

Hammer / Machine Compatibility

Small and Medium Hydraulic Excavators. Contact your Cat dealer for specific machine configurations.

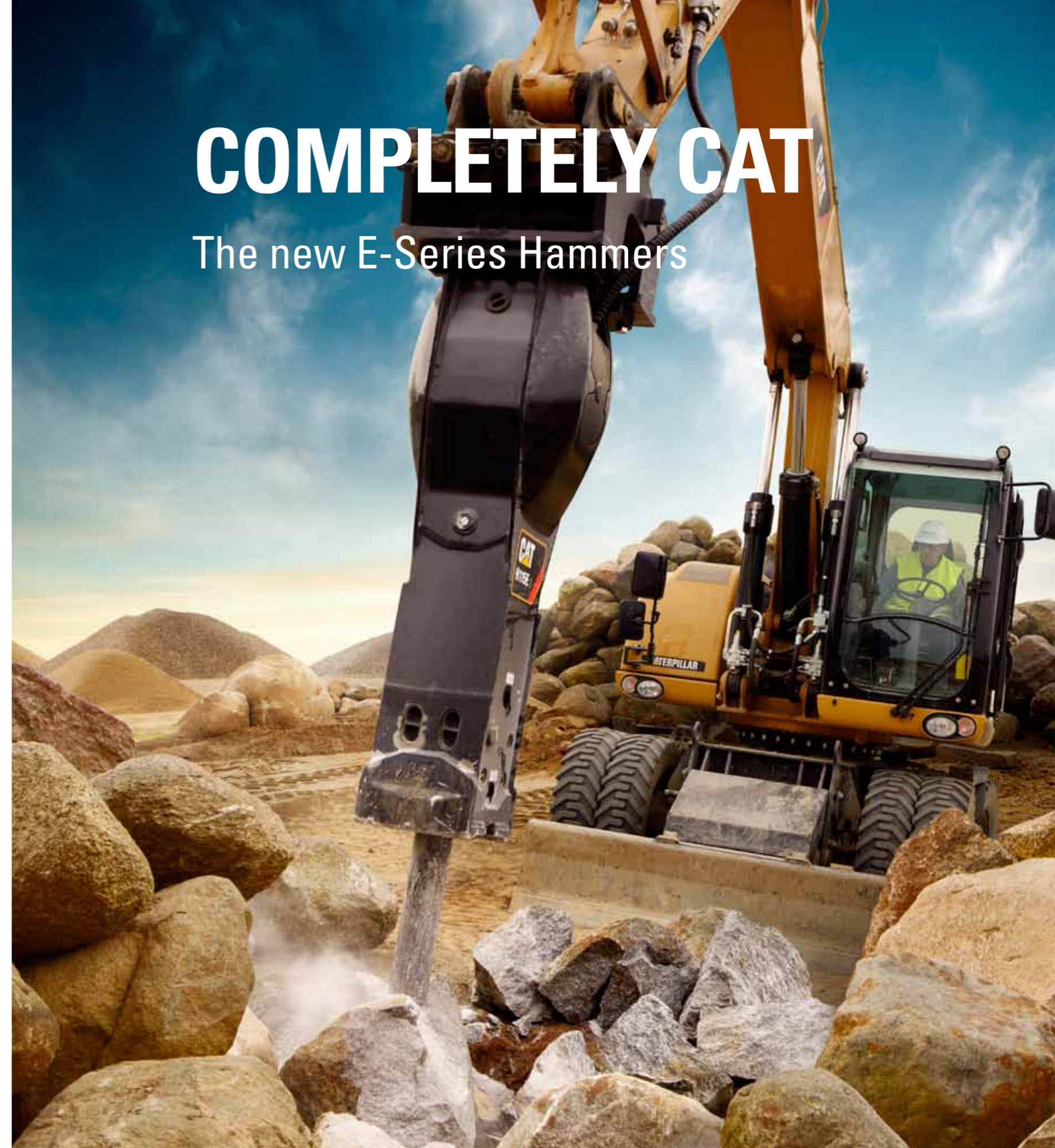
| Model | Machines |
|---------|---|
| H110E s | 311, 312, M313, 314, 315, M315, M316 |
| H115E s | 311, 312, M313, 314, 315, M315, M316, 318, M318, 319, 320, M322 |
| H120E s | 315, M315, M316, 318, M318, 319, 320, 321, 322, M322, 324, 325, 329 |
| H130E s | 318, M318, 319, 320, 321, 322, M322, 324, 325, 328, 329, 330, 336 |



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AEX00662-00 (10/2011) hr



COMPLETELY CAT

The new E-Series Hammers



COMMITMENT to bring you the best

The best equipment. The best solutions. The best support. You may already have personal experience of the Cat commitment to performance, quality and service. Now we have extended that commitment to the Cat range of hammers, by completely designing, engineering and manufacturing our own line from the ground up. That's right, 100% Cat. And we've even built a dedicated plant to produce them, making Cat the only global manufacturer of both hammers and carriers!

