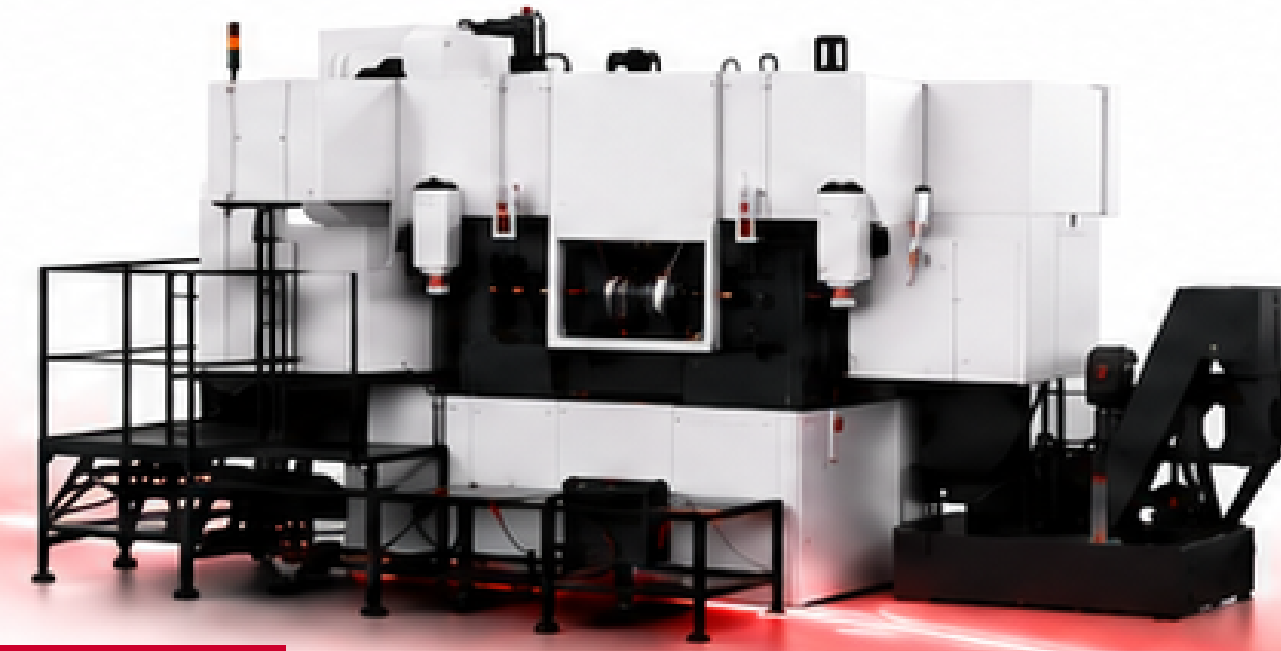


TRANSFER LINE



HIGH PRODUCTIVITY AND FLEXIBILITY - FROM BAR OR BLANK STOCK



ADVANCED
PERFORMANCE



MANUFACTURING
FLEXIBILITY



CONSISTENT
PRECISION



INTEGRATED
AUTOMATION



FROM BAR
OR BLANK STOCK



HIGH-PERFORMANCE TRANSFER SOLUTIONS
FOR CURRENT AND FUTURE INDUSTRY NEEDS.

Designed to produce more, with uncompromised quality, every time.

HIGH PRODUCTIVITY

+30%

FLEXIBILITY

100%

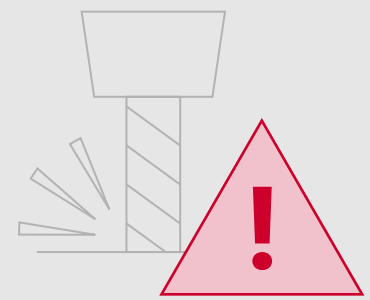
RELIABILITY

24/7

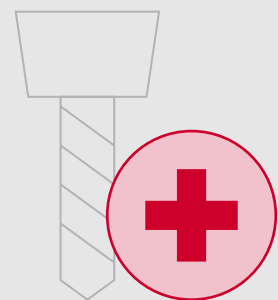
THE PRODUCTION CONTEXT HAS CHANGED

The technology must change accordingly and is driven to evolve at the same pace.

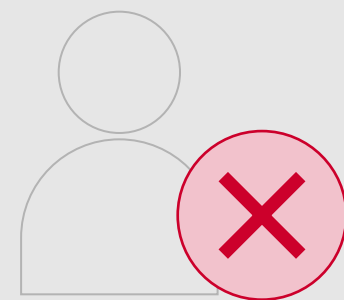
The challenges you face everyday:



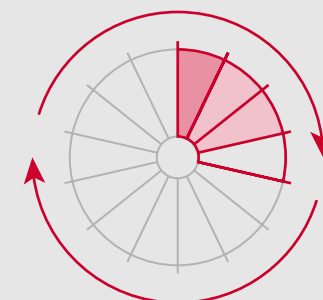
DIFFICULTY in
machining **CRITICAL**
MATERIALS



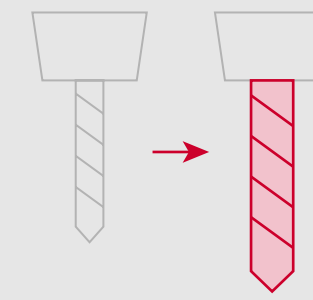
PROCESS COSTS
affected by **TOOL LIFE**



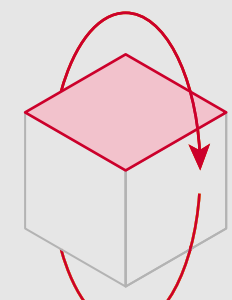
Production output
penalized by **LACK OF**
qualified **PERSONNEL**



