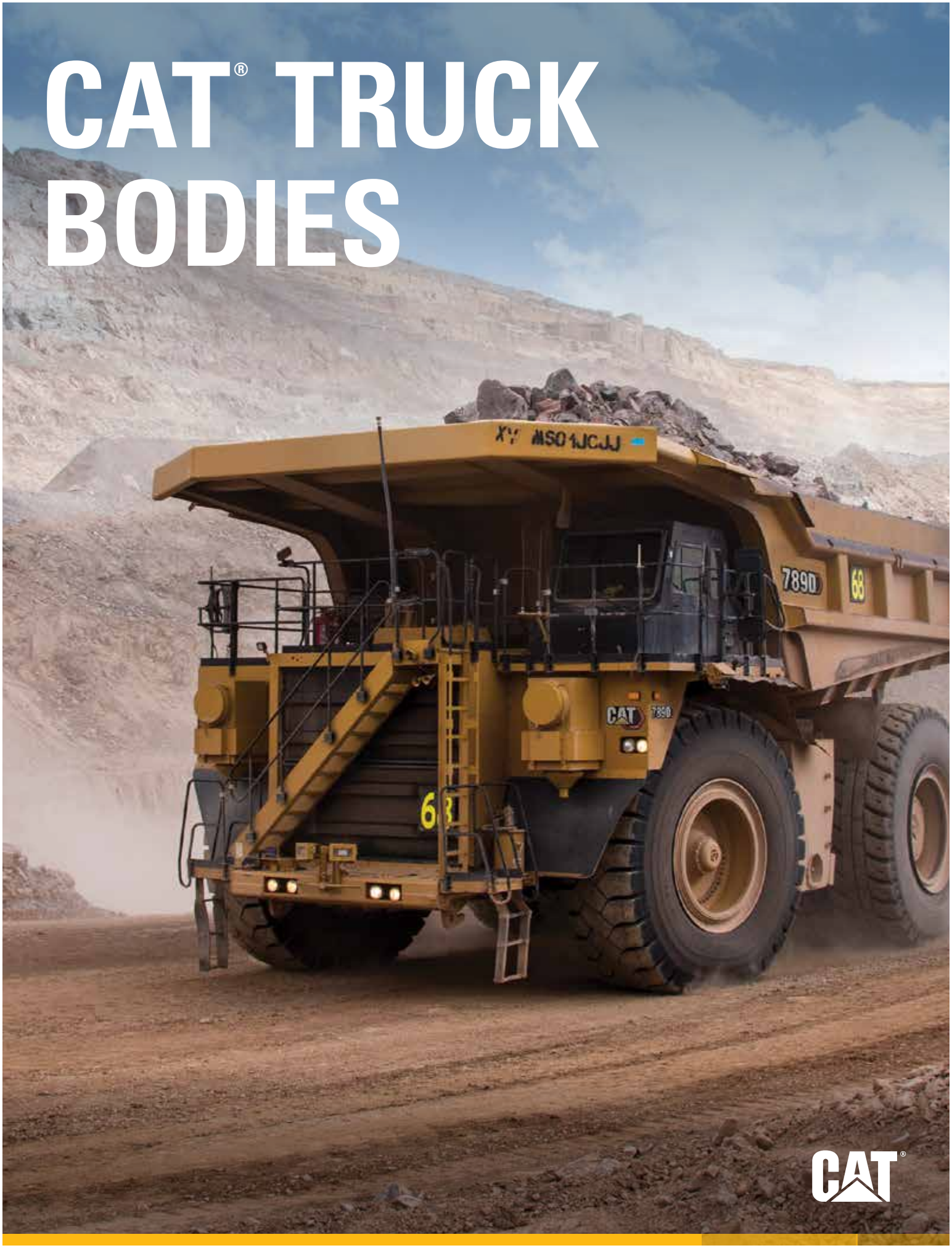
CAT® TRUCK BODIES



CAT® BODIES

DELIVERING A BETTER BOTTOM LINE

Matching the truck body to the application is a critical part of achieving the best value from your Cat© truck. Integral to the truck, Cat bodies are designed to fit with the chassis and work as part of the truck system. They are sized to meet the payload requirements without compromise to vehicle balance, braking or control.

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WHY CAT BODIES?

