

**Rammer**  
**mer**<sup>®</sup>



**Rammer Hammers**

# WHEN EVERY HIT COUNTS, COUNT ON RAMMER.

The world's best-known and most-respected brand of hydraulic hammers offers a comprehensive range of powerful, productive and durable attachments that are suitable for carriers in the 0.6 to 100 tons operating weight class.

Manufacturing of Rammer branded hydraulic hammers started in 1978 – ever since we have grown to be recognized world leader in the supply and support of hammers and other hydraulic attachments such as demolition tools and breaker booms.

Divided into four hydraulic hammer families, the Rammer hydraulic hammer range is unsurpassed in its innovation and reliability and offers class-leading power-to-weight characteristics that mark them as the best in their class.



Ram  
mer®

RAMMER  
999E



# SMALL RANGE



This Rammer series is one of the fastest hitting hydraulic hammers. Featuring an integrated tubular membrane type accumulator which maximizes it's surface area, delivering the maximum breaking power, with 30% fewer parts than it's predecessors.

## FEATURES

- Twin handed
- High pressure membrane accumulator
- PRS (Pressure release system)
- FBE (Fixed Blow Energy)
- No tie rods
- Single part tool bushing retained with shared tool pin

## BENEFITS

- Able to work in narrow spaces
- Fast and easy service
- Low operating costs



	111	222	333
Minimum working weight, flange mounted <sup>(1)</sup>	70 kg (150 lb)	105 kg (230 lb)	150 kg (330 lb)
Impact rate	1000-2600 bpm	1100-2600 bpm	1050-2050 bpm
Operating pressure	80-130 bar (1160-1885 psi)	100-150 bar (1450-2175 psi)	100-150 bar (1450-2175 psi)
Pressure relief, min <sup>(2)</sup>	130-180 bar (1885-2610 psi)	150-200 bar (2175-2900 psi)	150-200 bar (2175-2900 psi)
Pressure relief, max	220 bar (3190 psi)	220 bar (3190 psi)	220 bar (3190 psi)
Oil flow range	15-33 l/min (4.0-8.7 gal/min)	20-48 l/min (5.3-12.7 gal/min)	30-63 l/min (7.9-16.6 gal/min)
Back pressure, max	20 bar (290 psi)	20 bar (290 psi)	20 bar (290 psi)
Input power	7.15 kW (10 hp)	12 kW (16 hp)	15.75 kW (21 hp)
Tool diameter	36 mm (1.42 in)	42 mm (1.65 in)	50 mm (1.97 in)
Miniexcavator weight, optimum range <sup>(3)</sup>	1.0-1.5 t (2200-3300 lb)	1.4-2.2 t (3100-4900 lb)	2.0-3.2 t (4400-7100 lb)
Miniexcavator weight range <sup>(3)</sup>	0.8-1.8 t (1800-4000 lb)	1.2-2.7 t (2600-6000 lb)	1.8-4.0 t (4000-8800 lb)
Skid steer, robot weight, optimum range <sup>(3)</sup>	0.7-1.0 t (1500- 2200 lb)	0.9-1.5 t (2000-3300 lb)	1.3-2.1 (2860-4630)
Skid steer, robot weight range <sup>(3)</sup>	0.6-1.3 t (1300-1700 lb)	0.8-1.8 t (1800-11800 lb)	1.2-2.7 t (2600-21500 lb)
Noise level, measured soundpower level, LWA <sup>(4)</sup>	117 dB	123 dB	119 dB
Noise level, guaranteed sound power level, LWA <sup>(4)</sup>	121 dB	127 dB	123 dB

(1) Includes average mounting bracket and standard tool (2) Minimum setting = actual operating pressure + 50 bar or (+ 725psi).

(3) Check carrier allowed attachment weight from carrier manufacturer. Check application requirements. (4) According to European Union DIRECTIVE 2000/14/EC



# SMALL RANGE



Rammer's Small Range hydraulic hammers are your reliable long life solution for any breaking application for carriers between 0.6 and 15 tons.