Introducing... the Cat E-Series Hammers: a line that will help you work more efficiently and productively.

All Day. Every Day.

4 NEW MODELS have been developed for use in heavy-duty applications like secondary quarrying, trenching/primary excavation, demolition and road construction.

Cat hammers – the perfect complement to Cat machines.

100%

CAT

HAMMERS COMPLETELY
DESIGNED, ENGINEERED
AND MANUFACTURED
BY CAT



Cat has been making sustainable progress in the machine business for 85 years, and has been co-developing and selling approved hammers for 20 of those. As the world's leading manufacturer of construction and mining equipment, we take the business of understanding our customer's needs very seriously. And when it comes to hammers, we've heard your call for rugged, durable designs that are both operator-friendly and offer peak performance.

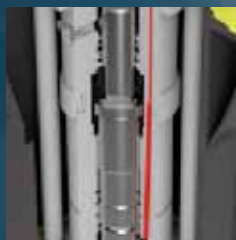
PERFORMANCE through and through

Rugged design



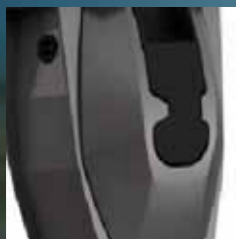
With its symmetrical and fully-enclosed housing, one-piece side plates, easily-replaced rock edges and optional wear package, the innovative new E-Series hammer has sleek looks as well as rugged design.

Operator-friendly



Auto shut off (eliminates blank firing) plus a unique Suspension System protect the carrier, increasing hammer durability. Integral silencing makes it more comfortable for operators, and more acceptable in urban environments.

Peak performance



Easily removable covers for daily maintenance. Field-replaceable lower tool bushing (simply rotate 90° to double its duty cycle). Simpler tool retaining pin system means it is quickly removed, shortening inspection time.

