

Metso

Loading and hauling solutions

Truck body

Haul more with less



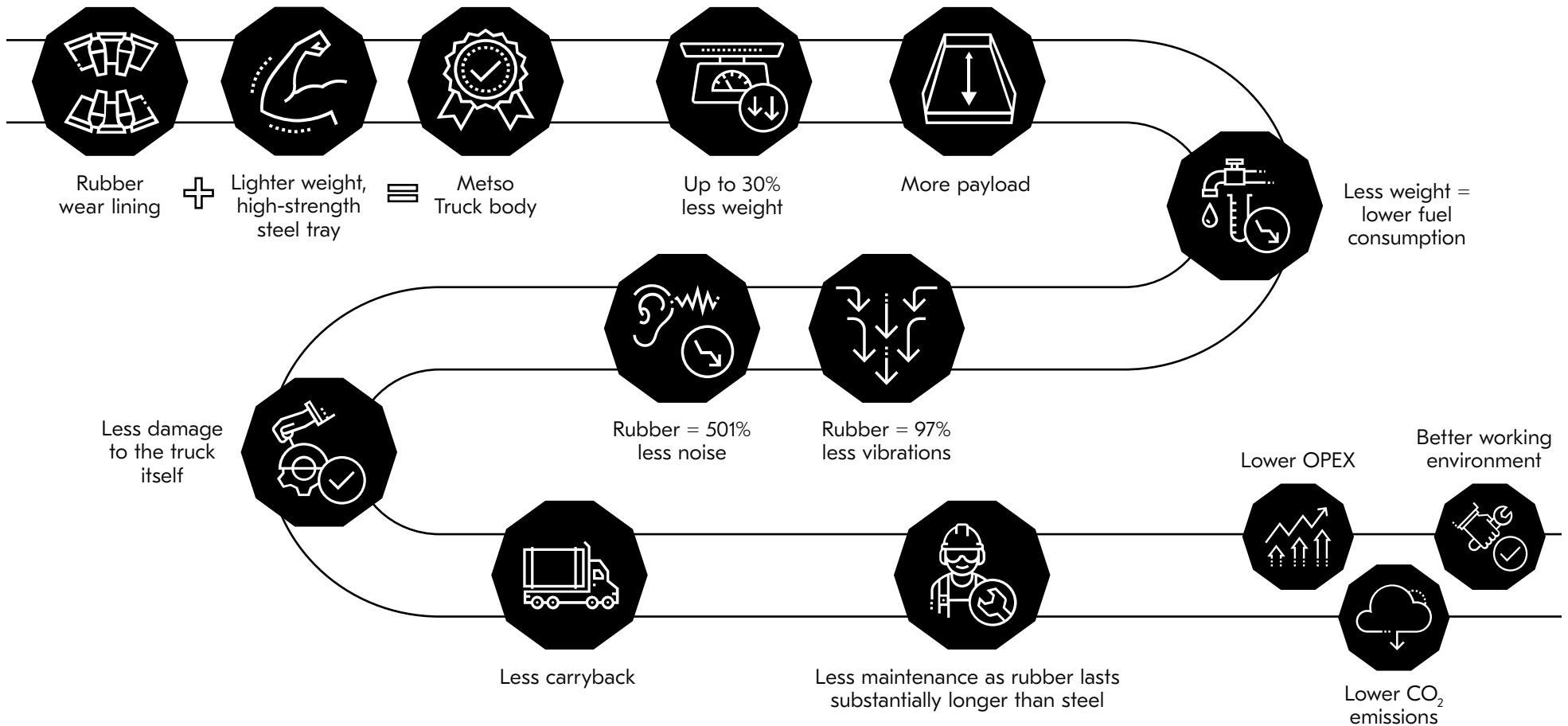
Decades of supplying the mining and aggregates industry with rubber and Poly-Cer wear lining solutions have given us valuable insights and the experience needed to present the unique and tailor-made Metso Truck Body.



How we deliver results



The Metso Truck Body is a groundbreaking innovation that combines the benefits of rubber and a high-strength steel structure, enabling mines and quarries to haul more with less.





Lower body weight allows for more payload.

Increased payload

The energy absorbing characteristics of the rubber lining allows for the construction of a lighter and optimized truck body and lowers OPEX by reducing maintenance and increasing payload.

One-piece solution

The Metso Truck Body is a custom-built, one-piece unit that is optimized to meet your preferences. Combining a high-strength steel structure with the characteristics of the rubber allows us to shave off unnecessary heavy steel in the structure, since the rubber takes on the impact and wear from the hauling.

Less carryback

To increase performance, even in difficult applications with significant carryback problems, we offer solutions with flexible linings, low-friction materials or combinations of these. This unique functionality maximizes the hauling capabilities of your trucks.



Lower OPEX

Conventional rubber-lined truck bodies are well known for increasing wear life while minimizing maintenance, while steel-lined, light-weight bodies are known for increasing payload.

The Metso Truck Body is a one-piece solution that does it all at a significantly lower OPEX.

Reduced maintenance

The rubber lining absorbs most of the vibrations and impact during loading and unloading. Hence less stress is conveyed to the truck itself. The rubber lining lasts substantially longer than a conventional steel lining. In combination with the modular construction, this means fewer and quicker maintenance stops.

Keeping downtime to a minimum is essential. Maintenance stops are very costly, so every minute less spent in the repair shop equals a lower OPEX and, ultimately, a higher revenue.