Rammer Small Range hammers are built to last. Membrane-type accumulators assist with power strokes, whilst providing protection against hydraulic spikes. The field replaceable lower tool bushing and low-maintenance design ensure optimum hammer uptime, higher availability levels and reduced costs of ownership and operation.

## FEATURES

- Twin Handed
- Tubular accumulator
- Vibration & sound suppression
- Pin and flange mounting
- PRS (Pressure release system)
- No tie rods
- Fast-change tool system
- Single part tool bushing retained with shared tool pin
- RD3 included

## BENEFITS

- Easy to install
- Broad carrier range
- Low operating costs
- Excellent fit for rental
- High reliability
- Constant high productivity

# SMALL RANGE



	155E	255E	355E	455E
Minimum working weight, flange mounted <sup>(1)</sup>	90 kg (200 lb)	110 kg (240 lb)	150 kg (330 lb)	230 kg (510 lb)
Impact rate	1000-2600 bpm	600-3200 bpm	800-3000 bpm	700-2600 bpm
Operating pressure	80-130 bar (1500-1900 psi)	95-150 bar (1380-2175 psi)	90-150 bar (1305-2175 psi)	100-170 bar (1450-2465 psi)
Pressure relief, min <sup>(2)</sup>	130-180 bar (900-2600 psi)	150-200 bar (2175-2900 psi)	150-200 bar (2175-2900 psi)	150-200 bar (2175-2900 psi)
Pressure relief, max	220 bar (3200 psi)	220 bar (3190 psi)	220 bar (3190 psi)	220 bar (3190 psi)
Oil flow range	15-33 l/min (4-9gal/min)	15-35 l/min (4.0-9.2 gal/min)	25-55 l/min (6.6-14.5 gal/min)	40-70 l/min (10.6-18.5 gal/min)
Back pressure, max	20 bar (300 psi)	20 bar (290 psi)	20 bar (290 psi)	20 bar (290 psi)
Input power	7.2 kW (10hp)	8.8 kW (12 hp)	13.8 kW (19 hp)	19.8 kW (27 hp)
Tool diameter	36 mm (1.42in)	40 mm (1.57 in)	48 mm (1.89 in)	56 mm (2.20 in)
Miniexcavator weight, optimum range <sup>(3)</sup>	1.0 - 2.5 t (2200-3300 lb)	1.4-2.1 t (3100-4600 lb)	1.9-3.1 t (4200-6800 lb)	3.1-4.6 t (6800-10100 lb)
Miniexcavator weight range <sup>(3)</sup>	0.8 - 1.8 t (1800-4000 lb)	1.2-2.5 t (2600-5500 lb)	1.6-3.6 t (3500-7900 lb)	2.7-5.2 t (6000-11500 lb)
Skid steer, robot weight, optimum range <sup>(3)</sup>	0.7 -1.0 t (1500-2200 lb)	0.9-1.4 t (2000-3100 lb)	1.3-2.1 t (2900-4600 lb)	2.1-3.1 t (4600-6800 lb)
Skid steer, robot weight range <sup>(3)</sup>	0.6 -1.3 t (1300-2900 lb)	0.8-1.7 t (1800-3700 lb)	1.1-2.4 t (2400-5300 lb)	1.8-3.5 t (4000-7700 lb)
Noise level, measured sound power level, LWA <sup>(4)</sup>	115	115	114	115
Noise level, guaranteed sound power level, LWA <sup>(4)</sup>	119	119	118	119

(1) Includes average mounting bracket and standard tool (2) Minimum setting = actual operating pressure + 50 bar or (+ 725psi).

