Since 1965
Reliability and technologic lead.
Systems for Surface Finishing

ARCOS

R e l i a b i l i t y  a n d  t e c h n o l o g i c  l e a d .
S i n c e  1 9 6 5
ARCOS has been working in the field of surface finishing since 1965.

Let us introduce our company.

We have always been devoting ourselves to the realization of machines and systems universally recognized as a synonymous of reliability and technical lead.

Our job consists of projecting and realizing the best technology for the solution to any kind of problems about grinding, deburring, polishing, cutting, and automation in general. In order to understand better the secrets of our success, we would like to show you how ARCOS develops planning and production activities.

First of all, we start from the careful analysis of our Customers’ needs, requirements and suggestions.

We are strongly determinate to combine always our professional experience with the Customers’ one, in order to put rapidly our efforts into a successful technical solution.

This first phase ends with the proposal of a suitable system for the achievement of the goal.

The CAD planning, strengthened by application tests done in our Company, determines the certainty of attainment of the objective.

The next confrontation with the Customers and Their approval generates the putting in production of the system.

“Production” means for ARCOS the creation of high-quality systems. As a result, we follow an ancient formula made up of capacity, professional competence, a strict industrial process and an advanced technology, supported by the best international components.

An effective production process can only generate strong, efficient and reliable machines.

Of course, our role does not end with the activation of our systems. A team of qualified technicians guarantees a rapid and careful customer service anywhere our machines are located.

Our main objective is and always will be the total satisfaction of our Customers.
**Ours machines**

**ROBOT SYSTEMS**
for grinding, deburring, polishing, and cutting any kind of item.

**CENTERLESS MACHINES**
with multiple heads for grinding of tubes and rods.

**AUTHOMATIC MACHINES FOR PLANE**
Multiple heads for grinding of flat items.

**CONTINUOUS, RELEASE AND CNC ROTARY TABLES**
for grinding and polishing

**MANUAL POLISHING AND GRINDING MACHINES**

**AUTOMATION and FOLLOW-UP LINK for:**
- tool machines
- lathes
- milling machines
- transfer lines
- cutting lines
- assembly lines
- electric galvanic systems
- laser systems for cutting or incision
- loading, unloading and pieces
- indexing systems
- collecting systems
### Perché scegliere la tecnologia ARCOS

<table>
<thead>
<tr>
<th>R+D</th>
<th>Automatic metering system for abrasive paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and development are for us the only route to follow in order to solve in a convincing way the most complicated technical problems.</td>
<td>Patented device for the controlled and programmable metering of abrasive paste.</td>
</tr>
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<table>
<thead>
<tr>
<th>Constant pressure</th>
<th>Programming and management of simplified machine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic control of pressure of the tool on the piece that has to be polished and of automatic compensation related to wear of the tool during the production process.</td>
<td>Intuitive keys, a charming graphic, clear messages and, most of all, a dedicated software enable the operator to manage easily our systems.</td>
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<table>
<thead>
<tr>
<th>Multipurpose working units</th>
<th>Remote assistance service</th>
</tr>
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<tbody>
<tr>
<td>The working units used in our robotic systems are the only ones in the world which can be employed both for grinding and polishing.</td>
<td>Our machines can be assisted, controlled, managed and programmed directly form our company with a simple online link.</td>
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<tr>
<th>Flexibility</th>
<th>Safety</th>
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<tbody>
<tr>
<td>Our machines allow the operator to manage in an extremely short period of time every change of item, as a result they are particularly effective even for the handling of small batches.</td>
<td>All our systems match perfectly the strictest safety regulations required by the laws in force.</td>
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<tr>
<th>Offline programming</th>
<th></th>
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<tbody>
<tr>
<td>Our steady update let us to plan, realize and verify the working programmes with 3D simulations.</td>
<td></td>
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</tbody>
</table>
Below you can find some of our operating fields:

