

AUTOMATIC
CERAMIC ROLLER CLEANING
ROBOT
FOR TEMPERING GLASS FURNACE
Model: **“RoboClean”**



IGE's
robo  **CLEAN**



MAIN WORKING FEATURES

This new, fully-automatic machine for cleaning and polishing rollers, developed by Eurotech Way, is a practical, safe, and guaranteed system for cleaning, polishing, and dusting fused silica rollers for glass tempering furnaces.

Positioned inside the furnace at the beginning of the area to be cleaned, the machine is designed to work simultaneously on two rollers. The cleaning head is equipped with an automatic levelling and compensation system, in order to keep adjustable constant pressure over the entire surface of the rollers with any kind of tool.



There are three different tools, each built with systems that fully protect the integrity of the surface of the rollers.

The accessories are made with soft materials, making for a very delicate touch on the rollers, in addition to the damping system of the head, to safeguard and guarantee the integrity of the rolls.



A special disk, assembled with a series of rotating high-resistance steel blades, is able to "cut" and remove, in an extremely accurate and secure way, any remaining glass or paint, (even of microscopic dimensions), from the rollers' surface. These blades have the feature to be independent and self – leveling. Additionally, the method of assembly within the disk *guarantees no abrasive action on the roller*. Their speed is variable and controlled with brushless motor technology.



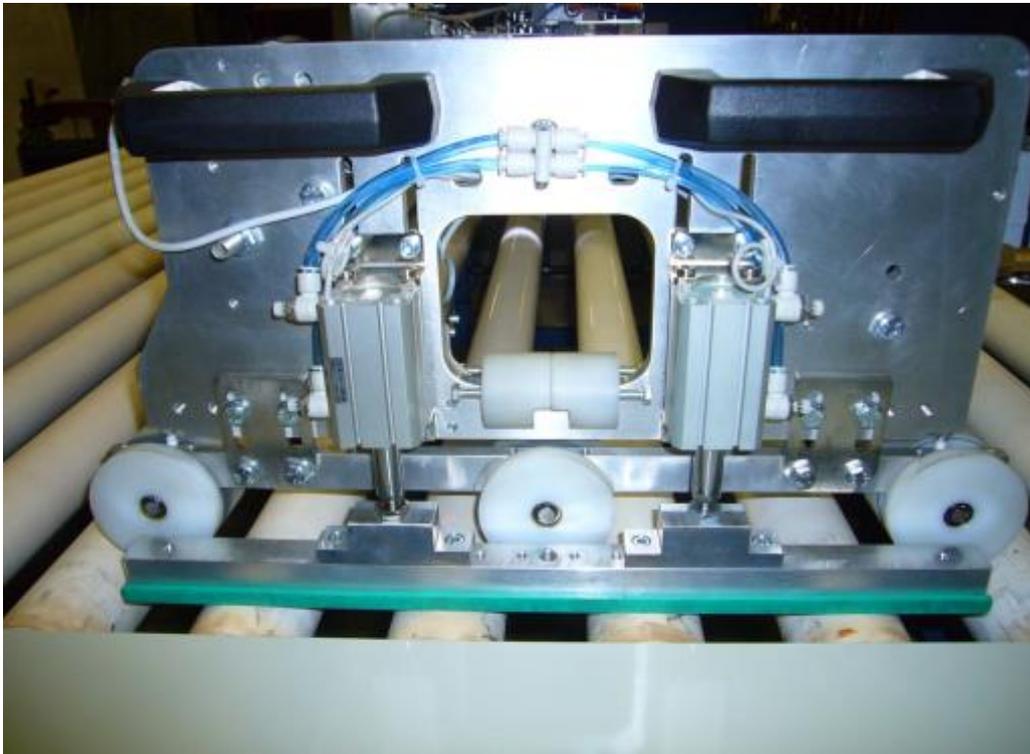
Another kind of disk available on this machine ensures a perfect polished roller surface, with superb finishing, even better than the original one, *ensuring no abrasive action on the roller*. The materials used are the result of research aimed to obtain a long polishing disk life which has never before been achieved with conventional systems of cleaning and polishing.



During the final phase, a special disk made with a unique fiber cloth removes any residual powder on the roller surface, allowing the immediate restart in production of the furnace.



With a single, simple, and functional system, the machine automatically moves ahead on the rollers after each cleaning cycle, using the rotation energy of the furnace rollers, without any more manual intervention or additional automation as this mechanism is an already integral part of the machine.



As part of the installed process, there is a vacuum system and filtration (with a filter clogging alarm indicating a need for cleaning), which provides the suction of the residual powder.



A PLC, installed in the main electrical panel, provides to manage and control all machine working processes. There is also a touch-screen operator interface, in order to display all speed parameters and working data. With this same machine, it is also possible to manage many different kinds of furnaces because the operator can store all working parameters, for each furnace, in the related recipes.



Furthermore, *for each alarm or malfunction regarding the machine's automatic cycle, the alarm description appears on the touch-screen associated with the image, in order to immediately identify the exact point of the alarm. At the same time, the program according to the type of alarm shall lift up the head, stopping the contact with the rollers.*

The machine is manufactured with components of top quality: extruded aluminium outlines, stainless steel, brushless motors, and omron electronics.

Certified CE and Patented

