

**Ram
mer**[®]



PERFORMANCE LINE HAMMERS

UNBEATABLE PERFORMANCE

The new Rammer Performance Line hammers are your everyday solution for a wide range of breaking demands. Designed with proven Rammer features and standards, these Rammer Performance Line hammers offer more than just excellent power-to-weight ratio, they bring the quality reassurance that only a true Rammer hammer can bring.

SANDVIK IS THE WORLD'S LEADING MANUFACTURER OF HYDRAULIC HAMMERS AND ATTACHMENTS. OVER THE PAST 40 YEARS, SANDVIK-OWNED RAMMER HAMMERS HAVE BEEN DEVELOPED IN CONJUNCTION WITH OUR CUSTOMERS ACROSS THE WORLD. AS A RESULT, THEY ARE TOUGH, DURABLE, RELIABLE AND OFFER THE MOST ECONOMICAL OWNING AND OPERATING COSTS WHILE DELIVERING MAXIMUM PRODUCTION.

40 YEARS OF INNOVATION

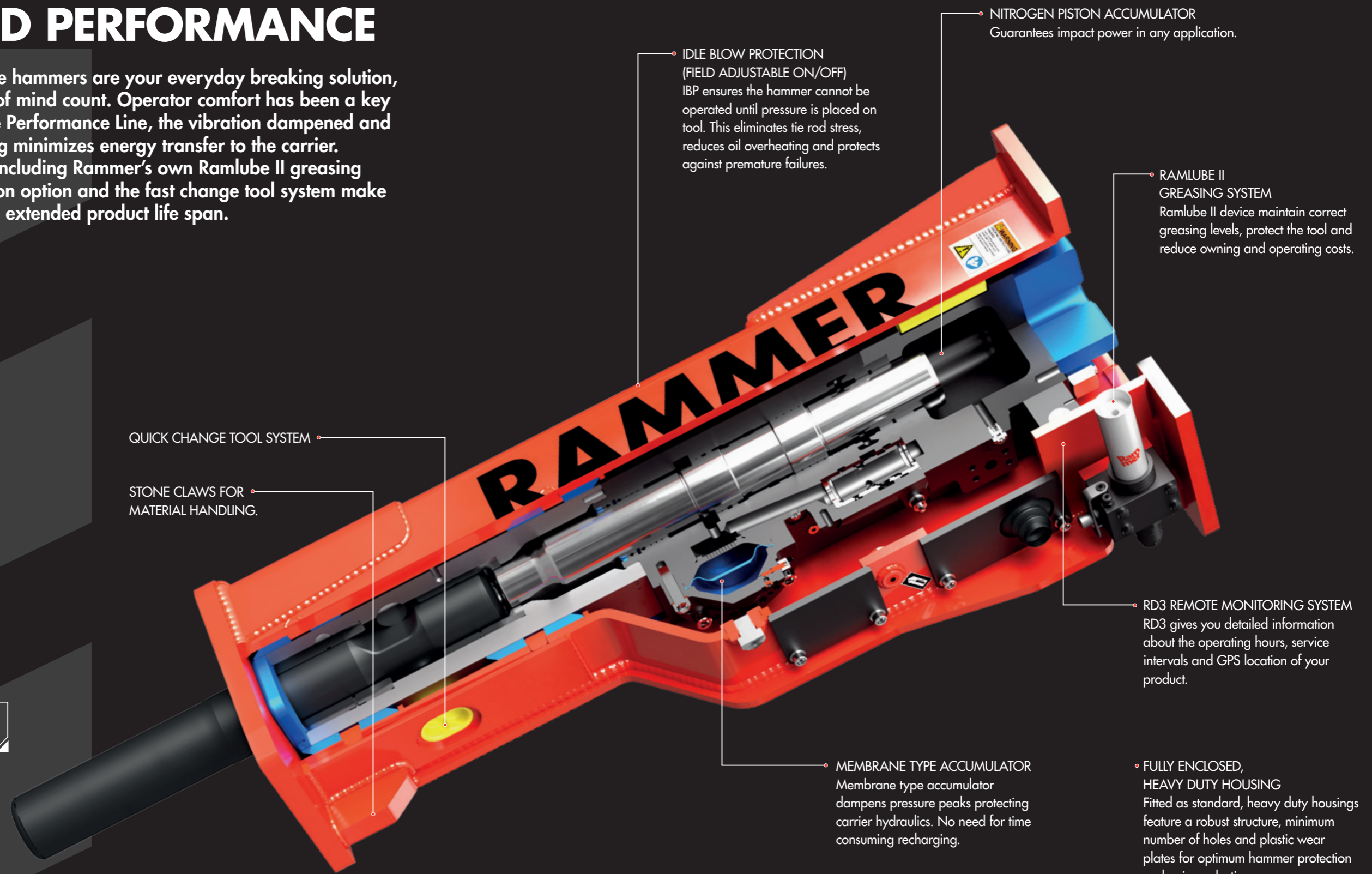
Manufacturing of Rammer branded hydraulic hammers started in 1978 – ever since it has grown to be a recognized world leader in the supply and support of hammers, and other hydraulic attachments such as demolition tools and breaker booms.