- Handles
- Faucets
- Accessories for metallic furnishing
- Accessories for bathroom
- Household articles
- Lamps and chandeliers
- Irons
- Items for automotive industry
- Items for aeronautic industry
- Items for marine industry
- Items for motorcycle industry
- Buckles and fashion accessories
- Knives and scissors
- Silverware
- Tubes, rods and shafts
- Blades for turbine
- Orthopaedic appliances
- Surgical instruments
- Radiators for heating
- Steel, aluminium, cast iron items
- Metal or wood items for weapons
- Follow-up link of lathes, milling machines, transfer, CNC and laser machines
- Horology
- Sinks
- Gearing
- Frames
- Car rims
- Crash helmets
- and more…
Robotic System

For grinding of faucets

The machine is composed of:

- 6 grinding units with abrasive belts
- Double loading/unloading system with rotary table
- Completely soundproof protection booth
- ABB robot
- PROFIBUS system for linking all the different working units
- Remote assistance system
- Offline programming system
- Control system for wear of tools
THE MACHINE IS COMPOSED OF:

- 2 polishing unit with Ø960 mm brushes
- 1 grinding unit with 2 abrasive belts
- Loading/unloading system with conveyor belt and vision system
- Metallic protection belt
- ABB robot

- PROFIBUS system for linking all the different working units
- Remote assistance system
- Offline programming system
- Control system for wear of tools

ROBOTIC SYSTEM

WITH VISION SYSTEM FOR GRINDING AND POLISHING OF BUCKLES
ROBOTIC SYSTEM

FOR DEBURRING, GRINDING AND CUTTING OF CAST ITEMS

THE MACHINE IS COMPOSED OF:

- 1 grinding unit with 2 abrasive belts
- 3 small units for milling and filing
- 1 cutting unit
- Loading/unloading system with conveyor belt and vision system
- Metallic protection belt
- ABB robot
- PROFIBUS system for linking all the different working units
- Remote assistance system
- Offline programming system
- Control system for wear of tools
THE MACHINE IS COMPOSED OF:

- 3 grinding units
- Loading/unloading system with rotary multi-plane table
- Completely soundproof protection booth
- COMAU robot
- PROFIBUS system for linking all the different working units
- Remote assistance system
- Offline programming system
- Control system for wear of tools

ROBOTIC SYSTEM

WITH VISION SYSTEM FOR GRINDING OF BUTTS
THE MACHINE IS COMPOSED OF:

> 3 belt grinding devices
> Loading/unloading system with loading and unloading conveyor belts
> Working units completely closed in booth
> Electronic system for pressure control between belts and pieces

This machine can be built up with a different number of elements.

THE MACHINE IS COMPOSED OF:

> 2 belt or brush grinding/polishing devices
> Loading/unloading system of tubes and/or rods with guidance
> System for rapid change of the diameter of tubes and/or rods
> Working units completely closed in booth
> Possibility of handling the solid or liquid polishing paste
> Electronic system for pressure control between belts and pieces

CENTERLESS MACHINE

FOR GRINDING AND POLISHING OF RODS AND ROUND TUBES

MACHINES ON PLANE

FOR GRINDING OF FLAT ITEMS
THE MACHINE IS COMPOSED OF:

- 4 brush polishing units + 1 loading/unloading station
- 1 compensation working unit with a system for the oscillation of brush
- Loading/unloading system with rotary multi-plane table
- Completely soundproof protection booth
- Remote control keyboard

CONTINUOUS, RELEASE AND CNC ROTARY TABLES

FOR POLISHING OF BUCKLES

> PROFIBUS system for linking the different working units
> Remote assistance system
> Possibility of handling the solid or liquid polishing paste
> Control system for wear of paste and brushes
> This machine can be built up with different number of elements
MANUAL MACHINES

S2/A Grinding Machine

SC1/A Grinding/Polishing Machine

1TS/A Polishing Unit with Electronic Speed Variation

P2/A Polishing Machine
Q/D Grinding/Polishing Unit with Electronic Speed Variation

2TS/A 2 Heads Polishing Unit with Electronic Speed Variation

2TS/B 2 Heads Grinding Machine Unit with Electronic Speed Variation

2TS/A 2 Heads Polishing Unit with Electronic Speed Variation

2TS/F 2 Heads Polishing Unit with Electronic Speed Variation
THE MACHINE IS COMPOSED OF:

- Conveyor belt for carrying pieces
- Vision system
- Packaging system
- Picking and sorting system
- PROFIBUS system for linking all the different working units
- Remote assistance system