PRODUCTIVITY
constrained by **CYCLE**
TIMES



EFFICIENCY,
maintenance and
changeovers



FLEXIBILITY

**EVERY MANUFACTURING CHALLENGE HAS ITS OWN CONFIGURATION.
THEY ALL SHARE THE SAME PLATFORM OF RELIABILITY.**

TRANSFER LINE SOLUTIONS



TR LINE

Maximum productivity and minimum cycle times



COMBYBAR LINE

Multi-spindle with non-rotating bar feed



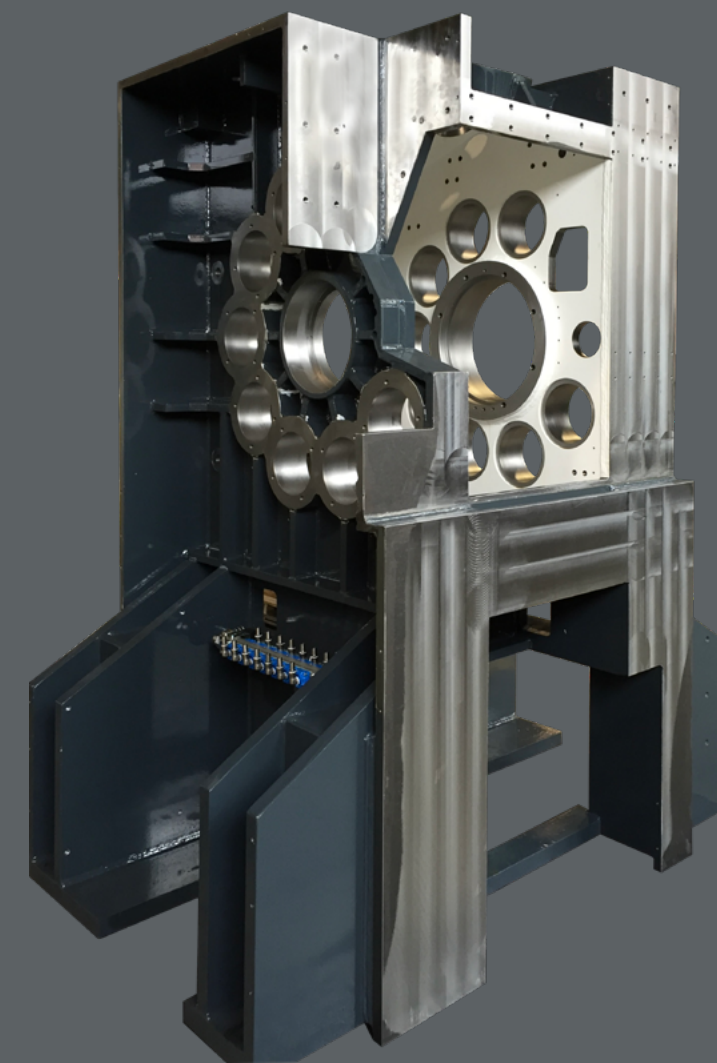
COMBYAX LINE

Multi-directional flexibility

EVERY MACHINE STARTS HERE: A SYSTEM THAT NEVER YIELDS

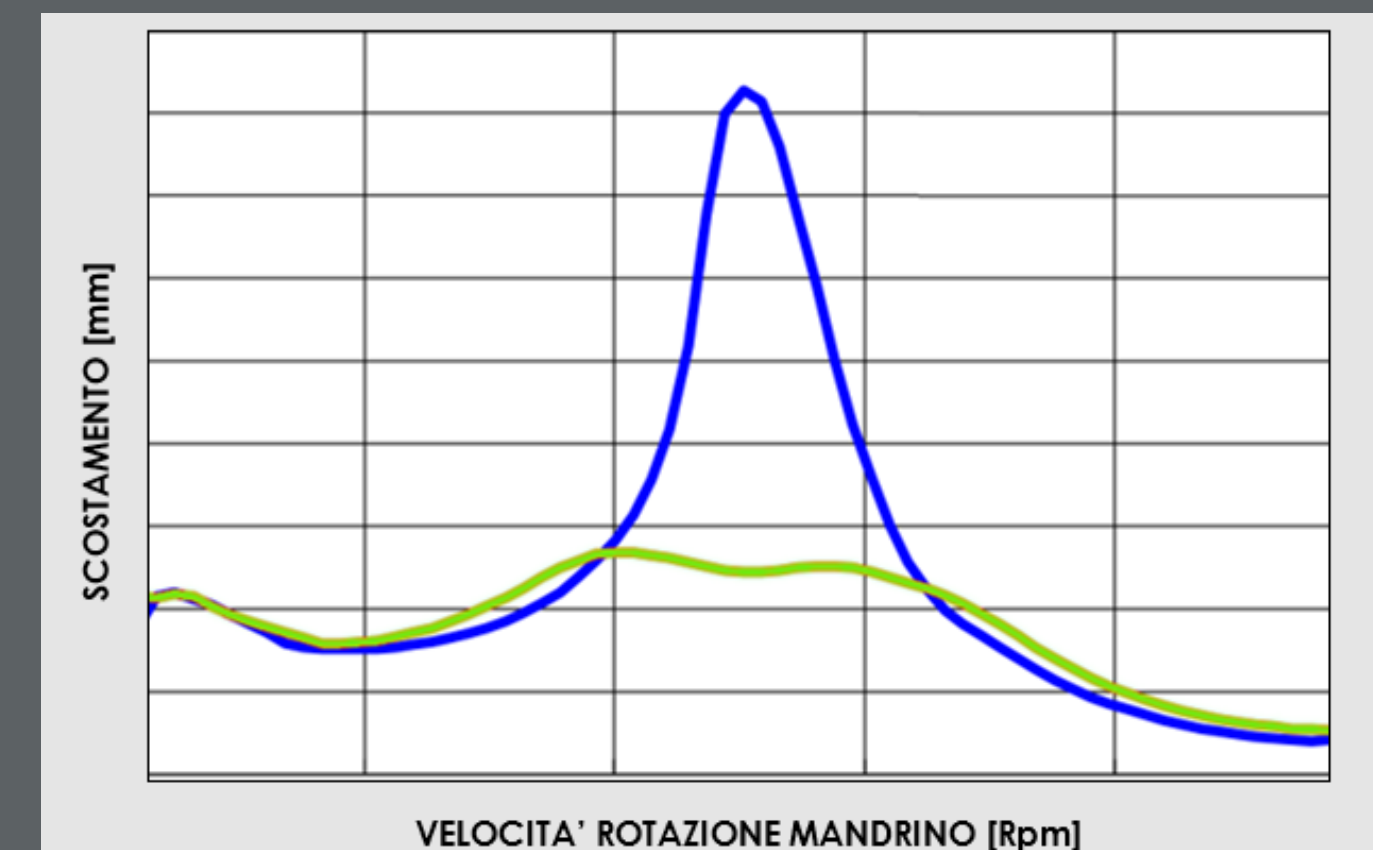
P_V_DUMPER:

THE FRAME: THE FOUNDATION OF PRECISION



01. **FEM Design**
Maximum rigidity, optimal vibration damping
02. **Wide chip-evacuation openings**
No foundation required, quick layout reconfiguration

INTEGRATED ANTI-VIBRATION SYSTEM



By combining these two factors, you achieve:
Higher machining precision
Longer tool life
Superior process quality

EFFICIENCY, PRECISION AND PERFORMANCE

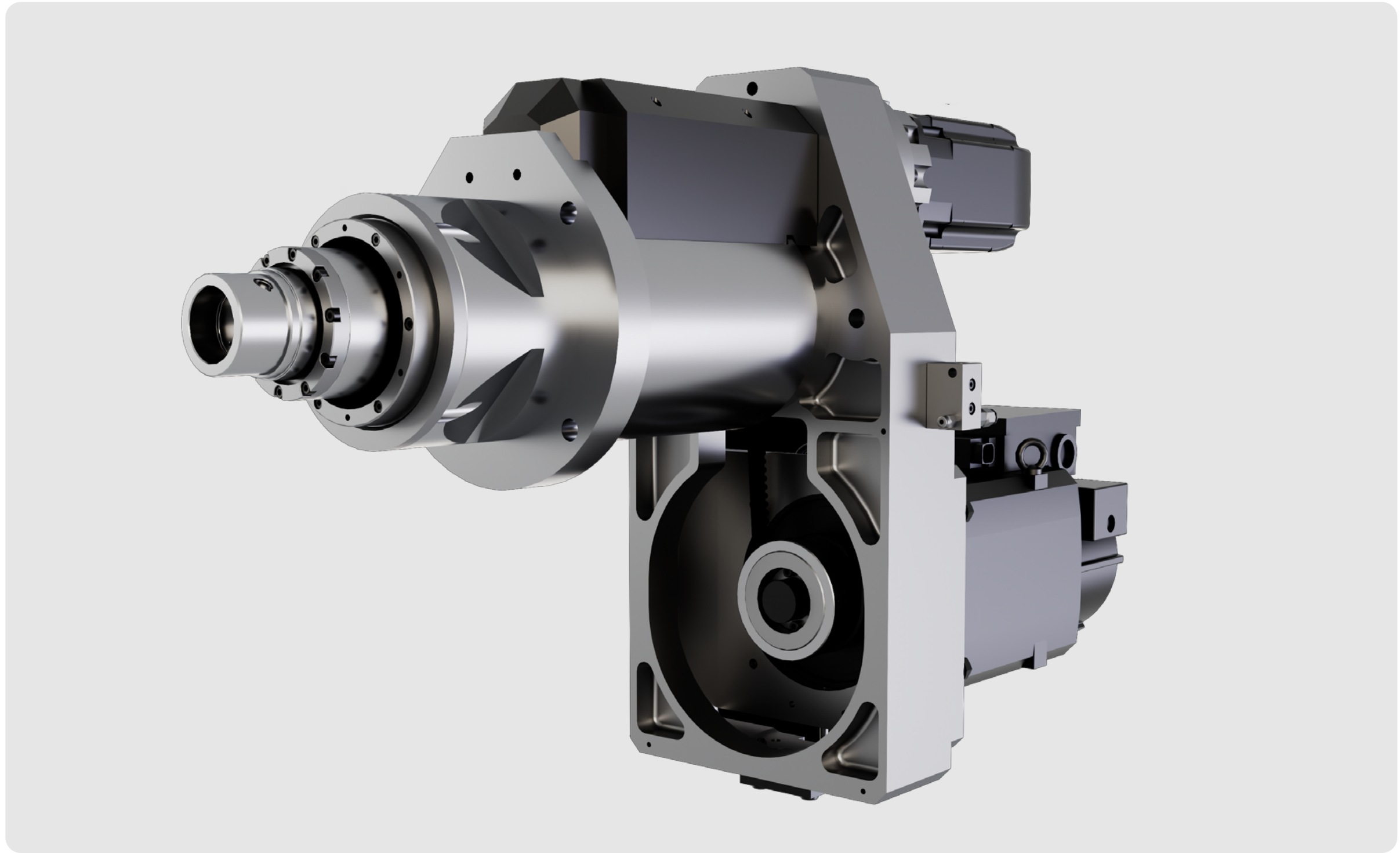
ZERO PLAY. ZERO VIBRATIONS. LONGER-LASTING TOOLS.

[▶ PLAY VIDEO](#)

The hydrostatic support removes any play between the body and the spindle sleeve:

- 01. **Maximum rigidity**
Cutting forces are absorbed without yielding
- 02. **Vibration dampening**
Superior surface finish, increased tool life
- 03. **Consistent performance over time**
Reduced changeover time for new batches

Parameter	Unit	Value
Spindle speed	rpm	10.000
Acceleration	g	2
Rapid speed	m/min	30



DIFFICULT MATERIALS, NO COMPROMISES

Critical materials



Working with materials like lead-free brass or long-chipping steels is more than a matter of parameters: it is a process challenge. PRT is Picchi's answer.

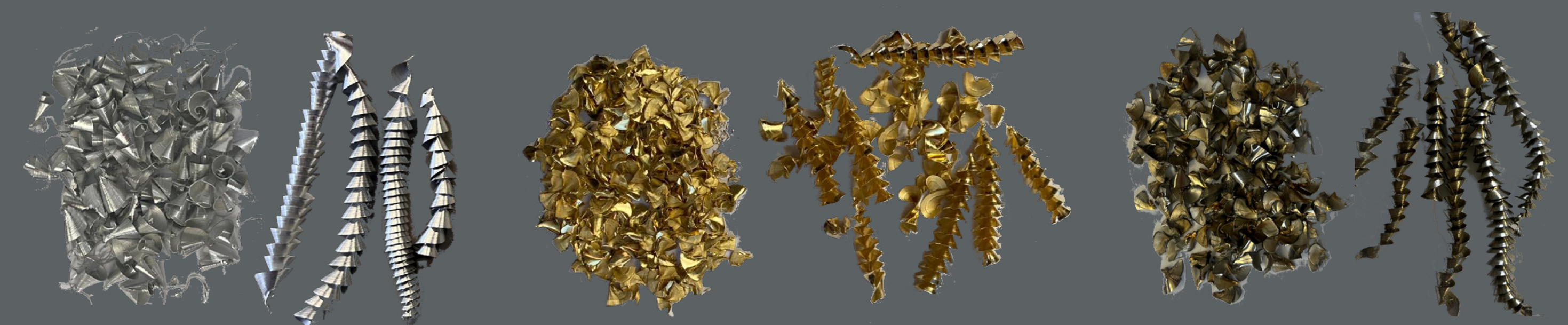
[▶ PLAY VIDEO](#)

PRT AND PRF: PICCHI TECHNOLOGY FOR CHALLENGING MATERIALS

Self-adaptive software that automatically adjusts machining parameters according to the desired chip size, without manual intervention. This ensures a stable, repeatable process and longer tool life.

