

# **Cat**<sup>®</sup> **Hydraulic Hammers**

H75Es, H95Es

### **F**EATURES:

### Completely Cat®

- E series hammers bring together Caterpillar customer knowledge; performance, quality, serviceability expectations; manufacturing and logistics experience. From design through manufacture — E series hammers are completely Cat.
- The H75Es and H95Es are designed for optimum performance and integration with Cat backhoe loaders and excavators. They can also be used on non-Cat machines.

### **Ease of Operation**

- Hammers are silenced making them ideal for use in cities, suburbs and applications in which noise abatement is important, or compliance with noise regulations is critical.
- Tri-suspension system guides the power cell and reduces noise and vibration. Top and bottom buffers on the power cell absorb reflective forces, while the suspension jacket guides the front head and reduces noise. The result is a quieter operation and lower operator fatigue.
- Gas-fired operating cycle delivers a consistent, reliable performance over time making the hammer reliable in applications such as concrete, asphalt, rock and light trenching.

### Reliable, Dependable

- Automatic Shut-Off protects the hammer from blank firing and reduces internal wear, protecting the hammer from less experienced operators.
- Fully enclosed housing is designed to protect the power cell and eliminate stress points.
- Seal system assures consistent power is maintained between scheduled service intervals. Cat Engine technology is leveraged.
- Tri-suspension system protects the power cell and assures reliable operation.

- Integral accumulator protects the carrier pumps from hydraulic spiking.
- Hoses route through the top of the hammer and are well protected to avoid damage.

### **Easy to Maintain**

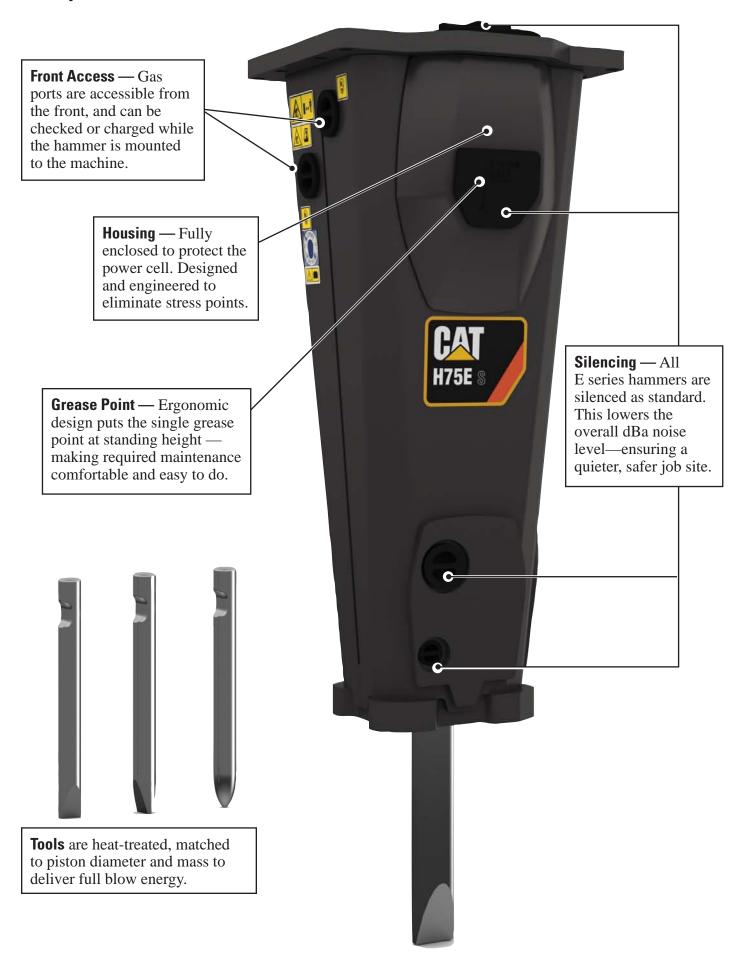
- Manually greasing the hammer has been simplified. A single grease point provides hammer paste to tool bushings. Grease point is ergonomically located at standing height making it comfortable for the operator to access.
- Tool changes are simple and easily accomplished with common hand tools. Lower tool bushing can be serviced in the field.
- Power chamber and accumulator pressures can be checked and charged while the hammer is mounted on the machine.
- Power cell is designed for efficiency with only two major components: front head and valve body.
- Cat hammers are designed to rebuild easily providing lasting value for your hammer investment.

# **Hammer / Machine Compatibility**

Backhoe Loaders and small Hydraulic Excavators. Contact your Cat dealer for specific machine configurations.

Model	Machines
H75Es	416, 420, 422, 428, 430, 432, 307, 308
H95Es	416, 420, 430, 307, 308, 311, 312

