

Tradition and innovation

INVIMEC was founded in 1963 in Vicenza. The business started with the production of machine tools and special machines for the mechanics, plastics, textile, automotive etc. industries.

As the years went on, INVIMEC consolidated its relations with the various branches of mechanics and began to specialise in the production of rolling and forming machines for the small and medium productions.

In 1996 the company moved to new, larger, custom-designed headquarters, at the border of Vicenza, near the Trade Fair pavilions.

Starting from 2000, the company has developed a new concept of rolling mills for wire and strip industry: the multi-stand independent motion rolling mills (SINGLE-DRIVE) for wires, strips, plates and flattened wires.

Nowadays INVIMEC stands alone on the market in offering the broadest and most diversified range of solutions, from the simplest and most economical to the most technologically advanced machines for rolling wire, strips, profiles, tubes and pipes as well as rolls for rolling, forming, profiling and cutting shears.

Installations are present in Italy as well as all continents, thanks to a lean and dynamic company structure, focused on listening to customer's requests to be solved with the best technologies available.





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PLATE STRIP FLAT rolling mills



QR 65 REVERSIBLE

4 - High rolling mills

SPECIAL APPLICATIONS TECHNOLOGY

QR 65 REVERSIBLE

The machine

4-High finishing rolling mill suitable for cold rolling of plates and strips, specific for reducing material to extremely small thicknesses.

Very strong and sturdy design to ensure maximum precision and consistency of the final thickness.

The operation can be in short length as well as in coils using the reversible mode.

Operating Principle

The configuration with 2 larger backup rolls avoids rolls deflection issues and allows the use of smaller work rolls.

This reduced work rolls diameter introduces some benefits:

- reduce the separating force during the reduction
- reduce the overall energy used for reducing material
- produce more consistent thickness output
- allows lower final output thickness

Applications

Typical materials that can be produced:

- gold, silver, precious metals lead
- special and exotic alloys
- copper
- brass

Specifications

The stand is built with the most advanced combination of materials and technology to reach the best result along with a compact design.

precious metals

brazing alloys

from 10 to 50 mm Plate width: 1.50 mm Max input: 0.05 mm Min output:

0.003 mm Tolerance: Work rolls: ø 65 x 140 mm Backup rolls: ø 160 x 140 mm

Rolls surface: polished, lapped, super-lapped, chromed, depending on request Rolls cooling: by means of rotating joints

Main motor: 7.5 kW Speed: up to 30 mt/min

Position Regulation

The vertical regulation is performed by means of electromechanical actuators, with brushless motors and drive, high-precision encoder.

It features a single motor and gearbox for each side of the roll, so any correction can be easily performed through the HMI in any moment.

Easy switchable working modes:

- automatic with repetitive reduction schedules
- semi-automatic
- manual working

Automatic material breakage detection during the rolling pass.



Quick rolls change

Options available

We offer several options to adapt the machine to each individual need:



Operating Principle

- several coilers solutions
- inline thickness measurement
- inline width measurement
- cleaning blocks for ingoing/outgoing
- lubrication of rolls by air/liquid
- advanced feed back options for roll positioning that provide tight output tolerances
- remote assistence by web

Rolling mill can have multiple different configurations that depends on material type, thickness and yield strengths.



Reversible Operation



Controls

All controls are available on the hanging control panel, consisting of a wide touch-screen display and multiple controls, to easily set-up all parameters before and during the rolling pass.

Single jog and manual comands available for all functions.

In the automatic mode, programs can be saved to store the complete sequence of rolling with all parameters as thickness, speed, coiler and uncoiler tension

Lubrication

Bearing lubrication is automatic and centralized with a unique circuit, pump and tank; oil is delivered to each one of the bearings individually with a proper timing. All bearings all sealed to prevent other lubricant and dirt to contaminate them











INVIMEC



DVERALL DIMENSIONS

Machine:

1500 x 1500 x 1900 (H) mm, weight 1850 kg

Cabinet:

800 x 500 x 1600 (H) mm. weight 250 kg



