

## Bailo Melting Furnace



Ref: 24-760-000

These furnaces differ from similar furnaces in that they are completely automatic and need little or no servicing or special maintenance. All functions are automatic and the display warns the operator when the temperature set has been reached. The electronic precision pyrometer, working on the proportional /differential principle, regulates the temperature with constant precision in different graduations. While the maximum temperature is 1100°C both of these furnaces are **not** suitable for melting lemmel. They are suitable for melting up to 1Kg of gold and its alloys; 0.750Kg of silver and its alloys; 0.650Kg of brass; 0.700Kg of bronze. Features include - Long life silicon carbide heating elements - Digital teperature gauge Crucible tongs included.

- |   |                             |                 |
|---|-----------------------------|-----------------|
| a | 1kg graphite crucible       | Ref: 25-350-000 |
| b | 500g graphite crucible      | Ref: 25-340-000 |
|   | Bailo Replacement Element   | Ref: 24-760-001 |
|   | Bailo Replacement Pyrometer | Ref: 24-760-003 |

## Saturn Melting Furnace



Ref: 24-761-000



a



b

## Propane Melting Furnace

1 Kg Gold

Ref: 24-700-000



Method of Use: Connect the brass burner (use correct type hose) to one or more bottles of LPG with correct regulator. Light while adjusting or regulating pressure gauge, fitted to the bottle. Adjust the flame by means of the serrated ring fitted on the burner thus allowing the right mixture of gas and air to produce the type of flame which will bring the metal to melting point. This flame should swirl completely around the crucible inside the furnace, for best results. (Includes furnace and burner only)



### Reference

- 24-701-000
- 24-704-000
- 25-300-000

### Description

- Brass burner with stand
- Furnace only
- Recommended Graphite crucible 1kg (goes inside furnace)

## 'One Off' Clay Casting Kit

Ref: 41-288-000

Many manufacturing jewellers, who do not have a casting setup often want to be able to make a good quality model of their one off ring. This can now be done without using wax models, vulcanisers and wax injectors. This method uses two aluminium rings and a very fine casting clay. This special clay is very fine which means the castings come out very smooth. The clay will not dry out and will retain its moisture level for 5 to 8 years. The clay can

be reused many times, apart from the small amount that is burnt each time by the hot metal. Fifteen step by step pictures show how easily and cheaply you can make a metal model of your ring, by melting silver and pouring it into the mould you have prepared.



## Metals for Carating Gold

These can be used to alloy fine gold to 18ct, 9ct, etc.



- | Ref        | Description                      |
|------------|----------------------------------|
| 41-706-000 | Copper granules<br>500 gram pack |
| 41-707-000 | Zinc granules<br>500 gram pack   |





## Master Alloys



### Superior Master Alloys

Legor's superior alloys contain special chemical additives and raw materials of the highest standard and purity to provide:-

- Enhanced fluidity
- Absence of surface defects
- Surface compactness and reflectivity
- Reproduction of the smallest details with maximum definition
- Reduced porosity caused by shrinkage
- Less residue in the crucible.

Legor's Carbon Free White Alloys have an average concentration of carbon 10 times lower than levels found in competitors products. In the 18k White Carbon Free Alloy this means:

- Reduction of unwanted gas during melting process (reduces incidence of gas porosity in casting).
- Reduction in carbonous inclusions in metal.
- Elimination of opaque surfaces caused by release of carbon due to its insolubility in gold.
- Ceramic Crucibles will be cleaner because soiling of crucibles is usually caused by impurities in the alloy.

The 'Ultra Cast' range is a new range (European Patent Pending) and has the following characteristics:

- Very high fluidity
- Resistant to Oxidation
- Reduction of shrinkage porosity
- Smaller grain size
- Easy to polish (reduces polishing time)
- No metal inclusions (hard spots)
- No crucible residue.

The 'Ultra Cast' Range includes special versions for Vacuum Casting:

Version A: Silicon & Zinc Free      B: Silicon Free      C: Anti Oxidant with silicon.

