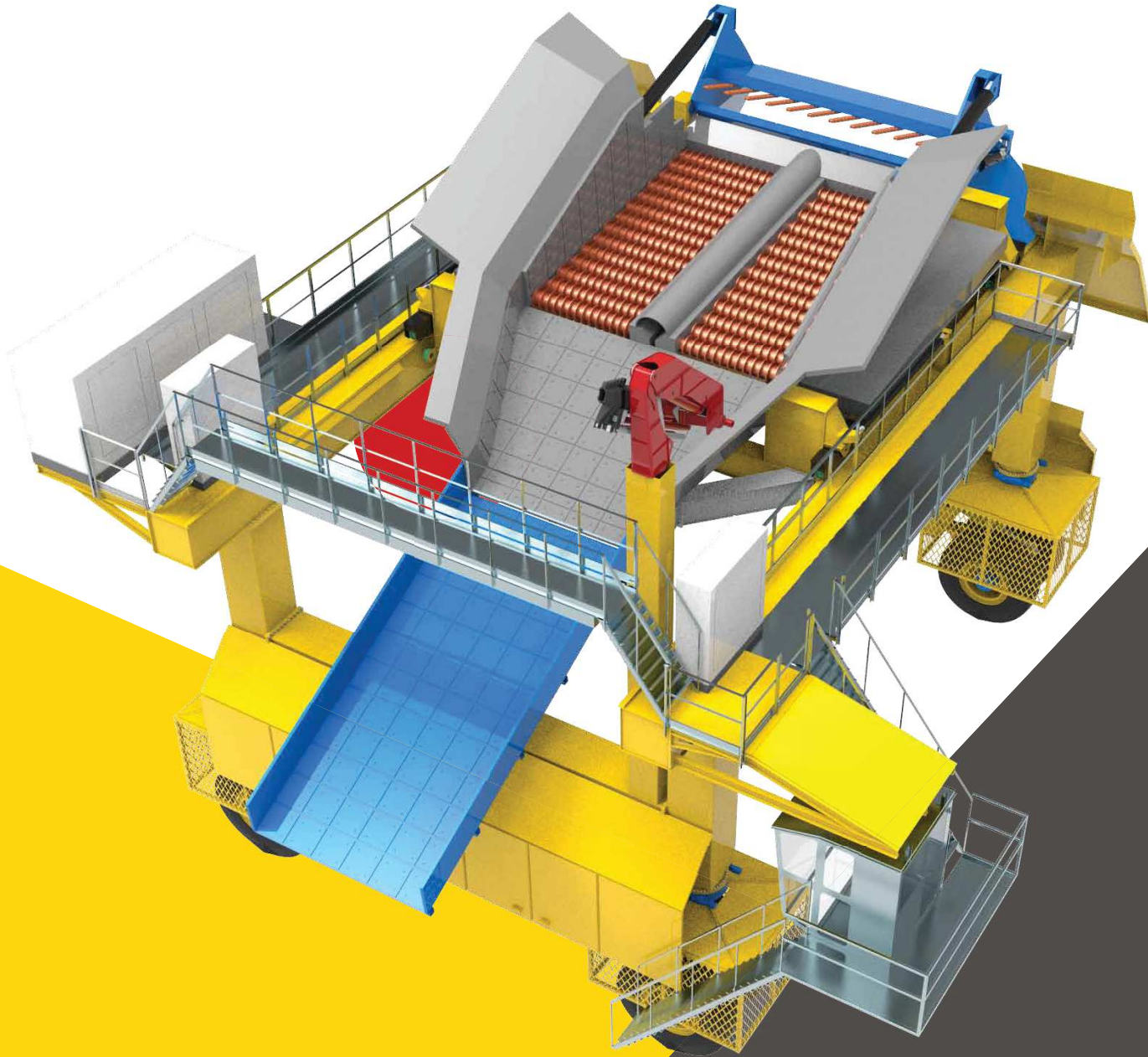




MOS
MOBILE SCREENER

H3 MOBILE ROLLER SCREEN SYSTEM



MOS

MOS is an independent Italian company founded with the aim of developing a new generation of mining machines. We have a long tradition as designers and manufacturers of mobile gantry cranes and material handling systems.