Caterpillar offers the widest variety of OEM designed, application-specific truck body solutions in the industry. Cat bodies consistently meet target payload and outperform competitive bodies in scale studies. They are designed and analyzed as an integral part of the entire vehicle system, helping to ensure you achieve maximum chassis life. From the design to the materials, manufacturing to shipping, the entire process meets Cat standards of quality and control.

THE CATERPILLAR ADVANTAGE

VERTICAL INTEGRATION
We follow a dynamic approach to engineering — treating the body as part of a system rather than a static structure. A static structure designed in isolation has the propensity to cause problems to other parts of the system. Cat bodies are designed along with the chassis. A sophisticated proprietary analysis software is used to simulate a virtual haul cycle, followed by validation in the field.

VIRTUAL AND FIELD VALIDATION
A virtual product environment ensures every aspect of the system works together efficiently. Caterpillar engineers use proprietary dynamic analysis tools to understand the true system interactions. This complete system knowledge results in optimal machine component life and value.

Further, Cat truck bodies are instrumented and tested in mining applications with loading tools, on haul roads and in extreme environments.

CONTINUOUS INNOVATION
Committed investments in research and development result in innovations that improve performance and reduce total costs.

LOCALIZED MANUFACTURING AND SALES
We're committed to meeting the needs of customers around the world and are actively growing our manufacturing and sales footprint. Localized manufacturing reduces transportation and onsite assembly costs while improving delivery lead times.

HIGH-QUALITY FACILITIES AND MATERIALS
Investments in tooling, equipment, facilities and expertise result in the most comprehensive body manufacturing facilities in the world.

All Cat bodies are manufactured using the highest quality sheet steel. Every gusset, bracket, plate and sub-assembly in the body is manufactured by Caterpillar.

EXPERIENCED TEAM
Having produced truck bodies for 35+ years, you can rely on Caterpillar for expertise and support unlike any other manufacturer.

PROVEN PRODUCTS
More than 5,000 MSD bodies and over 300 HP bodies are working in the field today.

CUSTOMIZABLE SOLUTIONS
Caterpillar offers truck bodies for every application. Liners offer flexibility for unique and extreme conditions, while the ability to vary the base plate allows them to handle the harshest applications.

Cat truck bodies are even customizable down to the paint color. Past paint colors have supported our customers' awareness campaigns for issues such as breast cancer and prostate cancer.

SAFETY FOCUS
To keep our customers safe, all bodies come with strategically placed tie-offs for working at heights.

We also follow a corporate safety initiative to maintain safe working conditions in our manufacturing facilities, which are clean, modern and updated to protect employees.

FLEXIBLE SHIPPING OPTIONS
A variety of flexible shipping options optimize the balance of shipping cost and local assembly requirements. Shipping options include one-piece (for select models), standard multi-piece (4-6 sections), and partial assembly. Shipping costs and restrictions vary by region so local considerations must be made to determine the best option.

UNPARALLELED SUPPORT
Caterpillar offers unparalleled product support and performance validation through our Cat Mining organization and global Cat dealer network. Cat dealers are located in every mining region in the world, providing boots-on-the-ground support no matter how remote the location. Together with our dealers, we are committed to delivering the Cat brand promise.

CRITICAL BODY DESIGN FACTORS

FRAGMENTATION

Drilling and blasting accuracy results in consistent and targeted fragmentation size. This size varies by material type (such as overburden vs. coal) and the intended downstream processing. In some applications, oversized fragmentation is intentional, routine, and more cost effective so the truck body must be durable yet lightweight enough for efficient hauling. Designed-in solutions include thicker central loading zones and special impact absorption. packages with reinforced ribs or thicker base plates.

ABRASION

Abrasion rates can be determined by the typical wear liner life and/or by bucket tip life. Severe abrasion can also influence liner decisions in the middle zone, although wear rates will be highest at the rear of the body. Options include:

+ Smooth plate for cohesive materials
+ Rock box for dry and non-cohesive materials
+ Tumbler bars for larger rocks
+ Chromium Carbide for severe abrasion

COHESION

Material cohesion is a concern when material is sticky and doesn't release from the truck body. The material left inside the body is referred to as carryback. In addition to being extremely inefficient, carryback makes it difficult to manage equipment and results in inadvertent mis-use of the machine. Accuracy of the Vehicle Information Management System (VIMS) can be erroneous due to the additional weight. Depending on where you are in the calibration process, the truck is either recording the carryback on every load — resulting in inflated production numbers — or, worse yet, ignoring the information and causing the truck to be overloaded. Carryback can also increase fuel burn and drive downtime for cleaning.
To mitigate carryback, exhaust is pumped through the body to heat the material, causing it to release, without affecting engine performance or hindering exhaust flow.

