675	26.6	825	32.5			710	28.0	675	26.6	675	26.6	770	30.3
Weight	kg	lbs	86	189	85	187	115	253			74	163	90	205	85	187	120	264
MOIL POINT																		
Part number	No.		543		663		563		633		643		653		663		683	
Total length	mm	in	1050	41.3	1050	41.3	1100	43.3	1000	39.4	1050	41.3	1050	41.3	1050	41.3	1100	43.3
Working length	mm	in	655	25.8	575	22.6	675	26.6	560	22.1	610	24.0	575	22.6	575	22.6	620	24.4
Weight	kg	lbs	78	171	77	169	99	218	68	150	67	148	84	185	77	170	103	227
LONG MOIL POINT																		
Part number	No.		548		668		568				648		658		668		688	
Total length	mm	in	1150	45.3	1150	45.3	1250	49.2			1150	45.3	1150	45.3	1150	45.3	1250	49.2
Working length	mm	in	755	29.7	675	26.6	825	32.5			710	28.0	675	26.6	675	26.6	770	30.3
Weight	kg	lbs	86	189	85	187	110	242			74	163	91	205	85	187	120	264
BLUNT																		
Part number	No.		544		664		564		634		644		654		664		684	
Total length	mm	in	850	33.5	850	33.5	900	35.4	800	31.5	850	33.5	850	33.5	850	33.5	900	35.4
Working length	mm	in	455	17.9	675	14.8	475	18.7	360	14.2	410	16.1	375	14.8	375	14.8	420	16.5
Weight	kg	lbs	69	152	68	150	94	207	58	128	58	128	74	163	68	150	90	198
LONG BLUNT																		
Part number	No.				664C1				634C1		644C1		654CI		664C1		684C1	
Total length	mm	in			1050	41.3			1000	39.4	1050	41.3	1050	41.3	1050	41.3	1100	43.3
Working length	mm	in			575	22.6			560	22.0	610	24.0	575	22.6	575	22.6	620	24.4
Weight	kg	lbs			82	180			72	159	78	171	87	196	82	180	111	244

SPECIAL TOOLS

E 60- and S 50-SERIES

HAMMER			S 55		S 56		E 63		E 64		E 65		E 66		E 68	
Diameter	mm	in	115	4.5	130	5.1	125	4.5	106	4.2	125	4.9	115	4.5	130	5.1
LIMESTONE CHISEL																
Part number	No.						631F3				651F3				681F3	
Total length	mm	in					1000	39.4			1000	41.3			1050	43.3
Working length	mm	in					525	20.7			525	22.6			570	22.5
Weight	kg	lbs					81	144			81	187			91	236
HARD ROCK CHISEL																
Part number	No.														681A2	
Total length	mm	in													1100	43.3
Working length	mm	in													570	22.5
Weight	kg	lbs													104	229
PYRAMID																
Part number	No.		663K3				633K3		643K3		653K3		663K3		683K3	
Total length	mm	in	1050	41.0			1050	39.4	1050	41.0	1050	41.3	1050	41.0	1100	43.3
Working length	mm	in	575	22.5			575	20.7	610	24.0	575	22.6	575	22.5	570	22.5
Weight	kg	lbs	76	167			66	145	66	145	76	61	76	167	104	229
SUPER BLUNT																
Part number	No.				564T2										684T2	
Total length	mm	in			900	35.5									900	35.5
Working length	mm	in			475	19.0									420	16.5
Weight	kg	lbs			96	211									97	214

TOOLS

m-SERIES

HAMMER			m14		m18	
Diameter	mm	in	125	4.9	140	5.5

CHISEL

Part number	No.		m141		m181	
Total length	mm	in	1100	43.3	1200	47.3
Working length	mm	in	565	22.3	615	24.2
Weight	kg	lbs	94	207	129	284

MOIL POINT

Part number	No.		m143		m183	
Total length	mm	in	1100	43.3	1200	47.3
Working length	mm	in	565	22.3	615	24.2
Weight	kg	lbs	92	202	124	273

LIMESTONE CHISEL

Part number	No.		m141F3		m181F3	
Total length	mm	in	1100	43.3	1150	45.3
Working length	mm	in	565	22.3	565	22.2
Weight	kg	lbs	100	220	127	279