MANAGED OPERATIONS

01. Drilling operations (PRT)
02. Single-point threading with recessing unit (PRF)



MACHINED MATERIALS

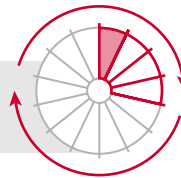
01. Lead-free brass alloys
02. Steel alloys
03. Stainless Steel
04. Lead-free aluminum
05. Special alloys



2" Valve body in CW 511L
Cycle time: 17 sec

PROFILING, THREADING, TURNING WITH PRF TECHNOLOGY

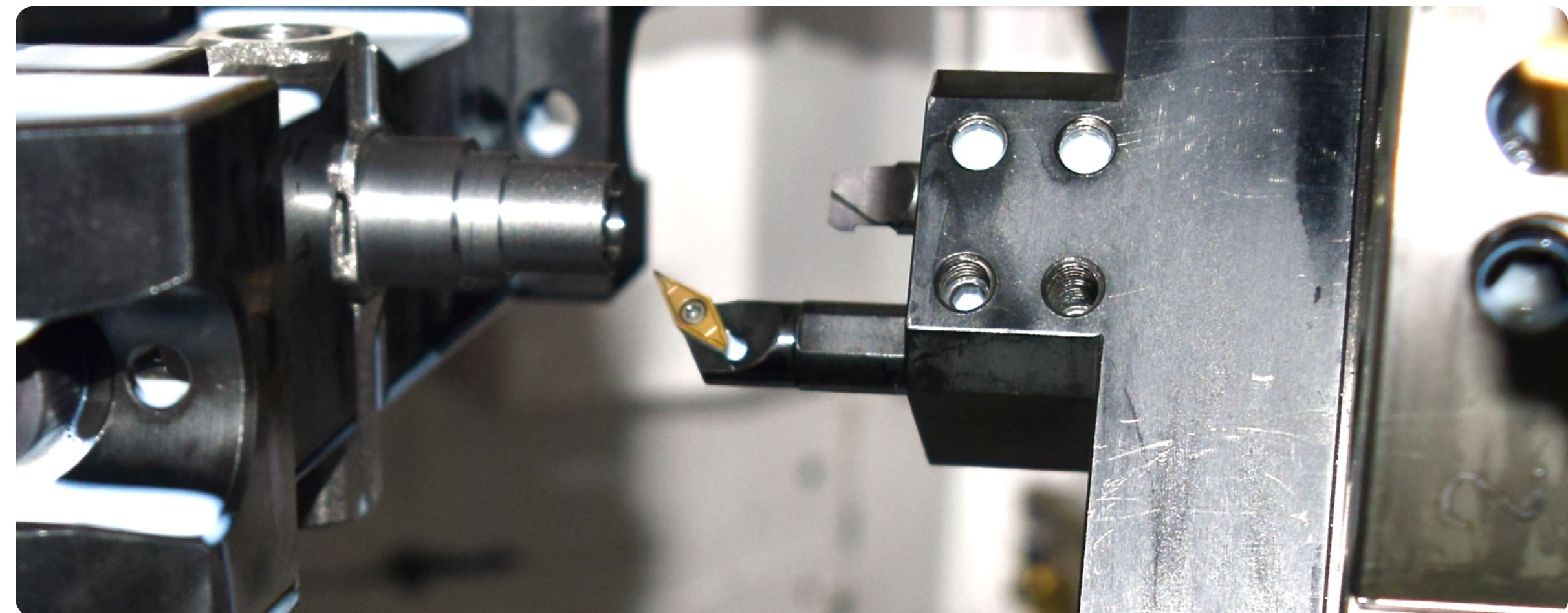
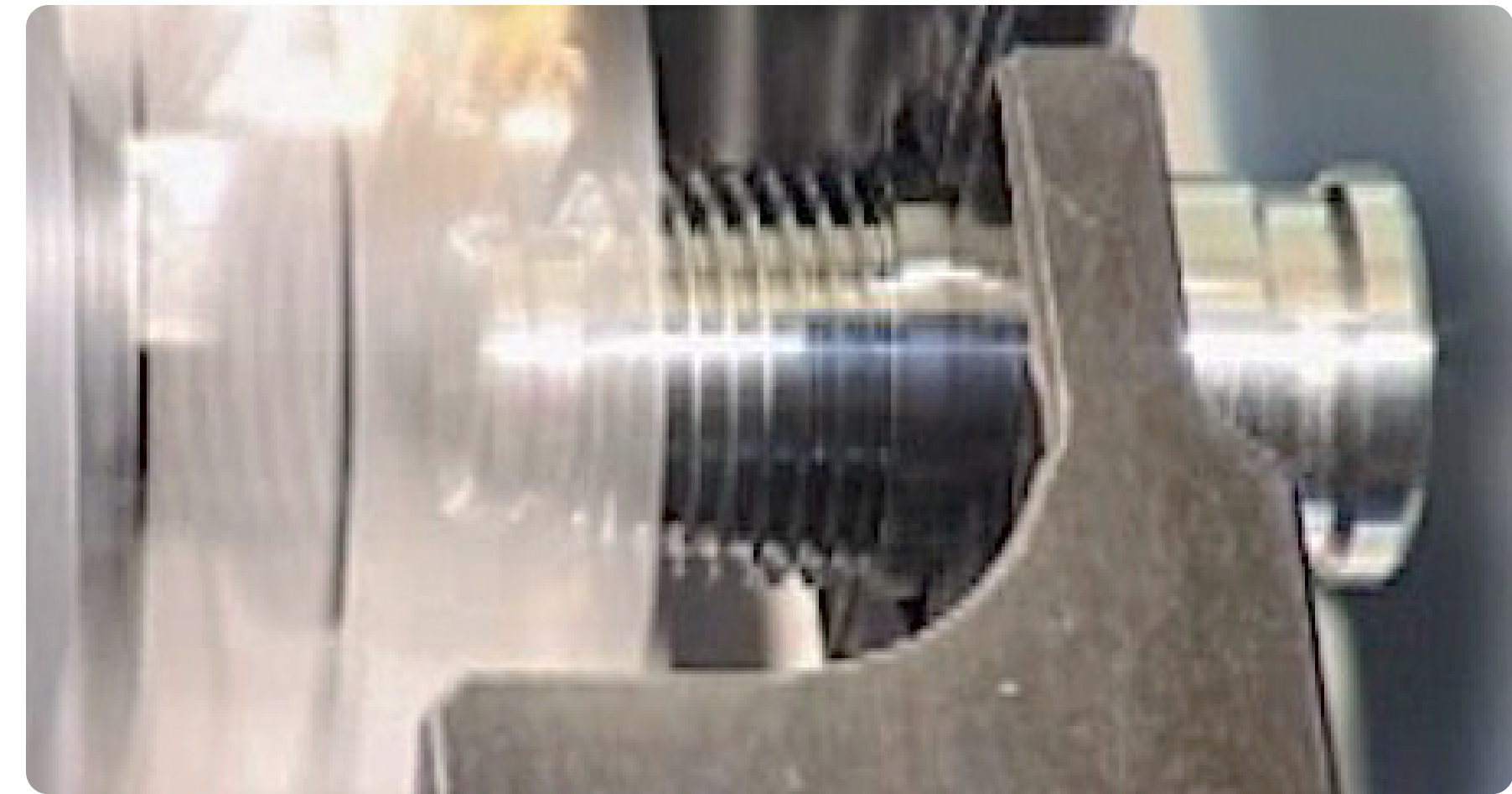
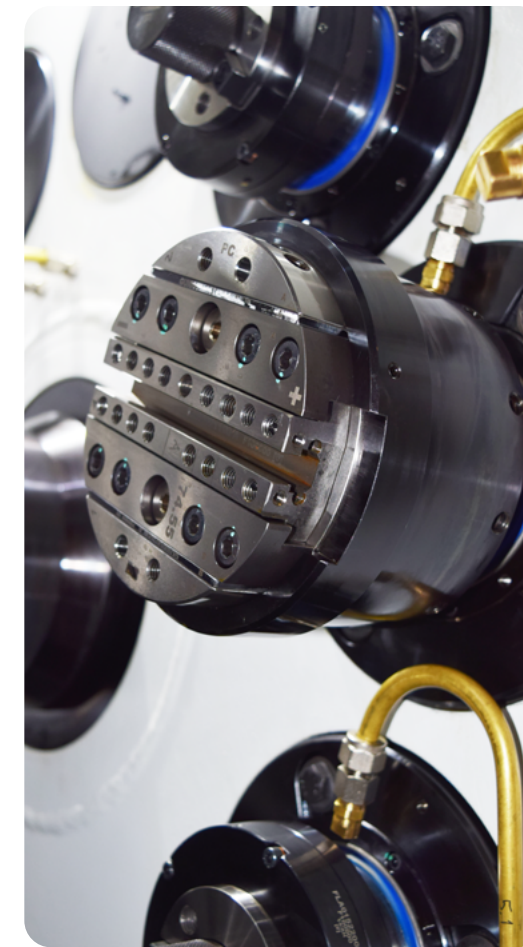
Critical materials 

Productivity 

 **PLAY VIDEO**

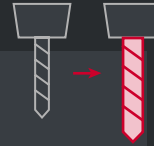
**DEVELOPED, PRODUCED, AND INTEGRATED
TO ADVANCE MANUFACTURING**

01. Speed: up to 5.000 rpm
02. Single-point turning, profiling, and threading
03. High-pressure coolant through the tool
04. Pressurized and automatically lubricated group
05. Single-point threading with PRF chip-breaking technology