Options to address cohesion include exhaust body heat, liner design (smooth plate), and body geometry changes such as stop sign plates and curved transition plates.

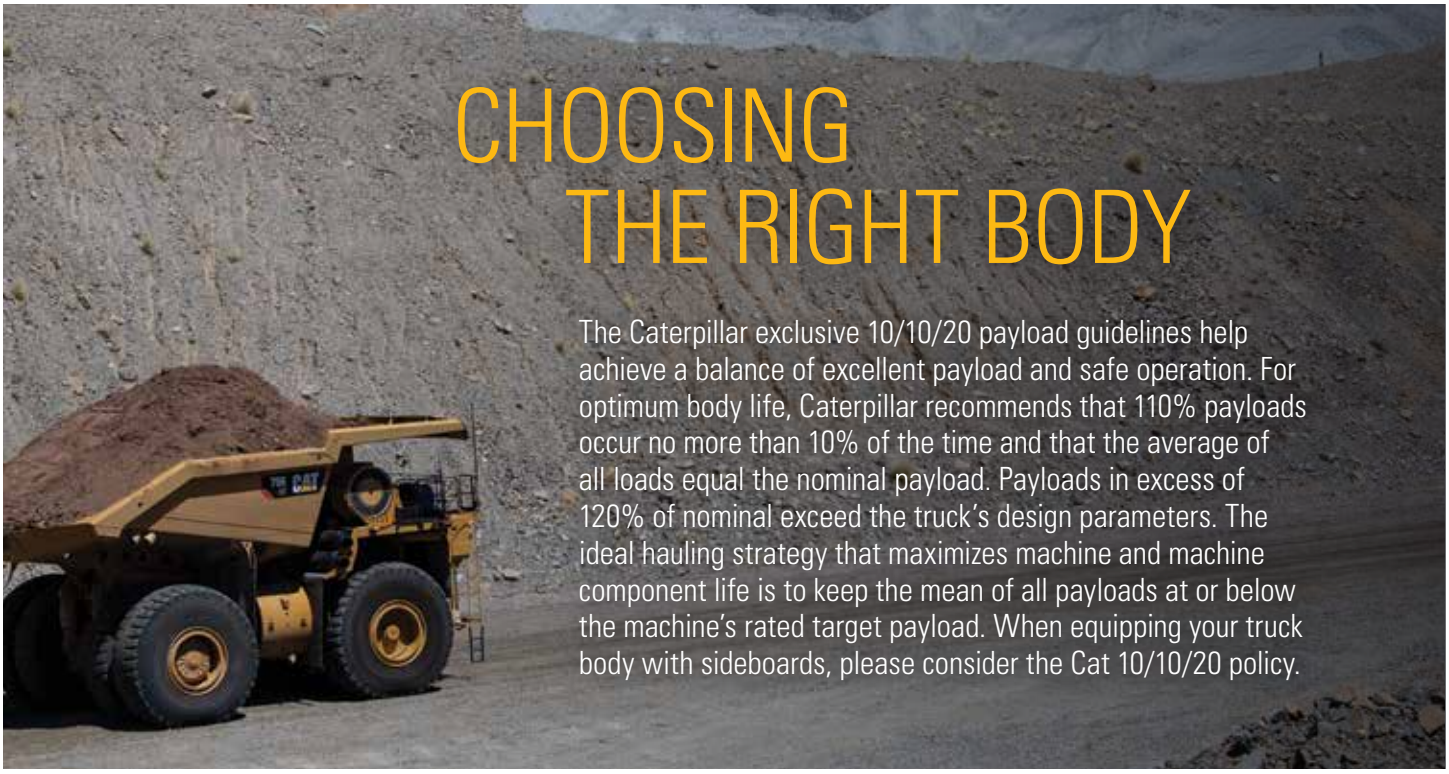
CAT BODIES ARE **THE IDEAL MATCH** FOR CAT TRUCKS

They are designed to fit with the chassis and work as part of the truck system. They consistently meet payload and outperform competitive bodies in head-to-head scales studies.