180°

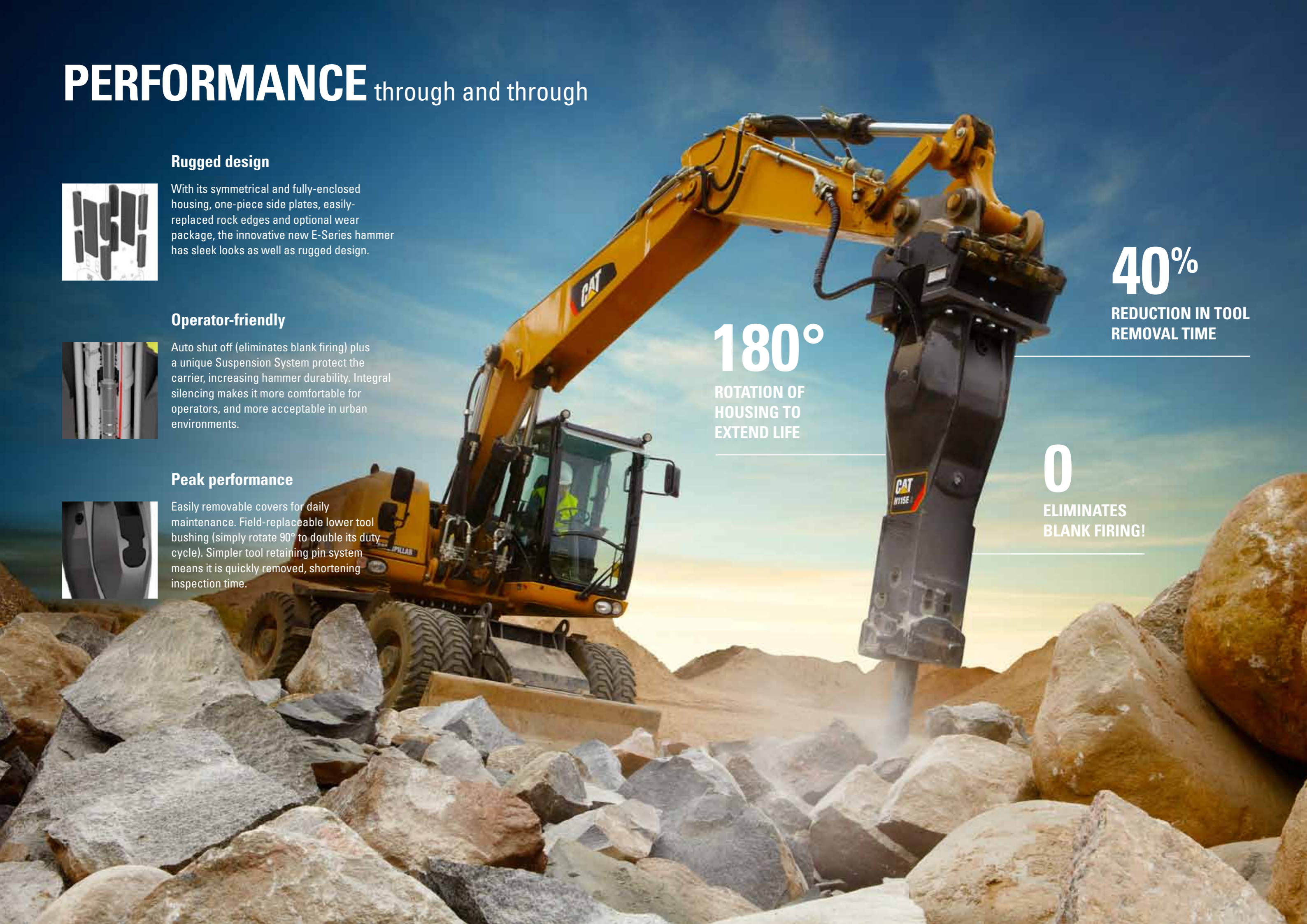
ROTATION OF HOUSING TO EXTEND LIFE

40%

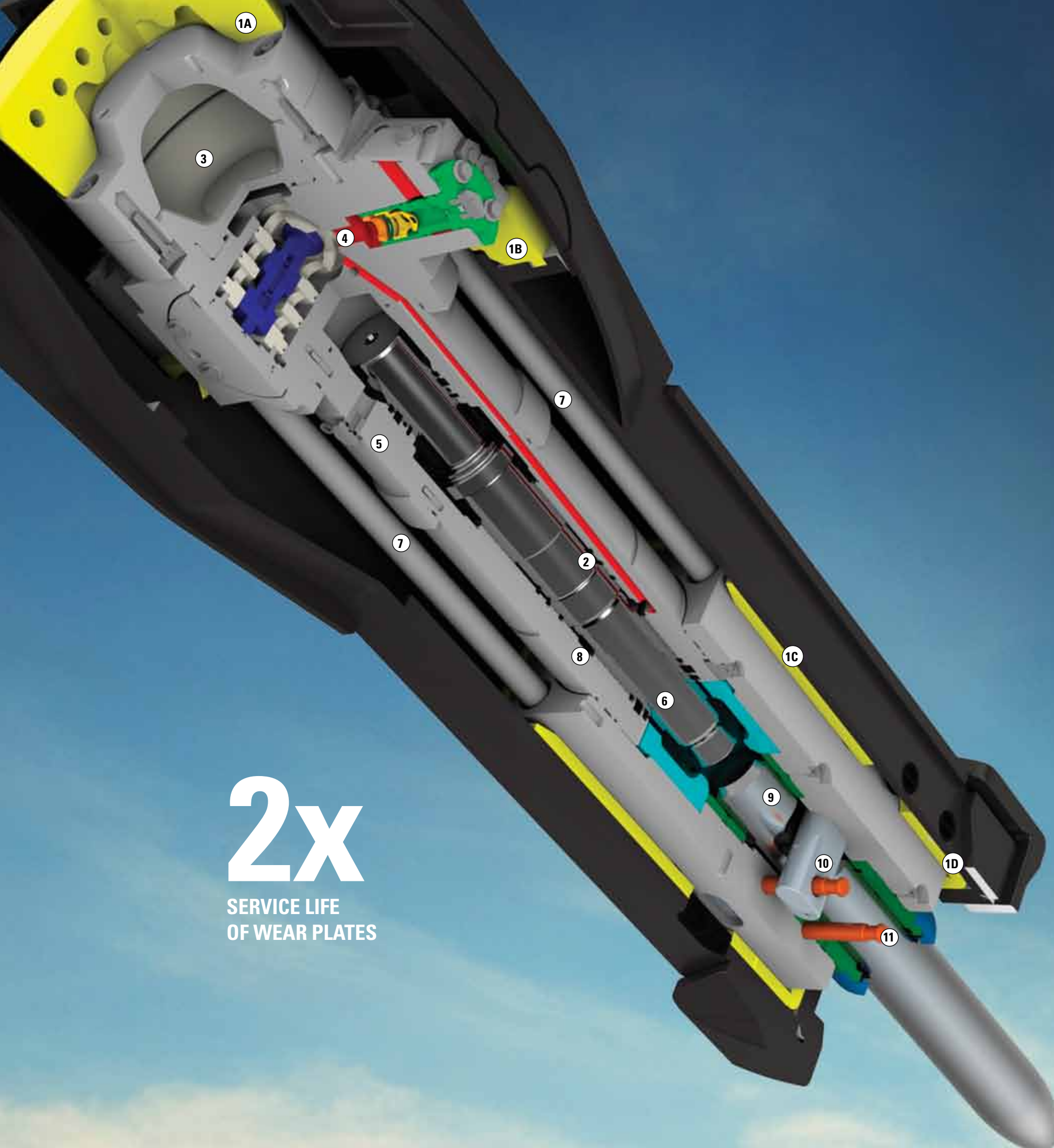
REDUCTION IN TOOL REMOVAL TIME

0

ELIMINATES BLANK FIRING!



QUALITY is in the details

- 
- 1 Unique Suspension System** – Improved recoil, support and guidance protects the carrier, increases hammer durability. Entire power cell is secured firmly inside housing. Noise suppression, operator feel and control is improved.
 - 1A Large Top Buffer** – Absorbs vibration from the hammer, preventing damaging impulses from reaching the carrier.
 - 1B Two Side Buffers** – Suspend the power cell, stabilize reflective forces and dampen tie rod loading. Side buffers can be easily inspected during daily walk-around.
 - 1C Interlocking Quad Wear System** – Wear plates guide and supports the front head. Plates can be rotated 90° – doubling their service life.
 - 1D Lower Buffer** – New bottom covers and absorbs vibration, dampens tie rod loading, enhances noise suppression.
 - 2 Auto Shut Off (ASO)** – Instantly stops the piston when breaking through material. Prevents blank firing, which is a top cause of hammer wear. Reducing wear improves maintenance and more productive hours of work.