THE ROTARY TABLE: RIGID, FAST, RELIABLE

Efficiency

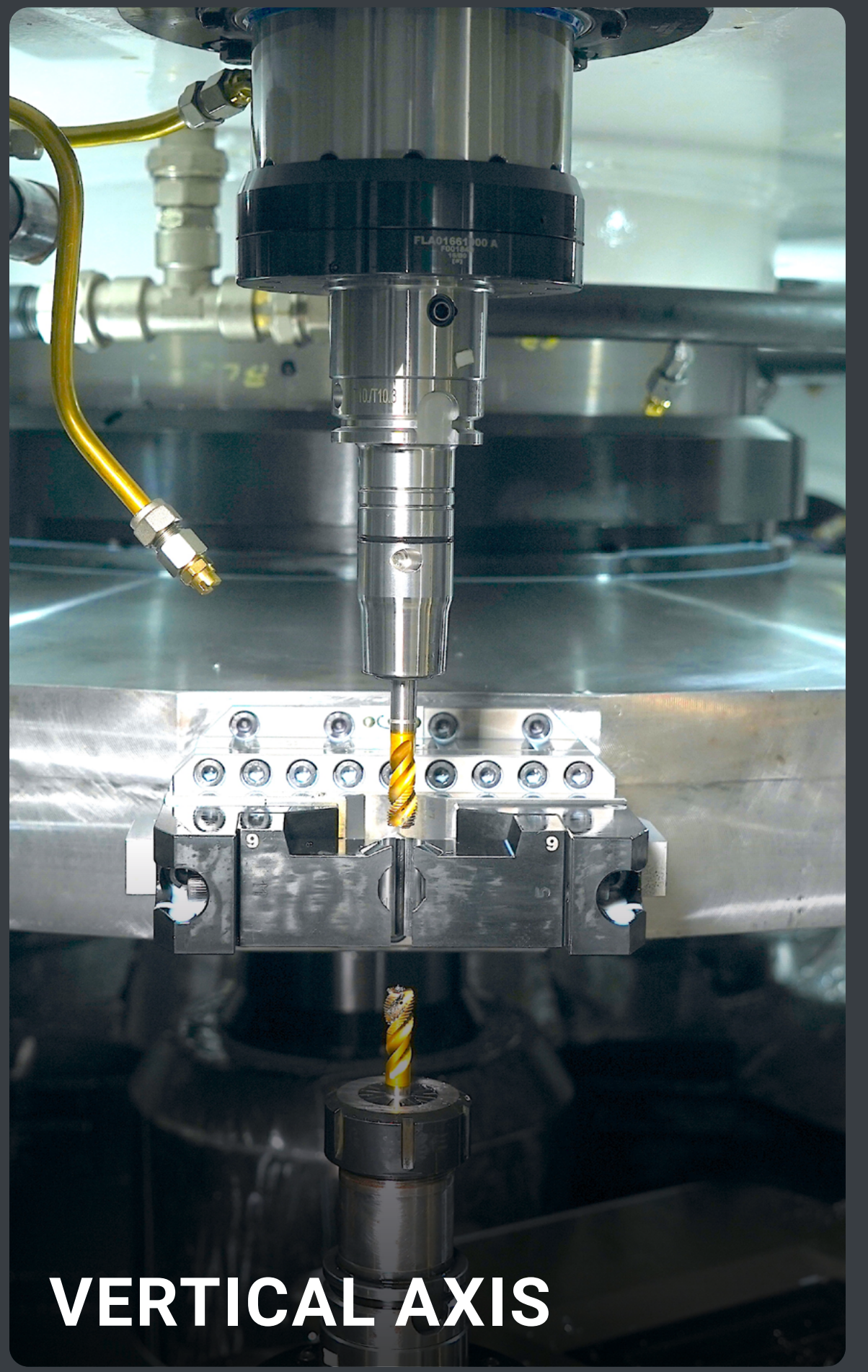
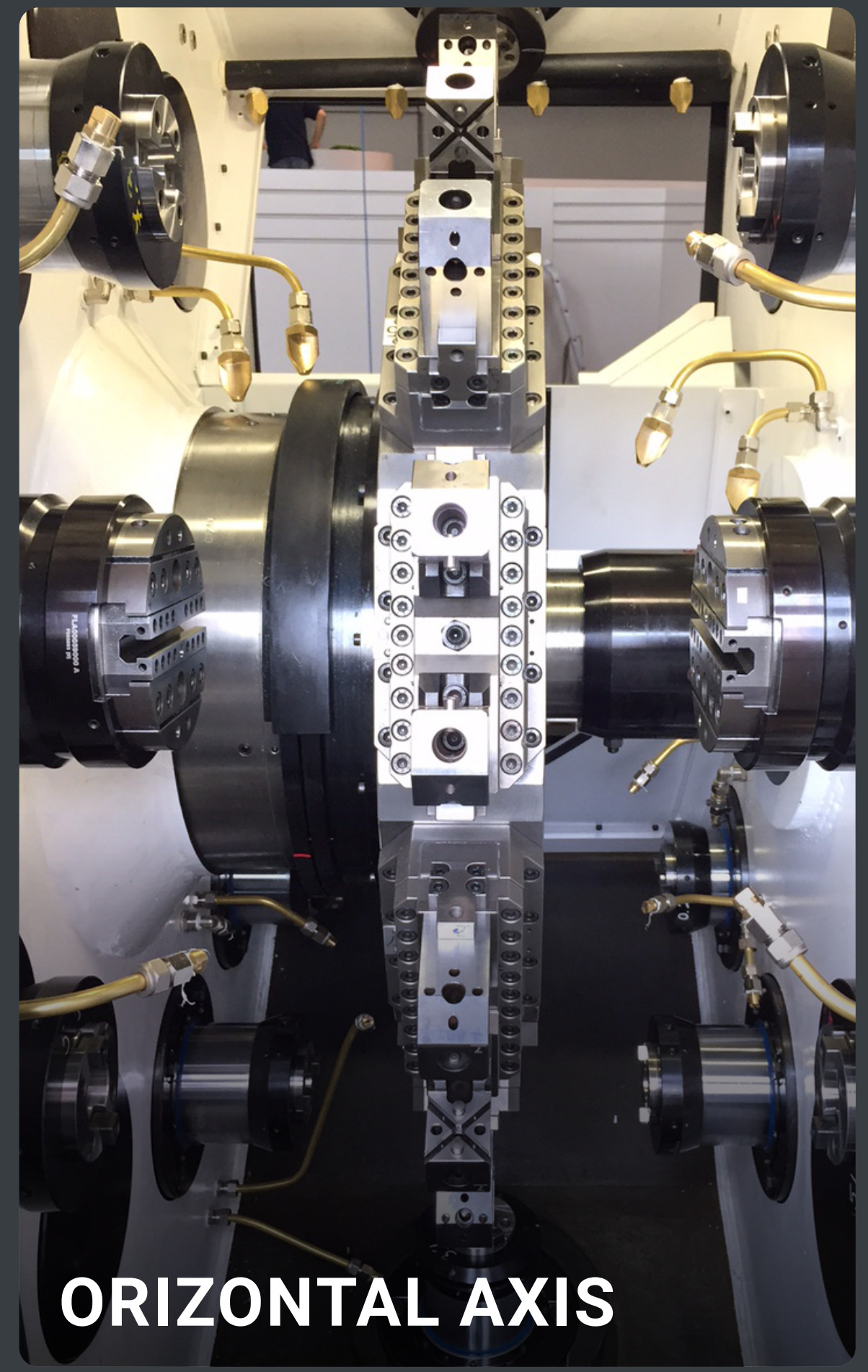


Productivity



THE TABLE INDEXING TIME IS
PART OF THE CYCLE TIME.
EVERY MILLISECOND COUNTS.

	Standard	High speed
Movement	Brushless motor	Torque Motor (Direct Drive)
Locking system	Hirth Ring	Hydraulic Brake
Indexing Time	0,80 sec	0,25 sec
Time saving	/	66%



MACHINE AND AUTOMATION COMPLETE INTEGRATION

Lack of personnel



ONE POINT OF CONTACT, NO CRITICAL INTERFACE POINTS

LINEAR CARRIAGE WITH ROBOT AND VISION SYSTEM

Loading in 1,5 sec.

"Out-of-the-way" position for retooling without moving anything.

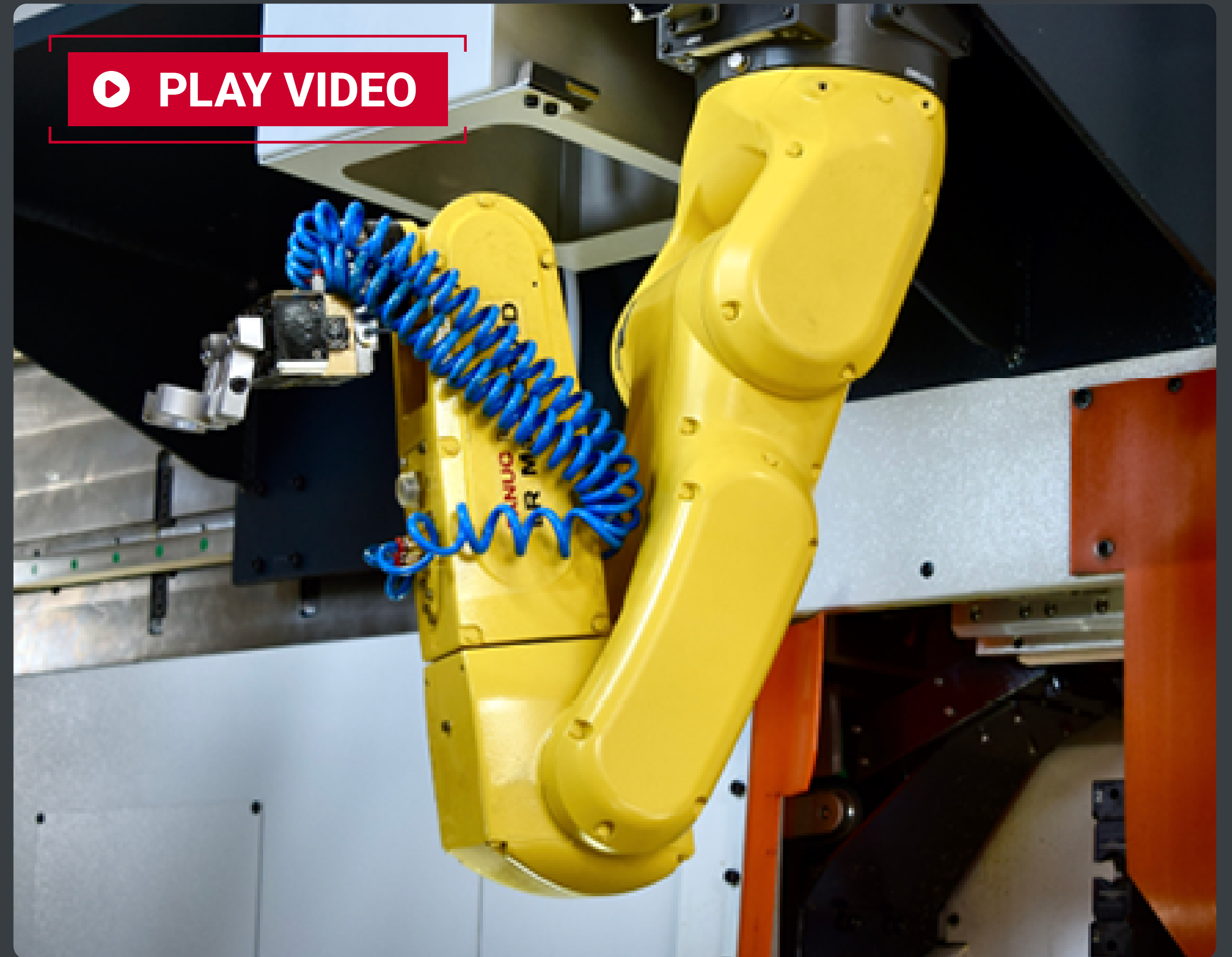
CNC INTEGRATION

The robot CNC is located inside the machine's electrical cabinet.

All programming is done directly from the control panel, with no need to move around.