RISKS OF SELECTING A THIRD-PARTY BODY

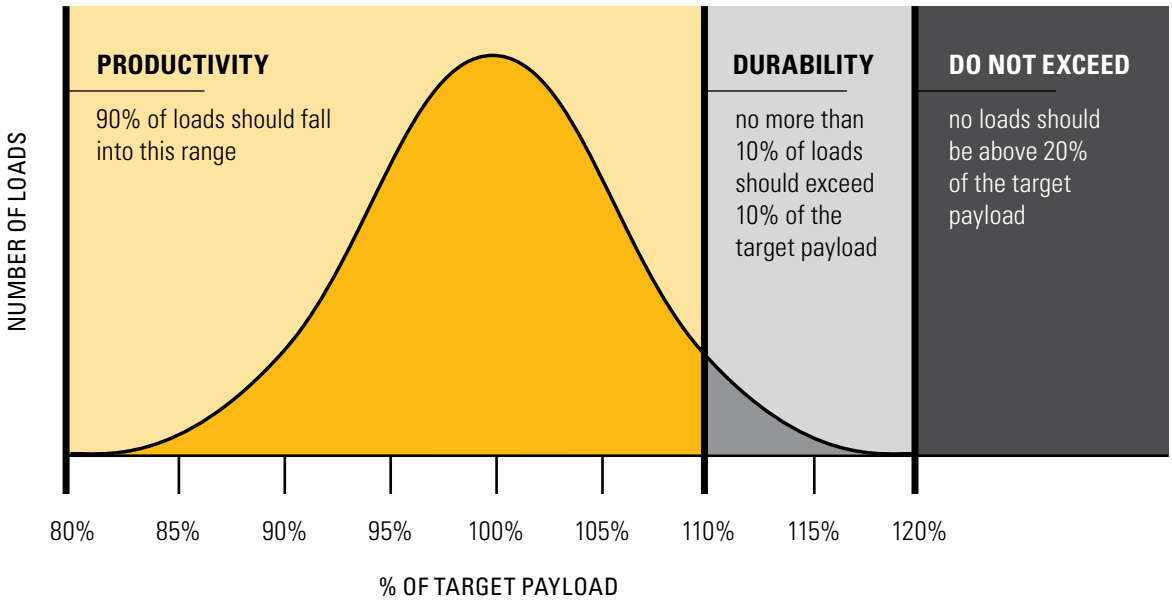
There are a number of potential risks to evaluate when considering a third-party body.

+ Lower payload
    + What is the actual competitive body weight?
    + Is it ready to go to work without liners?
+ Improper distribution of axle splits and structural load path
+ Negative impact on steering and suspension, frame, lower powertrain, light fabrications, pinned joints and tire life
+ Unbalanced machine weight splits, which can lead to tire and component life decreases as well as dumping problems
+ Increased machine downtime for repairs
+ Inaccurate VIMS readings
+ Machine overload
+ Excessive debris collected on fuel tank, cab outriggers and other components. On a 793 size machine, 2.5 tonnes (2.75 tons) of extra debris corresponds to approximately 1% additional fuel consumption.
+ Excessive engine exhaust back pressure
+ Body does not fit chassis. Competitive bodies with different connection points and stiffness characteristics can increase the risk of lower chassis life.
+ Interference with fuel tank, hoses, tires or other attachments
+ Damage to platforms, handrails or mirrors due to inadequate overhead protection
+ Liners or attachments failing and damaging crusher
+ Body retention cable may not be ISO13333 certified



CHOOSING THE RIGHT BODY

The Caterpillar exclusive 10/10/20 payload guidelines help achieve a balance of excellent payload and safe operation. For optimum body life, Caterpillar recommends that 110% payloads occur no more than 10% of the time and that the average of all loads equal the nominal payload. Payloads in excess of 120% of nominal exceed the truck's design parameters. The ideal hauling strategy that maximizes machine and machine component life is to keep the mean of all payloads at or below the machine's rated target payload. When equipping your truck body with sideboards, please consider the Cat 10/10/20 policy.



