

# H115 S, H120C S, H130 S, H140D S, H160D S, H180D S

## Hydraulic Hammers for Hydraulic Excavators



### Features

Silenced as standard

High oil flow acceptance

Slip fit rotatable lower tool bushing

Hard wearing housing

Auto shut off (ASO)

### 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.

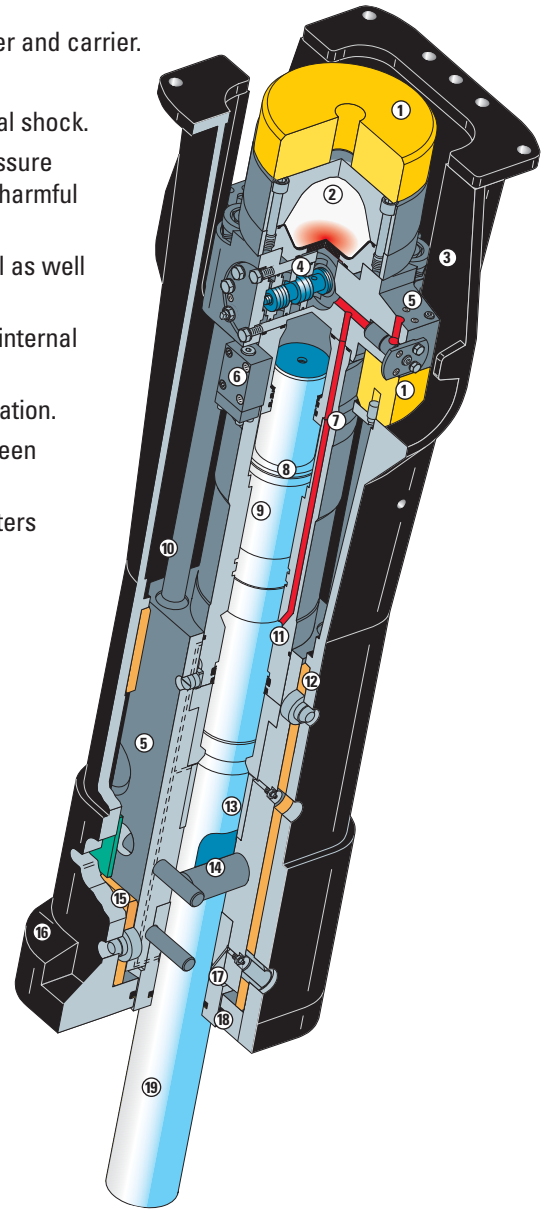
The slip fit lower bushing can be rotated once in the field without the need for special tools. This doubles its life and reduces owning and operating costs.

The foot of the hammer housing is made of Hardox 400 and incorporates a rock-claw to minimize abrasive wear and reduce overall owning and operating costs, there are no exposed cross bolts and a field replaceable dust seal prevents debris and dust from entering the power-cell.

Prevents blank firing of the piston. Increase hammer's reliability and durability. Available only for H140D S, H160D S and H180D S.