(3) Check carrier allowed attachment weight from carrier manufacturer. Check application requirements. (4) According to European Union DIRECTIVE 2000/14/EC





	<b>555E</b>	<b>777E</b>	<b>999E</b>	<b>1322E</b>
Minimum working weight, flange mounted <sup>(1)</sup>	275 kg (610 lb)	385 kg (850 lb)	505 kg (1110 lb)	850 (1870 lb)
Impact rate	600-1800 bpm	500-1700 bpm	500-1700 bpm	500-1000 bpm
Operating pressure	90-140 bar (1305-2030 psi)	90-140 bar (1305-2030 psi)	100-140 bar (1450-2030 psi)	125-150 bar (1815-2175 psi)
Pressure relief, min <sup>(2)</sup>	140-200 bar (2030-2900 psi)	140-190 bar (2030-2755 psi)	150-190 bar (2175-2755 psi)	
Pressure relief, max	220 bar (3190 psi)	220 bar (3190 psi)	220 bar (3190 psi)	220 bar (3190 psi)
Oil flow range	35-90 l/min (9.2-23.8 gal/min)	40-120 l/min (10.6-31.7 gal/min)	50-150 l/min (13.2-39.6 gal/min)	60-120 l/min (15.9-31.7 gal/min)
Back pressure, max	20 bar (290 psi)	20 bar (290 psi)	20 bar (290 psi)	20 bar (290 psi)
Input power	21 kW (28 hp)	28 kW (38 hp)	35 kW (47 hp)	32 kW (43 hp)
Tool diameter	72 mm (2.83 in)	80 mm (3.15 in)	90 mm (3.54 in)	95 mm (3.74 in)
Mini   excavator weight, optimum range <sup>(3)</sup>	3.6-5.8 t (7900-12800 lb)	4.9-7.8 t (10800-17200 lb)	6.6-10.6 t (14600-23400 lb)	9-15 t (19800-33100 lb)
Mini   excavator weight range <sup>(3)</sup>	3.2-8.0 t (7100-17600 lb)	4.3-9.5 t (9500-20900 lb)	5.8-13.0 t (12800-28700 lb)	9-15 t (19800-33100)
Skid steer, robot weight, optimum range <sup>(3)</sup>	2.4-3.9 t (5300-8600 lb)	3.3-5.2 t (7300-11500 lb)	4.4-7.1 t (9700-15700 lb)	N/A
Skid steer, robot weight range <sup>(3)</sup>	1.9-5.3 t (4200-11700 lb)	2.6-6.3 t (5700-13900 lb)	3.9-8.7 t (8600-19200 lb)	N/A
Noise level, measured sound power level, LWA <sup>(4)</sup>	118 dB	120 dB	123 dB	136 dB
Noise level, guaranteed sound power level, LWA <sup>(4)</sup>	122 dB	124 dB	127 dB	140 dB

# MEDIUM RANGE



Rammer's Medium Range hydraulic hammers are designed to get the job done and the fully enclosed housing means no job is too dirty and no conditions are too tough.

Rammer's Medium Range hydraulic hammers are your reliable long life solution for any breaking application for carriers between 10 and 32 tons.

## FEATURES

- High pressure membrane accumulator
- Twin-handed
- Vibration & sound suppressed
- VIDAT tie rods
- FBE (Fixed blow energy)
- Idle blow protector
- RAMLUBE II
- RD3 Included
- Air connection
- Wheeled excavator hammer

## BENEFITS

- Safe capital investment
- Good access to narrow places
- Constant high productivity
- Low operating costs
- Easy and safe installation
- High reliability