The grain refiners used in Legor alloys produce small compact metal grains, which make the metal easier to work.

A technical information sheet is available with each alloy.

Stock Code	Description	Method of Melting	Cast/Pour °C	Use Of Alloy	Attributes
OB307W1 41-710-914 Carbon Free	9 to 14ct White Gold	Open casting Closed casting	9) 1055- 1105 14) 1035- 1085	Casting Stone in Place	Does not require Rhodium Plating. Produces oxidation free castings. Legor's top selling white alloy
WB1482W 41-711-918 Carbon Free	9ct to 18ct White Gold	Torch Open Casting	9) 1100-1135 14) 1045-1080 18) 1005-1040	Fabrication	Requires Rhodium Plating Good Workability
WA12B1 41-716-900	9ct White Gold	Closed Casting	9) 965-1015	Casting	Does not require Rhodium Plating Does not contain Nickel or Palladium Low liquidus 885°C
WL80B 41-711-922	18ct White Gold	Open Casting	18) 1140-1210	Casting	Does not require Rhodium Plating
OB585QP 41-712-918	14ct to 18ct White Gold	Torch	14) 1065-1100 18) 1025-1060	Fabrication	Does not require Rhodium Plating
WF481CE 41-713-918	14ct to 18ct White Gold	Closed Casting	14) 1030-1100 18) 990-1060	Casting	Does not require Rhodium Plating
OR134 41-740-918	9ct to 18ct Rose Gold	Torch Open Casting Closed Casting	9) 1065-1115 14) 1020-1070 18) 1000-1050	Casting Fabrication	Has deep red colour, gives good contrast to white gold colours Grain refiners produce small grain size
OG130A 41-720-914	9ct to 14ct Yellow Gold	Open Casting Closed Casting	9) 990-1060 14) 935-1005	Casting	Contains anti-oxidant and grain refiner. Very fluid for complete fill of finest detail..
C182N1 41-730-180 UltraCast (C)	18ct Yellow Gold 2N colour	Open Casting Closed Casting	18) 985-1035	Casting	Anti-oxidant with silicon Very fluid metal, bright oxidation free surface Small grain size reduces shrinkage
YN821W 41-721-180	18ct Yellow Gold 2N colour	Torch Open Casting Closed Casting	18) 970-1005	Fabrication Chain/Wire	Good deformability characteristics Can be hardened by heat treatment
OG601C1 41-721-914	9ct to 14ct Yellow Gold	Torch Open Casting Closed Casting	9) 985-1020 14) 960-995	Fabrication Chain/Wire	Excellent deformation and workability Cannot be hardened by heat treatment
AG108M 41-745-925	925 Silver	Open Casting Closed Casting	940-1010	Casting	Anti-oxidant and anti-tarnish produces superb quality oxide free castings.

Torch= with jewellers torch

Open Casting = melting is open to air

Closed Casting = Melting/Casting under inert gas/vacuum

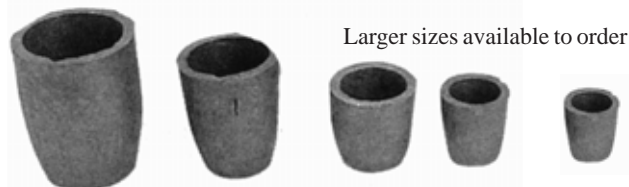
To learn more about Legor and their range of Alloys please visit their website [www.legor.com](http://www.legor.com)



This symbol indicates the item can not be sent by post or air freight.

## Graphite Crucibles

Reference	Height	O/D	I/D	Capacity
25-305-000	155mm	125mm	98mm	5kg
25-295-000	110mm	96mm	76mm	2kg
25-300-000	90mm	80mm	60mm	1kg
25-307-000	85mm	70mm	55mm	750g
25-310-000	65mm	55mm	45mm	500g
25-315-000	55mm	50mm	35mm	250g



## Crucibles - Electric Melt

Finely machined graphite for use in electric melting furnaces.