HARD ROCK CHISEL

Part number	No.				m181A2	
Total length	mm	in			1200	47.3
Working length	mm	in			615	24.2
Weight	kg	lbs			123	271

PYRAMID

Part number	No.		m143K3		m183K3	
Total length	mm	in	1100	43.3	1200	47.3
Working length	mm	in	565	22.3	615	24.2
Weight	kg	lbs	92	202	124	273

BLUNT

Part number	No.		m144		m184	
Total length	mm	in	900	35.5	1050	41.4
Working length	mm	in	365	14.5	465	18.3
Weight	kg	lbs	82	180	120	264

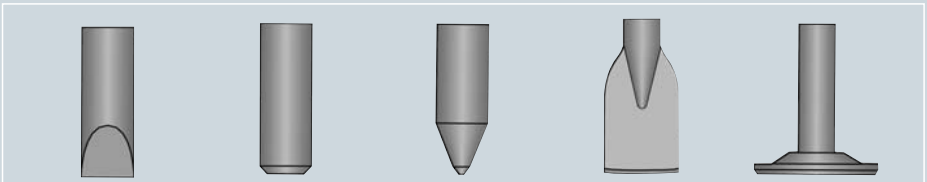
SUPER BLUNT

Part number	No.				m184T2	
Total length	mm	in			1050	41.4
Working length	mm	in			465	18.3
Weight	kg	lbs			123	271

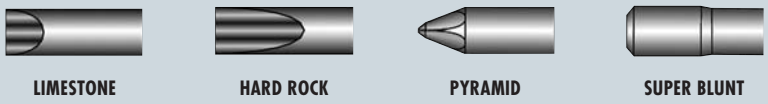
LONG BLUNT

Part number	No.				m184C1	
Total length	mm	in			1200	47.3
Working length	mm	in			615	24.2
Weight	kg	lbs			137	301

TOOLS



SPECIAL TOOLS



TOOLS

G- and S 80-SERIES

HAMMER			G 80		G 88		G 90		G 100		G 110		G 120		G 130		S 83		S 84		S 86	
Diameter	mm	in	140	5.5	142	5.6	160	6.3	170	6.7	175	6.9	195	7.7	203	8.0	140	5.5	160	6.3	170	6.7
CHISEL																						
Part number	No.		801		881		901		101		111		121		131		831		841		861	
Total length	mm	in	1200	47.2	1200	47.2	1405	55.3	1450	57.1	1450	57.1	1700	66.9	1550	61.0	1200	47.2	1350	53.2	1450	57.0
Working length	mm	in	615	24.2	610	24.0	750	29.5	700	27.6	700	27.6	930	36.6	780	30.7	660	26.0	750	29.5	800	31.5
Weight	kg	lbs	137	301	132	291	206	454	230	506	241	530	370	815	343	755	137	301	198	437	230	506
MOIL POINT																						
Part number	No.		803		883		903		103		113		123		133		833		843		863	
Total length	mm	in	1200	47.2	1200	47.2	1405	55.9	1450	57.1	1450	57.1	1700	66.9	1550	61.0	1200	47.2	1350	53.2	1450	57.0
Working length	mm	in	615	24.2	610	24.0	750	29.5	700	27.6	700	27.6	930	36.6	780	30.7	660	26.0	750	29.5	800	31.5
Weight	kg	lbs	127	280	128	282	206	454	225	496	236	520	370	815	327	720	137	301	187	411	230	506
BLUNT																						
Part number	No.		804		884		904		104		114		124		134		834		844		864	
Total length	mm	in	1050	41.3	1050	41.3	1255	49.4	1300	51.2	1300	51.2	1500	59.1	1500	59.1	1050	41.3	1200	47.2	1300	51.2
Working length	mm	in	465	18.3	460	18.1	600	23.6	550	21.7	550	21.7	730	28.7	730	28.7	510	20.1	600	23.6	650	25.6
Weight	kg	lbs	123	270	124	273	196	431	225	496	232	511	345	760	362	797	122	269	185	407	230	506

