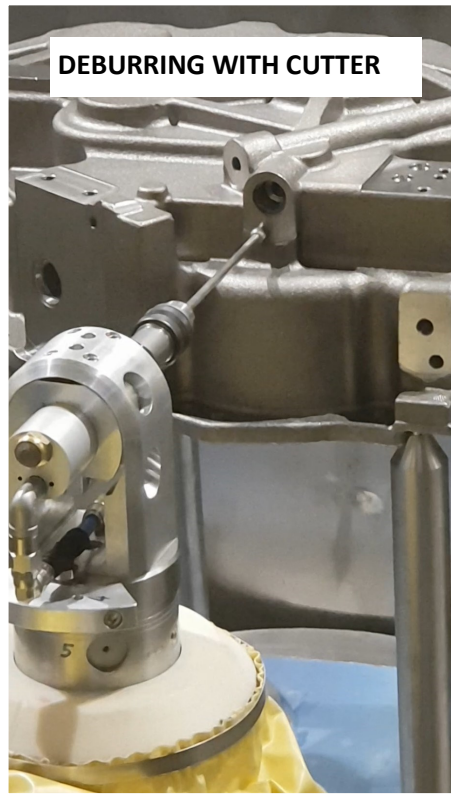




ROBOTIC MACHINES FOR DEBURRING WITH TOOLS OR HP





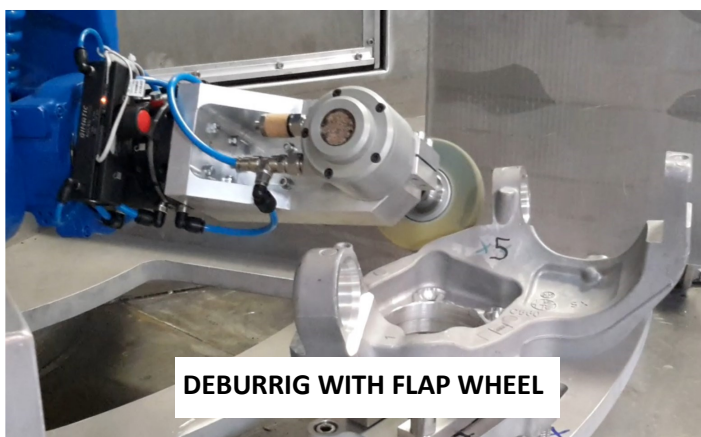
Introduction:

The problem of deburring metal products, and not only, after mechanical processing has always been faced up for the only scope to avoid that the "pendulous" burrs brake away from the product and create problems during the final use of the component generating malfunctions. The achievement as described above has been satisfied for years with "deburring" with high pressure water, and TRITON , one of the first company able to produce this kind of systems, is present on the market with numerous installations.

It is clear that the technology with high pressure water can satisfy only the minimum purpose of what is described above, but is not able to perform a regular and precise deburring on profiles, edges, seats, holes, counterbore, intersections, etc.... , therefore it is not suitable to satisfy all those cases where the presence of burrs causes problems of ergonomics, difficulty of mechanical coupling, criticality of insertion of bushings or gaskets, and last but not least, aesthetic problems.

Solution:

TRITON, due its philosophy, collects this growing market demand and solves it, integrating in its production a series of ROBOTIC MACHINES FOR DEBURRING WITH TOOLS