	<b>1553E</b>	<b>1655E</b>	<b>2155E</b>	<b>2166E</b>	<b>2577E</b>
Minimum working weight, flange mounted <sup>(1)</sup>	870-900 (1920-1980)	105 kg (230 lb)	1040 kg (2290 lb)	1360 kg (3000 lb)	1760 kg (3880 lb)
Impact rate	550-950 bpm	1100-2600 bpm	490 - 780 bpm	430-790 bpm	450-750 bpm
Operating pressure	140-160 (2030-2320 psi)	100-150 bar (1450-2175 psi)	140-160 (2030-2320 psi)	140-160 bar (2030-2320 psi)	135-145 bar (1960-2105 psi)
Pressure relief, min <sup>(2)</sup>	220 (3190 psi)	150-200 bar (2175-2900 psi)	220 (3190 psi)	210 bar (3045 psi)	190 bar (2755 psi)
Pressure relief, max	240 (3480 psi)	220 bar (3190 psi)	240 (3480 psi)	230 bar (3335 psi)	220 bar (3190 psi)
Oil flow range	80-140 l/min (21.1-37.0 gal/min)	20-48 l/min (5.3-12.7 gal/min)	120 - 180 l/min (31.7 - 47.6 gal/min)	120-180 l/min ( 31.7 -47.6 gal/ min)	140-200 l/min (37.0-52.8 gal/min)
Back pressure, max	10 bar (145 psi)	20 bar (290 psi)	10 bar (145 psi)	10 bar (145 psi)	10 bar (145 psi)
Input power	37 kW (50 hp)	12 kW (16 hp)	48 kW (64 hp)	48 kW (64 hp)	48 kW (64 hp)
Tool diameter	105 mm (4.13 in)	42 mm (1.65 in)	118 mm (4.65 in)	125 mm (4.92 in)	135 mm (5.31 in)
Carrier weight, optimum range <sup>(3)</sup>	11-17 t (24300-37500 lb)	1.4-2.2 t (3100-4900 lb)	19 - 22 t (41900 - 48500 lb)	16-26 t (35300-57300)	23-28 t (50700-61700 lb)
Carrier weight range <sup>(3)</sup>	10-19 t (22000-41900 lb)	1.2-2.7 t (2600-6000 lb)	14 - 26 t (30900 - 57300 lb)	16-26 t (35300-57300 lb)	21-30 t (46300-66100 lb)
Noise level, measured sound power level, LWA <sup>(4)</sup>	120 dB	123 dB	124 dB	121 dB	120 dB
Noise level, guaranteed sound power level, LWA <sup>(4)</sup>	124 dB	127 dB	128 dB	125 dB	124 dB

(1) Includes average mounting bracket and standard tool (2) Minimum setting = actual operating pressure + 50 bar or (+ 725psi).

(3) Check carrier allowed attachment weight from carrier manufacturer. Check application requirements. (4) According to European Union DIRECTIVE 2000/14/EC

# LARGE RANGE



The largest models in Rammer's Excellence Line unite all the key features for which Rammer hammers are renowned in one large, powerful, durable and reliable package.

Rammer's Large Range hydraulic hammers are your reliable long life solution for any breaking application for carriers between 26 and 120 tons.

## FEATURES

- Service access to high pressure membrane accumulator
- Indexable power cell (left or right handed)
- Vibration and sound suppressed
- Heavy, Super Duty housing
- Stone claws on housing
- Optimized hydraulic connection
- FBE (Fixed Blow Energy)
- RamValve
- Idle blow protector
- VIDAT tie rods
- Fast-change tool system
- Field replaceable lower tool bushing
- RD3 included
- Air connection

## BENEFITS

- Safe capital investment
- Constant high productivity
- Easy and safe installation
- Low operating costs
- High reliability



