

# *AUTOMATIC GRID* *CASTER*

*Model H22*

*Model H22-PLC*

WE RESERVE ANY MODIFICATIONS

## **AUTOMATIC GRID CASTER Model H22**

The H22 Grid Casting Machine represents today the most advanced and reliable solution specially designed for guarantee:



- Reliable production quality
- Constant production volumes
- Minimum maintenance requirements
- Minimum noise factor during the operation
- Maximum reliability compared with the last generation of similar equipment

The machine has been designed for a complete automatic process of low antimony and lead-calcium alloys and equipped with the most updated tools developed as results of the last requirements coming from the battery makers.

Special care and attention have been paid to the choice of the driving section of the mobile parts.

In fact, by applying hydraulic cylinders on the main mechanical parts in movement, we have achieved the double task of a drastic reduction of maintenance requirements and, quite definitively, any type of vibrations normally incurred during the casting operation.

If the absence of vibrations guarantee a lower noise factor, complying with the present legislation, the main, and the most important advantage remains a linear flow of the lead in the mould improving the quality of the plates in terms of constant weight and dimensions and a strong reduction of the casting scrapes.

In order to guarantee the maximum flexibility and adaptability to each customer specification and production requirements the main components like ladle, mould, trim and cast grid collecting unit, are hydraulically driven and can be adjusted separately for achieving the best machinery set-up.



*Hydraulic unit*



*Programmer*



*Ladle and Mould*

The feeding system has been designed with special accuracy on avoiding mechanical troubles.

The feeding pipe, adducting the melted lead from the pot to the dosing valve, is electrically heated by applying the "Joule effect". The solution guarantees a rapid and homogenous heating, taking no more than 15 minutes for reaching the settled working temperature, saving also energy.

A special design of the struggled steel dosing valve equipped with tempered bushes, avoid any dropping when the valve is off settled, meanwhile an internal gas flame eliminates the oxidation of the melted lead.

Similar attention has been paid to design the system to eliminate any ladle's dropping.

In order to guarantee a very precise adjustments, the controls of the temperature are applied and carried out on the control panel, on each main component like:

- Feeding pipe
- Dosing valve
- Ladle
- Mould

The machine is equipped with a pneumatic trim-die specially designed without springs to avoid any well-known troubles and equipped with its own independent blades lubricant system.



*Trim-die*

The machine is equipped by a cabinet control box provided by a panel on which are reported, in a very readable way, all parameters that controls the casting process. The casting speed is electronically controlled and adjustable from the front panel situated on the cabinet box and protected by a locked door.

An emergency switcher is installed on the external side of the control box in order to switch-off the complete equipment when necessary.

The best productivity is achieved when two groups of machines, each consisting of a couple of Grid Casting FG – H22 connected to the same pot, are installed in the same area.

In fact, each machine is full automatic and can drive until 20 panels/minute in the most current automotive grid and alloys mix.

The benefits of such solution are very easy to calculate, taking note that only 1 worker is requested when 4 machines are installed.

The machine is normally supplied with its own operating and service manual for a better use.

The latest and more interesting innovation regards the wide range of grids cast by our machine. Thanks to the new updating, we have achieved the important goal of obtaining grids usually cast by industrial casting machine. Our standard grid-casting machine is now able to produce single grids till a size of 183x320 mm or double grids till a size of 183x155 mm, both of a thickness up to 4 mm.