The Rammer brand and its reputation is built on quality: quality of manufacture, proven by its ISO standards, quality of support through the professional, worldwide dealer network and quality of exceptional people delivering the finest attachments in the mining and construction business.



OPTIMIZED PERFORMANCE

Rammer Performance Line hammers are your everyday breaking solution, when quality and peace of mind count. Operator comfort has been a key factor in the design of the Performance Line, the vibration dampened and sound suppressed housing minimizes energy transfer to the carrier. Other standard features including Rammer's own Ramlube II greasing system, RD3/MyFleet as an option and the fast change tool system make for easy servicing and an extended product life span.



ISO 9001

ISO 14001

OSHAS 18001

QUICK CHANGE TOOL SYSTEM

STONE CLAWS FOR MATERIAL HANDLING.

• IDLE BLOW PROTECTION (FIELD ADJUSTABLE ON/OFF)
IBP ensures the hammer cannot be operated until pressure is placed on tool. This eliminates tie rod stress, reduces oil overheating and protects against premature failures.

• NITROGEN PISTON ACCUMULATOR
Guarantees impact power in any application.

• RAMLUBE II GREASING SYSTEM
Ramlube II device maintain correct greasing levels, protect the tool and reduce owning and operating costs.

• RD3 REMOTE MONITORING SYSTEM
RD3 gives you detailed information about the operating hours, service intervals and GPS location of your product.

• MEMBRANE TYPE ACCUMULATOR
Membrane type accumulator dampens pressure peaks protecting carrier hydraulics. No need for time consuming recharging.

• FULLY ENCLOSED, HEAVY DUTY HOUSING
Fitted as standard, heavy duty housings feature a robust structure, minimum number of holes and plastic wear plates for optimum hammer protection and noise reduction.

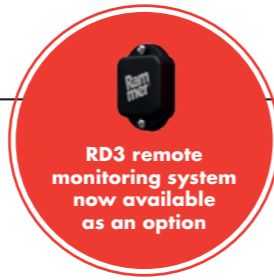
• VIBRATION AND SOUND SUPPRESSED

• EASY TO SERVICE

• EXCELLENT POWER-TO-WEIGHT RATIO

ALL RAMMER PERFORMANCE LINE HAMMERS COME FULLY CE COMPLIANT, SUPPLIED BY SANDVIK, LAHTI, FINLAND. THEY ARE MANUFACTURED IN ACCORDANCE WITH ISO STANDARDS.

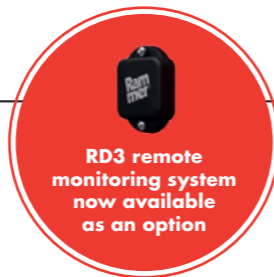
SMALL HAMMERS



	R01P	R02P
Min. working weight, kg (lb)	95 (210)	130 (290)
Tool diameter, mm (in)	40 (1.57)	46 (1.81)
Oil flow range, l/min (gal/min)	15 - 25 (4 - 6.6)	15 - 40 (4 - 10.6)
Impact rate, bpm	700 - 1 400	450 - 1400
Operating pressure, bar (psi)	80 - 120 (1 160 - 1 740)	60 - 120 (870 - 1 740)
Pressure relief, min, bar (psi)	150 (2 175)	150 (2 175)
Pressure relief, max, bar (psi)	170 (2 465)	170 (2 465)
Back pressure, max, bar (psi)	20 (290)	20 (290)
Input power, kW (hp)	5 (7)	8 (11)
Miniexcavator range, ton (lb)	0.8 - 2.1 (1 800 - 4 600)	1.3 - 3.3 (2 900 - 7 300)
Skid steer range, ton (lb)	0.7 - 1.6 (1 500 - 3 500)	1.2 - 2.2 (2 600 - 4 900)
Noise level measured sound power level, LWA, dB(A)	110	114
Noise level guaranteed sound power level, LWA, dB(A)	114	118