- 25-335-000 for Kerr Electro-melt 1 Kg
- 25-338-000 for Kerr Maxi-melt 3.1Kg
- 25-340-000 for AJS Furnace 500g - 90mm
- 25-350-000 for AJS Furnace 1Kg - 125mm

## Ceramic & Graphite Crucibles

These crucibles for induction casting machines are made with a graphite crucible bonded inside a ceramic outer.



### 100g capacity

50mm diameter, 75mm high

Ceramic & graphite Ref: 25-410-000

Ceramic only Ref: 25-410-020

Graphite only Ref: 25-410-050

### 800g capacity

50mm diameter, 105mm high

Ceramic & graphite Ref: 25-430-000

Ceramic only Ref: 25-430-020

Graphite only Ref: 25-430-050

Special Order



### 2.2kg capacity

70mm diameter, 148mm high

Ceramic & graphite Ref: 25-470-000

Lektros (the bonding cement for these crucibles) is available if required. Ref: 25-499-000

Special Order

## Glazing Ceramic

**Crucibles** Extend the life of crucibles and reduce the chance of contamination. Glazing the crucible before use.

- Preheat your burnout furnace/kiln to 600°C
- Place the crucible in the furnace and allow to heat for approx. 10-15 minutes
- Remove the crucible from the furnace and place it on a high temp. fireproof board.
- Using a melting torch, heat the inside of the crucible to 'red hot'.
- Coat the crucible with borax.
- Heat again to 'red hot'.

After cooling, the glazed areas will have a 'shiny look'.

## Borax Powder

Ref: 26-160-000 250g

Very good as a flux for melting gold, silver and other alloys.



Can be used to line ceramic crucibles to increase their usable life and helps protect the metal from any impurities that may be in the ceramic. Also reduces oxidation.

## Precious Metal Refining Powder

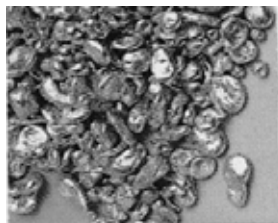
Ref: 26-200-000 250g



Cleans molten metal and helps eliminate cracking on melts and rolls. This easy to use powder comes highly recommended by many AJS customers. Melt metal. Place 1 teaspoon per 200g of metal onto the top of melt. Leave for a few moments then stir with a carbon rod, pour when ready.

## Artificial Casting Colour

Avoid the risk of losing expensive gold or silver stock line samples. Artificial Casting Colour is supplied in granular form for easy casting and offers a low cost alternative that will reproduce the same look and detail you would expect from precious metals. Back scrap from the casting process may be re-used many times. Artificial Casting Colour is designed to resist air tarnish and will require only a periodic clean-up



Reference	Description
41-700-000	Gold Colour 450g
41-705-000	Silver Colour 450g

## Ceramic Crucibles

Ref: 25-420  
60g



Ref: 25-375-000  
60g



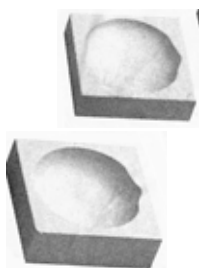
65mm high x 35mm 65mm high x 35mm

For dental casting machines

## Melting Crucibles

### Square Ceramic Crucibles

Reference	Size mm	Capacity
25-110-000	50 x 50	100g
25-120-000	70 x 70	300g
25-130-000	100 x 100	1kg
25-132-000	120 x 120	2kg



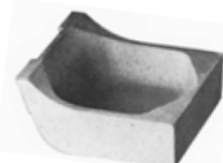
### Crucible Holder

Ref: 28-710 Strong well made holder will fit the crucibles above up to 100mm. Total length 505mm. - 590g.



### High Back Crucible

Ref: 25-125-000 Capacity 600g  
80 x 80 x 42mm high back  
Average depth inside 16mm



### Tip-up-ingot Crucible

Ref: 25-290-000 Tapered sides fit the crucible holder on the Tip-up-ingot Mould  
Base size 50 x 50mm Tip-up-ingot mould p34.