After 40 years in the heavy transportation market and hundreds of machines delivered, we are still able to grant innovative solutions and create efficient and reliable machines that are custom made. Most of our employees are engineers and we focus our work on the material handling in opencast mines.

MOS activity is based on a new innovative patent that assures a more efficient hauling system and higher production screening process.

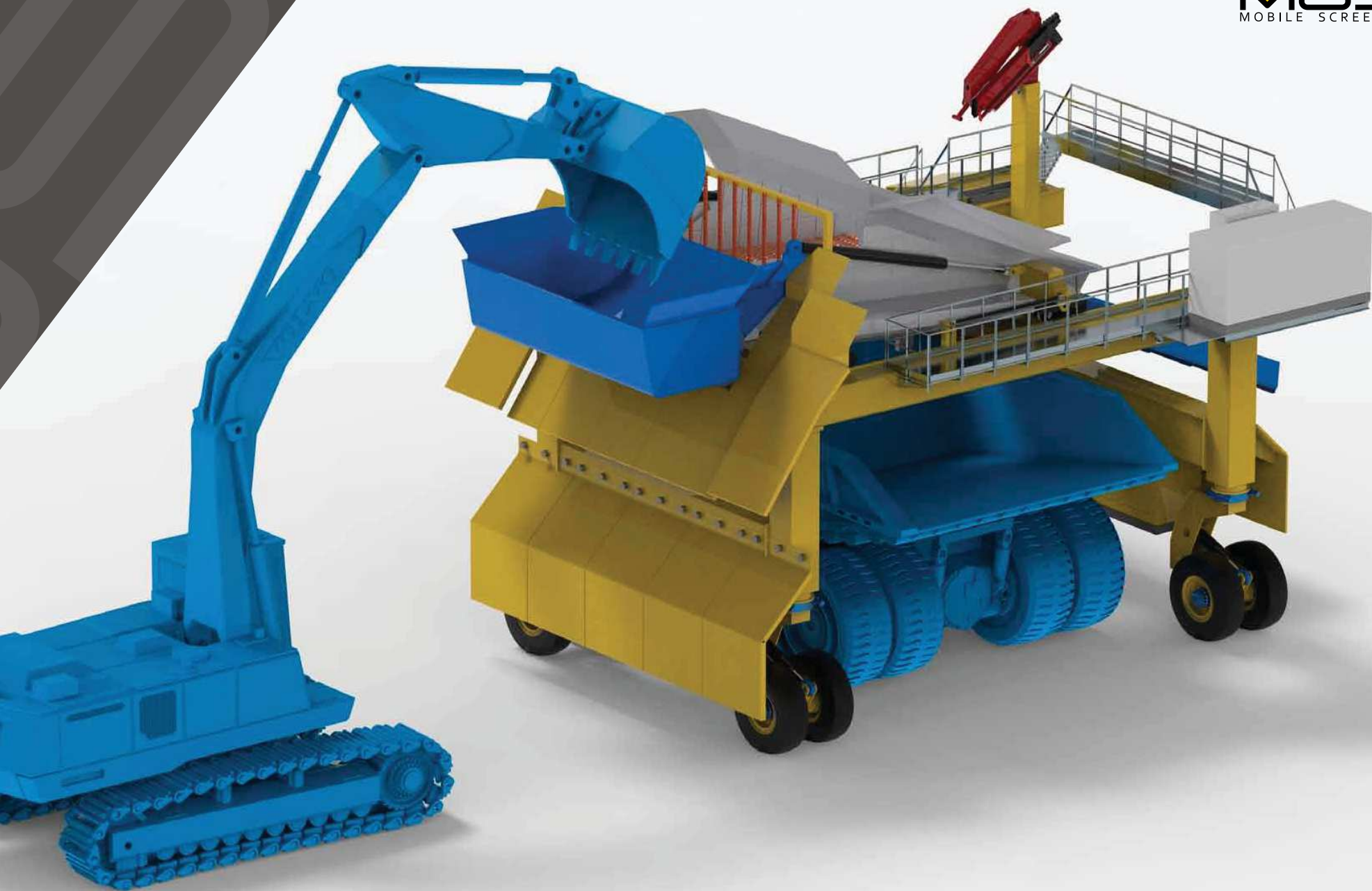
MOS H3 SERIES: 3000 TON/HOUR

When it comes to sizing and loading the ore material onto the extraction point of the open pit mines, the MOS H₃ Mobile Roller Screen System is particularly impressive thanks to its exceptional performance.