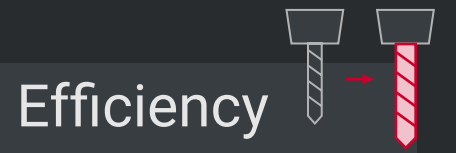


▶ PLAY VIDEO



NON-STOP PRODUCTION

QUICK JAWS SET-UP AND INTEGRATED AIR BLOW



QUICK-RELEASE JAWS

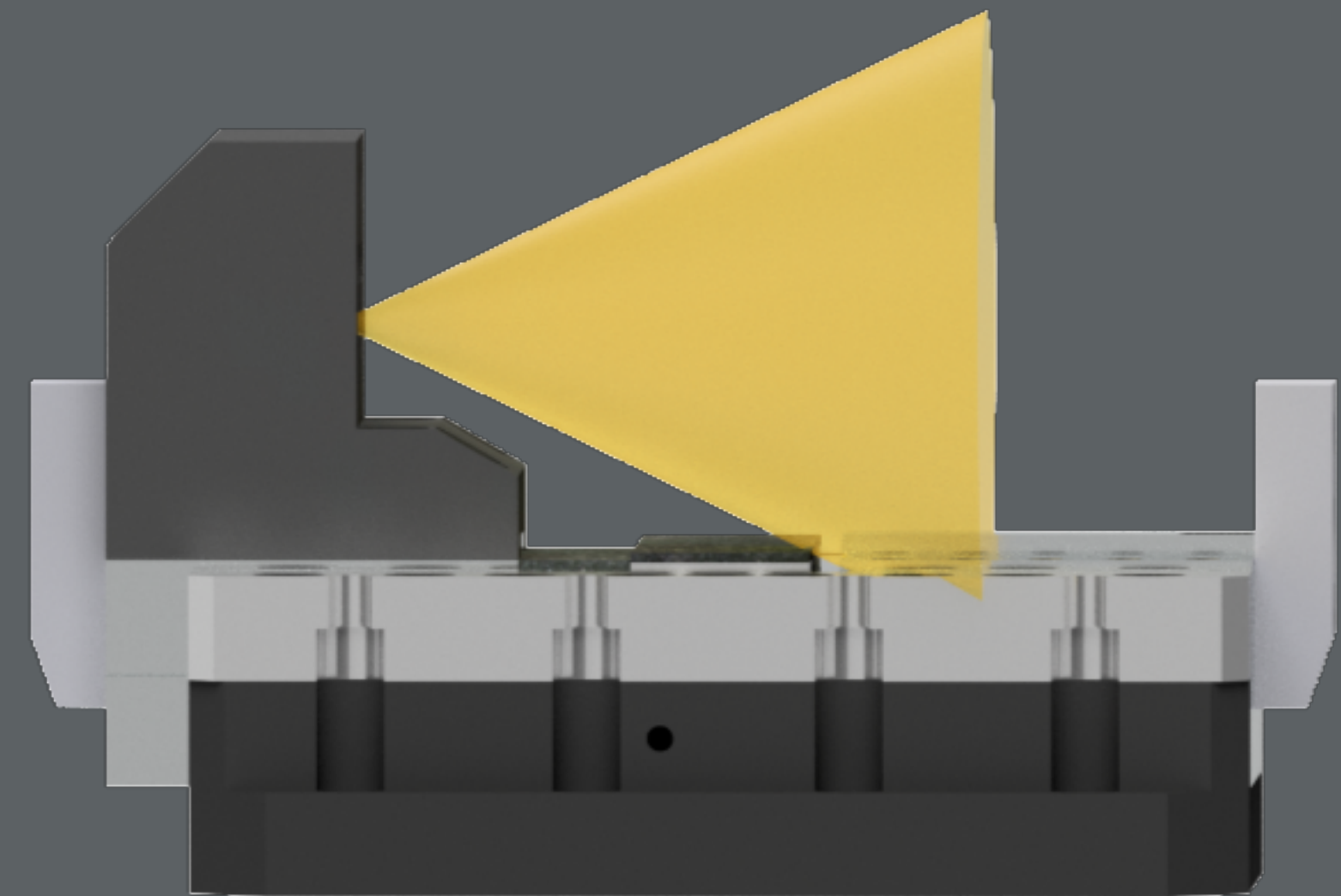
[▶ PLAY VIDEO](#)

Jaws equipped with a front quick-release mechanism, designed to significantly reduce set-up times and enhance operator ergonomics.



INTEGRATED AIR BLOW FOR AUTOMATIC CLEANING

The vices are equipped with an integrated air blow for automatic cleaning of both the workpiece and the jaw. This solution ensures effective and consistent cleaning, even within automated systems, improving production process reliability.

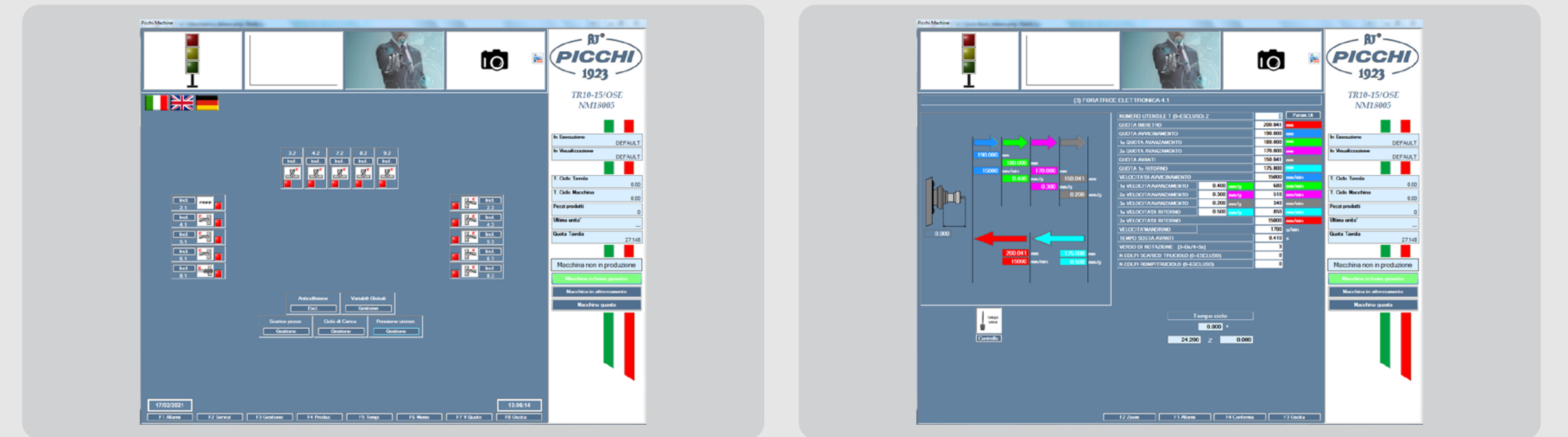


SUPPORTING TODAY'S OPERATORS

USER-FRIENDLY PICCHI OPERATOR INTERFACE

MACHINE COMPLEXITY, SIMPLIFIED FOR THE OPERATOR

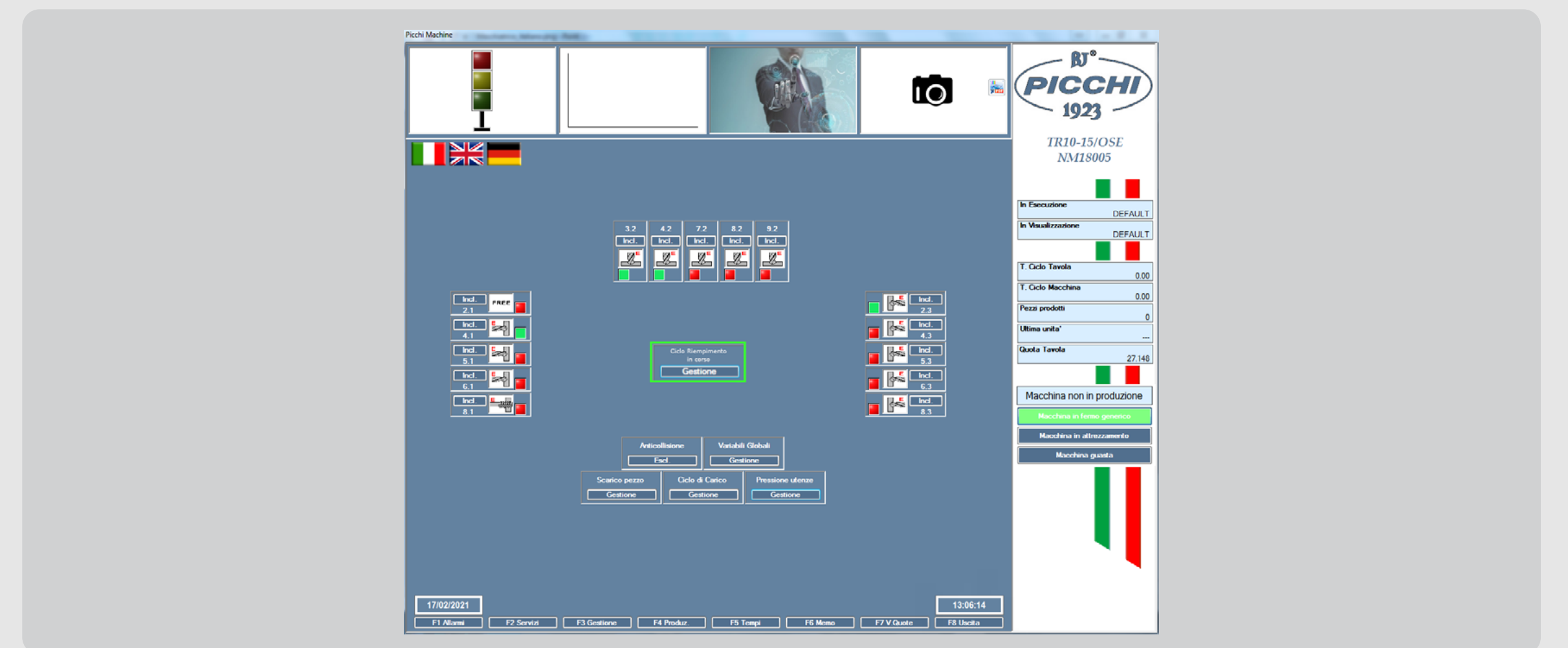
Accessible programming and machine management, independent of ISO language expertise.



