Hy-Ram®

Allied's all-new hydraulic impact hammer

The Hy-Ram® is in a league of its own

The concept of the high performance boom-mounted hydraulic hammer was pioneered by Allied Construction Products, LLC. The development of the Allied Hy-Ram® concept is legendary in the demolition industry that demands reliability.

Allied, which continues to lead the demolition industry, has combined performance, efficiency and reliability in their all-new boom-mounted Hy-Ram impact hammer to offer several design advantages over other hammer manufacturers.

Simple, proven design

With continuous improvements over the years, the Allied Hy-Ram still uses the same simple, proven design that first gained industry-wide acceptance for the hydraulic hammer concept.

with a simple, proven design, reliable pe

Oil and gas operation

One of the many features that contribute to the efficiency of the Allied Hy-Ram is the oil and gas operation. The Allied design of gas assist using low pressure nitrogen improves the efficiency by reducing demand on the carrier's hydraulic system. There is no dependency on hydraulic accumulators. The accumulators are merely used to eliminate hydraulic "spikes". And, pressurized oil is always present at the bottom of the piston which prevents internal cavitation.

Long-stroke design

Another feature that contributes to the reliability of the Allied Hy-Ram is the long-stroke design which minimizes recoil, reduces vibration and eliminates mechanical springs.

Auto-Stop

The Allied medium and large Hy-Rams also have an automatic Auto-Stop feature that prevents blank-firing once the demolition tool has penetrated through the material being broken and downpressure is no longer applied.

Durable housing design

The Allied Hy-Rams feature a durable housing design that suspends the internal working body inside a full-box enclosure to protect the hammer, reduce noise and minimize vibration and wear to the carrier. The durable housing design is enclosed at the bottom and incorporates a heavy-duty Hardox rock claw.

rformance and superior productivity.

AutoLube

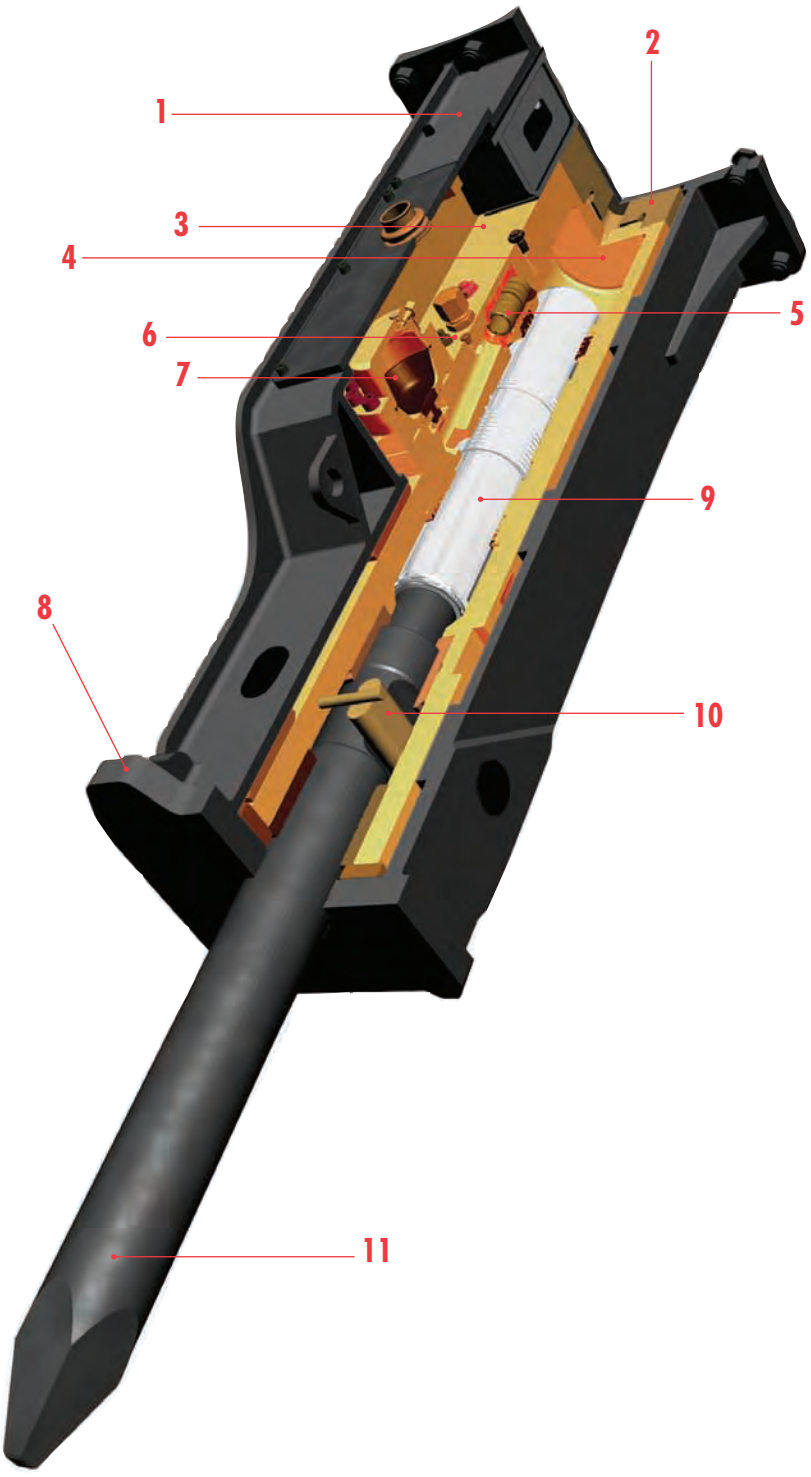
Hy-Rams can also have an optional AutoLube mounted on the hammer housing which is an automatic lubrication system that dispenses lubricant by the hammer's vibration. The AutoLube uses a high-grade chisel paste in handy replaceable cartridges