Equipped with an efficient roller screen, the MOS H₃ series ensures mobility (3 km/h), high productivity (3000 ton/h) and efficiency in a rugged machine even in difficult working conditions.

Designed and patented by MOS, this screening and loading technology is the ideal choice for cutting mining processing costs and offers a flexible range of applications in the open pit mines. The intuitive nature of the H₃ series makes it easy to use while also ensuring quick and trouble free positioning at the extraction point.





SIZING AND LOADING THE ORE MATERIAL DIRECTLY IN THE MINING EXTRACTION LOCATION

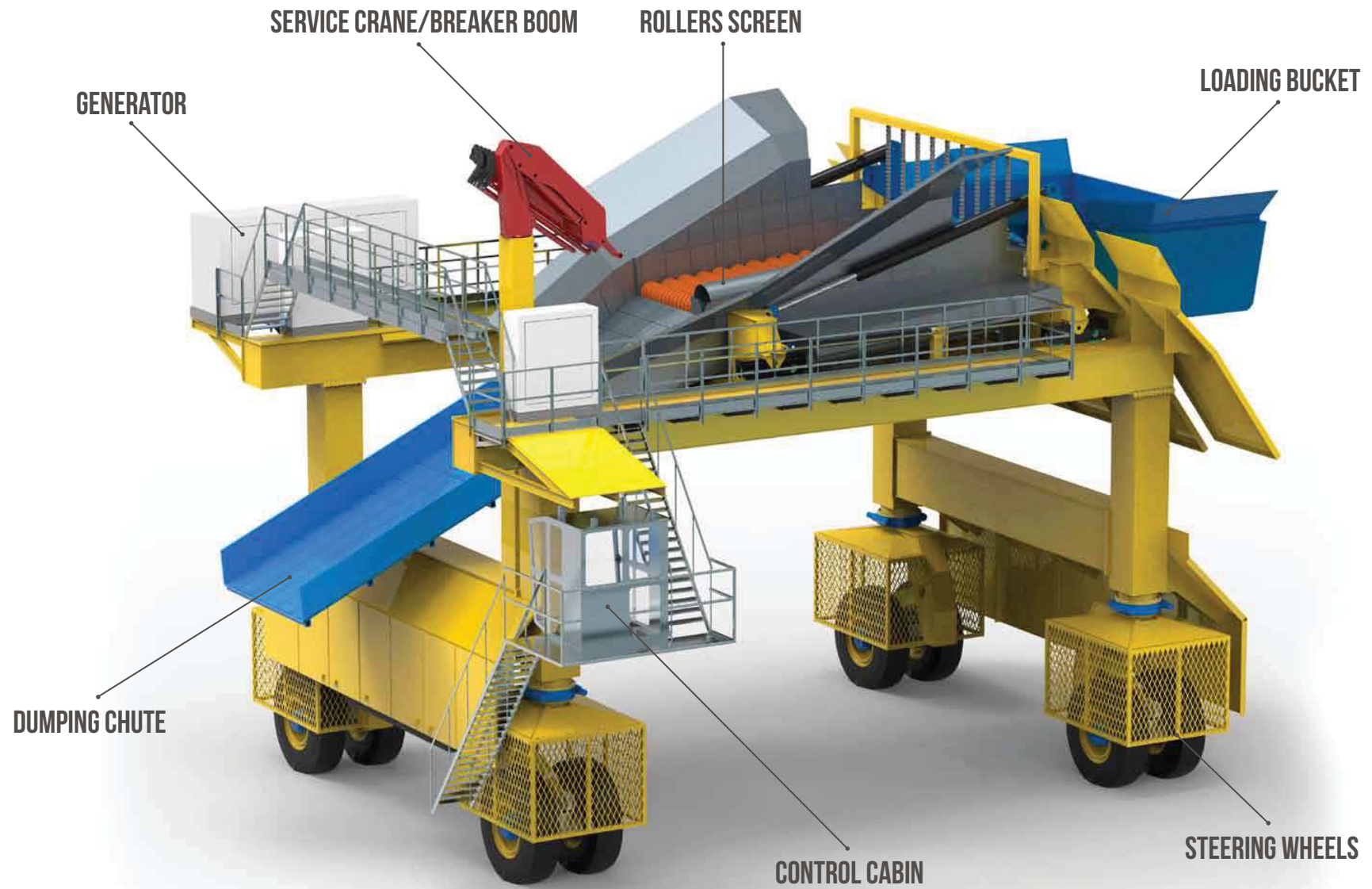
EXTRACTION ► LOADING ORE MATERIAL ON MOS H3 ► SCREENING ONSITE ► LOADING AUTOMATICALLY ON DUMP TRUCK