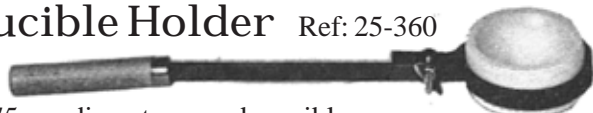
### Round Melt Crucibles

76mm diameter  
Ref: 25-370-000 400g (10oz) crucible  
Ref: 25-373-000 1kg crucible (not illust)



### Crucible Holder Ref: 25-360

For 75mm diameter round crucibles.



## Platinum Casting Crucibles

Ref: 25-215-000 - 3oz Ref: 25-216-000 - 5oz  
Wesgo high temperature crucibles will withstand the higher temperatures required for Platinum Casting. Can also be used for Stainless Steel.  
Base size 64 x 44mm.



### Platinum Melt Crucible

Ref: 25-150-000 Wesgo Platinum Melt Dish. 226g (8oz) capacity. 75mm diameter



### Platinum Melt/Ingot Crucibles

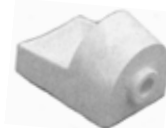
Reference	Ingot Size	Crucible Size
25-140-000	40 x 20 x 4mm - Plate	60 x 40 x 20mm
25-142-000	40 x 7 x 7mm - Bar	60 x 40 x 20mm

These Ceramic Crucibles are designed to have Platinum melted directly into the mould to form either Plate or Bar Ingots without the addition of any chemicals or concern for contamination.



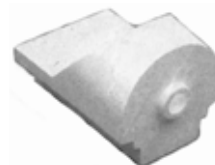
## Ceramic Crucible 1 oz

Ref: 25-210-000 Base size 47 x 34mm  
Suits Kerr Centrifico 4"



## Ceramic Crucible 2.5 oz

Ref: 25-229-000 Italian economy  
Ref: 25-230-000 Kerr  
Base size 28 x 67mm  
Suits Kerr Centrifico 4"



## Ceramic Crucible 7 oz

Ref: 25-239-000 Italian economy  
Ref: 25-240-000 Kerr  
Base size 84 x 47mm  
Suits Centrifugal and Kerr Centrifico 6"



Ref: 25-231-000  
Suits Neycraft centrifugal casting machine. Base size 45 x 43mm



## Ceramic Crucible 12 oz

Ref: 25-249-000 Italian economy  
Ref: 25-250-000 Kerr  
Base 84 x 47mm  
Suits Centrifugal & Kerr Centrifico 6"



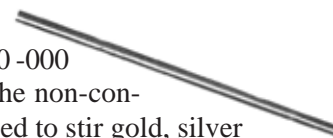
## Ceramic Crucible 20 oz

Ref: 25-259-000 Italian economy  
Ref: 25-260-000 Kerr  
Base 84 x 47mm  
Suits Centrifugal and Kerr Centrifico 6"



## Stirring Rods

**Carbon Rod** Ref: 41-150-000  
300mm x 10mm diameter. The non-contaminating carbon rod is used to stir gold, silver and other alloys in the crucible while melting the metal



**Quartz Rod** Ref: 41-149-000  
300mm x 9.5mm diameter, for stirring molten metal without contaminating.

**Ceramic Rod**  
25-180-000 300mm  
25-185-000 250mm  
Ideal for picking out impurities in the melt



## Crucible Tongs

Assayers tongs Ref: 28-705-000  
200mm Stainless Steel.  
Ref: 28-740-000 - 400mm Steel.



### Straight Handle Steel Tongs

Ref: 28-720-100 For picking up crucibles and small flasks. 483mm long.

## Multi Cavity Wire Ingot Moulds

Used to convert scrap into wire. Metal is melted in a crucible and poured into the mould. Wire sizes produced can then be rolled to required size in a rolling mill. Always heat ingot moulds before pouring metal into them.

