

# DECORING MACHINE

CHS-2  
CHROT



# DECORING MACHINE

## CHS-2 | CHROT

We are recognised worldwide as experts in the decorating industry. We have developed and patented decorating machine models focusing on both simple and complex solutions of rotating decorating machines combining hammering, vibration and rotation, reducing the cycle time while increasing production performance. We are also manufacturers of decorating hammers because our aim is to provide customers with a complete product, taking full responsibility for the safe process of reliability of our solutions.

### DECORING MACHINE

- Double or single casting patented vibrating decorating machines.
- Machines with solely hammering or hybrids with simultaneous hammering and vibration and the rotating version.
- Manual or automated machine.
- Machines for cylinder heads, engine blocks or other aluminium subcomponents.
- Machines suitable for cold box, hot box and inorganic sand decorating.

### DECORING CELL

- Single or double decorating automated cells with gantry or anthropomorphic robot.
- Complex cells with fire face deflashing (through tool or disc) before decorating.
- Cells with productivity of up to 180 pieces per hour (cylinder heads).

### DECORING STATION

- Single hammer, double hammer manual decorating stations integrated with blowing stations.

### HAMMERING STATION

- Pre-hammering stations for the cleaning of exterior runners positioned on conveyor belts or on roller conveyors.
- Pre-hammering stations for start of crushing of internal sand, suitable to be inserted before vibrating conveyors or heat treatment furnaces.

## CHS-2 |

The **CHS-2 system simplifies and makes decorating more efficient** through the integrated action of hammering and high frequency vibration, the latter element resulting in, among other aspects, less hammering, **reducing stress to the product.**

This design of the decorating machine offers several possibilities of adjustment that makes it extremely **flexible, ergonomic, easy to operate and simple to integrate within existing production lines.**

Thanks to their originality, these machines are patented and represent a service that is highly valued by customers who by purchasing them successfully reduce costs of operations, maintenance, disposal and recovery of sand.

The system also promotes the possible re-use of part of the existing facilities on previous decorating machines allowing very rapid loading and unloading.

Thanks to the shaping of the sliding doors, it is easy to maximise its efficiency with robotic loading and unloading of the casts.

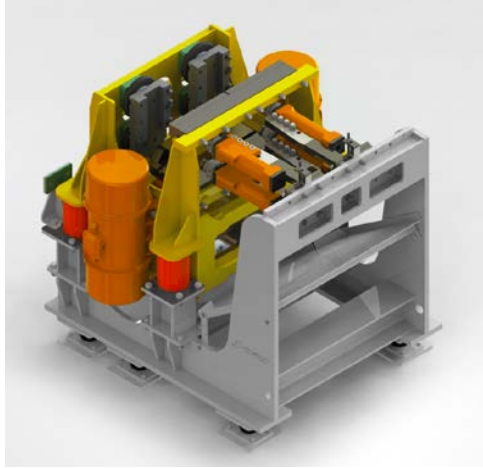


## CHROT |

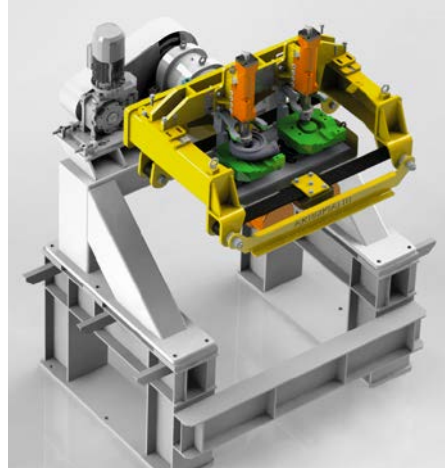
The **CHROT-2** rotary decorating machine, compared to traditional decorating machines, use the 180° cast rotation is able to improve and make the decorating operation more effective. Combining the vibration, hammering and rotation, it is possible to also decorate the more difficult castings and those with particular geometries. Using siphons the sand comes out better thanks to the different excavation angles during the cycle.



## CHS-2



## CHROT



<b>Characteristics</b>	<ul style="list-style-type: none"> <li>- Increased process efficiency</li> <li>- Reduced maintenance</li> <li>- Lower requirement for hammering time</li> <li>- The simultaneous working of 2 products</li> <li>- Quick loading/unloading of product</li> <li>- Reconfigurable on existing structures</li> <li>- Manual loading (upgradeable to automatic loading)</li> </ul>	<ul style="list-style-type: none"> <li>- Flexible configuration</li> <li>- Reduced maintenance</li> <li>- 100% process control</li> <li>- Performance optimisation</li> <li>- Reduced cycle times</li> <li>- WCM standards design</li> <li>- Manual loading (upgradeable to automatic loading)</li> </ul>
<b>Capacity</b>	120 kg	120 kg
<b>Maximum acceleration</b>	16 G'S max*	22 G'S max*
<b>Maximum amplitude</b>	14 mm (+/- 7 mm)*	18 mm (+/- 9 mm)*
<b>Clamping area</b>	780 x 600 mm depth 450 mm	1030 x 750 mm depth 450mm
<b>Rotation</b>	not present	+/- 180°
<b>Installed power</b>	8 kW	8 kW
<b>Total weight</b>	2.250 kg (excluding sound-proof booth)	1.960 kg (excluding sound-proof booth)
<b>Clamping type</b>	standard / according to customer request	standard / according to customer request
<b>Hammering</b>	on board / before, during and after the vibration / up to 4 hammers	on board / before, during and after the vibration and rotation / up to 4 hammers
<b>Maximum noise level</b>	with hammers and sound-proof booth < 79dBa without hammers < 75dBa	with hammers and sound-proof booth < 79dBa without hammers < 75dBa
<b>Compressed air</b>	5.5 bar (80 PSI)	5,5 bar (80 PSI)
<b>Electrical power supply</b>	380V 3 phases 50HZ / 460V 3 phases 60HZ	380V 3 phases 50HZ / 460V 3 phases 60HZ
<b>Applications</b>	aluminium alloys, non-ferrous metals, cast iron etc. cylinder heads, engine blocks, structural parts, manifolds, rims for wheels, etc.	aluminium alloys, non-ferrous metals, cast iron etc. cylinder heads, engine blocks, structural parts, manifolds, rims for wheels, etc.

\*the following parameters may vary depending on the load of the machine and to the settings of the moto-vibrators.



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*we put our heart in everything we do!*