Our ROBOTIC MACHINES FOR DEBURRING WITH TOOLS

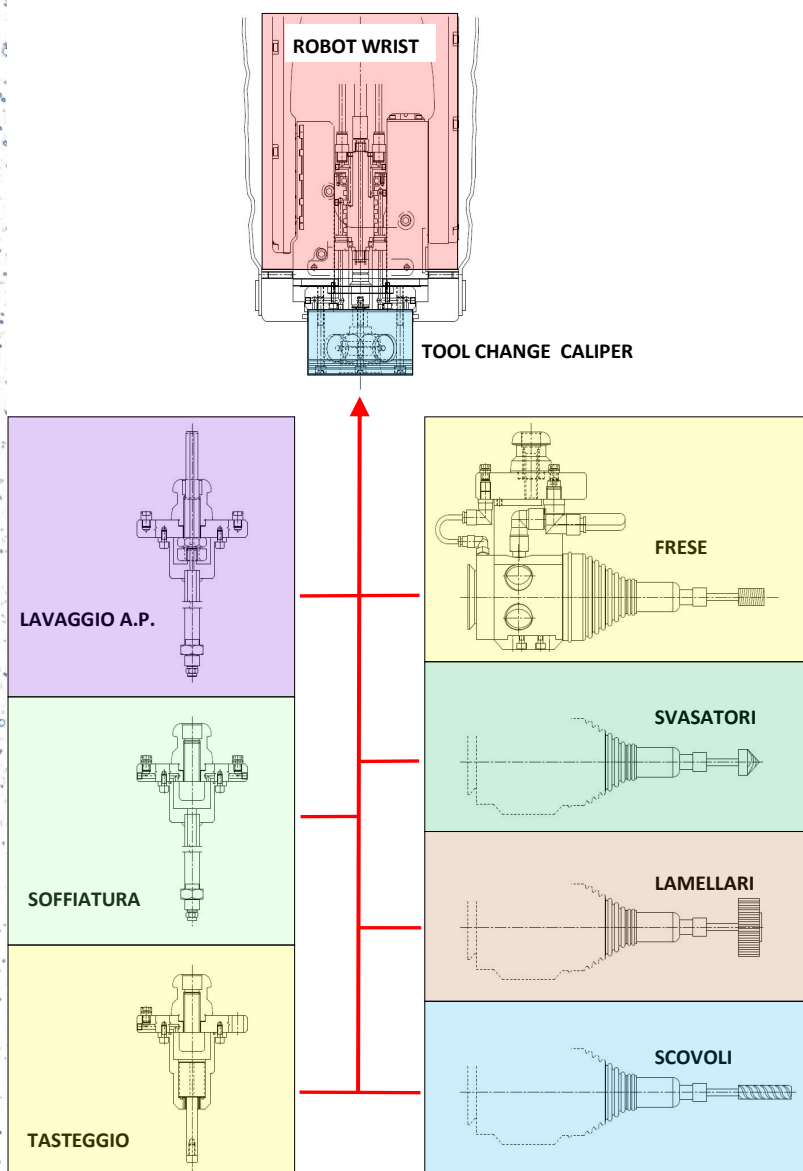
are divided into two families, according to the parts to be deburred:

machines for deburring pieces with medium / small mass and dimensions, in which the robot manipulates the pieces in front of a series of rotating spindles with the tool in a fixed position; in this case the anthropomorphic robot is equipped with a gripper on the wrist for gripping the piece; machines for deburring pieces with large mass and dimensions, in which the robot manipulates the rotating spindles with a tool, taking them from a special warehouse, using them to operate on the piece positioned on a pallet; in this case the anthropomorphic robot is equipped on the wrist with a Triton patent tool change system .

Both solutions can be used on machines with a rotating table transport system or in line with timed steps.

The two type of described solutions are equivalent in terms of productivity and quality of deburring and both can adopt a number of tools that vary in quantity and type.

A very important peculiarity of the TRITON project, the only company able to offer it, concerns the technology developed for the robot wrist , applicable on any brand of robot in the market



In fact, TRITON tool-change system is able to drive to the last robot axis 5 compressed air users, controlled independently or in combination, and 1 high pressure liquid user "up to 500 Bar".

All these utilities are made available by a special rotating distributor housed in the hollow robot wrist ; in this way it 's not necessary the external presence of flexible pipes that create a limit of robot movement

The benefits of having such advanced system allows us to create machines able to make deburring operation on parts and ,at the same time , able to perform an high pressure washing to eliminate the deburring residues and the final dry blowing.

Our technology is applicable to pieces of any metal "steel, cast iron, light alloys" but also to pieces of plastic, glass and composite materials.