A NEW STANDARD

With its unique features, the innovative MOS H3 series overcomes the disadvantages of the conventional mining material hauling and processing systems.

Bringing the roller screen to the extraction location, waste and oversized stones will not be loaded on trucks anymore. MOS H3 series is able to screen 3000 tons of ore material per hour and load it on the trucks. We set up a new standard in the market but other benefits are:

- HIGH PRODUCTION RATE, SIZING THE ORE MATERIAL AT THE EXTRACTION LOCATION AND LOADING AUTOMATICALLY ON TRUCKS
- TOTAL MOBILITY ON EVERY SURFACE AND UP TO 8% SLOPE TO STAY CLOSE TO THE EXTRACTION EQUIPMENT
- HIGH EFFICIENCY TO LOAD ON TRUCKS ONLY NEAT MATERIAL, REMOVING STONES AND IMPURITIES
- CUTTING MINING PROCESSING COSTS, REDUCING THE NUMBER OF NECESSARY TRUCKS, THEIR MAINTENANCE AND MOST OF THE STANDARD EQUIPMENT USED NOWADAYS



MINE OF SOLUTIONS

HIGH LOADING CAPACITY

Compared to what currently exists in the market of mining in-pit screening equipment, MOS H3 series has a higher production rate, reaching 3000 metric ton per hour and combining a high capacity mobile screen to a wheel loader/shovel, but still maintaining the mobility of a standard dump truck.

The machine also isolates the hard unwanted impurities like oversized rocks and loads the dump truck with only valuable fine mineral ore.

The use of rolling shafts with constant gap between discs and the use of scraper tools beneath each roller to remove caked material ensure a high rate and quick scalping operation.

The productivity is related to the width of the internal roller shafts (see product details) and the capacity of the used loading machines available on the extraction site.





EXTRAORDINARY MOBILITY

Being a mobile gantry, the MOS H3 series can travel within the mine pit and from site to site with extraordinary agility and easy maneuverability. The equipment is designed to follow the mining loading activity front and travelling on the hauling roads.

It can also travel on asphalt, concrete or uneven and inclined roads up to 8% maximum slope.

The MOS H3 series can steer at 90°, carousel, front or rear side in order to stay as close as possible to the loading equipment or to the loading platform area, minimizing the movements of the extraction equipment.



HAULING ONLY PURE MATERIAL

The MOS H3 series screens the ore material onsite, ensuring the load of only pure material on the trucks.

Where waste and oversized stones are up to 40% of the extracted material (like phosphate ore), the MOS H3 series can increase significantly the efficiency and the productivity of the whole mine.