THE CHANGE-OVER MUST NOT STOP PRODUCTION

Special cycles for quick restart:

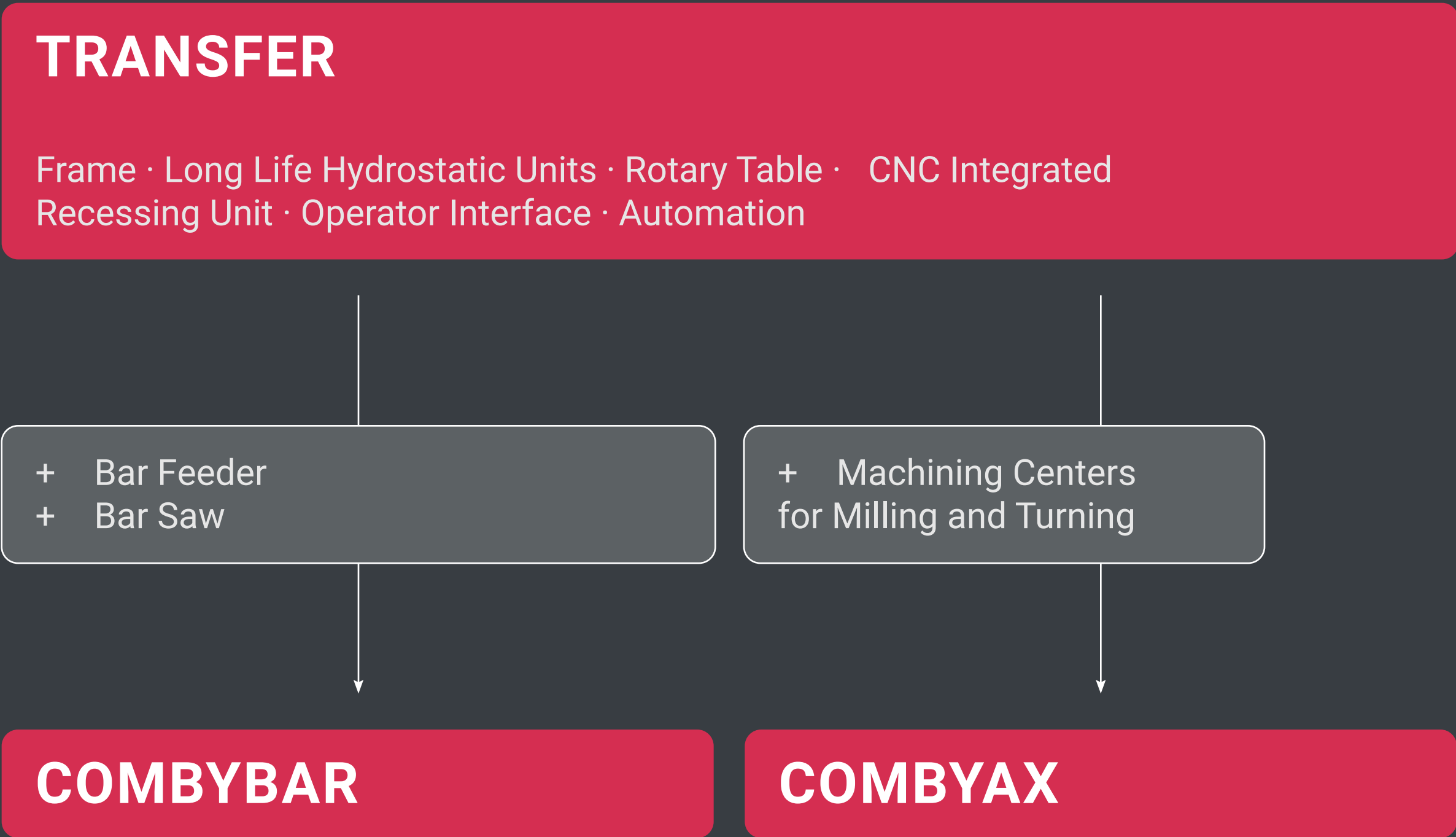
01. **Sampling**
Check of all machining operations on a single workpiece before starting production.
02. **Filling**
Automatic loading of all vises.
03. **Emptying**
Automatic unloading of all vises at the end of the batch.



THE VALUE: ONE SYSTEM - ONE PARTNER - ONE OUTCOME

Transfer, Combybar, and Combyax share the same modular platform: frame, Long Life Units, Rotary table, CNC Recessing Unit, Operator Interface, and automation.
The configuration changes depending on the workpiece and the cycle.

	TRANSFER	COMBYBAR	COMBYAX
Core focus	Maximum production, 2/3/4 directions	High productivity from bar	Flexibility, complex pieces 4/5 directions
Loading	Robot / manual	Non rotating bar-feeding	Robot / manual
Key feature	Tempi ciclo da 1,5 sec	Qualsiasi geometria, sfrido minimo	Pezzo completo in un solo giro tavola
Fields of application	The three configurations lend themselves to applications in the Automotive, Gas, Hydraulic, Pneumatic, Industrial Valves, Faucets, Electrical, and Lock sectors.		



TR: HIGH PRODUCTIVITY AND FLEXIBILITY

THE IDEAL SOLUTION TO MAXIMIZE PRODUCTION WHILE MINIMIZING CYCLE TIMES

Features

01. **Maximum productivity**
02. **Unbeatable cycle times down to 1,5 sec**
03. **Up to 4 directions**

▶ PLAY VIDEO



FITTINGS

PNEUMATICS



CW617N Brass - 1,5 sec

FITTINGS

INDUSTRIAL VALVES



Automatic steel - 5 sec

WATER METERS

WATER MANAGEMENT



CW617N Brass - 6,5 sec

FITTING SLEEVE

INDUSTRIAL VALVES



CW511L Brass - 11 sec

COMBYBAR

THE CONFIGURATION FOR BAR MACHINING

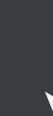
**FROM BAR TO FINISHED PART.
THE BAR DOES NOT ROTATE, THE PRODUCTION DOES.**

The key difference compared to a multispindle lathe: the bar remains stationary

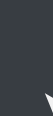
01. **Unlimited bar length**
More autonomy, less scrap.
02. **Any geometry**
Round, square, hexagonal, extruded. No constraints.
03. **Higher cutting speed**
Without bar rotation limits.
04. **Minimum waste**
No facing required. Final cutoff $\approx$ 1 piece.
05. **Emulsion fluid**
Lower operating and disposal costs.
06. **Optimized cutting parameters for every operation**
Maximum quality, tool life, and productivity.



TRANSFER
(core platform)



