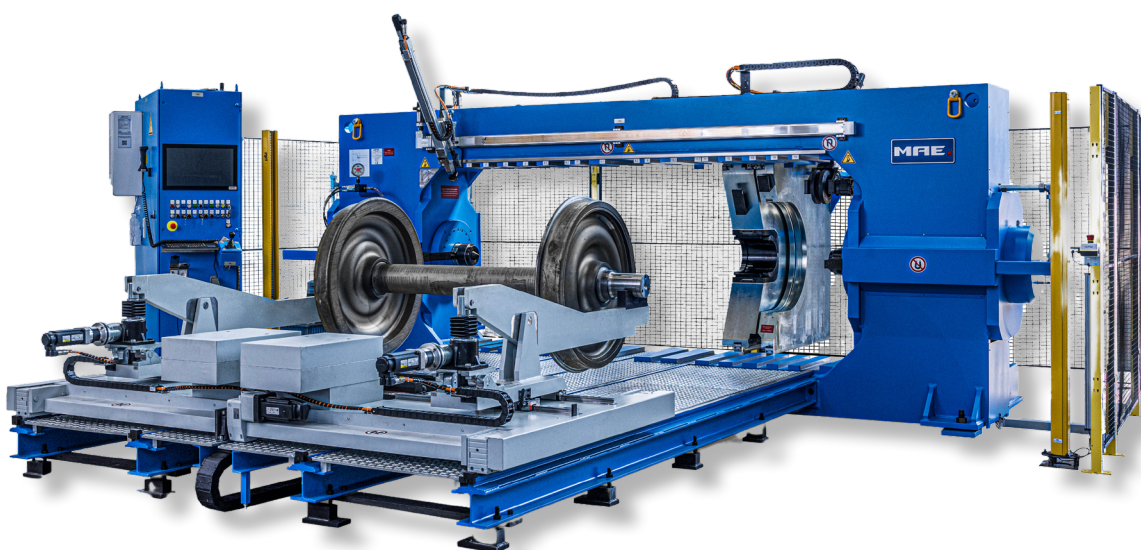


# MAE. Group

## Efficiency and Sustainability in Rail Transport: MAE. Group's Double-Cylinder Wheelset Presses



The world of rail transport faces enormous challenges and opportunities. Particularly in high-speed and urban rail transport, the demands for reliability, efficiency and sustainability have significantly increased. A crucial factor in this area is the maintenance and servicing of wheelsets.

This is where MAE. Group's innovative double-cylinder wheelset press comes into play, setting new standards with its patented hydraulic concept.

### The Necessity of Pressing Wheelsets

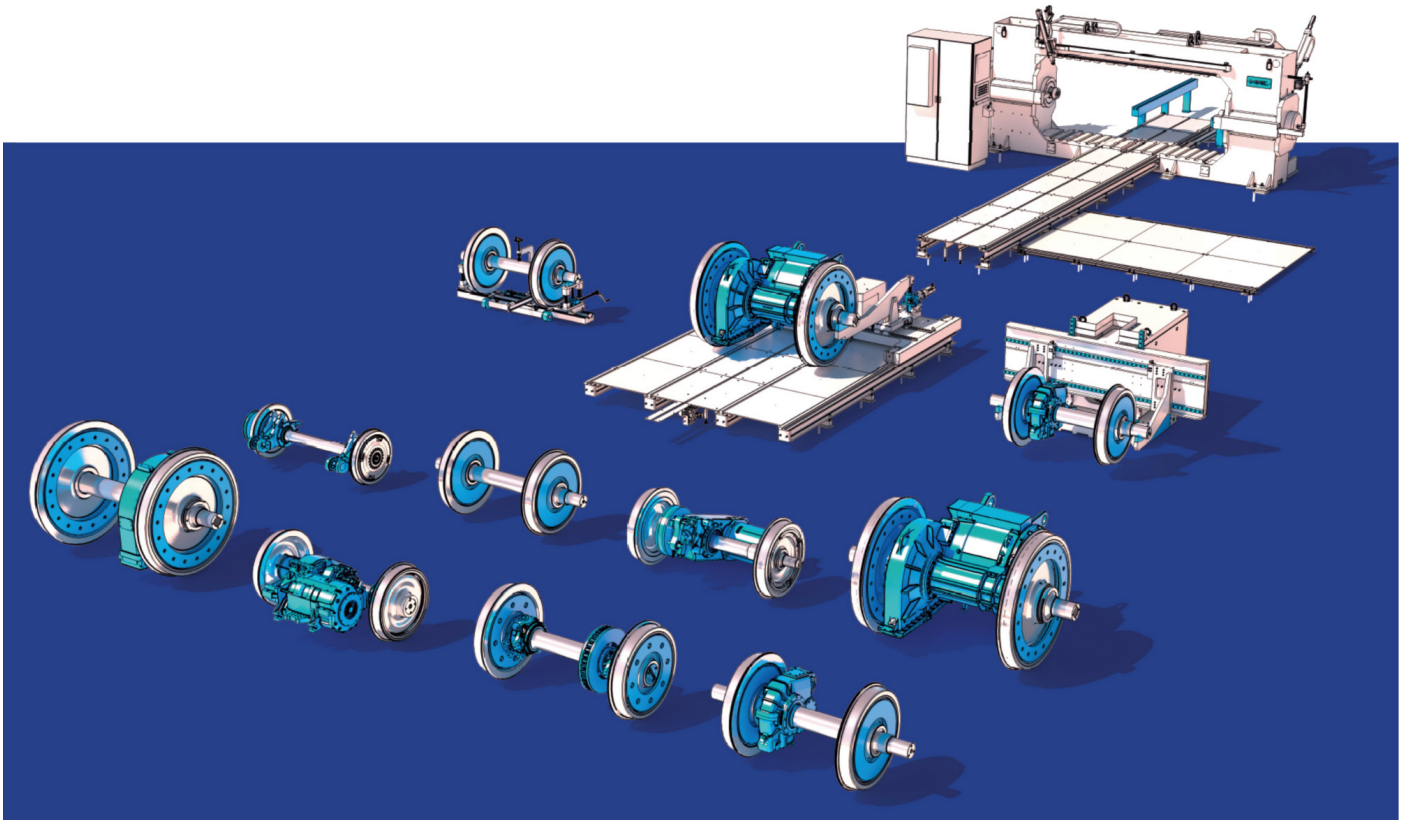
Wheelsets are the heart of every rail vehicle, whether it is a high-speed train or a subway. They not only carry the entire weight of the vehicle but are also exposed