Instead of transporting waste or unprocessed ore to the screening site, it is now possible to haul more uniform and clean material, increasing the daily production rate using the same fleet of dump trucks. Or it is possible to reduce the number of mobilized dump truck to fit the daily production rate so all the fleet CAPEX and OPEX expenses (equipment price, drivers, fuel, tires, grease, amortization, insurance, etc.) will be significantly reduced.

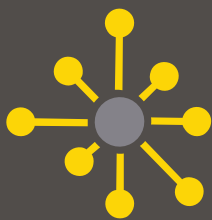


CUTTING MORE PROCESSING COSTS

With a MOS H₃ series working in-pit, the customer will not need to install and operate other equipment at the feeding hopper installation.

Rock breaker booms, rollers screen and rock crusher are no longer necessary.

- ▶ **For existing conventional feeding hopper:** the installed rock breaker boom, roller screen and rock crusher can be switched off. The dumped material is sent directly from the apron feeder to the installed vibrating screen. All the OPEX expenses for these machines (electrical energy, operators, maintenance and so on) will be economized. It is even possible to sell these machines as second hand equipment for other mining activities. Since the oversized waste material is already removed in-pit, the OPEX for the waste disposal system will be cut. Moreover the feeding hopper will produce less noise and less vibrations, extending its operating life.
- ▶ **For installation of a new feeding hopper:** with the MOS H₃ series working in-pit, the related CAPEX expenses will be optimized and significantly reduced. Rock breaker booms, rollers screen and rock crusher are no longer necessary. Also the reduction of the waste size material results in less disposal equipment.



VERSATILITY & CUSTOMIZABLE FEATURES

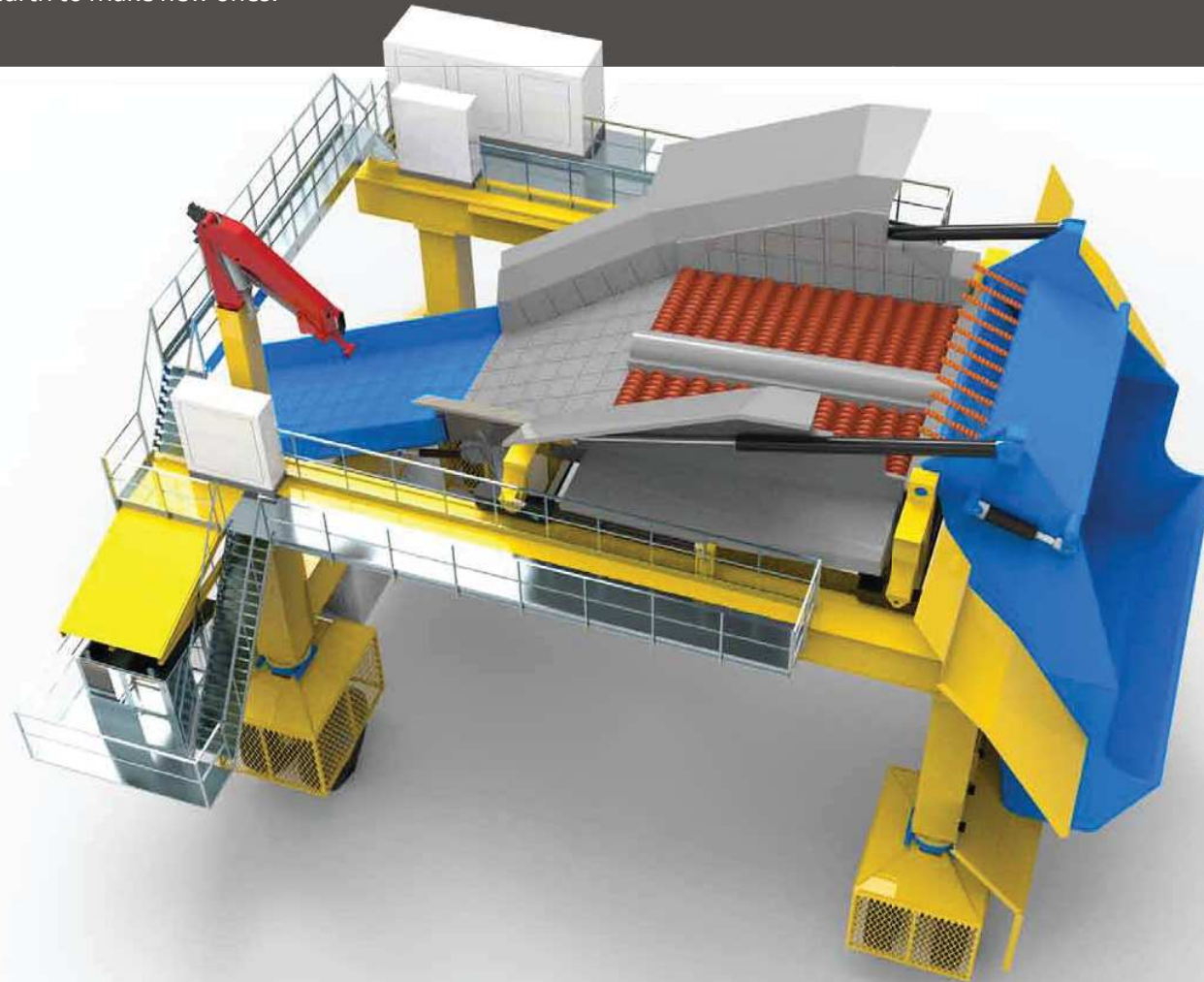
The MOS H₃ series can be manufactured as per the customer needs. It also can be designed to fit within the customer's existing loading/hauling equipment.

