

MECHANICAL-DRIVE DIESEL TRUCKS

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THE MECHANICAL-DRIVE ADVANTAGE

No truck is better suited for small to mid-size quarry and mining operations than Hitachi's mechanical-drive diesel haulers. Offering an excellent blend of economy and performance, your support staff will also appreciate their outstanding serviceability, and the use of traditional diagnostics.

Power to carry the mail

Hitachi mechanical-drive diesel trucks use Detroit Diesel (DDEC Series 2000) or Cummins Quantum engines – each has a proven track record of reliability and efficiency.

More brawn for the uphill

Hitachi mechanical-drive haulers have an Allison transmission perfectly matched to the size and capacity of each truck. The transmission is controlled by Allison's Commercial Electronic Control (CEC II) system that performs automatic shifting and electrical diagnostics. CEC II data is sent to the Contronic Vehicle Management System, which gives the operator constant feedback. Transmission performance can also be monitored by a hand-held diagnostic tool, Pro-link 9000.

The Allison transmission is "remote-mounted" halfway between the engine and rear axle. This setup allows much simpler access and serviceability to the transmission, engine and rear axle. The remote-mounted transmission also eliminates cross-contamination of oil with other systems.

The working end

Putting all of this power to the ground is no easy task. The "plug-in" design of the rear drive axle provides easy removal and installation. A "high-speed" ratio is optional on most models.

Creep on the downhill

Hitachi trucks feature wet-disc rear brakes, engineered for long service life in adverse environments. The brakes are continuously oil cooled, with a dual-circuit design for added safety. Dry-disc front brakes are air-cooled, simple, and reliable.

Designed for the hard stuff

At Hitachi, we see the truck as an extension of the operator. The frame, engine, transmission, differential and wheels all need to work in harmony to maximize loads. Our comfortable, state-of-the-art cab ensures operator safety and performance.

By designing on the cutting edge, Hitachi trucks maximize productivity with less downtime.



The plug-in design of the rear drive axle delivers outstanding ease of service because it is easy to remove and install. A “high-speed” ratio is optional.

The transmission is filled with synthetic oil at the factory. 4,000-hour change interval (depending on sampling) maximizes uptime and reduces operational costs.

Hitachi mechanical-drive diesel trucks feature Detroit Diesel or Cummins power.

Engines meet current EPA standards and provide more than enough power with great fuel economy.

BEAUTY MEETS BEAST. ENGINEERED FOR THE LONG HAUL.

With the strongest frame and suspension in their class, these burly machines bring new meaning to the word rigid. Hitachi haulers outclass competitive trucks in both frame and suspension strength.

