



Cat[®]

Hammers

H70, H70 s, H90C, H90C s

FEATURES:

High Blow Rate

- Ultra high blow rate means very high productivity for all hammers.

Wide Carrier Versatility

- Wide range of oil flow ideally matches Cat[®] and other machines and reduces likelihood of improper machine setting.

Constant Blow Energy

- Maximum and constant blow energy regardless of the oil flow adjustment (within the given min and max oil flow specifications).
- Powercell completely protected through full-length side plates. Front head is not exposed.

Energy Efficient

- Matching the mass and diameter of the piston to the mass and diameter of the tool helps ensure optimum energy transfer.

Slip Fit Lower Tool Bushing

- Slip fit field serviceable lower tool bushing with internal dust seal. Bushing includes grease retention grooves for better lubrication. Dust seal helps keep dirt out to provide longer life of the bushing and tool.

Silenced Option Available

- For operation in residential and noise-sensitive applications where compliance with regulations must be met.

Membrane Style Accumulator

- Membrane accumulator versus gas accumulator provides less maintenance and downtime resulting in greater productivity.

High Pressure Accumulator

- High-pressure accumulator located on the back side of the hammer protects the carrier pumps from hydraulic pressure spikes.

Dependability

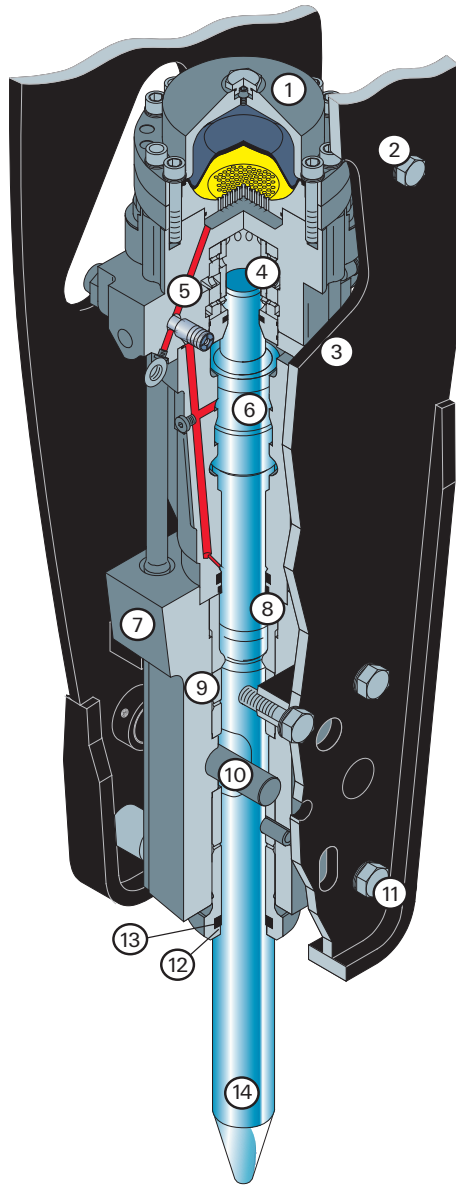
- Service and parts available through the worldwide Cat[®] Parts System.

Hammers/Machines Compatibility

Small Hydraulic Excavators, Wheel Excavators, Backhoe Loaders

Model	Machines
H70 / H70 S	307D, 308D CR, 416E, 420E, 422E, 428E, 430E, 432E, 442E
H90C / H90C s	307D, 308D CR, 311D, 312D, 416E, 420E, 422E, 424E, 428E, 430E, 432E, 434E, 442E, 444E, 450E

Hammer Illustrations



1. **Low Pressure Accumulator** – Assists in the power stroke of the piston.
2. **Custom Sideplates** – Designed for Caterpillar® carrier geometry. Protects the powercell and front end.
3. **High Pressure Accumulator** – Dampens pressure peaks thus protecting the carrier hydraulic system (not shown).
4. **Distributor** – High oil volume for greater blow frequency.
5. **Pressure Adjusting Valve (PAV)** – Assures that all blows are delivered at a constant blow energy.
6. **Piston** – Long heavy piston delivers maximum impact energy and minimizes recoil forces to carrier.
7. **Long Front End** – Ensures proper piston tool alignment.
8. **Slip Fit Thrust Ring** – Dissipates harmful shock loads in abusive applications.
9. **Slip Fit Upper Tool Bushing** – Positive alignment for the tool.
10. **Tool Retention Pin System** – Allows quick and easy removal of tool.
11. **Side Plate Fastener** – Working forces carried through cap screws and front end.
12. **Slip Fit Lower Tool Bushing (Field Replaceable)** – Grease retention grooves for extended lubrication and wear indication.
13. **Dust Seal** – Dust Seal helps prevent foreign material from entering the grease between the lower tool bushing and tool. This reduces the wear on the lower tool bushing and tool.
14. **Tool** – Heat treated for longer life. Ideally matched to piston for greater transfer of stress waves.