With different gaps between roller shafts configurations, several mining material can be processed granting high productivity. MOS H₃ series can be used either for scaling out the fines from the loaded material (by placing the dump truck under the roller screen) or for providing feed of the oversized material (by placing the dump truck on the dumping chute). It can be used to accomplish loading and scalping for industries such as phosphates, bauxite, coal, granite, salt, gypsum, limestone, coke, quartz, salt, aggregates and other mineral processing applications.



ENVIRONMENTALLY FRIENDLY

Manufacturing and maintaining all mining equipment has a relevant carbon footprint. Improving the productivity of the hauling process leads to less dump trucks roaming the mine and a reduced annual fuel consumption. To reduce our carbon footprint, we design each generation of our products to be as energy efficient as possible. When products can be used longer, fewer resources need to be extracted from the earth to make new ones.



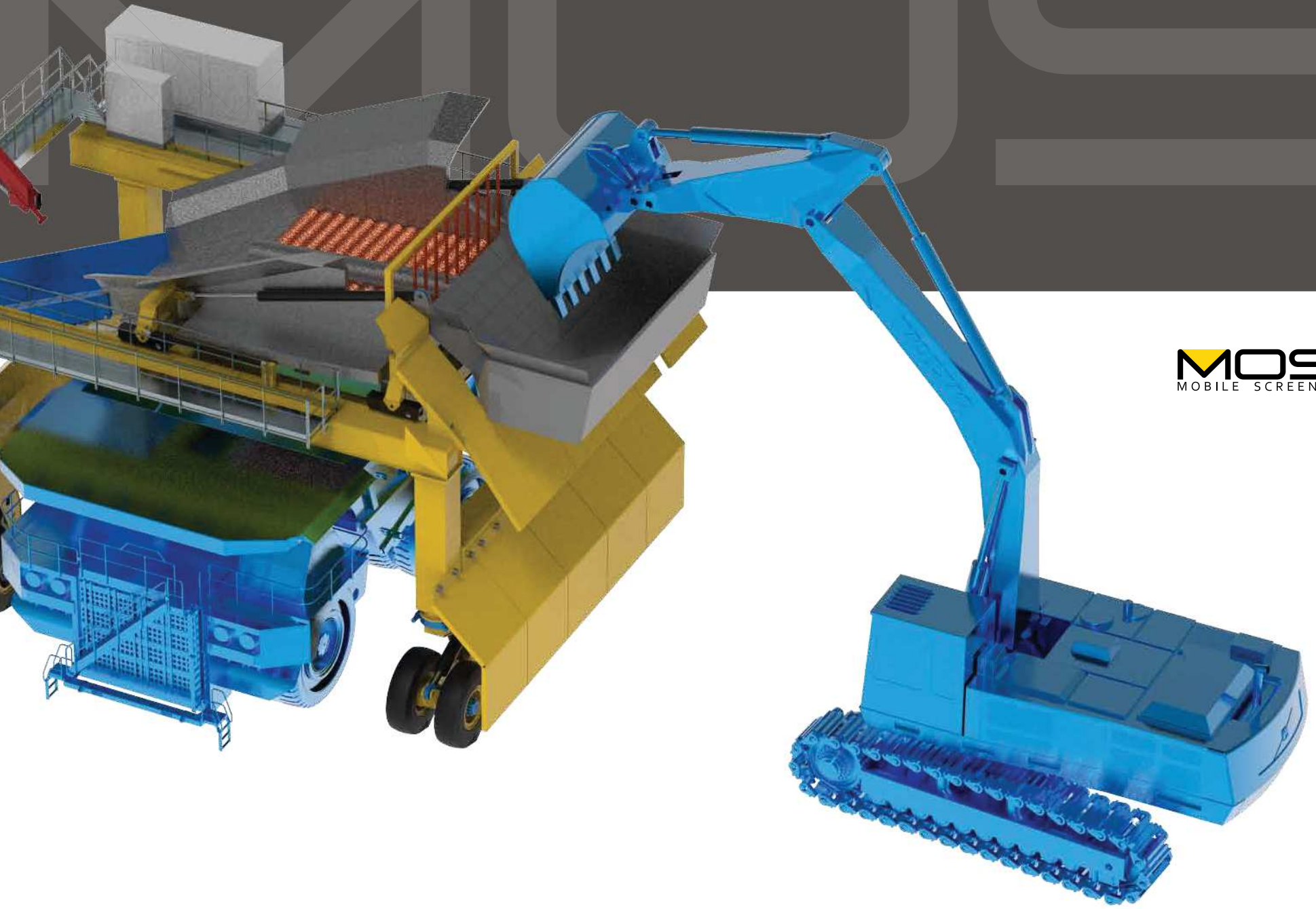
MOBILE ROLLER SCREEN - 3000 TON/H

THE MOS H₃ MOBILE ROLLER SCREEN SERIES IS ENGINEERED FOR HIGH PRODUCTION MINING AND DEVELOPED FOR MOVING THE ORE MATERIAL AT LOW COST PER TON AND SAVING ENERGY

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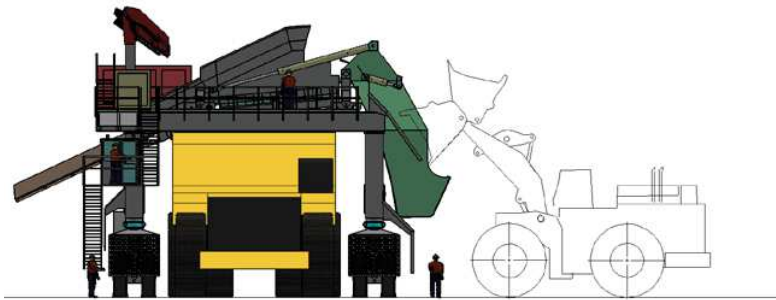




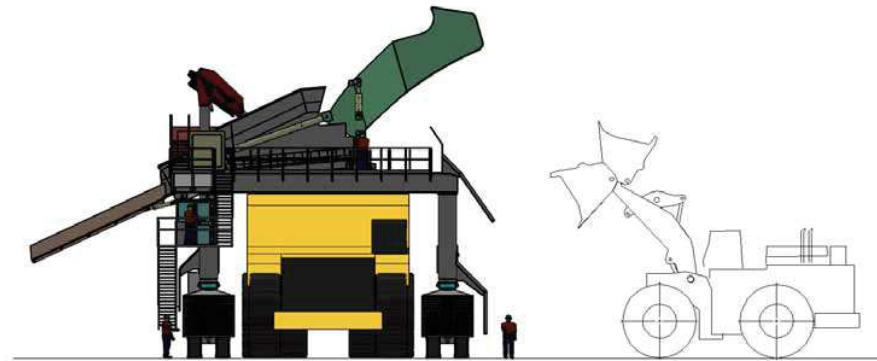
MOS
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H3 SERIES LOADING_BUCKET