Installation Kits

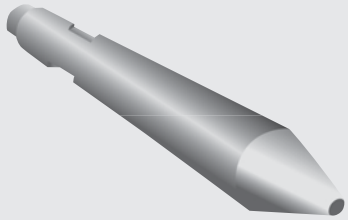
The Hy-Ram, which operates off of the carrier's hydraulic system, requires an installation kit in order to be mounted on the backhoe/loader, excavator or similar carrier. Allied offers over 2,500 installation kits to fit virtually every make and model carrier.

The large, medium, small and mini-size Hy-Ram models are available in 12 different models ranging from working weights of 265 to 8,375 pounds and tool diameters of 1.77 to 6.89 inches.

1. Full-box enclosure protects hammer and reduces noise
2. Shock-absorbing polyurethane acoustical inserts increase carrier endurance
3. Stroke adjuster automatically regulates blow energy and frequency (HR 150 through HR 1200)
4. Larger gas chamber ensures higher impact power
5. Main Internal Control Valve System with large oil circuit generates low heat and operates with high-efficiency
6. AutoLube system eliminates the need for manual greasing (HR 200 through HR 1200)
7. Accumulator reduces stress on hydraulic components (HR 75 and larger)
8. Durable housing incorporating heavy-duty rock claw (Hardox)
9. Long-stroke maximizes energy and minimizes recoil
10. Dual retainer bars extend retainer and tool life
11. Heat-treated tool for longer life

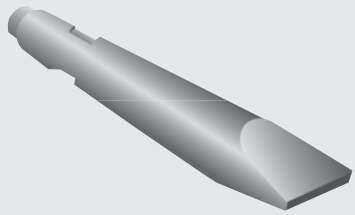


Demolition Tools



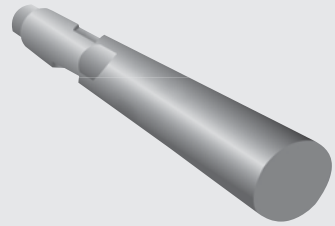
Conical Tool

The Conical Tool is extremely useful when solid materials are being broken. With no seam or relieved sections to break toward, the "pencil" point easily penetrates materials because its shape allows trapped dust to escape on all sides of the tool.



Cross-Cut Chisel

The Cross-Cut Chisel is the most commonly used demolition tool because it is compatible with a wide variety of rocks and concrete. It lends itself to following the seam of materials to accelerate the breaking action.

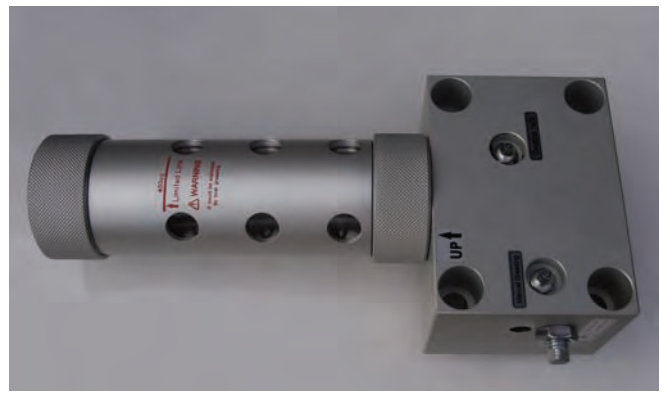


Blunt Tool

The Blunt Tool has a large, flat surface on the working end which increases stability when breaking brittle surfaces like concrete and magmatic materials. It is designed to crack materials without penetration. The impact force is applied in all directions causing multiple fractures in the material.