*Casted grid size 183x175x3,7*

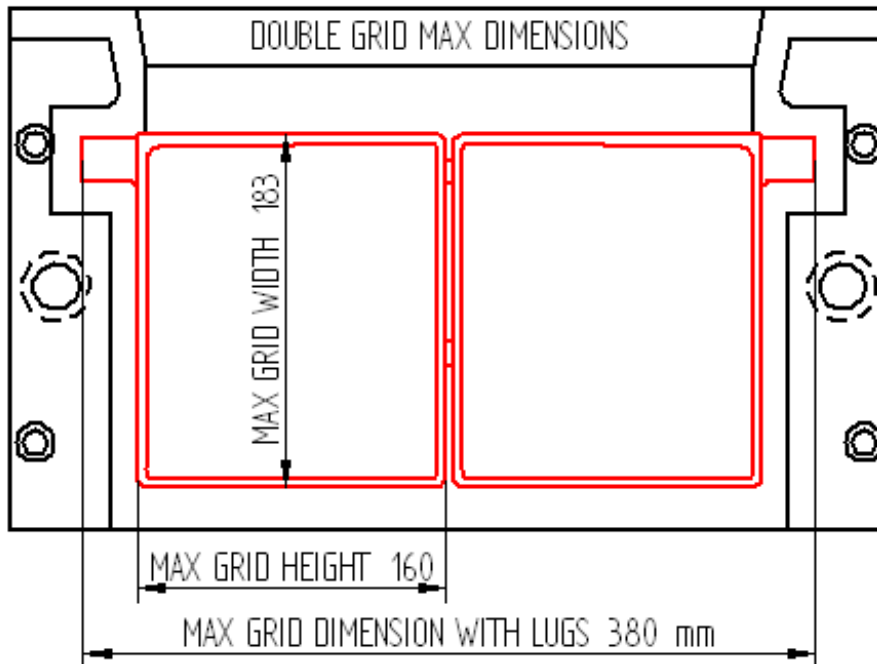
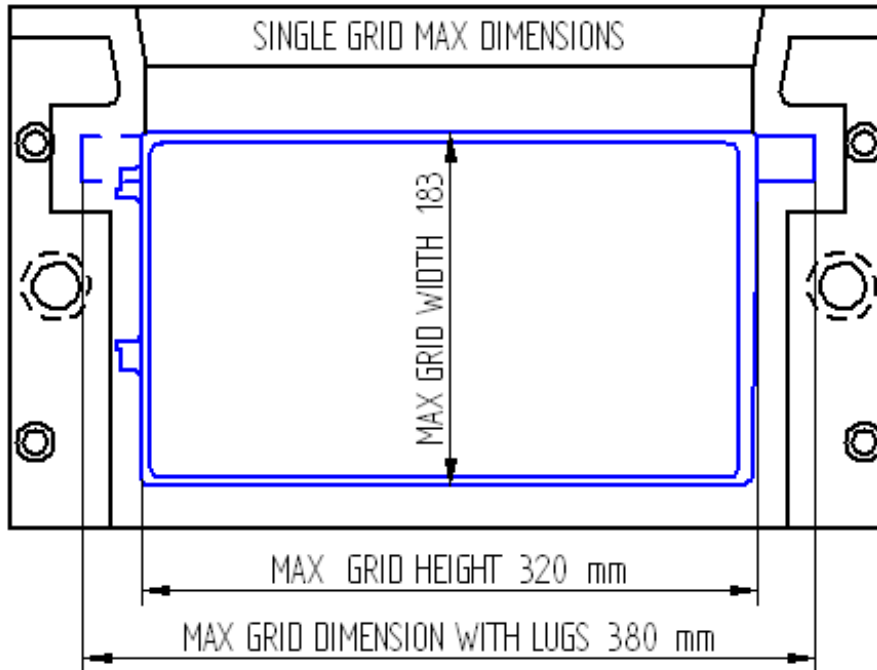
The recent upgrades involve the following parts:

1. The hydraulic unit that becomes more strength
2. The mould holder able to assemble bigger mould plates
3. The ejecting unit and the cams unit.

The new trim-die features a single trim, and remains the same for all grids with trimming sizes within 165 up to 183 mm.

These innovations make our machine more flexible, satisfying every customer's exigencies.

## GRID SIZE CAPACITY



## **TECHNICAL DATA**

OVERALL DIMENSIONS:	(3650 x 1340 x 2300) mm
WEIGHT:	1350 Kg
SPEED:	From 4 to 22 casting for minute

## **STANDARD INSTALLATION REQUIREMENTS**

Cooling water:	1 bar (Min.) 3 bar (Max.)
Compressed air:	5 bar (Min.) 7 bar (Max.)
Installed power:	17 KW (including feeding pipe heater)
Voltage:	230/400 Volt – 50 Hz
Gas	Max gas pressure allowed 200 mm/H <sub>2</sub> O

## **AUTOMATIC GRID CASTER Model H22-PLC**



The model H22-PLC has all the same features of the model H22 and in addition:

- PLC.
- Diagnostic alarms and errors.
- Grid archive: possibility to store and recall the fusion parameters of 20 grids.
- Count weekly grids produced daily.
- Automatic control of the cooling.
- Weekly timers to activate machine pre-heating.