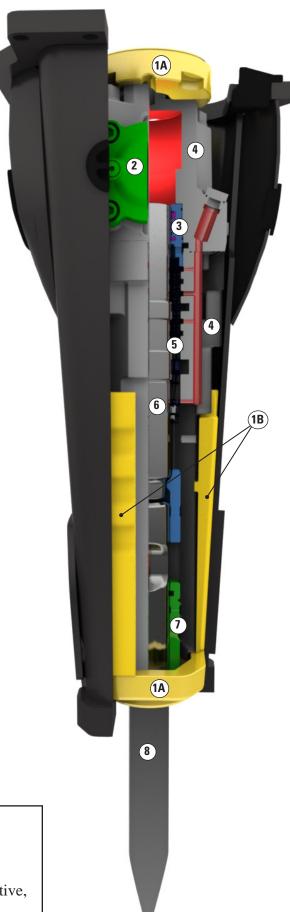




- 1 Tri-Suspension System This unique suspension system comprises the suspension jacket, the upper and lower buffers. Suspension aligns the power cell and gives manageable, smooth performance.
  - (A) Upper & Lower Buffers Buffers at both ends of the power cell absorb reflective forces, isolating them from the machine. Result is quiet, reliable operation and reduced operator fatigue.
  - (B) Suspension Jacket The front head is isolated by the one-piece suspension jacket, which dampens vibration and sound. A lower dBa allows the hammer to be used in urban and other noise restricted areas.
- 2 Front Accumulator An integral accumulator protects carrier pumps from spiking. Machine hydraulic system is protected.
- 3 **Seal Carrier** Gas is retained in the power chamber by a series of five seals. These are engineered using technology developed for Cat Engines, and provide maximum gas retention between scheduled service intervals. When service is needed, the seal carrier is easily removed.
- 4 Valve Body & Front Head Power cell is efficiently designed, with only two major components. They are held together by head bolts rather than tie rods. Bolts are simpler to install and service.
- (5) **Piston Sleeve** The sleeve of the piston cylinder is serviceable if hydraulic contamination results in damage. This hammer is designed for cost-effective rebuilds, protecting your hammer investment.
- **6 Auto Shut Off (ASO)** Instantly stops the piston when breaking through material. Prevents blank firing, which is a top cause of hammer wear. Internal stresses are reduced, providing more productive hours of work. Hammer is protected, regardless of operator skill level.
- **Tool Bushing** Lower tool bushing is rotatable 90 degrees to provide a second life and lowering owning and operator costs. Bushing can be serviced in the field with common hand tools, typically in about thirty minutes.
- **8 Tool** Cat Hammer tools are robust, and feature an increased diameter for better reliability.

## **Performance & Lasting Value**

- Power levels are consistent over time
- Simple design is easy to operate and maintain
- Key features make rebuild extremely cost effective, preserving your investment









# **Specifications**

			H75Es		H95Es	
Recommended carrier weight range	t	(lb)	6–10	(13,200–22,100)	7–14	(15,400–30,900)
Operating weight*	kg	(lb)	500	(1,103)	627	(1,382)
Impact frequency	blows	min.	840–1,650		700–1,260	
Energy Class	J	(ft. lb.)	1,356	1,000)	2,034	(1,500)
Acceptable oil flow	lpm	(gpm)	70–130	(18–34)	70–150	(18–40)
Operating pressure	kPa	(psi)	14,500–17,200	(2,100-2,500)	14,500–17,200	(2,100-2,500)

<sup>\*</sup> Operating weight includes hammer, standard tool and average mounting bracket.

# **Applications Guide with Standard Tools**





Applications

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

### Select when:

- Working in nonabrasive but ductile
- Needing medium penetration rate into rock.



# Moil (M)

**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

	H75Es	H95Es
1. Road building / construction		
Breaking of road surface	C, M	C, M
Asphalt cutting	С	С
Trench excavation for drainage	C, M	C, M
Demolition of bridges	C, M	C, M
Making holes (for traffic signs, lamp posts)	M	M
Breaking of frozen ground	C, M	C, M
2. Demolition / housing development	'	

Demolition of concrete walls, roofs, floors	C, M	C, M
Demolition of light, reinforced concrete (<20")	М	М
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 over sizes on a crusher/feeder/feed chute		C, M
Scaling	С	С

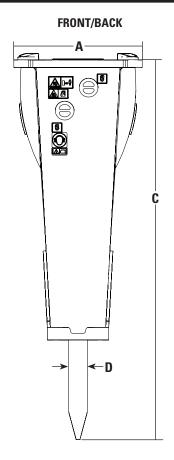
### 4. Metallurgical applications

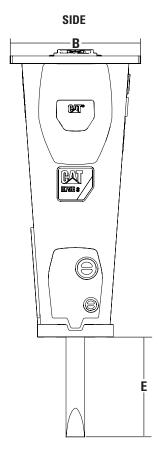
Breaking of slag in casting ladles		C, M
Cleaning of castings		C, M
Breaking of refractory linings in furnaces	C, M	C, M





# **Dimensions**





				H75Es		H95Es	
A	Length	mm	(in)	520	(20.47)	520	(20.47)
В	Width	mm	(in)	512	(20.16)	512	(20.16)
C	Height	mm	(in)	1,493	(58.79)	1,666	(65.61)
D	Tool Diameter	mm	(in)	74.5	(2.93)	87.5	(3.4)
Е	Tool Working Length	mm	(in)	376.1	(14.81)	416.3	(16.39)





# **Productivity**

		H75Es		H95Es	
Non-Reinforced Concrete	$m^3$ (yd <sup>3</sup> )	65–107	(85–140)	69–122	(90–160)
Reinforced Concrete	$m^3$ (yd <sup>3</sup> )	19–46	(25–60)	38–61	(50–80)

Production rates listed are based on 8-hour shift. The above figures are for general estimation purpose only. 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 work site, haulage of the broken material, skills of the operator, etc.











Scan here to see Cat Hydraulic Hammers in action!

For more information on the variety of Work Tool attachments available for Backhoe Loaders and Excavators contact your local Cat dealer.

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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