TARGET PAYLOAD: Lower Body Weight ⟶ Higher Payload

CALCULATION: GMW – Chassis Weight – Body Weight = Target Payload

CAPABLE PAYLOAD: Correct Body Sizing ⟶ Ideal Payload Distribution (10/20/20)

CALCULATION: Density x Volume x Fill Factor = Capable Payload

"MAP" TRUCK BODY SPECIFICATION PROCESS

With the MAP Process, input from miners is considered in the design configuration. Body configuration is aligned with the application and maintenance strategy.

Customers work with dealerships and regional teams to complete mine site profile forms. A clear understanding of customer expectations positions us to deliver the right body for the specific application.

MATERIAL

+ Mineral
+ Density
+ Fragmentation
+ Abrasiveness
+ Cohesion
+ Angle of Repose

APPLICATION

+ Loading Tool
+ % Overburden vs Ore
+ Haul Length
+ Haul Road Condition / Grade
+ Dump Clearance
+ Shop Bay Constraints
+ Established Mine or Greenfield

PREFERENCE

+ Specific Features
+ Historical Information
+ Remaining Chassis Life
+ Payload & Durability
+ Life Expectation
+ Maintenance Strategy

HIGH PERFORMANCE BODY

FOR MECHANICAL-DRIVE TRUCKS

When you equip your truck with a Cat High Performance (HP) body, you'll experience the benefits of a higher payload thanks to a weight reduction of 2.0-5.0 tonnes (2.2-5.5 tons) or more. The Cat High Performance (HP) Body is a blend of lightweight design and durability for high payload potential and long life. A canopy with overhead coverage plus perimeter reinforcement from the rear rib through the top rail adds strength and durability. Patented floating bolsters and spring plates replace welds in high stress areas, improving durability. Thick base plates reduce the need for heavy liners. Curved front and side transitions minimize carryback, while a kick-up at the tail provides material retention and offers the highest available dump clearance.

+ Increased payload
+ Reduced fuel consumption
+ Optimized payload splits
+ Extended tire life and front wheel life
+ Less spillage
+ Minimized carryback
+ Safer operation

KEY FEATURES

Productive
There is up to 7.5% higher payload potential with HP than MSD II (with typical liner configuration)

Versatile
The ideal blend of light weight and durability, the HP body is designed for use in any application

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

HP-XL BODY

This version of the standard HP body features an extended length floor, designed to neutralize extreme forward bias loading applications. Increased base plate thickness is concentrated on the loading area for efficient impact resistance.

HIGH-EFFICIENCY DUMP BODY

FOR CAT ELECTRIC-DRIVE TRUCKS

The Cat High Efficiency (HE) Body is a blend of lightweight design and durability for high payload potential and long life. The curved floor plate provides impact resistance without the need for heavy structural support.

A canopywith overhead coverage plus perimeter reinforcement from the rear rib and through the top rail adds strength and durability. Spring plates replace welds in high stress areas, improving weld fatigue life.

+ The structural perimeter beam—along with curved floor, front wall and canopy—provides the natural strength and stiffness required to successfully operate in diverse mining applications.
+ Higher-strength base plates allow for a minimal wear package, resulting in lower weight.
+ The patented designs of the floating bolster and spring plate improve overall durability by allowing structural flexibility and avoiding welds in high stress areas.

KEY FEATURES

Productive
The HE Body is a bolsterless, lightweight design resulting in the highest payload potential in this size class.

Durable
3 million+ operating hours demonstrate durability. The large open area design allows for impact absorption. A robust tail rib resists damage during dump events.

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

MAXIMUM PAYLOAD BODY

The Cat Maximum Payload (MP) Body is a bolster-less, lightweight design that allows for the highest potential payload. A convex canopy plus perimeter reinforcement in the rear rib and top rail adds strength and durability. Internal transition geometry minimizes carryback.

The two-stage kick-up in the floor creates a smooth, angular transition for material discharge, minimizes spillage, and provides freeboard at the tail while offering the highest available dump clearance.