Hitachi wins the Cat® fight

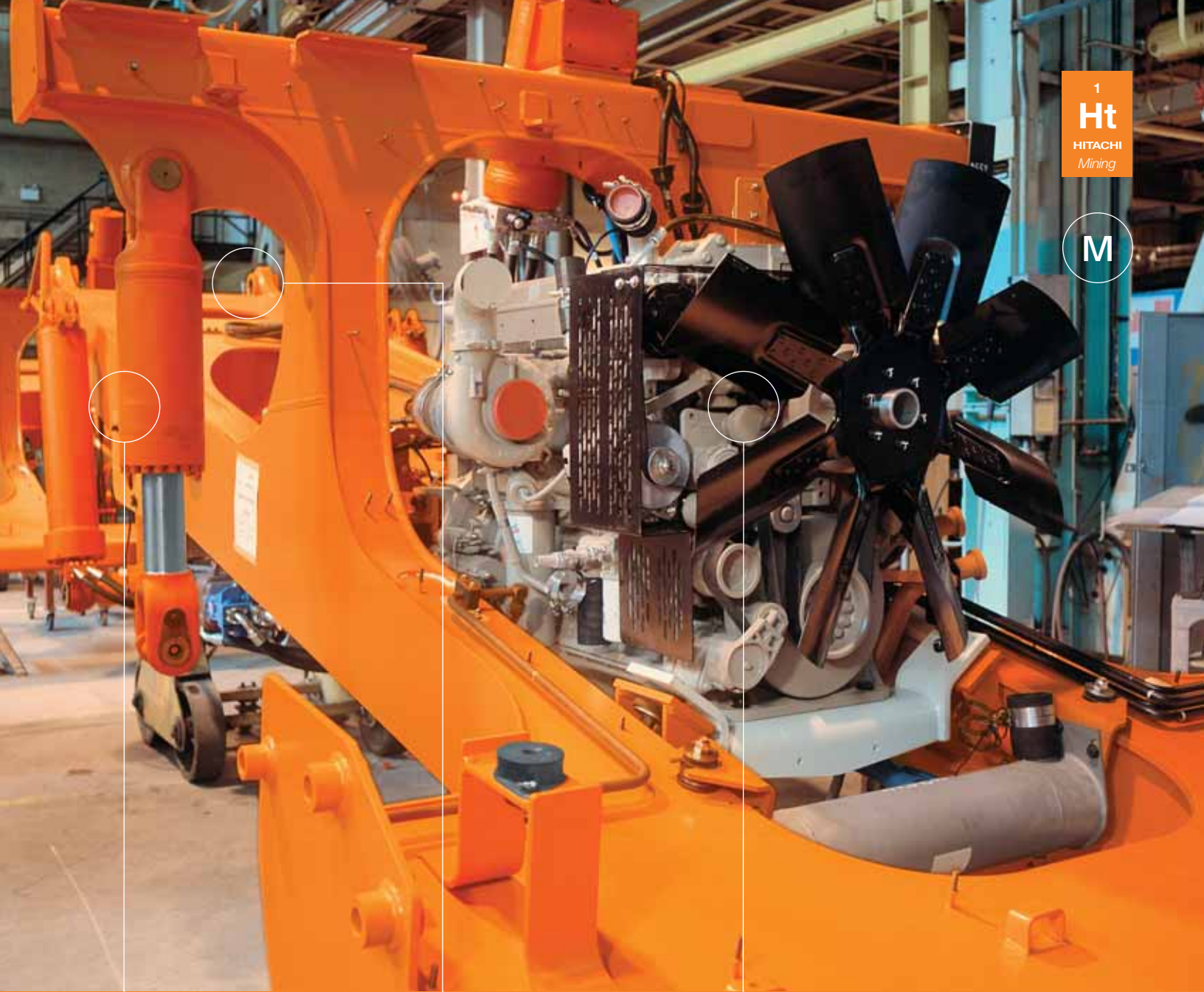
Cat trucks use a suspended kingpin design — a design that increases tire scuffing and wear due to frame twist. Cat haulers also use more castings, frame components, and welds, which make them vulnerable to structural failure.

Hitachi engineers chose a broadly radiating frame to distribute the stress of a full load over the frame's entire length and width. Welds are oriented longitudinally, eliminating stress cracks. Frame intersections are curved to create a more resilient backbone. And reinforced inner, center, and outer web plates accommodate a larger payload.

Truck frame rails are connected laterally by a high-arching cross member. This structure is positioned behind the engine and provides a mounting point for the cab and upper deck that doesn't restrict engine access.



Your quarry or mine deserves the kind of performance and reliability that only Hitachi mechanical-drive trucks deliver.



Vertically mounted struts absorb haul road input and minimize frame twisting.

Frame is wider at the rear to support loads better.

Hitachi's "horse-collar" design provides best-in-class engine access. This keeps trucks hauling longer and faster.



THE NEOCON STRUT. A MIRACLE SHOCK ABSORBER.

Mechanical-drive trucks feature Accu-Trac suspensions that have an independent trailing arm for each front wheel. Both arms are supported by Neocon-filled struts that minimize stress and vibration. The trailing arm allows energy to travel straight up, where it is absorbed by the strut, which minimizes frame fatigue. The rear struts are mounted in a more vertical position to allow better axial loading.

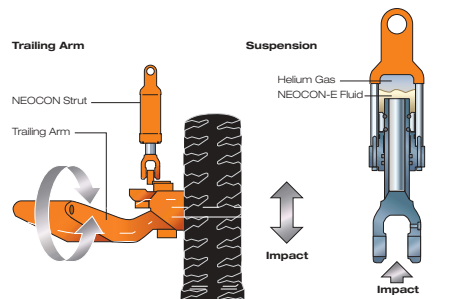
Neocon-filled struts take on the hard stuff

Neocon-filled struts consist of two subsystems:

- 1) an energy-absorbing system to isolate shocks
- 2) an energy-releasing system for stabilization.

The absorbing system uses helium gas and Neocon-E™ fluid to absorb energy in direct proportion to the force it receives. Neocon-E is very stable at high temperatures and has a low freezing point. It's also chemically inert, reusable, and environmentally friendly.

