

# **Salamander**

### **Introduction & application**

Salamander Super is a high quality ceramic bonded clay graphite crucible range manufactured by plastic forming techniques. Salamander Super crucibles are used to provide consistent performance in fuel-fired furnaces and medium / high frequency induction furnaces. The smaller sizes are typically used to melt precious metals, while larger sizes can be used for some ferrous alloys such as grey iron as well as to melt non-ferrous alloys. These crucibles are ideally suitable for applications requiring high liquid metal non-wettablility with the crucible wall.

## **Typical Metal Casting Temperature**

850°C - 1600°C

#### **Performance Characteristics**

- Clean melting
- Good thermal conductivity
- Good resistance to chemical corrosion
- High refractoriness

#### Identification

These crucibles are colored black and are available in a larger sizes used in induction furnaces of medium and high frequency.

#### **Pattern Range**

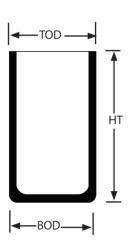
Salamander Super crucibles are available in a range of sizes as A-shapes, F-shapes (bilge), and E-shape cylinders to suit a wide spectrum of end user requirements. Ladle liners are also available in standard or bottom pour configuration.





#### Straight Shape Clay Graphite Crucibles - For Induction Furnaces

| PATTERN | HT<br>mm | TOD<br>mm | BOD<br>mm | BRIMFUL<br>CAPACITY<br>Water Litres | BRASS<br>CAPACITY<br>Kgs |
|---------|----------|-----------|-----------|-------------------------------------|--------------------------|
| E323    | 318      | 165       | 165       | 4.3                                 | 25                       |
| E375    | 270      | 205       | 195       | 4.4                                 | 26                       |
| E305    | 500      | 310       | 310       | 21                                  | 120                      |
| E303    | 200      | 110       | 110       | 1.1                                 | 6.4                      |

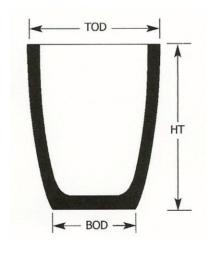




# Salamander

## Salamander Clay Graphite Crucibles A shape Crucibles

| PATTERN<br>NO. | DESCRIPTION  | HT<br>mm | OUTSIDE<br>DIAMETER |           | BRIMFUL<br>CAPACITY | BRASS<br>CAPACITY |
|----------------|--------------|----------|---------------------|-----------|---------------------|-------------------|
|                |              |          | TOD<br>mm           | BOD<br>mm | Water Liters        | Kgs               |
| A5/0           | A&0032H0035  | 35       | 32                  | 24        | 0.01                | 0.09              |
| A3/0           | A&0046H0052  | 52       | 46                  | 30        | 0.03                | 0.22              |
| AI/0           | A&0060H0067  | 67       | 60                  | 41        | 0.07                | 0.56              |
| A0.5           | A&0068H0078  | 78       | 68                  | 48        | 0.13                | I                 |
| Al             | A& 0079H0097 | 97       | 79                  | 55        | 0.16                | 1.5               |
| AI.5           | A&0090H0092  | 92       | 90                  | 55        | 0.2                 | 2.1               |
| A2             | A&0095H0109  | 109      | 95                  | 61        | 0.33                | 2.5               |
| A3             | A&0105H0127  | 127      | 105                 | 70        | 0.49                | 3.7               |
| A4             | A&0114H0141  | 141      | 114                 | 76        | 0.75                | 5.6               |
| A5             | A&0124H0152  | 152      | 124                 | 86        | 0.91                | 6.8               |
| A6             | A&0130H0165  | 165      | 130                 | 95        | 1.2                 | 9                 |
| A7             | A&0140H0175  | 175      | 140                 | 105       | 1.46                | 11.3              |
| A8             | A&0156H0184  | 184      | 156                 | 108       | 1.67                | 12.5              |
| AI0            | A&0160H0200  | 200      | 160                 | 110       | 2                   | 15.5              |
| AI2            | A&0171H0210  | 210      | 171                 | 121       | 2.4                 | 19.5              |
| Al6            | A&0184H0232  | 232      | 184                 | 130       | 3.07                | 23                |
| A20            | A&0197H0260  | 260      | 197                 | 145       | 4                   | 30                |
| A25            | A&0210H0280  | 280      | 210                 | 155       | 4.8                 | 36                |
| A30            | A&0232H0290  | 290      | 232                 | 160       | 5.72                | 43                |
| A40            | A&0232H0318  | 318      | 232                 | 160       | 6.67                | 50                |
| A50            | A&0248H0324  | 324      | 248                 | 180       | 8                   | 60                |
| A60            | A&0276H0362  | 362      | 276                 | 190       | 10.27               | 77                |
| A70            | A&0292H0315  | 315      | 292                 | 200       | 12.4                | 93                |
| A80            | A& 0300H0397 | 397      | 300                 | 210       | 14.01               | 105               |
| A100           | A&0324H0400  | 400      | 324                 | 230       | 15.97               | 120               |
| A120           | A&0333H0435  | 435      | 333                 | 240       | 18.36               | 138               |
| AI 50          | A&0362H0452  | 452      | 362                 | 250       | 22.36               | 168               |
| A200           | A&0400H0491  | 491      | 400                 | 285       | 31.88               | 239               |



#### Crucibles with Baffle Plate

| PATTERN | HT<br>mm | TOD<br>mm | BOD<br>mm | BRIMFUL<br>CAPACITY<br>Water Litres | BRASS<br>CAPACITY<br>Kgs |
|---------|----------|-----------|-----------|-------------------------------------|--------------------------|
| AP30    | 290      | 232       | 160       | 5.7                                 | 43                       |
| AP40    | 318      | 232       | 160       | 6.7                                 | 50                       |
| AP50    | 324      | 248       | 178       | 8                                   | 60                       |
| AP60    | 362      | 276       | 190       | 10                                  | 77                       |
| AP70    | 375      | 292       | 200       | 12                                  | 93                       |

<sup>-</sup> TOD -**←**BOD →

All dimensions are subject to normal manufacturing tolerances. Morgan reserves the right to change specifications at any time

except those containing more than 30% of Nickel, Chromium or Iron.

<sup>•</sup> Our crucibles are recommended for non-ferrous alloys • Crucible Working capacity = 90% of (Water liter capacity x Specific gravity of the metal) Specific gravity of various metals are: Aluminium = 2.72, Brass = 8.35, Copper = 8.9, Gold = 19.3, Silver = 10.5, Zinc = 7.12, Iron = 7.85