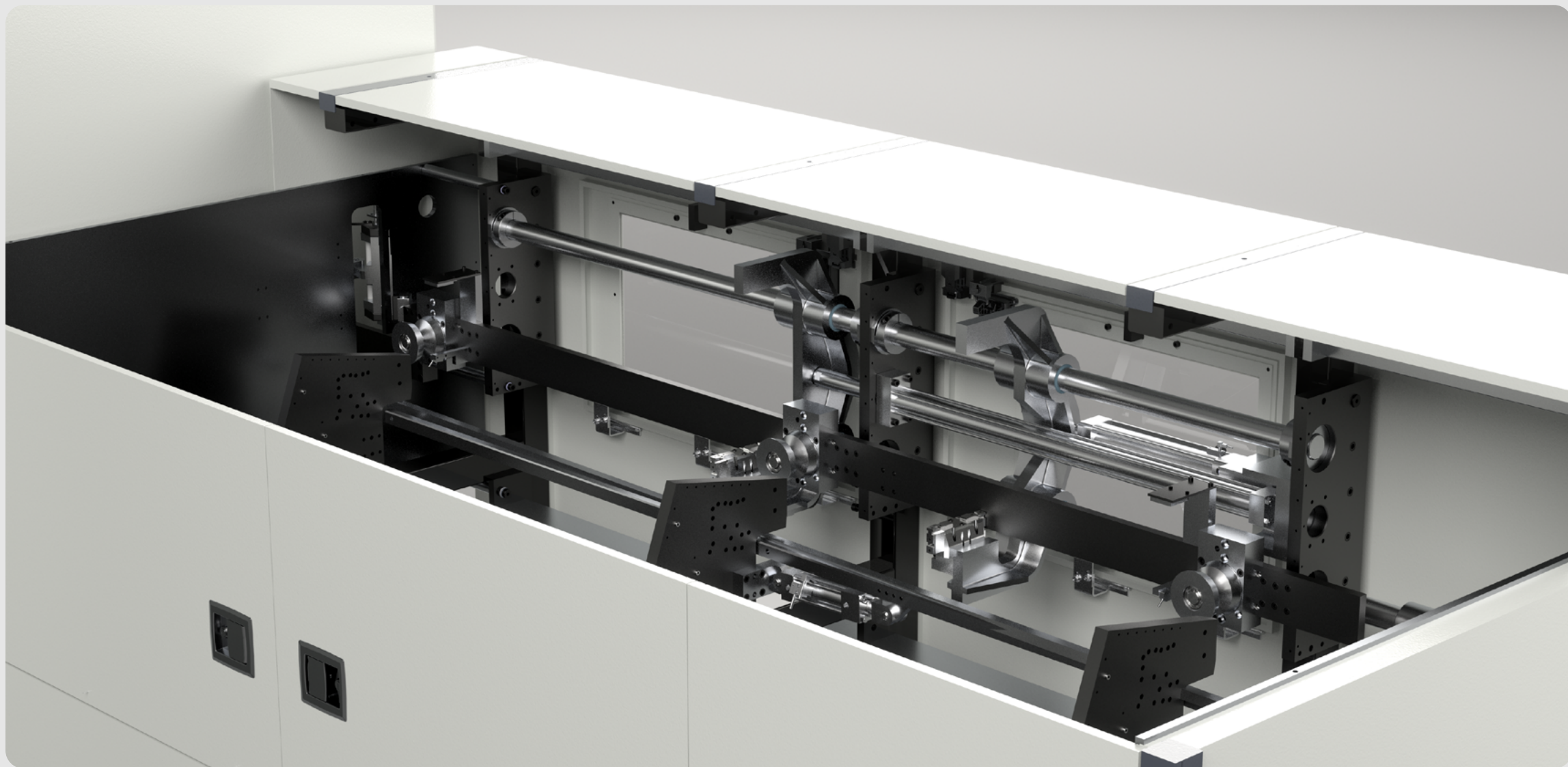
**+ BAR FEEDER
+ BAR SAW**



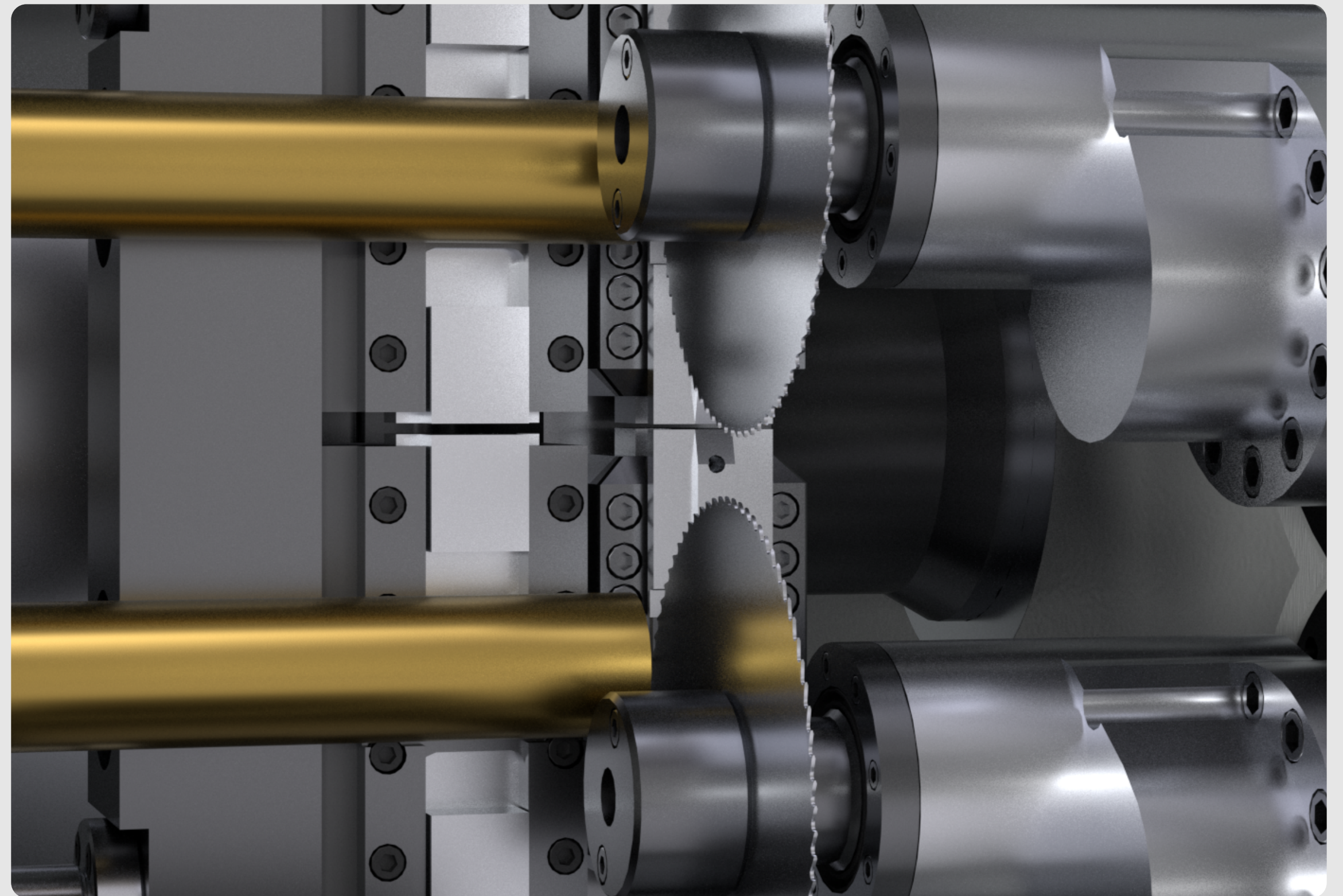
COMBYBAR



A CONTINUOUS FLOW, A FLAWLESS CUT



- 01. 2.500 kg capacity, an entire bundle
- 02. Bundle loading while the machine is running
- 03. CNC adjustments for quick changeover
- 04. Dual-feeding capability for doubled productivity
- 05. “Walking beam step” feeding for delicate and difficult to load profiled bars



RAPID AND PRECISE SAW

Thanks to its advanced cutting technology, it preserves part quality.

AUTOMOTIVE, FITTINGS AND NIPPLES: UNBEATABLE CYCLE TIMES FROM BAR STOCK.

HYDRAULIC FITTINGS AUTOMOTIVE

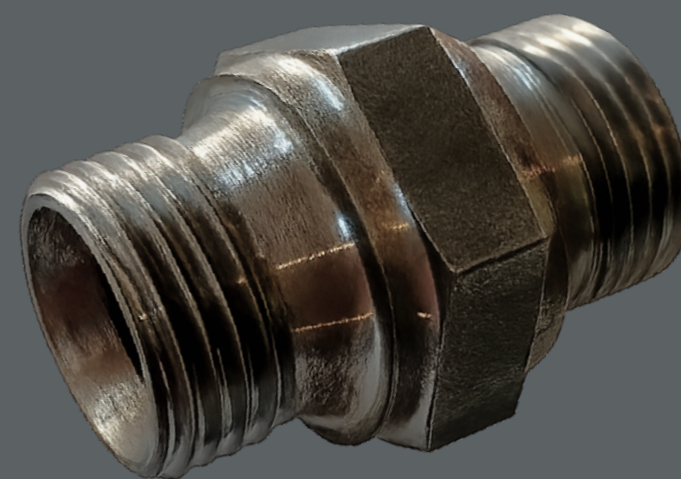
[▶ PLAY VIDEO](#)



Parameter	Value
Material	Steel
Cycle time	7 sec
Bar diameter	20 mm

HYDRAULIC NIPPLES AUTOMOTIVE

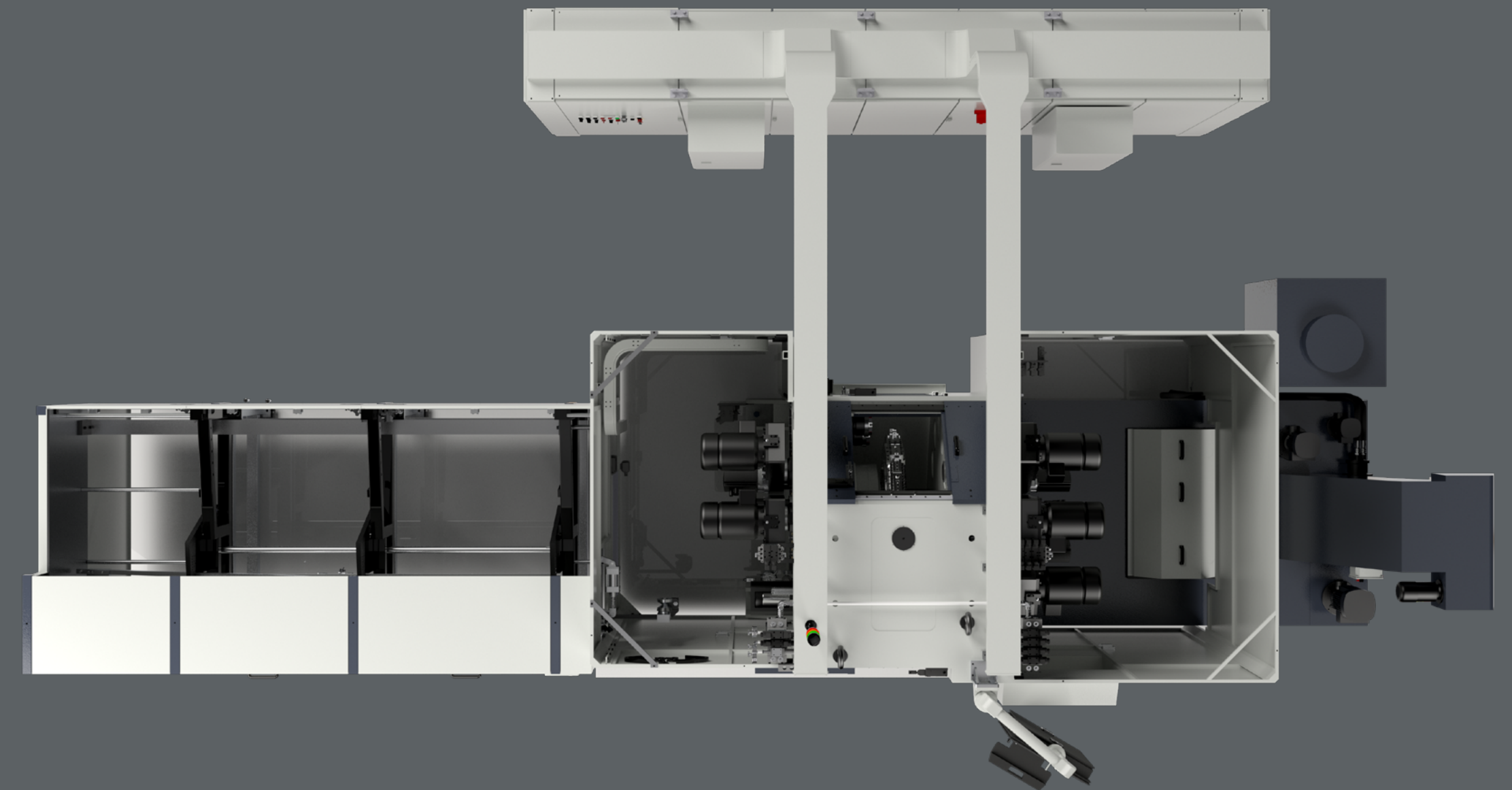
[▶ PLAY VIDEO](#)



Parameter	Value
Material	Steel
Cycle time	6 sec
Hexagonal bar	32 mm

COMBYBAR WITH 3M BAR LOADER

42 M² (10 × 4,2 M)



COMBYAX

THE CONFIGURATION FOR COMPLEX PARTS

A SINGLE TABLE ROTATION, FIVE MACHINED DIRECTIONS

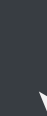
Combyax integrates milling and turning machining centers directly within the Transfer platform. **Complete machining without reclamping including 4 or 5 side operations.**

Additional modules:

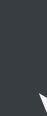
01. **2 and 3 axes Machining Centers**
High production flexibility..
02. **4th and 5th axis Indexing Chucks**
Torque motors, 0.001° G central encoder, hydraulic brake.
03. **Integrated Vertical Lathes (optional)**
For in-cycle precision turning.