** The demolition tools are representative of typical Hy-Ram tools and may vary according to model.*

AutoLube



The AutoLube (HR 200 through HR 1200) provides lubrication of the Hy-Ram hydrualic impact hammers with a compact cartridge mounted with a clamp or a bracket that is welded to the housing. It is operated by the hammer's vibration (no hydraulic pressure is required). As a result, there is a more continuous flow of lubricant from the cartridge as it dispenses around the demolition tool and wear bushings.

Hy-Ram® Specifications

		Mini			Small			Medium			Large		
Model		**HR 25**	**HR 50**	**HR 75**	**HR 100**	**HR 150**	**HR 200**	**HR 300**	**HR 400**	**HR 500**	**HR 750**	**HR 1000**	**HR 1200**
Mounting Type		XR	XR	XR	BR	BR	SR	SR	MR	MR	LR9	LR9	LR10
Foot Pound Energy Class	ft. lbs.	250	500	750	1000	1500	2000	3000	4000	5000	7500	10000	12000
Frequency Range	bpm	550-1,000	450-1,000	550-1,100	380-900	350-1,000	350-900	320-900	320-800	340-800	230-600	230-600	230-550
Hydraulic Flow Required Range	gpm (lpm)	4-8 (15-30)	7-13 (26-50)	8-16 (30-60)	11-21 (40-80)	13-26 (50-100)	20-32 (75-120)	26-40 (100-150)	26-41 (100-155)	37-50 (140-190)	53-69 (200-260)	58-74 (220-280)	63-85 (240-320)
Hydraulic Pressure Range	psi (bar)	1,300-1,750 (90-120)	1,450-2050 (100-140)	1,600-2,400 (110-165)	1,750-2,400 120-165	2,050-2,450 140-170	2,050-2,600 140-180	2,300-2,750 160-190	2,300-2,750 160-190	2,300-2,750 160-190	2,300-2,750 160-190	2,300-2,750 160-190	2,300-2,750 160-190
Working Weight	lbs. (kg)	265 (120)	386 (175)	574 (260)	728 (330)	1,200 (545)	1,765 (800)	2,535 (1150)	3,200 (1450)	3,970 (1800)	5,950 (2700)	7,275 (3300)	8,375 (3800)
Overall Length	in. (cm)	40 (102)	46 (116)	53 (134)	55 (141)	70 (179)	73 (185)	85 (215)	95 (241)	97 (246)	108 (273)	115 (293)	127 (322)
Space Inside Brackets	in. (mm)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)
Boom Pin Diameter	in. (mm)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)	Varies (1)
Standard Demolition Tool		Conical	Conical	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut	Cross-Cut
Tool Diameter	in. (mm)	1.77 (45)	2.24 (57)	2.76 (70)	2.95 (75)	3.54 (90)	3.74 (95)	4.53 (115)	4.92 (125)	5.31 (135)	6.10 (155)	6.50 (165)	6.89 (175)
Recommended Carrier Weight (Excavator)	lbs.	4,000-8,000	6,000-10,000	7,000-15,000	15,000-30,000	15,000-30,000	20,000-40,000	31,000-40,000	40,000-62,000	44,000-76,000	72,000-100,000	90,000-133,000	110,000-190,000
Recommended Carrier Weight (Loader/Backhoe)	lbs.	NA	NA	9,000-17,000	12,000-25,000	14,000-25,000	16,000-25,000	NA	NA	NA	NA	NA	NA
Recommended Carrier Weight (Skid-Steer)	lbs.	3,000-6,000	4,000-6,000	5,000-8,000	8,000+	NA	NA	NA	NA	NA	NA	NA	NA

(1) Space Inside Brackets and Boom Pin Diameter varies by carrier

For sales and service, contact your Allied Distributor:

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 Allied has a policy of continuous product improvements and reserves the right to change specifications, design or prices any time without obligation. Form No. HY-R 1/10-5M