DAVI

MAV

3 Roll



Mission

01

We work hard to be the partner of choice whenever companies need to roll Metal Plates and Sections. We strive to be by the customers' side for any rolling work they have to carry on.

02

This goal has deep roots in the past, with the rolling challenges we overcame in our history since 1966, studying the specific needs of customers and finding the best way to go on together.

03

This goal is very clear in the present: our daily task is to support our current customers and to invest in research and development for being at the forefront of rolling innovation.

04

This goal sets clear projects for the future: our financial strength and our solid structure grant the continuity of our business and the support we will be able to give in terms of both service and new solutions.

DAVI

Davi is since more than a decade the world largest manufacturer of Plate Rolls, Angle Rolls, High Productivity Lines and Customized Rolling Machines in terms of sales volume, employees, range, production, assets and rating.
In fact, Davi has been awarded 'Prime Company' and given maximum commercial reliability by Dun & Bradstreet and holds all the ISO Certifications (Quality ISO 9001, Environmental ISO 14001, Safety ISO 45001).

Since 1966, Davi has been committed in Research & Development with the goal of finding the best Rolling Solutions for the global market.

Davi headquarters are located in Italy, where all Plate and Angle Rolls are manufactured and then delivered all around the world, while the Sales & Service network is comprised of two branches in the United States and China and more than a hundred dealers in the five continents.

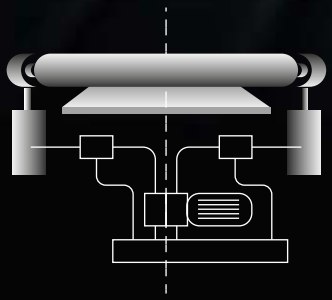


MAV - 3 Roll Variable Axis Plate Rolling Machine

The operating principle is conceptually similar to that of a press-brake, with the top roll pressing the plate between the two side rolls, but the MAV is much more flexible and accurate

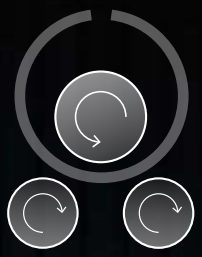
Best Rolls Parallelism

thanks to patented Servo-Tronic© system



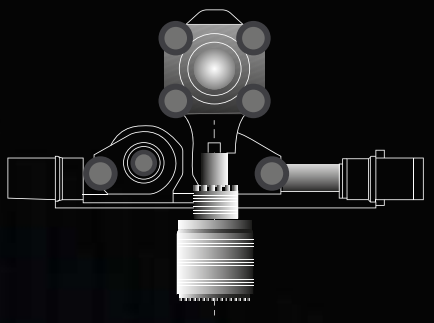
Great Operability and Maintainability

thanks to Multi-gearboxes configuration



Shortest Flat End and Safer Operations

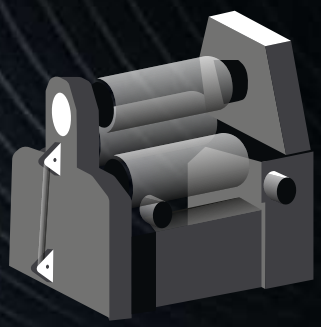
thanks to ideal Torque Transmission and Rolls Synchronization



Maximum Flexibility

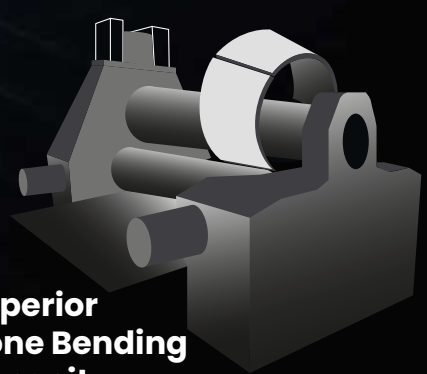
thanks to 3 Motorized Rolls with Flat Gearboxes





