
FILTRONE®
where quality filtration does matter

SINCE 1990



ICV

*Certificate of Registration*

This Certificate certifies that the Quality Management System of

SHAKTI INDUSTRIES

Survey No.-22 Paiky, Unit No-3, Nr Bhoot Ni Dairy, Nr FCI Godown, Heater Nagar - 2, Sonagadh, Thangadh, Surendra Nagar, Gujarat 363530, India.

has been audited by ICV and found to be in compliance with the requirements of the standard

ISO 9001:2015

This certificate is valid for the following scope

Manufacturing, Trading, Importing, Exporting and Supply of Ceramic Alumina Foundry Filters and all type of Refractories

Certificate No. : N/5876552/8573
Certificate Issue Date : 14/10/2020
1st Surveillance Due : 14/10/2021
2nd Surveillance Due : 14/10/2022
Date of Expiry : 13/10/2023

IAF

UKAS CERTIFICATION
CAB: 11007

CEO
ICV ASSESSMENTS PVT. LTD.

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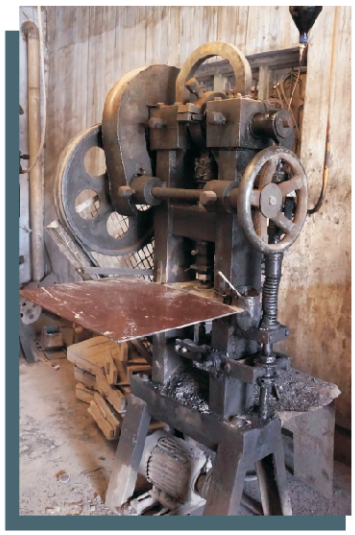
# Production flow



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## Company Profile

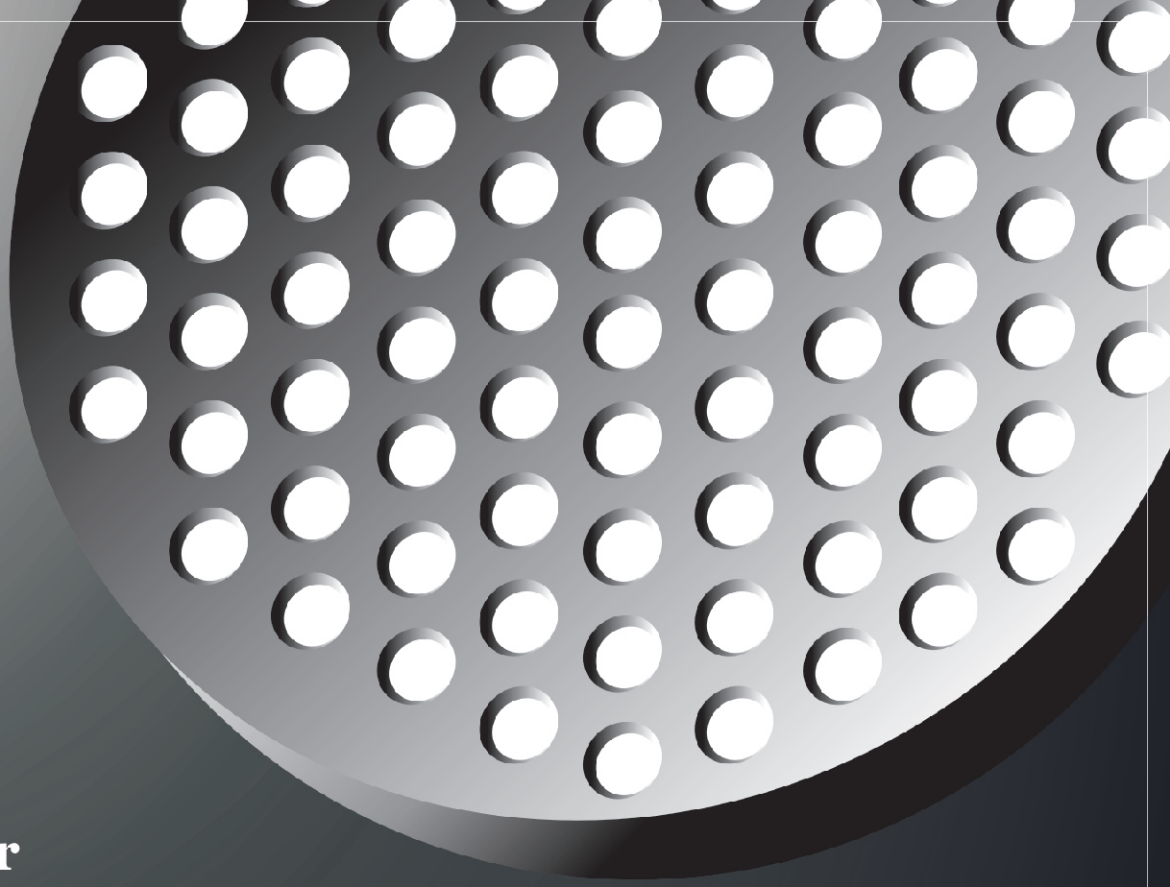
Shakti industries is specialized in manufacturing and supply of ceramic foundry filter and refractory.

