## LOGIC



## **HORIZONTAL CONTINUOUS CASTING INDUCTION FURNACES**

















The horizontal continuous casting furnace **LOGIC**, with induction heating system, has been conceived to produce wires, plates, tubes and customized special sections.

It is used for semi-finished products in precious alloys, in the mint industry, in the watch industry, in the dental industry and in the jewellery manufacturing in general.

The alloys normally used are:

- Fine gold **AU 999.9**
- Fine silver **AG 999.9**
- Alloys of gold-silver and copper and other
- Silver alloys in AG 925 AG 800 AG 500
- Alloys for the watch industry
- Alloys in gold-palladium and dental alloys
- Soldering alloys in silver-copper, silver-zinc-copper and other.

## **ADVANTAGES**

- Crucible and die heated by two generators and two inductors, with independent regulation of power and temperature
- Maximum safety thanks to the horizontal withdrawal of the material
- High working speed thanks to the special cooling system of the die
- Homogeneity of the metal structure thanks to the secondary cooling system by direct water contact on the profile.
- High quality standard thanks to the powerful pulling system
- Certainty of maintaining the plant in good condition thanks to the self-diagnosing system and possible alarms with buzzer
- Possibility of placing in complete safety the pre-melting unit for a controlled casting into the holding crucible.
- Protection of the melting chamber by aluminum casing easily and quickly removable to change the consumables.
- Crucible, die and thermocouples quick change for short setup time.
- Pulling system with four rollers, stepper motor, closing and opening of the rollers with pneumatic control.
- Silent working plant.
- Control of the working parameters by PLC and touch screen video, self-diagnosing and possible alarms with buzzer.
- LOGIC: the hallmark for casting

MODEL	LOGIC 70	LOGIC 110	LOGIC 150
CRUCIBLE HEATING POWER	<b>12</b> kW	<b>25</b> kW	<b>40</b> kW
DIE HEATING POWER	<b>4</b> kW	7 kW	<b>10</b> kW
CRUCIBLE CAPACITY	<b>940</b> cm <sup>3</sup> <b>15</b> Kg - Au/999 <b>12</b> Kg - Au/750 <b>8</b> Kg - Ag/925	<b>2250</b> cm <sup>3</sup> <b>30</b> Kg - Au/999 <b>24</b> Kg - Au/750 <b>16</b> Kg - Ag/925	<b>5300</b> cm <sup>3</sup> <b>75</b> Kg - Au/999 <b>60</b> Kg - Au/750 <b>40</b> Kg - Ag/925
MAXIMUM TEMPERATURE	<b>1250</b> ° C	<b>1250</b> ° C	<b>1250</b> ° C
ON REQUEST, MAXIMUM TEMPERATURE	<b>1500</b> ° C	<b>1500°</b> C	<b>1500°</b> C
SPEED OF THE FOUR-ROLLER PULLING UNIT	Min. <b>10</b> mm/min Max <b>999</b> mm/min	Min. <b>10</b> mm/min Max <b>999</b> mm/min	Min. <b>10</b> mm/min Max <b>999</b> mm/min
NUMBER OF WORKING DATASHEETS TO SAVE	100	100	100
FEEDING VOLTAGE	<b>230/400</b> V <b>50/60</b> Hz 3 ph	<b>230/400</b> V <b>50/60</b> Hz 3 ph	<b>230/400</b> V <b>50/60</b> Hz 3 ph
1 WIRE DIAMETER	Min. <b>5</b> mm Max <b>25</b> mm	Min. <b>5</b> mm Max <b>15</b> mm	Min. <b>5</b> mm Max <b>20</b> mm
2 WIRES DIAMETER	Min. 5 mm Max 10 mm	Min. 5 mm Max 12 mm	Min. 5 mm Max 16 mm
3 WIRES DIAMETER	Min. 5 mm Max 8 mm	Min. 5 mm Max 10 mm	Min. 5 mm Max 14 mm
4 WIRES DIAMETER		Min. 5 mm Max 10 mm	Min. 5 mm Max 12 mm
6 WIRES DIAMETER			Min. <b>5</b> mm Max <b>10</b> mm
PLATE SIZE (WIDTH BY THICKNESS)	Max <b>70</b> x <b>8</b> mm	Max <b>110</b> x <b>20</b> mm	Max <b>150</b> x <b>25</b> mm
TUBE SIZE (OUTER DIAMETER BY THICKNESS)	Min. <b>8</b> x <b>1.5</b> mm Max <b>30</b> x <b>5</b> mm	Min. <b>10</b> x <b>1.5</b> mm Max <b>30</b> x <b>5</b> mm	Min. <b>12</b> x <b>1.5</b> mm Max <b>35</b> x <b>5</b> mm
FURNACE DIMENSIONS	<b>188</b> x <b>85</b> x <b>120</b> h cm	<b>233</b> x <b>130</b> x <b>137</b> h cm	<b>233</b> x <b>130</b> x <b>137</b> h cm
ELECTRIC BOX DIMENSIONS	<b>60</b> x <b>58</b> x <b>140</b> h cm	<b>80</b> x <b>58</b> x <b>140</b> h cm	<b>80</b> x <b>58</b> x <b>140</b> h cm
FURNACE WEIGHT	<b>500</b> Kg	<b>950</b> Kg	<b>1100</b> Kg
ELECTRIC BOX WEIGHT	<b>86</b> Kg	<b>98</b> Kg	<b>109</b> Kg

All datas are not binding and may be changed in every moment by G.B. F.LLI BERTONCELLO SRL without notice to improve the product