 - 3 Accumulator** – Self-contained membrane accumulator designed for long life. Port is accessible while hammer is mounted on the machine making testing and recharging a routine task achievable in the field.
 - 4 Hydraulic Valves** – A Pressure Control Valve (PCV) maintains maximum hydraulic pressure to ensure the hammer delivers all blows at full power. PCV can be easily checked and adjusted from outside the hammer in about 30 minutes. A check valve (not shown) isolates harmful pulsation spikes from the carrier hydraulic circuit.
 - 5 Seal Carrier** – Contains special high performance seals to extend leak-proof operation.
 - 6 Piston** – Long piston transfers a long shock wave into the rock. Tool-piston diameters are matched for maximum energy transfer.
 - 7 Tie-Rods** – Larger threads improve load carrying capability, durability and reliability.
 - 8 Cylinder** – Engineered to be durable and reliable with minimal maintenance and down time.
 - 9 Upper Tool Bushing** – Guides the tool to optimize in-line piston to tool contact.
 - 10 Tool Retaining Pins & Keepers** – Tool removal process is simplified, achievable with common hand tools. Removal time reduced by 40% over previous models.
 - 11 Lower Tool Bushing** – As bushing reaches the wear limit, it can be easily rotated (90°) or replaced to bring it back into specification. Dust seals keep contaminants out.

