PICOT
ROULEUSES DE TÔLES
ROLL BENDING MACHINES

Strategy, technology

2, 3, or 4 rolls ?

+ electric energy

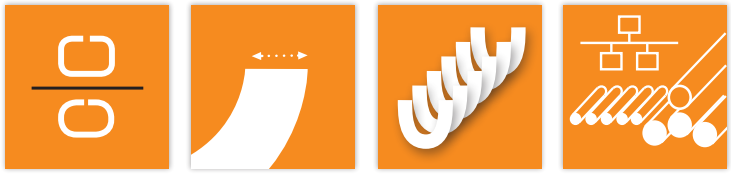
R2 = 2 rolls technology

Integrated process | Mass production high productivity | Small thickness | No flat end | Perforated sheet

R3 = 3 rolls technology

High performance pre bending | Large distance between rolls | Cones rolling - best class | Calibration after welding | Fragile material, no lamination | Small thickness

R4 = 4 rolls technology



Large radius variation | Big thickness | Big thickness series production | Integrated process

2, 3 or 4 rolls now 100% electric

100% electric | 80% energy saving | No noise | Minimum maintenance | No oil | High precision | Interchangeable top roll

PICOT R4 TECHNOLOGY

hardware

All rolls driven Picot Maximal Torque Management Solution

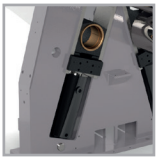
To ensure maximum power and versatility, each roll is driven by an independent Danfoss motor providing independent torque.

Note: *competition have either 1 or 2 rolls driven as standard only.*

Architecture design & Roll diameter

To ensure best behaviour against flexion and part profile deformation, we have 4 rolls within the same diameter range.

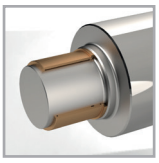
Note: *side rolls at competition have much smaller diameter -> reduced capacity*



Linear Guide for cylinders

Most efficient design ensuring 1:1 efficiency and no wear on all mechanism.

Note: *the planetary guide is a low cost solution used by competition. This means up to 30% power losses and increased wear.*



Bronze Bearing technology

This technology accepts an important axial load without risk a wear (lubrication). Designed for machine life time.
Note: *competition use roller bearings (cheaper but less resistant to axial load).*

Smart pinch management – Symmetrical rolling feature

The picher roll is controlled in pressure and in position. This ensure an adequate pinching process to minimise material deformation.

R3 feature

You can use your machine in a 3 rolls mode to get benefits of the 3 rolls symmetrical double pinch configuration: Small thickness – symmetrical roll for tight tolerance – part calibration – rolling of welded parts.

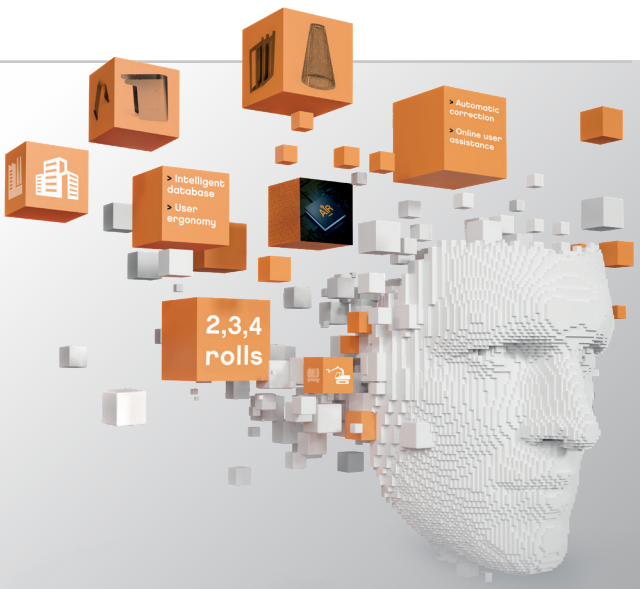
No civil engineering (pit) for roll diameters smaller than 350 mm

software

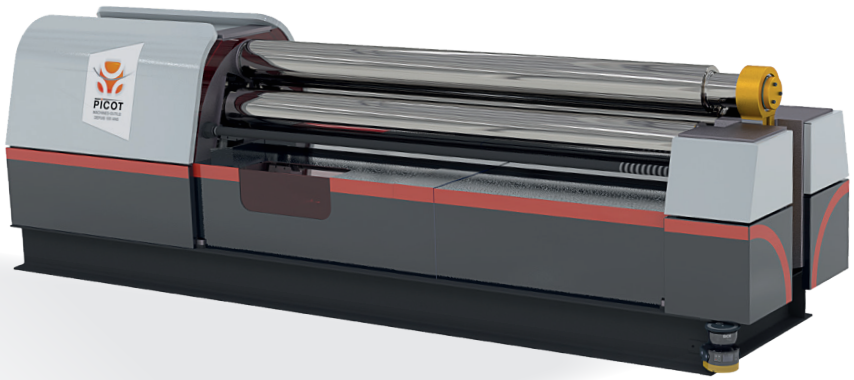
DISCOVER THE NEW FACE OF SHEET METAL ROLL BENDING TECHNOLOGY

> Missing experience or an operator in roll bending?