As an ISO-9001 certified enterprise, Shakti industries devote our selves to provide products with consistent quality, technical improvement and professional service, we have set up worldwide sales network, supplying products and serving globally for Indian market.

Based on more than 30 year of ceramic and refractory manufacturing and Shakti industries are dedicating product in steady quality and professional services to the customers and enjoying the progress along with them.

**We make an item according to customer's requirement**

# index



# Ceramic Filter

Ceramic Filter Manufactured today are highly reliable for their Physical Characteristics and dimension and therefore mass production of casting on automated moulding lines has seamlessly accepted and accommaodated the introduction of these high quality filters.

**FILTRONE CERAMIC FILTERS** prepared from good quality raw material and made under strict process controls are ideally suited for foundry applications. Good thermal and mechanical properties together with consistent dimensions make FILTRONE filters the best in choice for the production of clean castings with superior surface finish.

Rejection of casting due to inclusions can be reduced considerably by using **FILTRONE CERAMIC FILTERS** in foundry moulding systems. Customers who buy these high quality casting will benefit immensely because of the reliability and assured performance characteristics derived from these casting.

## What makes **FILTRONE CERAMIC FILTER** superior ?

- They are prepared under high pressure and therefore offer high densities.
- They are fired at elevated temperatures to ensures complete sintering.
- Their external dimensions pore sizes are accurate and made to close tolerances.
- They can be offered in different shapes and sizes to suit a variety of mould design and gating systems.
- They posses consistent thermal properties like refractoriness,thermal shock resistance etc.

### TOLERANCE

Range of tolerance (length & width)

| | |
|---|---|
| Up to 40mm | +0 / -1.00 mm |
| 40mm to 120mm | +0 / -2.00 mm |
| Over 120mm | +0 / -3.00 mm |
| Thickness | +0 / -1.00 mm |

## Benefits of using **FILTRONE CERAMIC FILTERS**

- Purify the liquid iron
- Remove non-metalic impurities
- Trap slag and dross particles
- Minimize turbulent flow of liquid iron
- Reduce inclusion in the casting
- Improve the surface quality of casting
- Improve mechanical properties of casting
- Reduce rejection rate and improve energy consumption
- Enable reduction in machining allowances
- Increase life of cutting tools and reduce cost of machining
- Improve reliability of casting performance

## why do we need filters....

### Economical production of casting

- Scrapped casting are wastefull expenditure.
- Increase the yield of castings per mould poured
- If defects are minimized supply of good casting will increase
- Quality improvement will cut down costs of post casting processes (like cleaning and finishing)

### Improve Productivity

- Assured quality means operating procedures are stable and reliable
- Better surface quality gives scope for reduced allowances for machining
- Better internal soundness means trouble free production for uninterrupted supplies

