

H70, H70 S, H90C, H90C S, H100, H100 S

Hydraulic Hammers for Small Hydraulic Excavators



Features

Silenced option available

High oil flow acceptance

Slip fit bushing

Sealed accumulator

Benefits

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

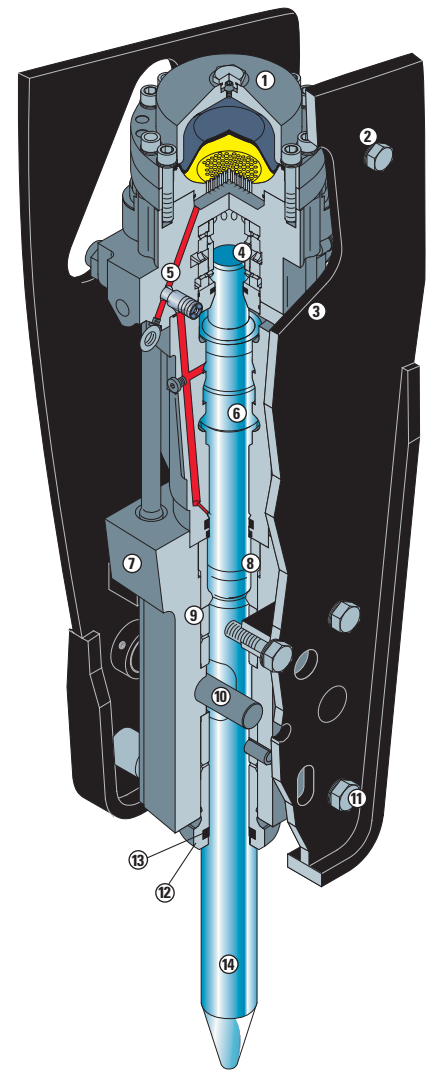
The hammer has a high frequency and high productivity to get the job done fast. Due to the wide oil flow acceptance range, the hammer can be used across a wide range of carrier brands for maximum utilization within a mixed carrier fleet.

The lower bushing is a slip fit design which can be changed in the field without the need for special tooling thus increasing hammer up-time and productivity by eliminating the need to send the hammer to a workshop.

The hammer has a sealed accumulator providing constant blow energy and delivering full power with each and every blow without the need for recharging the nitrogen at site.

Hydraulic Hammers for Small Hydraulic Excavators

- 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 housing. This reduces the wear on the power cell and other major components.
- 14 **Tool** – Heat treated for longer life. Ideally matched to piston for greater transfer of stress waves.



Specifications

		H70/H70 S	H90C/H90C S	H100/H100 S
Recommended carrier weight	tonnes	5-8	7-12	8-14
Working weight*	kg	430/435	590/600	820/830
Impact frequency	bpm	600-1850	500-1450	430-1300
Acceptable oil flow	liter/min	50-150	60-150	60-120
Operating pressure	bar	140	135	145

H70 and H90C are available in either flat top or pin-on version

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



Applications Guide with Standard Tools



Chisel

Applications

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

C

Select when:

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



Moil

Applications

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

M

Select when:

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



Blunt

Applications

- Igneous and tough metamorphic rock into which tool doesn't penetrate
- Concrete

B

Select when:

- Working in low or medium abrasive rock
- Tool wear rate is low

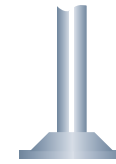


Spade (parallel or transverse)

Applications

- Frozen or compact ground
- Asphalt

S



Compacting Plate

Applications

- Ground compacting

CP

Roadbuilding/construction

	H70/H70 S	H90C/H90C S	H100/H100 S
Breaking of road surface	C, M, S	C, M, S	C, M, S
Breaking uneven bedrock to lay a road			C, M
Asphalt cutting to shape or area	C, S	C, S	C, S
Trench excavation for drainage	C, M	C, M	C, M
Demolition of bridges	C, M	C, M	C, M
Compacting soils	CP		
Making holes (for traffic signs, lamp posts)	M	M	M
Breaking of frozen ground	C, M, S	C, M, S	C, M, S

Demolition/housing development

Demolition of concrete walls, roofs, floors	C, M	C, M	B, C, M
Demolition of light, reinforced concrete foundation (<.5m)	M	M	B, M
Brick walls	C, M	C, M	C, M
Rock trenches for mains/water supply/utilities	C, M	C, M	C, M
Rock excavation for foundation		C, M	C, M
Separating rebar from concrete (for recycling)	C, M	C, M	B, C, M

Quarrying/open cast mining

Breaking oversizes on a crusher/feeder/feed chute		C, M	B, C, M
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Underground applications

Scaling	C	C	C
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Metallurgical applications

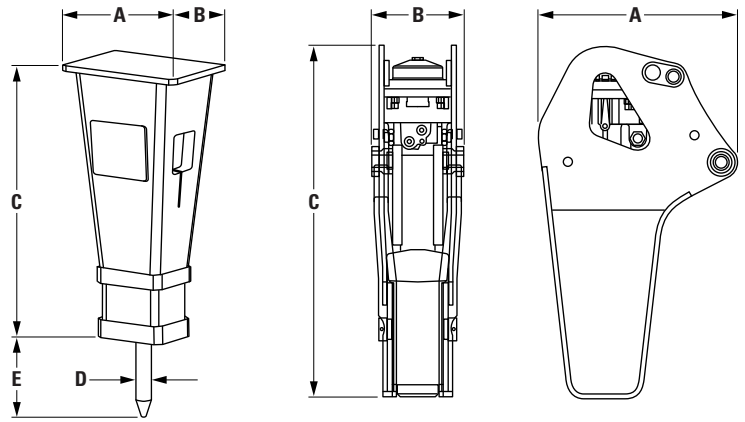
Breaking of slag in casting ladles		C, M	C, M
Cleaning of castings		C, M	C, M
Breaking of refractory linings in furnaces	C, M	C, M	C, M

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

H70, H90C, H100C Hydraulic Hammers

Dimensions

		H70	H70	H90C	H90C	H100
		H70 S	Pin-on	H90C S	Pin-on	H100 S
		Flat-top		Flat-top		Flat-top
A	mm	470	690	510	749	585
	mm	520		520		585
B	mm	380	348	380	348	540
	mm	400		400		540
C	mm	1134	1228	1286	1325	1397
	mm	1150		1294		1394
D	mm	70	70	84	84	95
	mm	70		84		95
E	mm	402	355	417	417	459
	mm	390		417		459



Hydraulic Requirements

Single action tool control, high pressure lines.

Matching Guide

Hammer	Hydraulic Excavators
H70/H70 S	307D, 308D CR
H90/H90C S	307D, 308D CR, 311D, 312D
H100/H100 S	311D, 312D, 314D CR, 315D, M313D, M315D, M316D

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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