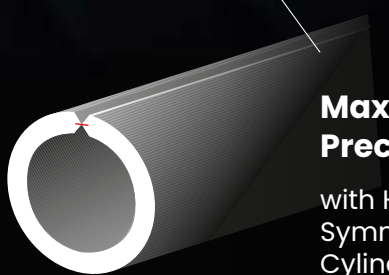
Superior Re-rolling Performance

thanks to Sturdy and Compact Frame



Superior Cone Bending Capacity

thanks to 3 Tilting Rolls



Maximum Precision

with Hydraulic Symmetry and Side Cylinders design

Shortest Flat End and Safer Operations

Thanks to ideal torque transmission and rolls synchronization, the MAV holds as much grip as possible on the plate.

Particularly on a 3-roll machine, it is of paramount importance to hold as much grip as possible on the plate. Featuring motorized top and side rolls as standard, Davi all-rolls-drive technology guarantees the optimum torque transmission to the plate and distribution between hydraulic motors.

Thanks to this innovative system, the machine doesn't need to have any mechanical brake installed. Then, the speed of the rolls is automatically and hydraulically synchronized, and this is why you can get the best result on the final product: in fact, the plate can always be positioned at the tangent point in order to achieve the shortest flat end. During the pre-bending phase, all these features prevent from any possible slipping or falling of the plate.

Last but not least, the 3 motorized rolls allow the top and pinching side roll to almost overlap while pre-bending, granting the highest accuracy.



Superior Re-rolling Performance

The sturdy and compact frame constitutes, effectively, the back-bone of the machine. All stresses during plate forming must be withstood by this critical component and, eventually, transmitted to the foundations.

Davi machines feature the largest and most compact frame on the market, which allows to improve the rigidity of connection to the ground as well as machine stability, increase the available side rolls stroke (hence increasing the maximum interaxis distance), construct a much shallower pit, due to reinforcement beams installed between frames (intra-frame design) rather than base platform.





Superior Cone Bending Capacity

Thanks to three fully tilting rolls the MAV will make the cone bending operation as accurate and shift as possible. Davi pendular shaft-mounted gearboxes configuration allows for stress-free tilting of the rolls up to 100 mm every 3 meters rolls length.