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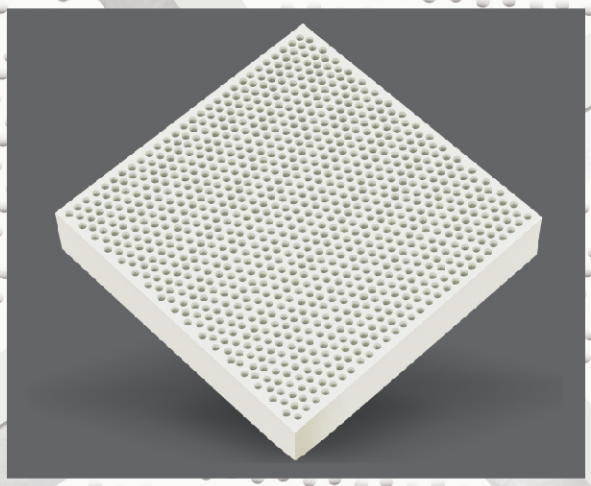
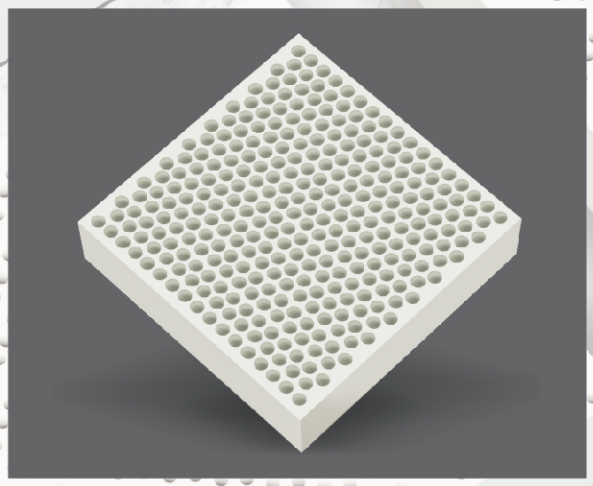
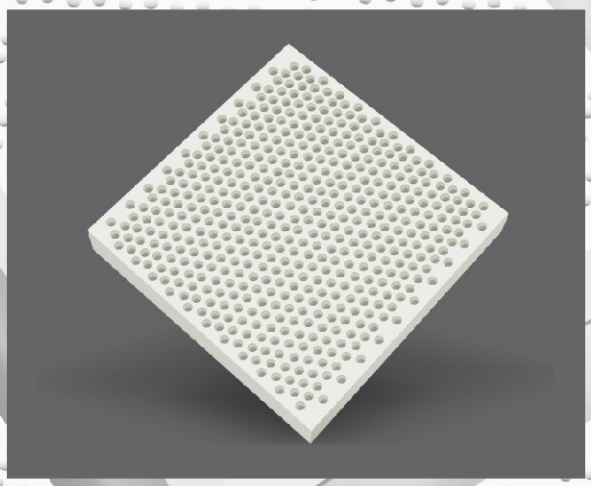
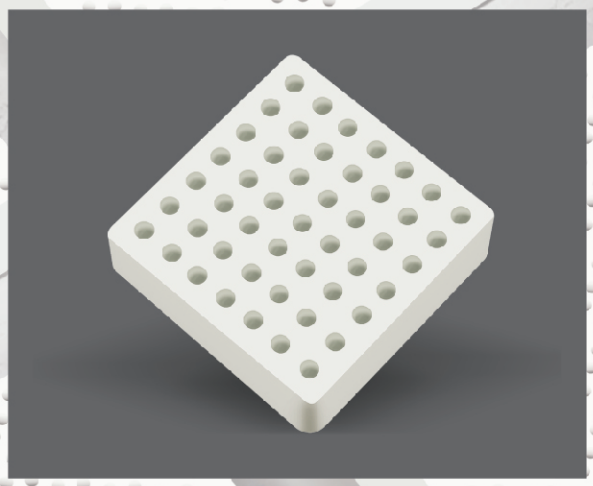
# Square Ceramic Filter