2x

SERVICE LIFE
OF WEAR PLATES

SPECIFIED to suit your needs

Specifications

| | | | H110E s | H115E s | H120E s | H130E s |
|----------------------------------|-------------|--|-----------------------|------------------------|------------------------|------------------------|
| Recommended carrier weight range | t (lb) | | 8–16 (17600–35200) | 12–20 (26400–44000) | 17–36 (37400–57200) | 19–32 (41800–70400) |
| Operating weight* | kg (lb) | | 1017 (2237) | 1180 (2596) | 1582 (3480) | 1890 (4158) |
| Impact frequency | beats/min. | | 450–1000 | 370–800 | 350–620 | 320–600 |
| Energy Class | J (ft. lb.) | | 2305 (1700) | 3390 (2500) | 4067 (3000) | 4745 (3500) |
| Acceptable oil flow | lpm (gpm) | | 60–120 (16–32) | 70–130 (18–34) | 100–170 (26–45) | 120–220 (32–58) |
| Operating pressure | kPa (psi) | | 16000 (2320) | 15000 (2175) | 15000 (2175) | 15000 (2175) |

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

Dimensions



SOLUTIONS that are fit for purpose

8hr Productivity
m³ (yd³)

Applications Guide with Standard Tools

Chisel (C)

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.

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

Blunt (B)

Applications

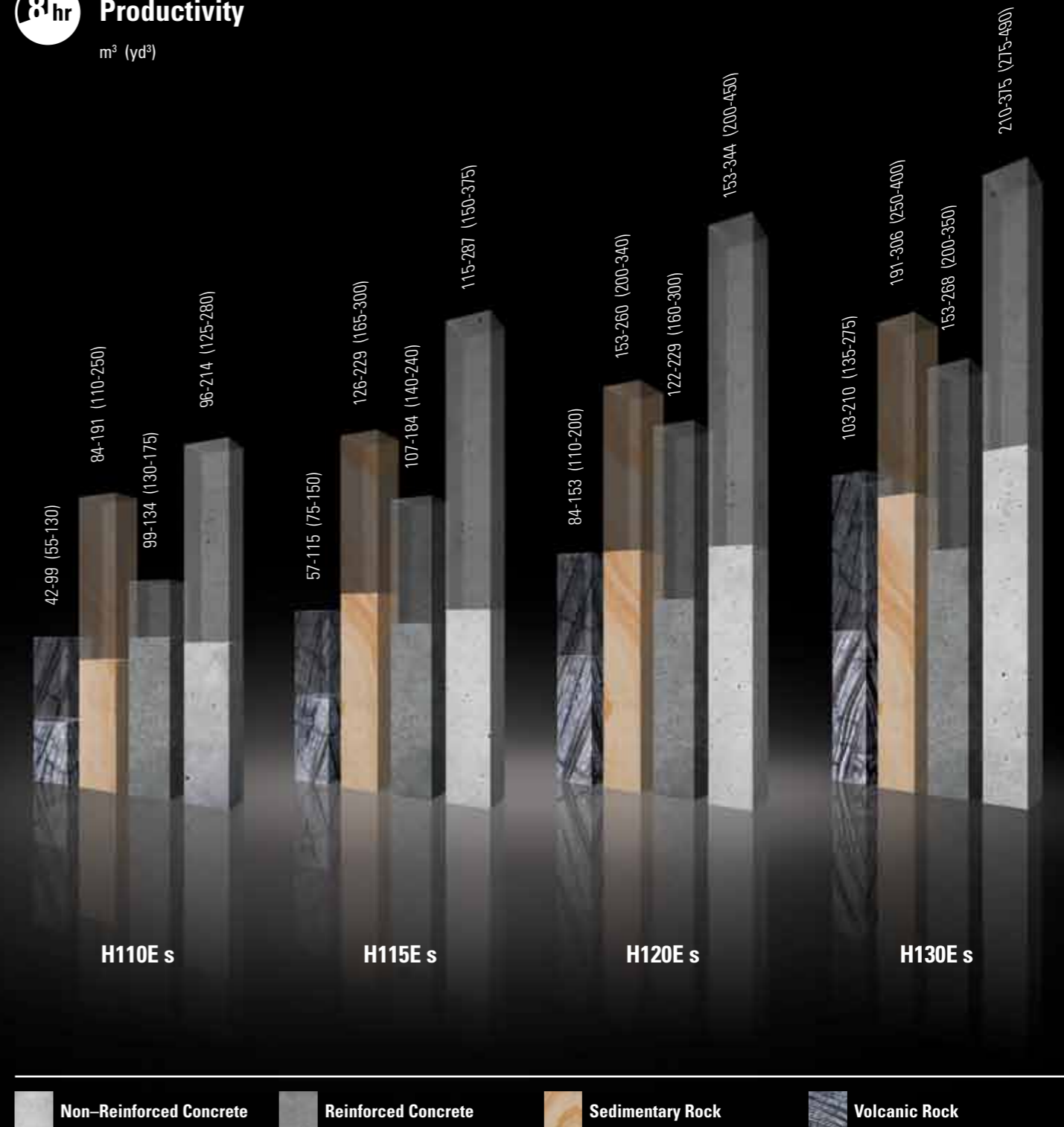
- Igneous and tough metamorphic rock into which tool doesn't penetrate