Ref: 25-510-000 3 of 170mm long cavities (cast)  
18/24ct Capacity 150g in 8 x 8mm  
Ingot Mould 220g in 8 x 9mm  
Weight 1Kg 420g in 8 x 19mm



Ref: 25-530-000 4 of 197mm long cavities (cast)  
18/24ct Capacity 180g in 8 x 7mm  
Ingot Mould 230g in 8 x 9mm  
Weight 1.3Kg 260g in 8 x 10mm  
880g in 8 x 34mm



Ref: 25-520-000 3 of 245mm long cavities (machined)  
18/24ct Capacity 70g in 4 x 4.5mm  
Ingot Mould 80g in 4 x 5mm  
Weight 1.6Kg 285g in 8 x 9mm



Ref: 25-525-000 3 of 245mm long cavities (cast)  
18/24ct Capacity 120g in 5 x 6mm  
Ingot Mould Weight 145g in 6 x 6mm  
1.6Kg 195g in 8 x 6mm



## Ingot Mould Ref: 25-540-000



35 x 35 x 90mm long  
1850g capacity.

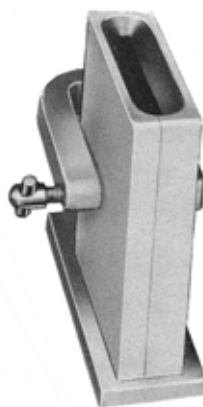
## Tip Up Ingot Mould Ref: 25-290-000



Metal is heated in the crucible and when molten, can be tipped directly into the steel mould attached.  
Uses crucible (see page 33)  
Mould size: 35 x 50 x 3mm  
Shipping weight 1.3Kg

## Flat Plate Moulds

These machined steel moulds allow metal to be melted and formed into suitable shapes for the rolling mill.



Ref: 25-620-000 45 x 3.5 x 50mm high  
18/24ct max.130g  
Mould 1.1 Kg  
Ref: 25-630-000 45 x 4.5 x 70mm high  
18/24ct max.250g  
Mould 1.4 Kg  
Ref: 25-640-000 45 x 4.5 x 100mm high  
18/24ct max.340g  
Mould 1.6 Kg  
Ref: 25-650-000 70 x 5.5 x 135mm high  
18/24ct max.850g  
Mould 3.8 Kg

## Combination Flat and Wire

Ref: 25-820-000

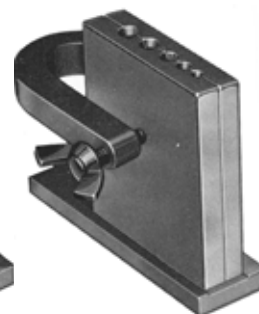


This reversible ingot mould gives you three ingot moulds in one. You can make flat plates 78 high x 43 wide x 3mm thick or wires suitable for use in rolling mills. Wire up to 78mm long can be formed in 3, 4, 5, & 6mm diameters. Round and half round.  
Shipping weight: 1.8Kg

## Reversible Wire Mould

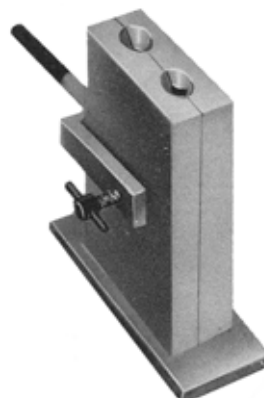
This mould can be reversed to make both round and half round wire. Half round wire: 2 x 1mm, 3 x 1.5mm, 4 x 2mm, 5 x 2.5mm, 70mm high. Round wire:

Ref: 25-760-000 2, 3, 4 and 5mm  
70mm high.



Shipping weight: 1.5Kg

## Square Wire Moulds



Ref: 25-720-000  
6 x 6 x 120mm high  
Capacity: 210g  
Shipping weight: 4.8Kg

Ref: 25-721-000  
8 x 8 x 160mm high  
Capacity: 510g  
Shipping weight: 5.5Kg