# Hydraulic Hammers for Hydraulic Excavators

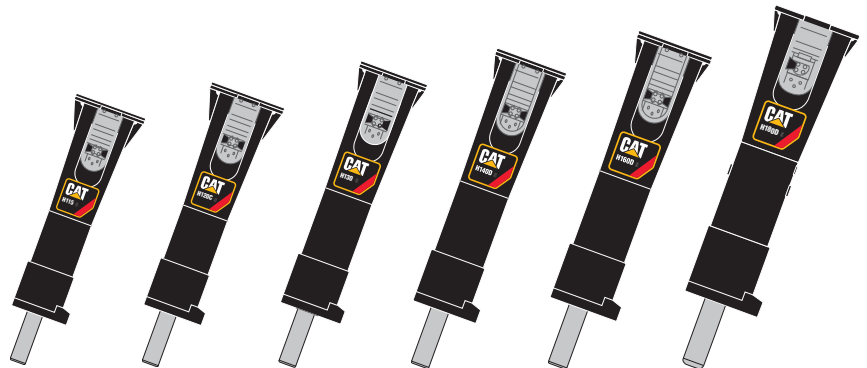
- 1 Shock Absorbers** – Provide maximum shock and recoil protection for both hammer and carrier.
- 2 Accumulator** – Self-contained diaphragm accumulator designed for long life.
- 3 Housing** – Symmetrical lean enclosed housing – no parts to break through external shock.
- 4 Hydraulic valves** – The Pressure Control Valve maintains maximum hydraulic pressure to ensure that the hammer delivers all blows at full power. A check valve isolates harmful pulsation spikes from the carrier hydraulic circuit.
- 5 Auto-Lube Connection and Grease Channel** – Ensures proper greasing of the tool as well as the upper and lower tool bushings.
- 6 Auto Shut Off (ASO)** – Prevents blank firing and extends hammer life by reducing internal stress and heat (available only for H140D S, H160D S and H180D S).
- 7 Seal carrier** – Contains special high performance seals to ensure leak-proof operation.
- 8 Hydraulic brake** – Dampens idle strokes and prevents steel to steel contact between piston and cylinder.
- 9 Piston** – Long piston transfers a long shock wave into the rock. Tool-piston diameters are matched for maximum energy transfer.
- 10 Tie-Rods** – Heat-torqued tie rods ensure maximum clamping force and minimum maintenance.
- 11 Cylinder** – Low recoil stress.
- 12 & 15 Wear Plates** – High abrasion resilient plastic wear plates between hammer and housing reduce noise and guide hammer assembly properly.
- 13 Upper tool bushing** – Guides the tool to optimize in-line piston to tool contact.
- 14 Tool retaining pins** – Allow quick and easy tool maintenance.
- 16 Rock Claw** – Special high abrasion resistant rock claw, enables quick positioning of boulders, gives maximum wear life.
- 17 Lower tool bushing** – Easily replaceable during normal maintenance. Circular retention grooves retain grease and lower friction between tool and bushing.
- 18 Dust Seal** – Dust Seal helps prevent foreign material from entering the housing. This reduces the wear on the lower bushing and tool.
- 19 Tool** – Specially heat-treated tools match piston diameter and mass, to deliver full blow energy.



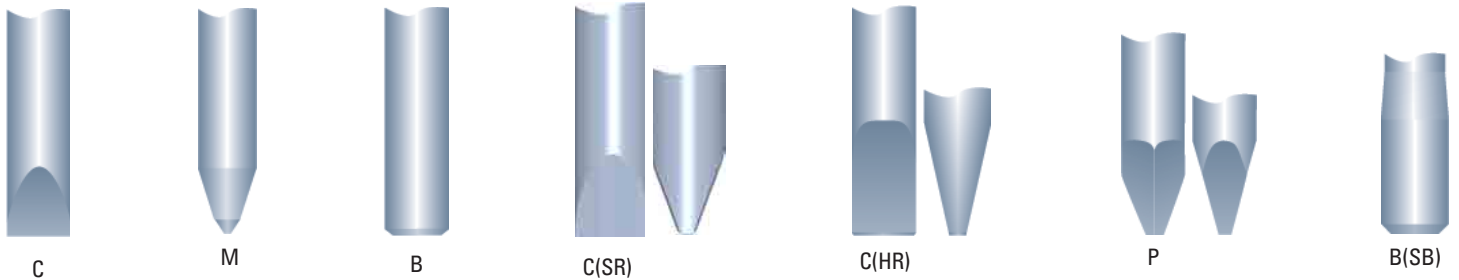
## Specifications

		H115 S	H120C S	H130 S	H140D S	H160D S	H180D S
Recommended carrier weight	tonnes	12-20	17-26	19-32	25-40	32-55	40-80
Working weight*	kg	1000	1300	1700	2350	3150	3900
Impact frequency	bpm	370-800	350-620	320-600	350-600	380-560	400-575
Acceptable oil flow	liter/min	70-130	100-170	120-220	160-230	220-310	250-330
Operating pressure	bar	140	140	140	160	160	160