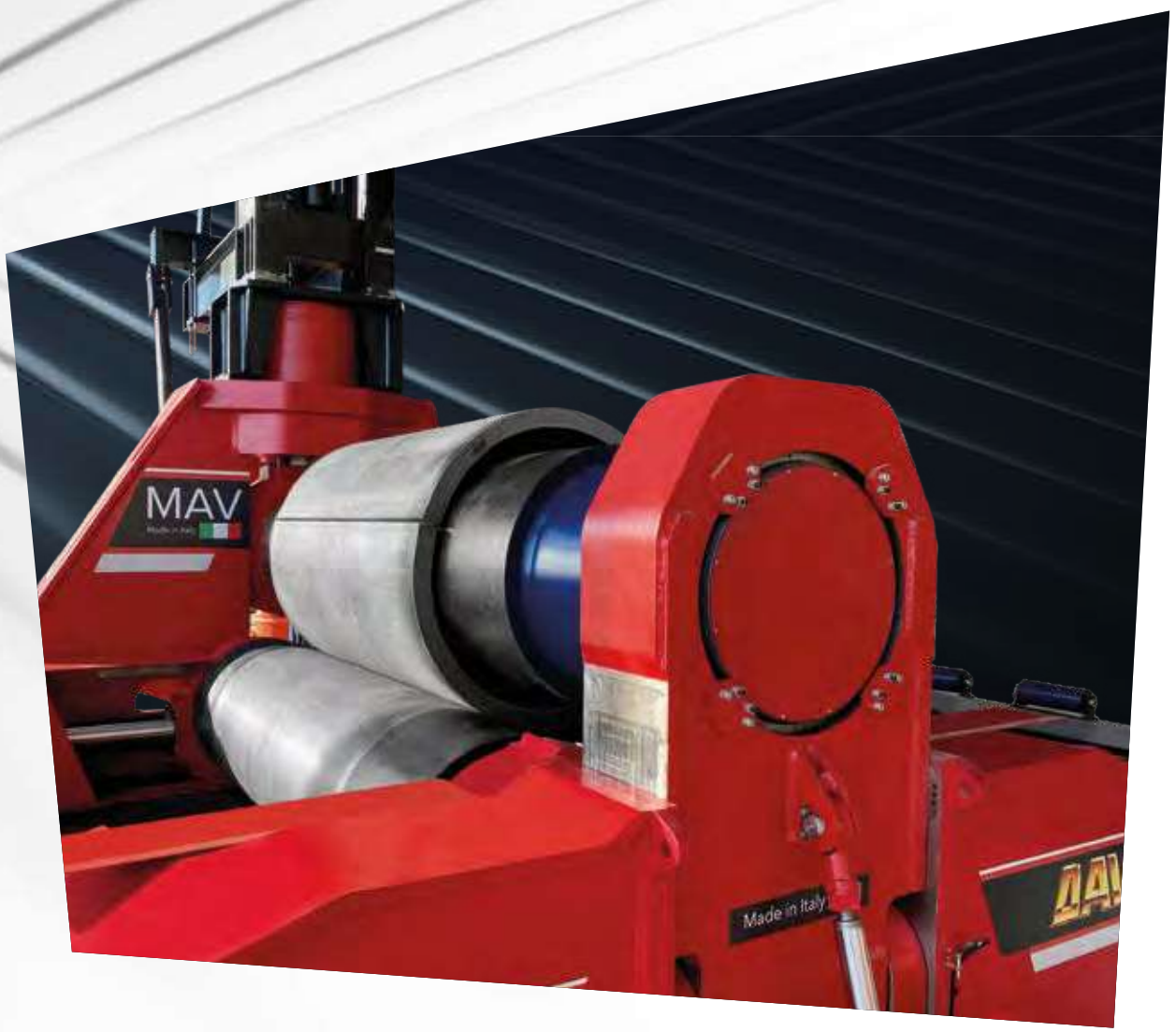
Davi MAV guarantees unparallel performance in continuous cones rolling.

Maximum Precision

Unlike other solutions on the market, Davi cylinder cans are mounted inside the frame and kept in position by leaning on thick frame plates rather than multiple bolts. It is hence not necessary to limit the force available to the cylinders, thus achieving the maximum performance rolling tight cans.

The full hydraulic symmetry is a Davi exclusive feature that, unlike other solutions available on the Market, does not require a continuous actuation of the electronically-controlled rolls parallelism system to the benefit of the rolling accuracy as well as equipment durability.

In fact, by exerting the very same force (cylinders with the same displacement) in the very same way (“push-push” or “pull-pull”) at the two ends of the top-roll, Davi MAV guarantees a perfectly even load distribution along the forming plate to achieve the best output in every condition.