Select when:

- Demolishing concrete structure
- Boulder breaking

| | H110E s* | H115E s* | H120E s* | H130E s* |
|---|----------|----------|----------|----------|
| 1. Road building / construction | | | | |
| Breaking of road surface | C, M | C, M | C, M | C, M |
| Breaking uneven bedrock to lay a road | C, M | C, M | C, M | C, M |
| Trench excavation for drainage | C, M | C, M | C, M | C, M |
| Demolition of bridges | C, M | B, C, M | B, C, M | B, C, M |
| Making holes (for traffic signs, lamp posts) | M | M | M | M |
| Breaking of frozen ground | C, M | C, M, P | C, M | C, M |
| 2. Demolition / housing development | | | | |
| Demolition of concrete walls, roofs, floors | C, M | B, C, M | B, C, M | B, C, M |
| Demolition of light, reinforced concrete (<20") | M | B, M | B, M | B, M |
| Brick walls | C, M | B, C, M | B, C, M | B, C, M |
| Rock trenches for mains/water supply/utilities | C, M | C, M | C, M | C, M |
| Rock excavation for foundation | C, M | C, M | C, M | C, M |
| Mass excavation of rock for industrial building bases | | | | C, M |
| Separating rebar from concrete (for recycling) | C, M | B, C, M | B, C, M | B, C, M |
| 3. Quarrying / open cast mining | | | | |
| Secondary boulder breaking | B | B | B | B |
| Primary breaking of rock | | | | C, M |
| Breaking oversizes on a crusher/feeder/feed chute | C, M | B, C, M, | B, C, M | B, C, M |
| 4. Underground applications | | | | |
| Scaling | C | C | | |
| 5. Metallurgical applications | | | | |
| Breaking of slag in casting ladles | C, M | C, M | | |
| Breaking of slag in converter openings | C, M | C, M | C, M | C, M |
| Cleaning of castings | C, M | C, M | | |
| Breaking of aluminum electrolyze slag | C, M | C, M | C, M | C, M |
| 6. Other applications | | | | |
| Demolition/Rock breaking under water | | C, M | C, M | C, M |

*E series tools not compatible for use with previous hammer models.



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.

UNIQUE capabilities

THE INSIDE STORY

Take a look inside the birthplace of the E-Series Hammers

Designed to address your needs

The Cat E-series hammers are designed & developed by Cat specialists from several disciplines. Together, they form a world-class team with decades of experience in hammer design. Cat designers are responsible for the complete hammer concept, ensuring that our hammers and machines work as a seamless system.

Engineered to last

Cat engineering turns our designers' vision into reality. Ensuring that each Cat hammer inherits the DNA of Cat machines and their reputation for performance, quality and serviceability. In this dedicated hammer facility, E-Series hammers are engineered using proven Cat methods and tested according to stringent Cat specifications.

Manufactured to the highest standards

As the world's number one producer of construction and mining equipment, and the industry's largest manufacturer of work tools, Cat's record of manufacturing excellence is unsurpassed. Leveraging the Caterpillar Production System and 6 sigma principles, you can be assured that Cat hammers are made to be the best. And that's a commitment!



SERVICE that's second to none

Cat E-series hammers are sold through the same Caterpillar dealers as Cat machines. That gives you access to an integrated service and support network – a single organisation for machine and work tool parts and service. No other manufacturer can offer you the same.

You can count on your Cat dealer to help keep your equipment in top condition, so that you can work more efficiently and productively. All day. Every day. And that's a promise that goes beyond just parts, repairs and warranty work. It includes innovative financial arrangements like barter transactions and counter purchase agreements.



Your local Cat Dealer is the single best source for everything you need to keep your equipment up and running. Maybe your business has full maintenance and service facilities of its own. Or maybe you prefer to outsource all of your equipment care so you can focus on your core business. Either way, your Cat Dealer can provide whatever level of support you need, from online to on-site.

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CAT DEALERS WORLD WIDE