SPECIAL TOOLS

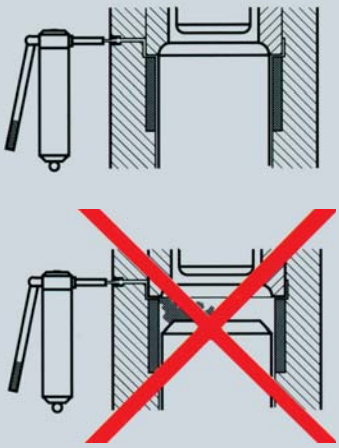
G- and S 80-SERIES

HAMMER			G 80		G 88		G 90		G 100		G 110		G 120		G 130		S 83		S 84	
Diameter	mm	in	140	5.5	142	5.6	160	6.3	170	6.7	175	6.9	195	7.7	203	8.0	140	5.5	160	6.3
LIMESTONE CHISEL																				
Part number	No.		801F3		881F3		901F3		101F3		111F3		121P3		131P3		831F3		841F3	
Total length	mm	in	1200	47.2	1200	47.2	1405	55.3	1450	57.1	1450	57.1	1400	55.1	1400	55.1	1200	47.2	1350	53.2
Working length	mm	in	615	24.2	610	24.0	750	29.5	700	27.7	700	27.7	630	24.8	630	26.0	660	26.0	750	29.5
Weight	kg	lbs	136	308	140	300	208	459	240	529	250	551	298	656	303	667	134	295	198	437
HARD ROCK CHISEL																				
Part number	No.		801A2		881A2		901A2		101A2		111A2		121A2		131A2		831A2		841A2	
Total length	mm	in	1200	47.2	1200	47.2	1405	55.3	1450	57.1	1450	57.1	1700	66.9	1550	61.0	1200	47.2	1350	53.2
Working length	mm	in	615	24.2	610	24.0	750	29.5	700	27.7	700	28.0	930	36.6	780	30.7	660	26.0	750	29.5
Weight	kg	lbs	132	291	132	291	206	454	245	539	257	566	370	815	323	711	137	301	198	437
PYRAMID																				
Part number	No.		803K3		883K3		903K3		103K3		113K3		123K3		133K3		833K3		843K3	
Total length	mm	in	1200	47.2	1200	47.2	1405	55.3	1450	57.1	1450	57.1	1700	66.9	1550	61.0	1200	47.2	1350	53.2
Working length	mm	in	615	24.2	610	24.0	750	29.5	700	27.7	700	27.7	930	36.6	780	30.7	660	26.0	750	29.5
Weight	kg	lbs	132	291	131	289	197	433	215	473	226	498	370	815	332	731	137	301	187	411
SUPER BLUNT																				
Part number	No.		804T2		884T2		904T2		104T2		114T2						834T2		844T2	
Total length	mm	in	1100	43.3	1100	43.3	1250	49.2	1350	53.2	1350	53.0					1100	43.3	1250	49.2
Working length	mm	in	515	20.3	510	20.1	600	23.6	600	23.6	600	23.6					560	22.1	650	25.6
Weight	kg	lbs	134	295	138	304	220	484	248	546	255	561					134	295	214	471

TOOL LUBRICATION

A hammer tool is subject to extreme wear that requires proper lubrication and care if it is to achieve a long, trouble free life.

Tool lubricant must have properties to withstand high temperature and extreme pressure. Special tool lubricants and automatic tool lubrication systems specifically designed for Rammer products are available from your Rammer dealer.



TOOL MAINTENANCE SCHEDULE

DAILY

- Lubricatee tool shank and tool bushings minimum every two hours.
- Keep the tool against thrust ring to avoid over lubrication.

WEEKLY

- Remove retaining pin(s) and check their condition.
- Remove tool and check tool shank for wear.
- Remove burs from retainer pin groove.
- Check that the tool has received sufficient lubrication.

MONTHLY

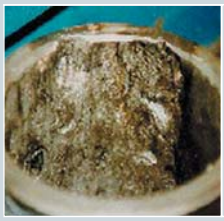
- Check tool bushings for wear.
- Check condition of other wear parts and hoses.