TRANSFER
(core platform)



+ MACHINING CENTERS

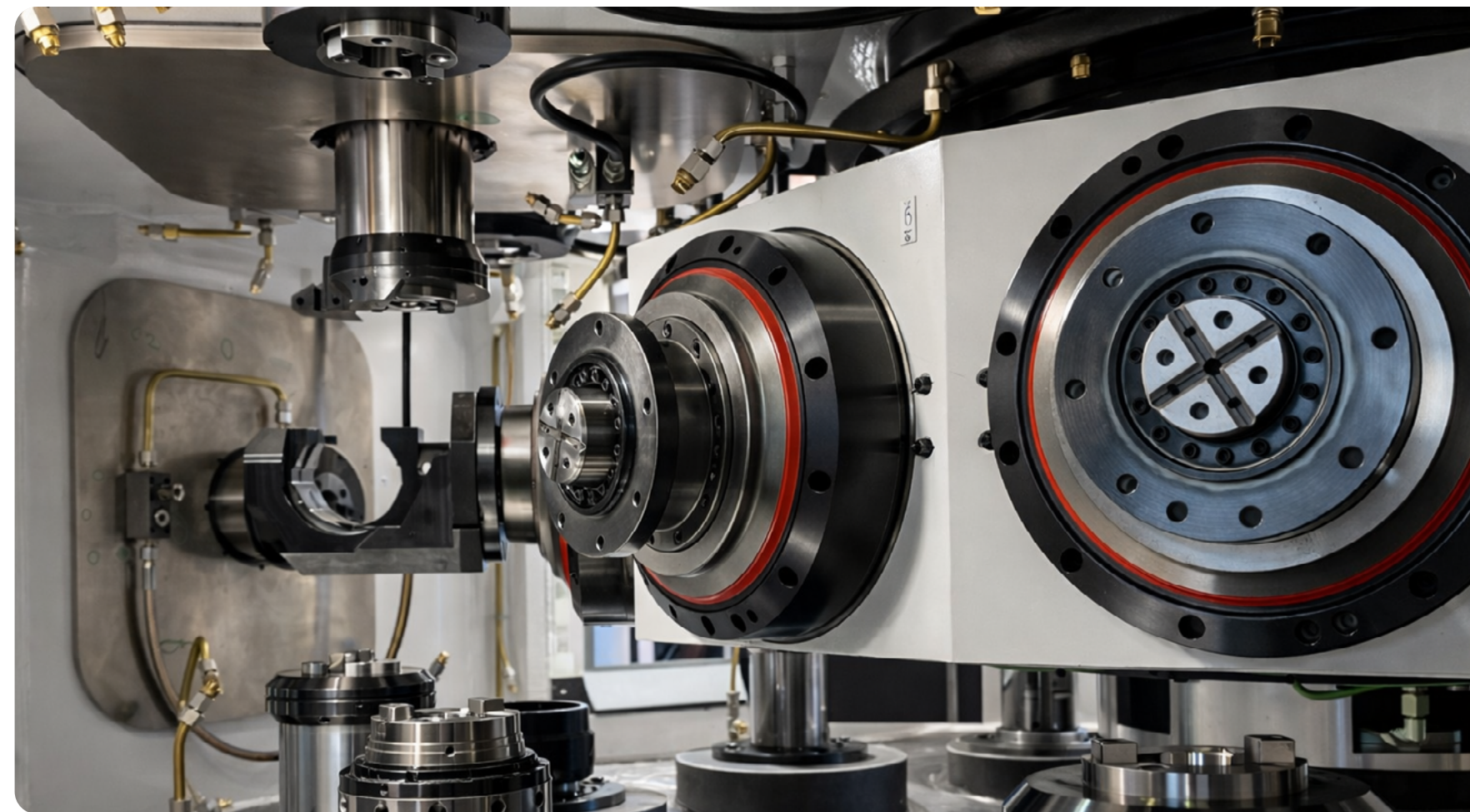


COMBYAX



THE PART DOESN'T MOVE. THE VISE DOES. NO RE-CLAMPING REQUIRED.

The part is clamped along the forging plane.
The chuck rotates via the B-axis, sequentially exposing all machining directions **without ever repositioning the part**.



Advantages

01. **Machining in 4 or 5 directions in a single table rotation**
No part repositioning required.
02. **No re-clamping**
Higher precision, less downtime.
03. **More compact layout**
Positive impact on accuracy, cycle times, and floor space.

CASE STUDY



MANIFOLD AND VALVES

HVAC and Hydraulic

Average cycle time: 12 sec

Production was carried out using a Combyax fed by two robots and equipped with radial self-centering vises, allowing up to 5-direction machining in one table rotation.

NOT SIMULATIONS BUT MEASURED CYCLE TIMES

AUTOMOTIVE

START AND STOP

In-line Combyax with dual automation for machining an aluminum part.

Cycle time: 5,9 sec.



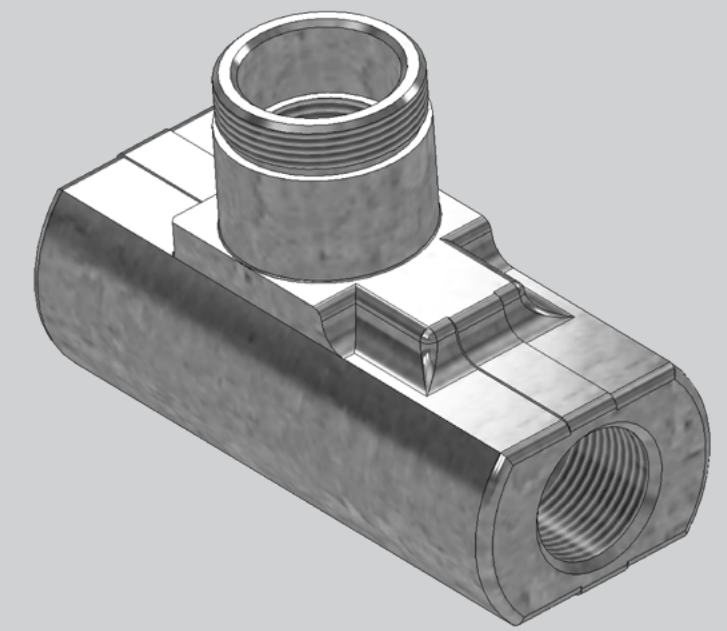
HYDRAULICS

FLOW CONTROL VALVE

[▶ PLAY VIDEO](#)

Combyax with CNC-controlled tilting axes for inclined holes, designed for machining steel components.
Robot on a linear axis with vision system.

Cycle time: 5 sec.



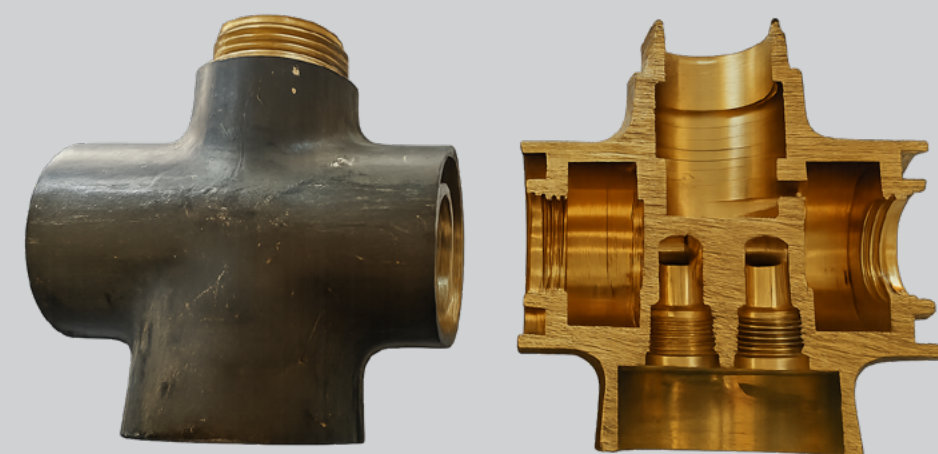
FAUCETS

UNDER-SINK FITTING

[▶ PLAY VIDEO](#)

Combyax equipped with indexing chucks with axial clamping for machining CW511L brass parts.

Cycle time: 16 sec.

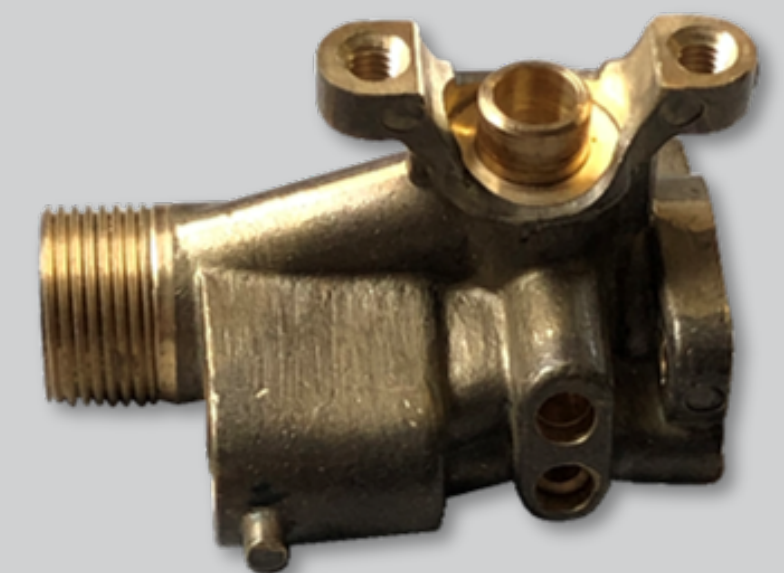


GAS

COMPONENT FOR GAS COOKERS

Combyax dedicated to machining multi-way brass components.

Cycle time: 4 sec.



PICCHI S.R.L. PRODUCT RANGE

THE RIGHT TECHNOLOGY FOR EVERY
PART AND ANY PRODUCTION VOLUME.

Transfer Line



TR

Maximum productivity,
unbeatable cycle times.



COMBYBAR

Bars of any geometry,
high-volume production.



COMBYAX

Complex components,
multiple directions.

Machining Center



CHRONO

Flexibility and productivity,
variable batch sizes.



LET'S DISCUSS YOUR PROJECT.

Picchi doesn't offer standard machines: it builds tailor-made production solutions.
The right question isn't 'which machine?', but 'what is the most efficient cycle for your part?'

PICCHI S.r.l.

Dal 1923, Italian technology
for high-volume production.

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