THE H3 FAMILY: H3/L FOR LOADER
H3/S FOR SHOVEL



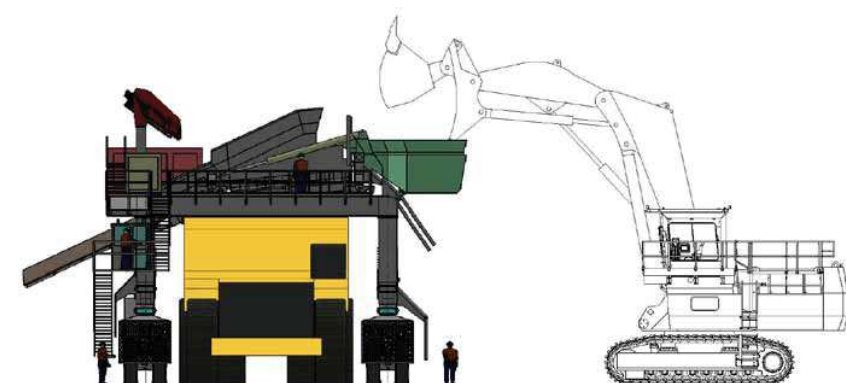
MOS H3/L for wheel loader



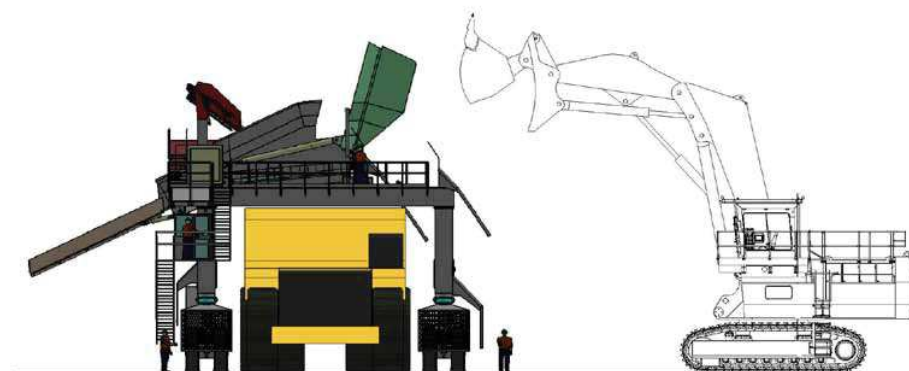
MOS H3/L with rotated bucket

H3/L: BUCKET FOR WHEEL LOADER

Capacity	25-34 m ³	Flow ore control	hydraulically assisted
Rated payload	30-34 ton	Rotating cylinders	2 units
Bucket width	6.400 mm	Cylinders stroke	2.700 mm
Min. bucket height	5.200 mm	Max working pressure	260 Bar
Complete cycle time	24 seconds	Weight	10.000 kg



MOS H₃/S for shovel



MOS H₃/S for shovel with rotated bucket

H3/S: BUCKET FOR SHOVEL

Capacity	32.5 m ³
Rated payload	36 ton
Bucket width	5.600 mm (can be adjusted)
Min. bucket height	8.200 mm
Complete cycle time	14 seconds

Rotating cylinders	2 units
Cylinders stroke	1.700 mm
Max working pressure	260 Bar
Weight	7.000 kg

FOR BOTH CONFIGURATION

Floor sheet	12 mm
Front sheet	10 mm

Side sheet	10 mm
Canopy sheet	5 mm