	3288E	4099E	5011E	9033E
Minimum working weight, flange mounted <sup>(1)</sup>	2400-2500 kg (5290-5510 lb)	3380-3540 kg (7450-7800 lb)	4750 kg (10470 lb)	7400 kg (16310 lb)
Impact rate, long stroke	370-630 bpm	400-560 bpm	370-530 bpm	300-520 bpm
Impact rate, short stroke	460-740 bpm	520-700 bpm	450-620 bpm	355-645 bpm
Operating pressure	150-160 bar (2175-2320 psi)	150-160 bar (2175-2320 psi)	160-170 bar (2320-2460 psi)	170-180 bar (2465-2610 psi)
Pressure relief, min <sup>(2)</sup>	220 bar (3190 psi)	210 bar (3045 psi)	220 bar (3190 psi)	230 bar (3335 psi)
Pressure relief, max	240 bar (3480 psi)	230 bar (3335 psi)	230 bar (3335 psi)	240 bar (3480 psi)
Oil flow range	160-250 l/min (42.3-66.0 gal/min)	250-350 l/min (66.0-92.5 gal/min)	280-380 l/min (73.9-100.4 gal/min)	360 - 460 l/min (95.1 - 121.5 gal/min)
Back pressure, max	10 bar (145 psi)	12 bar (175 psi)	10 bar (145 psi)	10 bar (145 psi)
Input power	67 kW (90 hp)	93 kW (125 hp)	108 kW (145 hp)	138 kW (185 hp)
Tool diameter	142 mm (5.59 in)	166 mm (6.54 in)	190 mm (7.48 in)	215 mm (8.46 in)
carrier weight, optimum range <sup>(3)</sup>	28-38 t (61700-83800 lb)	37-50 t (81600-110200 lb)	45-69 t (99200-152100 lb)	65-120 t (143300-264600)
carrier weight range <sup>(3)</sup>	26-40 t (57300-88200 lb)	34-55 t (75000-121300 lb)	43-80 t (94800-176400 lb)	65 - 120 t (143300 - 264600 lb)
Noise level, measured sound power level, LWA <sup>(4)</sup>	124 dB	126 dB	122 dB	127 dB
Noise level, guaranteed sound power level, LWA <sup>(4)</sup>	128 dB	130 dB	126 dB	131 dB

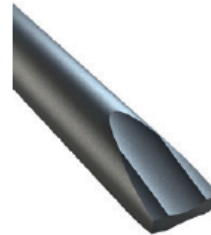
(1) Includes average mounting bracket and standard tool (2) Minimum setting = actual operating pressure + 50 bar or (+ 725psi).

(3) Check carrier allowed attachment weight from carrier manufacturer. Check application requirements. (4) According to European Union DIRECTIVE 2000/14/EC

# TOOL SELECTION

## Standard chisel tool

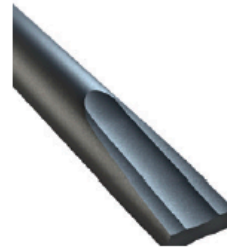
- Non-abrasive but tough rock or concrete
- For material which has low or medium penetration rate



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## Hard rock chisel

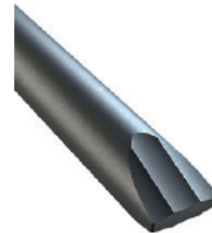
- Hard and abrasive rock with fractures
- For applications where drilling and blasting cannot be used
- Materials with low penetration rate



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## Limestone and concrete chisel

- Very soft and easily breaking, non-abrasive rock or concrete
- For rock which has high penetration rate



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## Pyramid point tool

- Soft, non-abrasive and tough rock and especially concrete
- Materials requiring high penetration rate
- Where chisels have excessive retaining pin groove wear





# SPARE PARTS AND TOOLS FOR OPTIMUM PERFORMANCE

Rammer genuine parts and tools utilize only the finest raw materials and heat treatment processes to ensure optimum durability across a broad range of industries, materials and applications. These parts and tools are available through a highly experienced global dealer network that is unmatched in this industry and which ensures that you get the right part or tool, in the right place, at the right time.

During recent years Rammer has researched tool design to provide longer service life and enhanced value. Our innovative tool design and worldwide testing programs have resulted in improved wear characteristics and greater durability across a broad range of applications. Furthermore, several new job-specific tools have been developed.

Rammer offers tailor made service kits designed to keep your hammer hitting harder. For more information with regards to Rammer's high quality parts and tools, please contact your local authorized Rammer dealer.

**Rammer**<sup>®</sup>



## **GLOBAL DEALER NETWORK**

Sandvik sells and supports its Rammer-branded products through a global dealer network that operates in more than 130 countries around the world.