Neocon-filled struts deliver superior stability, control, and isolation over struts filled with hydrogen/oil or silicone. Improved isolation means reduced impact loading on the structural members of the machine and greater operator comfort.



While our suspension and steering system is tough, maintenance is simple. Front suspension cylinders can be serviced quickly without removing them from the truck. Steering geometry can be kept within specs with one adjustment. And steering components are designed with fewer lubrication points for easy maintenance.

Accu-Trac suspension absorbs all the abuse a haul road can deliver while putting the brakes on suspension-induced frame twisting.

And Accu-Trac can improve tire life by up to 40 percent over suspended kingpin designs.



The four-pin planetary gear has been reduced in size and is lighter than previous designs. The unit runs at lower temperatures to extend lubricant life and, ultimately, the longevity of the gear itself.

CLIMBING TO THE NEXT LEVEL. ADVANCED BODY AND CAB.

Body mechanics

The body is manufactured from high-tensile, abrasion-resistant alloy steel. The rubber-cushioned body features a sloped floor for easy cleaning and reduced contamination of the air filter. A heated tipper floor helps shed material, while an extended canopy protects the operator from the elements.

Between a rock and a soft place

The Command Cab III takes operator comfort to the next level. Double-wall 11-gauge inner and outer steel panels produce a more structurally sound operator's station. Foam-rubber lining absorbs sound and helps maintain interior temperature while keeping road noise outside where it belongs.

A wraparound dashboard positions controls within easy reach. A full complement of easy-to-read gauges, the Contronic II monitoring system, six-way adjustable air seat, tilt/telescopic steering wheel, filtered ventilation, door locks, and a full-size trainer seat all contribute to operator safety and comfort.

Hydrostatic power steering

A closed-center hydrostatic power-steering system provides unparalleled control. Accumulators supplement steering power in accordance with J/ISO 5010 regulations. Steering components have been designed for easier maintenance and fewer lubrication points.

Electronic watchdog

The Contronic II system minimizes downtime by monitoring and diagnosing all onboard systems, including the engine, Allison transmission, and the electrical system. The optional Haultronic II load-weighing system can also integrate with Contronic II, improving productivity by reporting cycle time, distance, and cycle count. Data links offer complete integration, while one multi-language LCD clearly details machine functions.

Better hydraulics

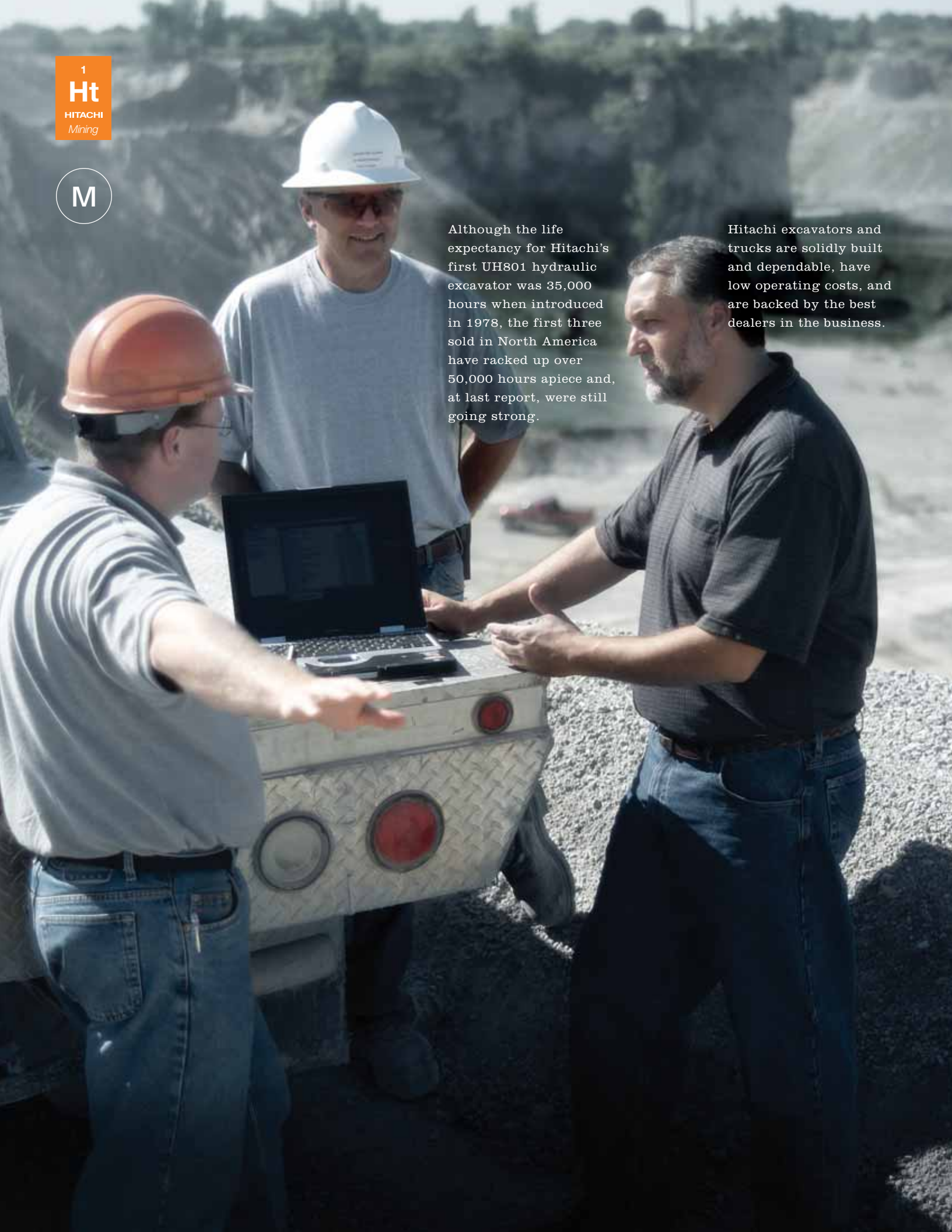
The hydraulic hoist system uses two, three-stage, double-acting cylinders. Hydraulically cushioned hoist cylinders slow body descent to a crawl over the last several inches of travel, minimizing wear and tear on components.