		H70 / H70 S		H90C / H90C S	
Recommended carrier weight	kg (lb)	5,000–8,000	(11,000–17,600)	7,000–12,000	(15,400–26,400)
Working weight*	kg (lb)	430/435	(948/959)	590/600	(1,298/1,320)
Impact frequency	bpm	600–1,850		500–1,450	
Energy Class	J (ft-lb)	1,220	(900)	1,627	(1,200)
Acceptable oil flow	lpm (gpm)	50-150	(13–39)	60-150	(16–39)
Operating pressure	bar (psi)	140	(2,030)	135	(1,958)
Sound power level Lwa**	dB(A)	133 / 127		133 / 127	

* Working weight includes hammers, standard tool and average mounting bracket.

** Sound power level Lwa as tested per Directive 2000/14/EC.

Applications Guide with Standard Tools



Chisel

Applications

- Sedimentary and weak metamorphic rock into which tool penetrates
- Concrete

Select when:

- Working in non-abrasive but ductile rock
- Needing medium penetration rate into rock

C



Moil

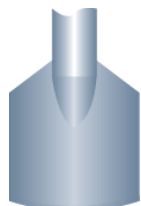
Applications

- Sedimentary and weak metamorphic rock into which tool penetrates
- Concrete

Select when:

- Working in soft, non-abrasive rock
- Needing greater protection against excessive retaining pin groove wear

M

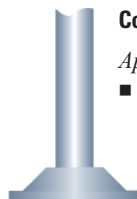


Spade (parallel or transverse)

Applications

- Frozen or compact ground
- Asphalt

S



Compacting Plate

Applications

- Ground compacting

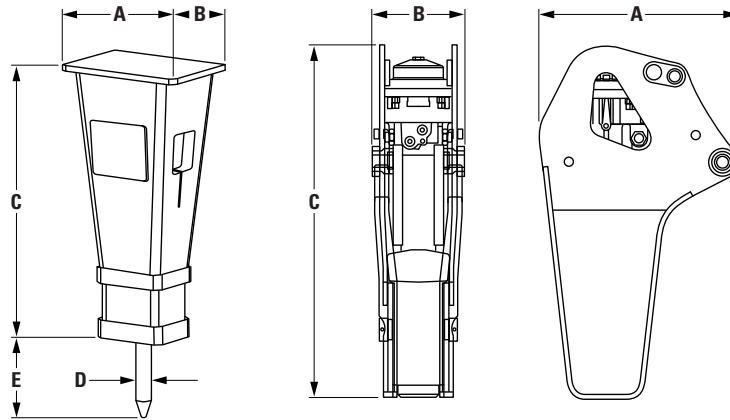
CP

C - Chisel
M - Moil
S - Spade
CP - Compacting Plate

	H70 / H70 S	H90C / H90C S
1. Roadbuilding/Construction		
Breaking of road surface	C,M,S	C,M,S
Asphalt cutting to shape or area	C,S	C,S
Trench excavation for drainage	C,M	C,M
Demolition of bridges	C,M	C,M
Compacting soils	CP	
Making holes (for traffic signs, lamp posts)	M	M
Breaking of frozen ground	C,M,S	C,M,S
2. Demolition/Housing Development		
Demolition of concrete walls, roofs, floors	C,M	C,M
Demolition of light, reinforced concrete foundation [<.5m (19' 7'')]	M	M
Brick walls	C,M	C,M
Rock trenches for mains/water supply/utilities	C,M	C,M
Rock excavation for foundation		C,M
Separating rebar from concrete (for recycling)	C,M	C,M
3. Quarrying/Open Cast Mining		
Breaking oversizes on a crusher/feeder/feed chute		C,M
4. Underground Applications		
Scaling	C	C
5. Metallurgical Applications		
Breaking of slag in converter openings		
Breaking of slag in casting ladles		C,M
Cleaning of castings		C,M
Breaking of refractory linings in furnaces	C,M	C,M

Hammers

Dimensions



		H70 Flat-top	H70 s Flat-top	H70 Pin-on	H90C Flat-top	H90C s Flat-top	H90C Pin-on
A. Length	mm (in)	470 (18.5)	520 (20.5)	690 (27.1)	510 (20.1)	520 (20.5)	749 (29.4)
B. Width	mm (in)	380 (15)	400 (15.7)	348 (13.7)	380 (15.0)	400 (15.7)	348 (13.7)
C. Height	mm (in)	1134 (44.6)	1150 (45.3)	1228 (48.3)	1286 (50.6)	1294 (50.9)	1325 (52.1)
D. Tool Diameter	mm (in)	70 (2.8)	70 (2.8)	70 (2.8)	84 (3.3)	84 (3.3)	84 (3.3)
E. Tool Working Length	mm (in)	402 (15.8)	390 (15.3)	355 (14.0)	417 (16.4)	417 (16.4)	417 (16.4)

Productivity

		H70 / H70 s		H90C / H90C s	
Non-Reinforced Concrete	m ³ (yd ³)	65-107	(85-140)	69-122	(90-160)
Reinforced Concrete	m ³ (yd ³)	19-46	(25-60)	38-61	(50-80)

* Production rates listed are based on 8-hr shift. The above figures are for general estimation purpose only and must not be used to guarantee any production figure to the customer. The actual working results may vary according to the quality and structure of the material to be broken, required degree of material size reduction, installation, condition of the carrier, conditions at the worksite, haulage of the broken material, skills of the operator etc.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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