Lower fuel consumption

The lower weight combined with the increased payload equals lower fuel consumption per hauled tonne.

Modular construction

The Metso Truck Body is developed from years of on-site experience in the toughest conditions, and is highly resistant to wear and impact.

Our Truck Body lining consists of a modular system of separate rubber elements made of different polymer compounds. This allows added strengthening of the impact zones and quick and easy change-out of the independent rubber elements, compared to steel-lined truck boxes where you need to exchange the whole the steel lining through time-consuming heavy welding or air-arcing.

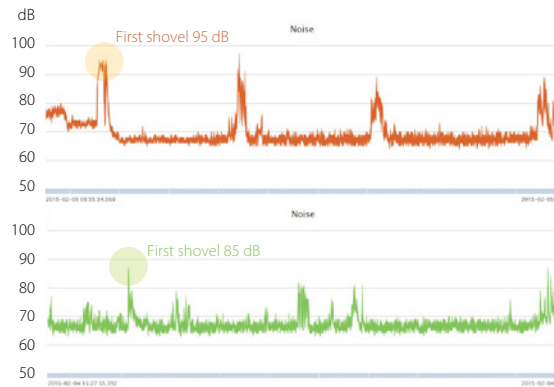


Rubber lasts up to
300%
longer than steel



Improved working environment

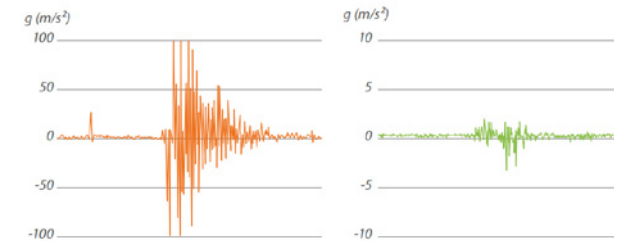
Optimizing working conditions can make a big difference in the well-being and safety of your drivers. The Metso Truck Body cuts the noise in half and reduces vibrations by an amazing 97%.



Sound level measured in the driver's cabin of an ordinary steel-lined truck (on top) showing a value of 95 dB when the first shovel hits the truck box. In a Metso Truck Body (bottom) the measured level when the first shovel hits the truck box is significantly lower: 85 dB. It's also evident that the overall level is lower in the Metso Truck Body.

50% less noise

Managing noise pollution is more important than ever, both for the health and safety of your employees and to satisfy regional legislative demands. The Metso Truck Body absorbs impact better than steel ever can and reduces noise by average 10-15 decibels — in effect, that's like cutting the noise by half or more. You can really feel and hear the difference when sitting in the operator cabin during loading and dumping.



Vibrations measured in the tray bottom during loading in a truck body lined with steel (left) compared to a Metso Truck Body (right). The result shows 97% less vibrations in the Metso Truck body. Please note the different scales required to illustrate the difference of the measurements.

97% less vibrations

When comparing a steel-lined truck body to a Metso Truck Body, measurements show that up to 97% of the energy from the impact during loading is absorbed in the rubber-lined truck body. Consequently, the vibrations dissipate before reaching other parts of the truck structure, including the operator cabin.

Case: Terrafame, Sotkamo Mine, Finland

Significant noise reduction

Background

The Terrafame multi-metal mine has been among the first mines in the world to test the Metso Outotec Truck Body. The abrasive ore mined means that wear protection is high on the agenda in every part of the process as well as the need to increase payload and improve driver comfort.

Solution

The Metso Outotec Truck Body was installed on their oldest haul truck, a Hitachi EH3500, in December 2018.

Results

- 9 tonnes more payload
- Improve hauling efficiency
- Significant reduction in noise & vibration levels
- Reduced CO₂ emissions

"The capacity and the durability of the body match Metso's promises. Higher payload and driver comfort are both top priorities for us. The feedback from the drivers has been very positive. Despite the higher, 325-tonne total load, the elevated rear flange keeps the boulders onboard."

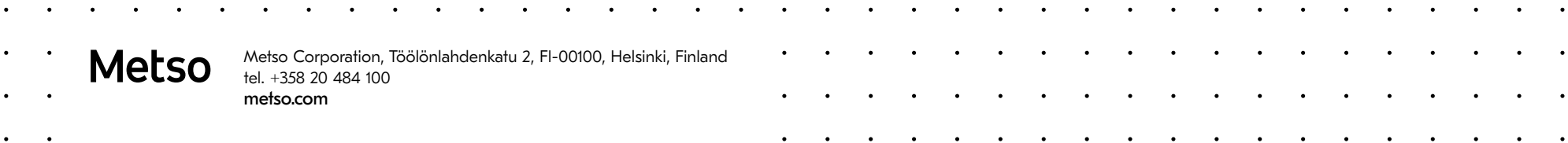
Esa-Tapani Leinonen, Head of Mining Department at Terrafame Sotkamo Mine

"The new rubber-lined truck body has indeed cut noise significantly. I would definitely like to see a rubber-lined body installed on the truck number 10 that I usually drive."

Kristiina Karjalainen, Haul Truck Driver at Terrafame Sotkamo Mine



Metso is a frontrunner in providing sustainable technologies, end-to-end solutions and services for the aggregates, minerals processing and metals refining industries globally. By helping our customers increase their productivity, improve their energy and water efficiency and environmental performance with our process and product expertise, we are the **partner for positive change**.



Metso

Metso Corporation, Töölölahdenkatu 2, FI-00100, Helsinki, Finland
tel. +358 20 484 100
metso.com