	R03P	R04P
Min. working weight, kg (lb)	180 (400)	285 (630)
Tool diameter, mm (in)	53 (2.09)	60 (2.36)
Oil flow range, l/min (gal/min)	25 - 50 (6.6 - 13.2)	30 - 60 (7.9 - 15.9)
Impact rate, bpm	600 - 1200	550 - 1050
Operating pressure, bar (psi)	75 - 120 (1 090 - 1 740)	70 - 130 (1 015 - 1 885)
Pressure relief, min, bar (psi)	150 (2 175)	150 (2 175)
Pressure relief, max, bar (psi)	170 (2 465)	170 (2 465)
Back pressure, max, bar (psi)	20 (290)	20 (290)
Input power, kW (hp)	10 (13)	13 (17)
Miniexcavator range, ton (lb)	2.0 - 4.4 (4 400 - 9 700)	3.0 - 6.0 (6 600 - 13 200)
Skid steer range, ton (lb)	1.4 - 3.2 (3 100 - 7 100)	2.0 - 3.7 (4 400 - 8 200)
Noise level measured sound power level, LWA, dB(A)	112	114
Noise level guaranteed sound power level, LWA, dB(A)	116	118

SMALL HAMMERS



	R05P	R07P
Min. working weight, kg (lb)	325 (720)	400 (880)
Tool diameter, mm (in)	68 (2.68)	75 (2.95)
Oil flow range, l/min (gal/min)	35 - 70 (9.2 - 18.5)	45 - 90 (11.9 - 23.8)
Impact rate, bpm	400 - 1050	450 - 950
Operating pressure, bar (psi)	110 - 155 (1 595 - 2 250)	80 - 140 (1 160 - 2 030)
Pressure relief, min, bar (psi)	200 (2 900)	200 (2 900)
Pressure relief, max, bar (psi)	220 (3 190)	220 (3 190)
Back pressure, max, bar (psi)	15 (220)	15 (220)
Input power, kW (hp)	18 (24)	21 (28)
Miniexcavator range, ton (lb)	4.0 - 7.5 (8 800 - 16 500)	5 - 9 (11 000 - 19 800)
Skid steer range, ton (lb)	3.0 - 5.2 (6 600 - 11 500)	3.5 - 6.0 (7 700 - 13 200)
Noise level measured sound power level, LWA, dB(A)	118	117
Noise level guaranteed sound power level, LWA, dB(A)	122	121

	R10P
Min. working weight, kg (lb)	530 (1 170)
Tool diameter, mm (in)	85 (3.35)
Oil flow range, l/min (gal/min)	50 - 95 (13.2 - 25.1)
Impact rate, bpm	450 - 900
Operating pressure, bar (psi)	110 - 160 (1 595 - 2 320)
Pressure relief, min, bar (psi)	200 (2 900)
Pressure relief, max, bar (psi)	220 (3 190)
Back pressure, max, bar (psi)	15 (220)
Input power, kW (hp)	25 (34)
Miniexcavator range, ton (lb)	6 - 12 (13 200 - 26 500)
Skid steer range, ton (lb)	4 - 7.5 (8 800 - 16 500)
Noise level measured sound power level, LWA, dB(A)	119
Noise level guaranteed sound power level, LWA, dB(A)	123

MEDIUM HAMMERS



R12P

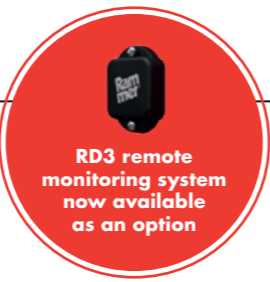
Min. working weight, kg (lb)	830 (1 830)
Tool diameter, mm (in)	90 (3.54)
Oil flow range, l/min (gal/min)	60 - 100 (15.9 - 26.4)
Impact rate, bpm	380 - 750
Operating pressure, bar (psi)	100 - 160 (1 450 - 2 320)
Pressure relief, min, bar (psi)	200 (2 900)
Pressure relief, max, bar (psi)	220 (3 190)
Back pressure, max, bar (psi)	15 (220)
Input power, kW (hp)	27 (36)
Miniexcavator range, ton (lb)	9 - 14 (19 800 - 30 900)
Noise level measured sound power level, LWA, dB(A)	121
Noise level guaranteed sound power level, LWA, dB(A)	125

R16P

Min. working weight, kg (lb)	1 080 (2 380)	1 240 (2 730)
Tool diameter, mm (in)	110 (4.33)	120 (4.72)
Oil flow range, l/min (gal/min)	90 - 120 (23.8 - 31.7)	100 - 140 (26.4 - 37)
Impact rate, bpm	280 - 860	280 - 760
Operating pressure, bar (psi)	160 - 180 (2 320 - 2 610)	160 - 180 (2 320 - 2 610)
Pressure relief, min, bar (psi)	210 (3 045)	200 (2 900)
Pressure relief, max, bar (psi)	230 (3 335)	220 (3 190)
Back pressure, max, bar (psi)	10 (145)	10 (145)
Input power, kW (hp)	36 (48)	42 (56)
Carrier weight, allowed range, t (lb)	13 - 21 (28 700 - 46 300)	15 - 23 (33 100 - 50 700)
Noise level measured sound power level, LWA, dB(A)	117	119
Noise level guaranteed sound power level, LWA, dB(A)	121	123