Productive
There is up to 15% higher payload potential with MP Body than our current body offerings in the same application

Serviceable
Maintenance is easier thanks to open sections on the hoist and pivot brackets as well as an open-style rocker tower design that allows for easier weld inspection and repair

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

TRADITIONAL BODY OPTIONS

Designed to work with the Cat frame for superior structural performance

MINE SPECIFIC BODY (MSD II)

The Cat Mine Specific (MSD II) Body offers a lightweight and highly customizable platform that provides maximum versatility for use in most applications. This is a site-specific designed body that is to maximize performance based on the application. Highly versatile, it's available in several sizes for high payload potential in varying material densities. This is a lightweight base body with full canopy coverage and features configurable liner zones to prioritize productivity and durability. The Cat MSD II Body is the most widely chosen lightweight body on the market, proving its value through its reliability and durability.

Productive
Increased payload potential with average 14.5% weight reduction vs. typical Dual Slope Body

Versatile
The most customizable body, offering numerous application-specific configurations

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

COMBINATION BODY

The Cat Combination Body is a hybrid design capable of hauling both coal and overburden. This is a multipurpose, high volume body for light density, well fragmented material. It's based on the dual slope design for applications that require a flexible body to haul light ore (such as coal) and light, well fragmented overburden. It is robust enough to handle overburden when equipped with a site-specific liner package and provides the increased volume required for coal hauling applications.

Versatile
Cat Combination Body is upsized, allowing for multi-purpose use

Durable
Robust base body design and optional liner provide enough durability for any combination application

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

X BODY

The Cat X Body design leverages heavier steel while incorporating the benefits of the lightweight body design, resulting in the same durability as the standard heavy-duty bodies. It has configurable liner packages so the body contains only liner sections that are required for a specific customer's application, minimizing added weight.

Added volume comes at no extra weight because of design improvements, including a more robust understructure with a body pivot system and hoist bracket. The dump clearance results in less berm contact for longer pivot life and less induced frame stress. The Cat X Body allows the same high degree of customization as MSD II with added durability.

Reliable
Up to 33% longer life over lightweight bodies

Durable
25% thicker base floor provides improved durability vs MSD II

Integrated
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

CUSTOM BODY OPTIONS

A variety of options including tail extensions, sideboards, tumble bars, rock boxes and rock shedders are available to maintain rated payload, reduce spillage and improve hauling efficiencies.

GATELESS COAL BODY

The Cat Coal Body is specifically designed to be dedicated to hauling coal. It accommodates a large volume to account for light density coal material and does not have the durability suited for overburden. It's based on the dual slope design for applications that require a flexible body to haul light ore such as coal where hauling applications accommodate increased volume.

Productive
48% higher capacity over MSD II provides optimal payloads in low density material

Efficient
Weight to volume ratio a 2 kg improvement over standard rock bodies

Integrated
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

DUAL SLOPE BODY

The Cat Dual Slope body design has a V-shaped floor that increases load retention, maintains a low center of gravity, reduces shock loading, and maintains optimum load distribution on steep inclines. This body is an ideal choice for challenging applications.

Durable
Up to 33% longer body life over lightweight body in the same application

Proven
30+ years of successful operation

Efficient
Cat Truck Bodies are ideally sized and designed to work as part of a complete hauling system, helping you achieve high productivity and the lowest cost per ton.

CURRENT BODY OFFERINGS

	785	789	793	795	797	797F	794 AC	796 AC	798 AC
MP			ALL VINTAGES						
HP		D	C/D/F			HP & HP XL			
HE									
DS	ALL VINTAGES	ALL VINTAGES	C/D						
X	C/D	ALL VINTAGES	ALL VINTAGES						
MSD II	ALL VINTAGES	ALL VINTAGES	ALL VINTAGES	ALL VINTAGES	ALL VINTAGES				
SPECIALTY	COMBINATION ALL VINTAGES	COMBINATION ALL VINTAGES	COAL ALL VINTAGES			OIL SANDS		COMBINATION ALL VINTAGES	OIL SANDS

+ Body offerings limited on Tier 4 machines to optimize fore-aft weight splits
+ All new body designs are backwards compatible (e.g., 785G bodies fit older models)
+ 797 T4 Oil Sands body for customers needing body heat, otherwise HP body is used
+ 794 / 798 T4 HE body are the sole option for these trucks

TRUCK BODIES

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For more complete information on Cat products, dealer services and industry solutions, visit us at www.cat.com

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.