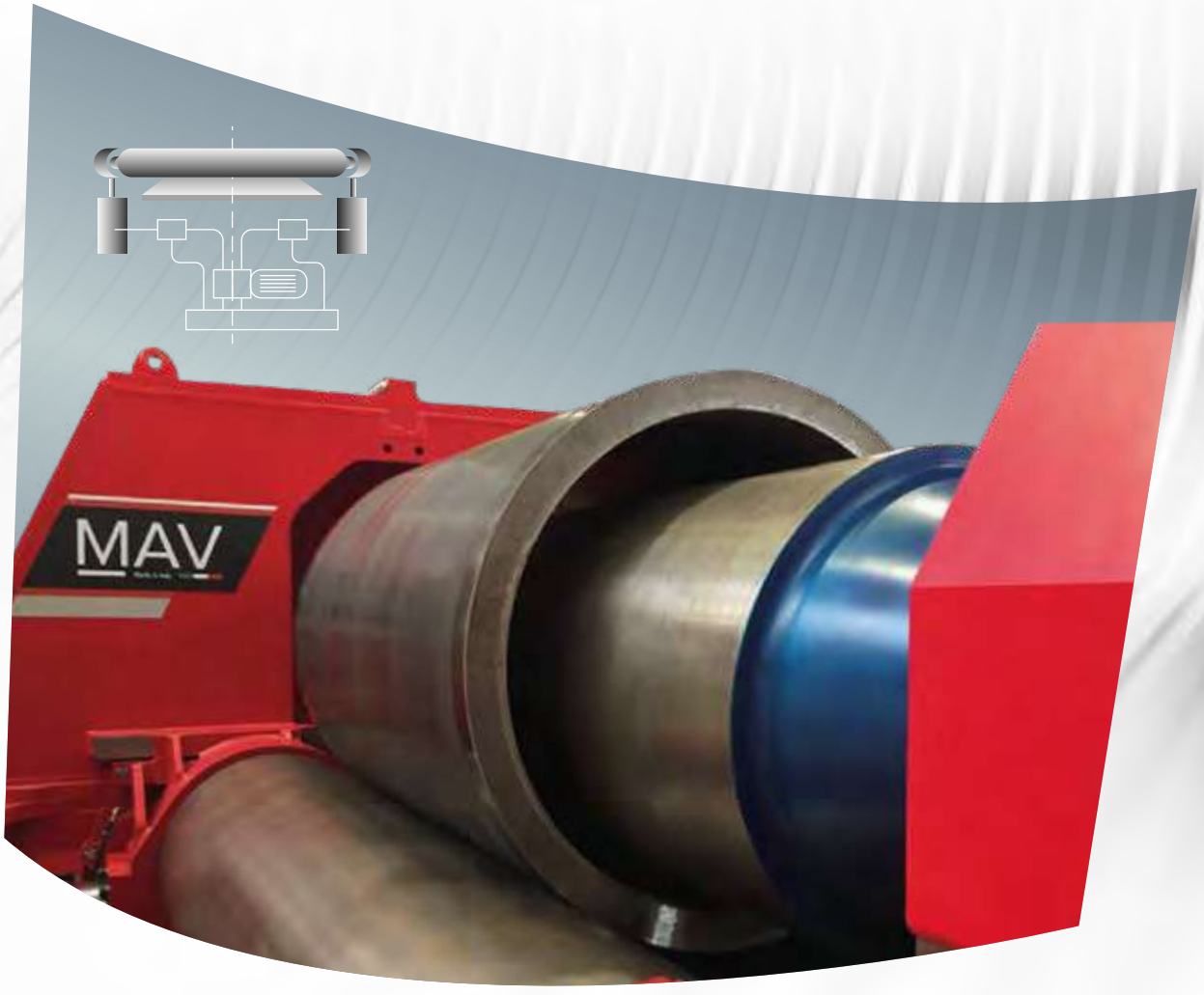


Best Rolls Parallelism

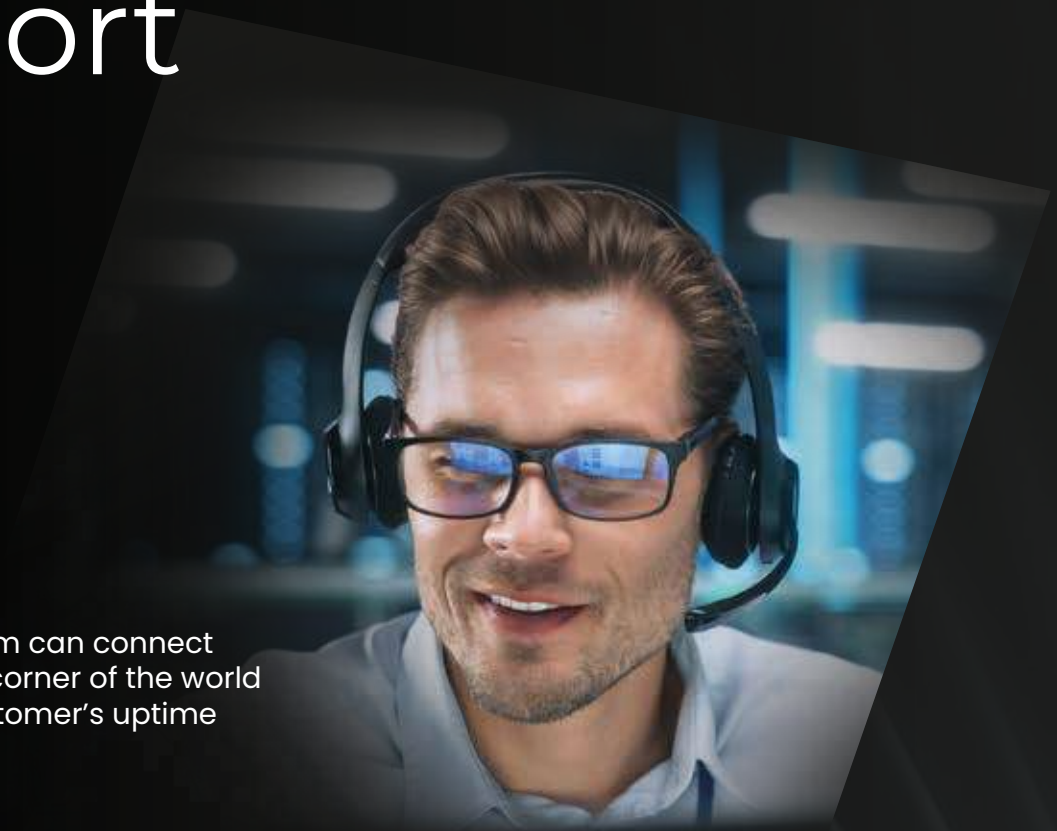
The rolls movement is actuated by hydraulic cylinders installed at the two ends of the machine, thanks to patended Servo-tronic© system.

The patented Servo-Tronic© system keeps the machine's rolls parallel at all times thanks to its dual, independent but integrated, parallelism control system.
In fact, the oil feeding each roll cylinder is mechanically kept at the very same pressure and mass flow thanks to dedicated pumping groups and circuits supported by electro-valves in charge of fine-tuning only. This way, even in case of electronic failure, the rolls parallelism is hydraulically and mechanically maintained and the machine can keep operating with excellent results.

The Servo-Tronic© allows for maximum accuracy of the rolls positioning, limited reliance on electronics with improved uptime in case of its failure and best geometrical tolerances on the workpiece.
The MAV also grants the best operability and maintainability thanks to a multi-gearboxes configuration.



Customer support



Remote Support

Davi Specialized Team can connect remotely with every corner of the world and improve the customer's uptime



On Site

On site intervention can be performed on both Davi Machines and other brands: from Installation to Commissioning, from Training to Preventive Maintenance

Production in numbers

100

Plate and Angle Rolls always available and ready for delivery

300

Plate and Angle Rolls produced every year

10,000

More than 10,000 Plate and Angle Rolls installed worldwide



Research & Development

Engineering Everyday Challenges

Davi Sales and Technical Teams are always ready to exchange ideas with Customers, in order to get a full comprehension of the Rolling Challenge they have to face. Davi R&D wants more, and strives to offer innovative solutions to problems customers didn't even think of!





Total Control of the Production System

In order to obtain Complete Management on the whole Manufacturing Process, for many years Davi has created a solid partnership with Suppliers, High-level Companies with production sites in the most skilled areas of Italy.

Throughout the entire flow, Davi is committed to ensure an Integrated Quality Control with the aim of ensuring the highest quality standards on the Market.

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QUALITY SYSTEM CERTIFICATION DNV ISO 9001

ENVIRONMENTAL SYSTEM CERTIFICATION DNV ISO 14001

SAFETY SYSTEM CERTIFICATION DNV ISO 45001

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