R18P

LARGE HAMMERS



	R25P	R35P
Min. working weight, kg (lb)	1 650 (3 640)	2 320 (5 110)
Tool diameter, mm (in)	135 (5.31)	150 (5.91)
Oil flow range, l/min (gal/min)	130 - 170 (34.3 - 44.9)	150 - 200 (39.6 - 52.8)
Impact rate, bpm	390 - 700	400 - 700
Operating pressure, bar (psi)	160 - 180 (2 320 - 2 610)	160 - 180 (2 320 - 2 610)
Pressure relief, min, bar (psi)	200 (2 900)	210 (3 045)
Pressure relief, max, bar (psi)	220 (3 190)	230 (3 335)
Back pressure, max, bar (psi)	10 (145)	10 (145)
Input power, kW (hp)	51 (68)	60 (80)
Carrier weight, allowed range, t (lb)	20 - 29 (44 100 - 63 900)	27 - 40 (59 500 - 88 200)
Noise level measured sound power level, LWA, dB(A)	121	118
Noise level guaranteed sound power level, LWA, dB(A)	125	122

	R45P
Min. working weight, kg (lb)	2950 (6500)
Tool diameter, mm (in)	165 (6.50)
Oil flow range, l/min (gal/min)	200 - 250 (52.8 - 66.0)
Impact rate, bpm	360 - 630
Operating pressure, bar (psi)	160 - 180 (2 320 - 2 610)
Pressure relief, min, bar (psi)	210 (3 045)
Pressure relief, max, bar (psi)	230 (3 335)
Back pressure, max, bar (psi)	10 (145)
Input power, kW (hp)	75 (101)
Carrier weight, allowed range, t (lb)	32 - 53 (70 500 - 116 844)
Noise level measured sound power level, LWA, dB(A)	124
Noise level guaranteed sound power level, LWA, dB(A)	128



GREASING AND DATA OPTIONS

A hammer's tool is subject to extreme wear that requires proper lubrication and care 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, which have been especially designed to work with Rammer products, are available from your local Rammer dealer.



Rammer Tool grease

Tool grease is essential when using most hydraulic hammers. It needs to withstand high temperatures and pressure. Our special tool grease has been specially formulated to be used with our products.



Ramlube

A hammer's tool is subject to extreme wear that requires proper lubrication and care in order to achieve a long, trouble-free life. Tool lubricant must withstand high temperature and extreme pressure. We have designed special tool lubricants and automatic tool lubrication systems specifically to work with Rammer hydraulic hammers.



Ramlube II

The Ramlube II kit is mounted on the hammer housing. For optimum wear and impact protection, the system features no external electric cables or hydraulic hoses. Available as a retrofit option, Ramlube II is a standard feature for Rammer R18P and larger models. It is ideally suited to applications in which the hammer is required to work with more than one carrier.



RD3

RD3 remote monitoring system gives you detailed information about the operating hours, service intervals and GPS location of your product. You can see all the data you need by logging into the My Fleet platform. RD3 improves your fleet management, makes your processes more efficient and improves your profitability.

PERFORMANCE LINE TOOL OPTIONS

Chisel tool

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



Moil point tool

- Where chisels have excessive retaining pin groove wear
- Soft and nonabrasive rock
- General demolition of concrete



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



Blunt tool

- Hard rock with low or medium abrasive content
- Boulder breaking or concrete demolition
- Application where tool wear rate is low



FIRST CLASS SERVICE AND SUPPORT

In the factory

Safety is the primary consideration. Visitors are to consider and improve safety to help us achieve our aim of zero accidents.

Products

Safety is the driving force behind the development of all our products. Our aim is to set the safety standard by making products that are safe to operate and maintain. Rammer operator and service training packages reinforce that message to ensure the safety of your entire workforce. Always study and follow the safety instructions (operator's manual) before installing, maintaining or operating the product.

Process

Rammer products also improve the safety of the working site and its processes. Rammer products have been designed the safety in mind - for example our Grapples featuring important Safety Valve, avoiding material falling off the shells in case of any problems in carrier hydraulic hydraulics or lines.

Safety – Your Advantage

Injuries can impact upon an entire workforce and resulting in lost working days and a loss of production. A safe site is a productive site.

Environment

Rammer products are manufactured utilizing state-of-the-art technology. Our manufacturing processes are certified against ISO standards with focus on low energy consumption, recycling of cutting fluids and metal chips. Furthermore, when Rammer products reach the end of their useful working life, more than 90 percent of the metallic components can be recycled.







GLOBAL DEALER NETWORK

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

YOUR LOCAL RAMMER DEALER



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