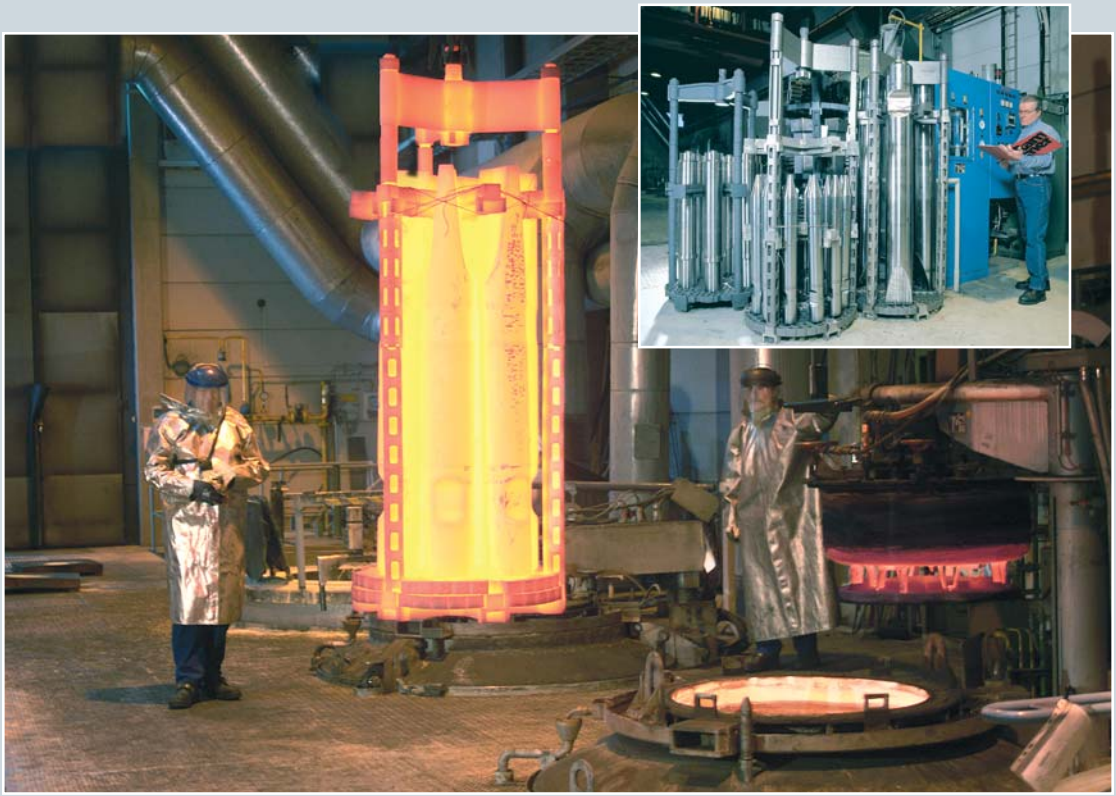
Study service and maintenance manuals for additional instructions.

TOOL SHARPENING

- Tools can be reconditioned by milling, turning or planing.
- Max. working temperature 392 F/200° Celsius.
- Don't use gas cutting. It softens the tool and causes micro-cracks that may lead to breakages.
- When using hard facing do not exceed working temperature 392F /200° Celsius.

TOOL ANALYSES - WHAT A BROKEN TOOL TELLS US:

	PROBLEM	LIKELY CAUSE	REMEDY
	Striking face of the tool may be mushrooming and peeling.	Overheating of tool tip.	Reposition the hammer every15 seconds.
	Brittle fracture with a lip formation.	Breakage caused by excessive bending. This type of stress is caused by using the wrong working angle or use of the tool for mechanical leverage.	Adopt correct working angle and follow operating instructions detailed above.
	Fatigue failure - Mechanical damage on tool surface	Caused by heavy gouge on tool surface.	Avoid blank firing and striking when moving material.
	Pitting and cracking of the tool bushings.	Poor grease or lack of greasing causes seizures.	Use recommended quality grease and follow manufacturer's maintenance instructions.
	Seizing in tool bushing - Fatigue fracture that starts from the tool surface.	Strong side load and striking at the same time cause tool-bushing surface to be damaged. Caused by wrong working angle and/or wrong or insufficient lubrication.	Adopt correct working angle and follow operating instructions detailed above.
	Breaking of the tool at groove area or heavy wear on tool retainer pin groove.	Idle strokes/ blank firing.	Ensure operator follows operating instructions as detailed in operator's manual.
	Fatigue failure that starts from the inside of the tool.	Material failure.	Contact your local dealer for possible warranty claim.



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- Superior durability from special alloy steels and controlled in-house heat treatment.
- The tool and hammer are designed together for perfect component compatibility and longer life.
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