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



# Applications Guide with Standard Tools



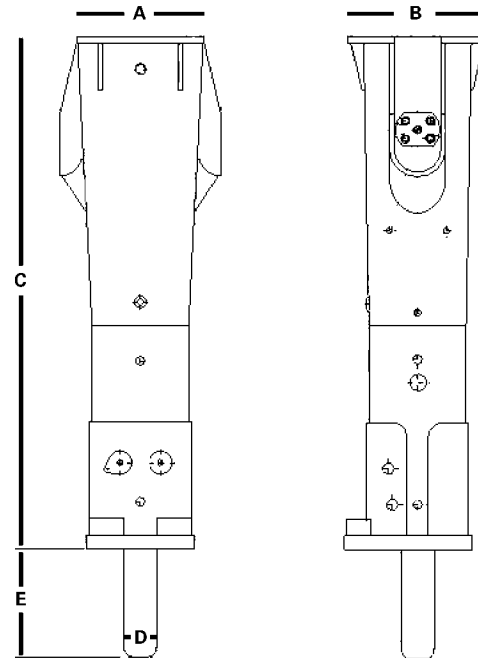
	H115 S	H120C S	H130 S	H140D S	H160D S	H180D S
<b>Roadbuilding/construction</b>						
Breaking of road surface	C, M, P, S	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
Breaking uneven bedrock to lay a road	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
Primary breaking to prepare road bed				C, M, P	C, M, P	C, M, P
Trench excavation for drainage	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
Demolition of bridges	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P
Heavily reinforced bridge pillars				B	B	B
Making holes (for traffic signs, lamp posts)	M	M	M	M	M	M
Breaking of frozen ground	C, M, P, S	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
<b>Demolition/housing development</b>						
Demolition of concrete walls, roofs, floors	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P
Demolition of light, reinforced concrete foundation (<.5 m)	B, M, P	B, M, P	B, M, P			
Brick walls	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P
Rock trenches for mains/water supply/utilities	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
Rock excavation for foundation	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P
Mass excavation of rock for industrial building bases			C, M, P	C, M, P	C, M, P	C, M, P
Massive reinforced concrete foundations				M, P	M, P	M, P
Separating rebar from concrete (for recycling)	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P
<b>Quarrying/open cast mining</b>						
Secondary boulder breaking	B	B	B	B	B	B
Primary breaking of rock			C, M, P	C, M, P	C, M, P	C, M, P
Breaking oversizes on a crusher/feeder/feed chute	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	B, C, M, P	
<b>Underground applications</b>						
Scaling	C					
<b>Metallurgical applications</b>						
Breaking of slag in casting ladles	C, M, P					
Breaking of slag in converter openings	C, M, P	C, M, P	C, M, P	C, M, P		
Cleaning of castings	C, M, P					
Breaking of massive steel slag					C, M, P	C, M, P
Breaking of aluminium electrolyse slag	C, M, P	C, M, P	C, M, P	C, M, P		
<b>Other applications</b>						
Demolition/Rock breaking under water	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P	C, M, P

C	Chisel	C(SR)	Soft Rock Chisel
M	Moil	C(HR)	Hard Rock Chisel
B	Blunt	P	Pyramidal Moil
		B(SB)	Super Blunt

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## Dimensions

		H115 S	H120C S	H130 S	H140D S	H160D S	H180D S
<b>A</b>	mm	585	585	585	585	730	730
<b>B</b>	mm	540	540	540	540	730	730
<b>C</b>	mm	1625	1783	1885	2167	2326	2478
<b>D</b>	mm	106	115	130	140	160	174
<b>E</b>	mm	390	357	397	454	632	542



## Hydraulic Requirements

Single action tool control, high pressure lines.

## Matching Guide

Hammer	Hydraulic Excavators
H115 S	312D, 314D CR, 315D, 319D, 320D, M313D, M315D, M316D, M318D, M322D
H120C S	315D, 319D, 320D, M315D, M316D, M318D, M322D, 321D CR, 323D, 324D, 329D
H130 S	319D, 320D, M318D, M322D, 321D CR, 323D, 324D, 328D CR, 329D, 336D
H140D S	323D, 324D, 328D CR, 329D, 336D
H160D S	336D, 345D
H180D S	345D, 365C