A separate reservoir and tandem-gear pump connects to a four-piston, electronic pilot-controlled hoist valve. An electronic hydraulic controller is mounted to the operator's seat.

Closely spaced horizontal stiffeners minimize stress and maximize the stability of the body.

Hitachi haulers have an amazingly tight turning circle for their size. The suspension geometry also affords better stability in tight turns.





Although the life expectancy for Hitachi's first UH801 hydraulic excavator was 35,000 hours when introduced in 1978, the first three sold in North America have racked up over 50,000 hours apiece and, at last report, were still going strong.

Hitachi excavators and trucks are solidly built and dependable, have low operating costs, and are backed by the best dealers in the business.

EXPERIENCE WHERE IT MATTERS MOST. IN THE PIT.

Hitachi introduced the first 180-ton UH801 hydraulic excavator in 1978. Up until that time, hydraulic excavators showed great promise on paper, but failed to deliver in the field. Hitachi excavators, however, performed reliably and at low operating costs. In short order, the UH801 became the top seller in its class. The UH801 was replaced by the EX1800 in 1987, which in turn, was replaced by the EX1900 in 2002.

The rigid-frame truck legacy

In 2000, Hitachi acquired Euclid, the legendary truck manufacturer. In the 1930s, Euclid's very first self-powered off-highway trucks were used in the Mesabi Iron Range and at Boulder (now Hoover) Dam in Arizona. They proved to be so rugged and indestructible, yet easy to maintain, that "Eucs" became the standard of the industry.

Solid dealer support

Hitachi dealers are among the best in the world. They are committed to providing you with the best machine for your job, then making sure that machine lives up to your expectations. Hitachi dealers can provide comprehensive, competitively priced service for your Hitachi excavators or trucks, either as part of a guaranteed availability package or on an as-needed basis. They're your source for expert advice on improving production and reducing operating costs, as well as training for operator and mine mechanics.

Critical parts demand critical attention

All Hitachi dealers stock wear parts and maintenance items, as well as critical components — those parts that can cause a machine to go down and can be replaced in two hours or less. Through the John Deere distribution system, Hitachi dealers can quickly access tens of thousands of strategically located parts depots.

Hitachi also offers remanufactured components for a fraction of the cost of brand new. Each is remanufactured to OEM specs with certified parts and is tested for leaks and performance. Mining components are backed by a one-year/unlimited-hour warranty for parts and labor, when dealer installed.

OUR NAME LOOKS GOOD ON ORANGE.

It's our color. It's our brand. New product support initiatives and strengthening our dealer network is more proof that we are as passionate as ever about this industry. We are dedicated to building the best equipment in the world and keeping them painted Hitachi Orange.

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