> Looking for more flexibility and performance in your roll bending application?



PICOT R3 TECHNOLOGY



hardware

All rolls driven Picot Maximal Torque Management Solution

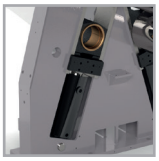
To ensure maximum power and versatility, each roll is driven by an independent motor providing independent torque.

Note: *competition is having either 1 or 2 rolls driven as standard only.*

Architecture design & Roll diameter

To ensure best behaviour against flexion and part profile deformation, our machines have 3 rolls with the same diameter or within the same range.

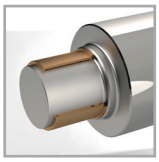
Note: *side rolls at competition have much smaller diameter.*



Linear Guide for cylinders

Most efficient design that ensure 1:1 efficiency and no wear on all mechanism.

Note: *the planetary guide is a low cost solution used by competition. This leads usually to 30% losses and increased wear.*



Bronze Bearing technology

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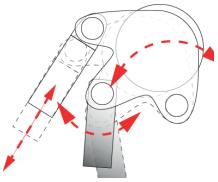
Note: *competition is using roller bearings (cheaper but less resistant to axial load).*

Cones rolling architecture – Symmetrical rolling feature

The design of the frame has been optimised to allow cone forming in a comfortable way.
The 3 roll symmetrical configuration is the most appropriate design for cone rolling.



The cheap and complex competitor's solution is one of the most common failure point due to several friction spots.

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software

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easyroll© FOLLOW THE GUIDE !

PICOT ENGINEERS have developed an innovative software, a real GPS dedicated to the rolling of sheet metal

PATENTED PREDICTIVE LEARNING TECHNOLOGY
Learning, predicting and optimising rolling performance

ARTIFICIAL INTELLIGENCE FOR ROLL BENDING MACHINES
Improve and capitalize on production experience

REMOTE SUPPORT
For a manageable and controlled production

SMART MATERIAL DATABASE
All cards to better produce, with confidence

With its ergonomic and user-friendly HMI, easyroll® integrates more than 150 years of driving expertise and technological innovations into an intelligent, predictive, learning and customizable digital assistance software.

Materials, shapes, number of passes, roller speed... easyroll® puts its intelligent system and your specific data into perspective and integrates them in real time to help you succeed in each rolling under the best possible conditions. Easyroll® assists you in your choices, facilitates your calculations and improves your experience at every stage.

AIR : Artificial Intelligence For Rollbending machine
Learn, predict and optimize working performance

Easyroll® is equipped with an intelligent expert algorithm that helps the user and the machine to correct their errors, stabilizes program performance and transforms each personal experience into modelable and reproducible know-how. AIR goes further than a simple material correction update and allows a memorized personalization of your easyroll®, adapted to your needs (fine sheet metal work, tanks, aeronautical fuselage...).

Patented predictive learning Technology
Learn, predict and optimize working performance

The AIR algorithm and the intelligent material base of easyroll® are the two pillars of the technology developed and patented by AMB PICOT to anticipate rolling performance with unequalled reliability.
This technology increases the capabilities and scalability of the digital assistance provided to the user, in particular through the functions of simulation, programming assistance and cone setting, prediction of springback on 3-roll machines, etc.

Smart Material Database
All the cards for a better work, with complete peace of mind

The characteristics and thicknesses of the materials (steel, stainless steel...) as well as their typical advanced rolling behaviors are integrated in easyroll®. These data can be modified or enriched, during software updates or in a personalized way by the user.

Remote Support
For manageable and controlled production

easyroll® integrates and accompanies the practical and technological evolutions of the industry of the future. Innovation and continuous improvement are in its DNA.
- Proven and scalable plug and play system (MES connection...)
- Networked learning machines
- Advanced machine monitoring (self-diagnostics, personalized reports, etc.)
- Remote assistance in real environment via integrated camera
- Picot Academy: expert training, active user community

etc...