to extreme stresses. Precise and safe pressing of the wheelsets is therefore essential to ensure smooth and safe operation.

In high-speed rail transport, where trains travel at speeds exceeding 300km/h, wheelsets must be manufactured and maintained with the utmost precision. Any irregularity can lead to significant safety risks. Similarly, in urban rail transport, where trains frequently stop and accelerate, the wheelsets are subject to enormous stresses. Regular maintenance and servicing are crucial here to avoid failures and extend the lifespan of the vehicles.

### Advantages of MAE. Group's Double-Cylinder Wheelset Press

MAE. Group has developed a solution with its double-cylinder wheelset press that offers numerous



advantages for users, particularly transport companies and maintenance businesses. Here are some of the outstanding benefits in detail:

### Energy Efficiency through Patented Hydraulic Concept

MAE. Group's wheelset presses are particularly energy-efficient due to their unique hydraulic concept, which only consumes energy when the cylinders of the press are moving. The patented system significantly reduces energy consumption and needs less oil – the oil tank's size is only one third compared to similar machines and the oil lifetime is up to three times longer, which not only lowers operating costs but also makes a substantial contribution to sustainability. One single pressing operation requires less energy than boiling water for a cup of tea. As a result, transport companies can better achieve their environmental goals and improve their carbon footprint.

### High Precision and Reliability

Thanks to the double-cylinder technology, the wheelsets can be pressed with the highest precision in a single clamping without having the need to turn the wheelset as it is needed when using single-cylinder

presses. This ensures an optimal fit and minimises the risk of malfunctions. For all trains, this means increased safety, higher reliability and reduced downtime.

### Reduced Maintenance Costs

The precise processing of the wheelsets leads to a longer lifespan of the components. This means less frequent maintenance intervals and thus reduced maintenance costs, which is further supported by the press's ability to completely measure the assembled wheelset after pressing. The investment in a double-cylinder wheelset press from MAE. Group quickly pays off through savings in servicing as well as through savings for no longer needed external measuring machines. Further savings can be materialised by the fact that MAE. wheelset presses do not require a separate foundation as they can simply be placed on the floor.

### Improved Workplace Safety

MAE. Group places great emphasis on operator safety. The double-cylinder wheelset press is equipped with numerous safety features that minimise the risk of accidents. Fully automated processes and ergonomic design features significantly improve workplace safety.

## Flexibility and Adaptability

The wheelset presses are versatile and can be adapted to different types and sizes of wheelsets. This makes them particularly attractive for transport companies with a wide variety of vehicle types in their fleet. The flexibility of the machine allows for quick responses to different requirements, making operations more efficient.

## Enhanced Operational Efficiency

The advanced design of the double-cylinder wheelset press allows for faster cycle times and higher throughput. This means that more wheelsets can be processed in a shorter amount of time, increasing the overall operational efficiency of maintenance facilities. This efficiency gain translates into better resource utilisation and higher productivity.

## Intuitive Control Systems

The MAE Group's wheelset presses are equipped with state-of-the-art control systems that are user-friendly and intuitive. This reduces the learning curve for operators and ensures that the press can be operated with minimal training. The advanced controls also provide real-time monitoring and diagnostics, further enhancing the maintenance and troubleshooting processes.

## Focus on Sustainability

MAE Group is committed to making rail transport not only more efficient but also more sustainable. The patented hydraulic concept of the double-cylinder

wheelset press plays a central role in this. By reducing energy consumption and extending the lifespan of the wheelsets, resource consumption is minimised. This is an important step towards reducing the environmental impact of rail transport and contributing to climate protection.

## Conclusion

MAE Group's double-cylinder wheelset presses are a prime example of how innovative technology can make rail transport more efficient and sustainable. They offer numerous advantages for transport companies, from energy efficiency and high precision to reduced maintenance costs and improved workplace safety. By optimising maintenance and extending the lifespan of wheelsets, they make a crucial contribution to making rail transport future-proof. At a time when sustainability and efficiency are more important than ever, MAE Group's solutions are a vital building block for the mobility of tomorrow.

If you would like to learn more about MAE's wheelset presses and their advantageous technology you will have the opportunity to meet the team of MAE Group at this year's InnoTrans in Berlin, from 24–27 September 2024. Stop by and visit the MAE booth in **Hall 23, Number 750**.

For more information visit [www.mae-group.com/en/](http://www.mae-group.com/en/)

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