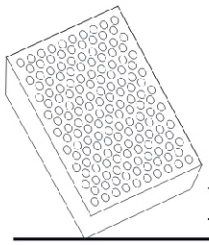






# Square Ceramic Filter

| Item Code | Dimensions | | Number Of Hole | Hole Dia (mm) | Open Area % | Pouring Area ($mm^2$) |
|---|---|---|---|---|---|---|
| | Nominal | Thickness | | | | |
| FF-101 | 25x25 | 10 | 39 | 2.25 | 25 | 155 |
| FF-102 | 39x39 | 12 | 143 | 2 | 30 | 449 |
| FF-103 | 40x40 | 15 | 168 | 2 | 33 | 528 |
| FF-104 | 40x40 | 12.5 | 188 | 2 | 37 | 590 |
| FF-105 | 40x40 | 10 | 112 | 2.5 | 50 | 550 |
| FF-106 | 40x40 | 10 | 114 | 2.5 | 50 | 559 |
| FF-107 | 40x40 | 12 | 264 | 1.7 | 37 | 599 |
| FF-108 | 40x40 | 12.5 | 127 | 3 | 56 | 897 |
| FF-109 | 49x49 | 15 | 294 | 2 | 38 | 923 |
| FF-110 | 50x50 | 20 | 137 | 2.3 | 23 | 569 |
| FF-111 | 50x50 | 12.5 | 310 | 1.9 | 35 | 878 |
| FF-112 | 50x50 | 21 | 64 | 3.75 | 28 | 707 |
| FF-113 | 50x50 | 12.5 | 230 | 2.3 | 38 | 955 |
| FF-114 | 50x50 | 12.5 | 279 | 2.17 | 41 | 1031 |
| FF-115 | 50x50 | 12.5 | 294 | 2 | 37 | 923 |
| FF-116 | 50x50 | 15 | 294 | 2 | 37 | 923 |
| FF-117 | 50x50 | 22 | 294 | 2 | 37 | 923 |
| FF-118 | 50x50 | 20 | 104 | 2.8 | 29 | 640 |
| FF-119 | 55x55 | 12.5 | 389 | 2 | 40 | 1221 |
| FF-120 | 55x55 | 12.5 | 261 | 2.3 | 36 | 1084 |
| FF-121 | 55x55 | 12.5 | 468 | 1.7 | 35 | 1062 |
| FF-122 | 55x55 | 12.5 | 279 | 2.2 | 38 | 1159 |
| FF-123 | 55x55 | 12.5 | 687 | 1.5 | 40 | 1213 |
| FF-124 | 60x60 | 12.5 | 426 | 2 | 37 | 1338 |
| FF-125 | 66x66 | 12.5 | 537 | 2 | 39 | 1686 |
| FF-126 | 75x75 | 12.5 | 585 | 2.3 | 43 | 2429 |
| FF-127 | 75x75 | 15 | 585 | 2.3 | 43 | 2429 |
| FF-128 | 75x75 | 22 | 585 | 2.3 | 43 | 2429 |
| FF-129 | 75x75 | 22 | 425 | 2.5 | 37 | 2085 |
| FF-130 | 75x75 | 15 | 621 | 2 | 35 | 1950 |
| FF-131 | 75x75 | 22 | 621 | 2 | 35 | 1950 |
| FF-132 | 75x75 | 20 | 513 | 2.5 | 45 | 2517 |
| FF-133 | 100x100 | 20 | 295 | 4.5 | 58 | 4689 |
| FF-134 | 100x100 | 20 | 952 | 2.3 | 40 | 3953 |
| FF-135 | 100x100 | 22 | 952 | 2.3 | 40 | 3953 |
| FF-136 | 100x100 | 20 | 1050 | 2 | 33 | 3297 |
| FF-137 | 132x132 | 20 | 493 | 4.5 | 45 | 7837 |
| FF-138 | 134x134 | 20 | 1340 | 2.5 | 37 | 6574 |



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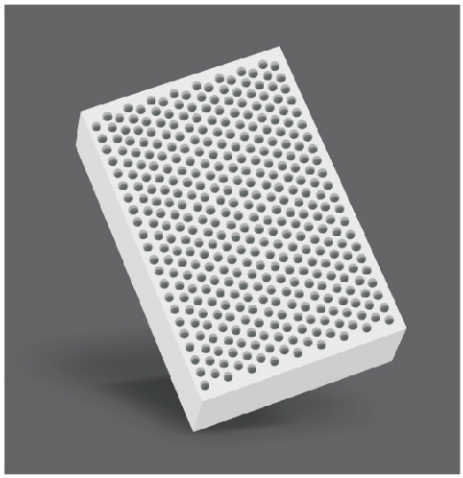
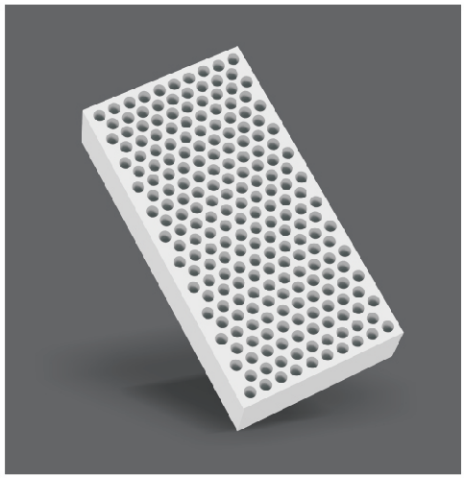
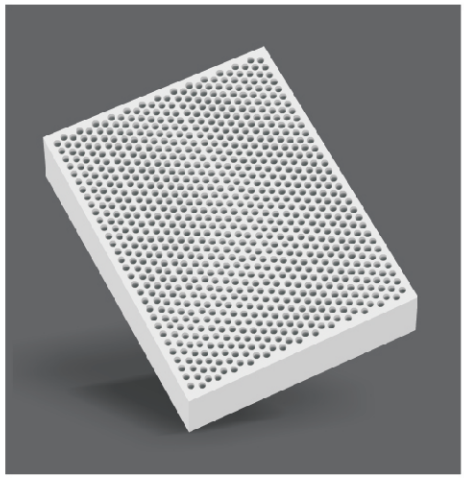
# Rectangle Ceramic Filter

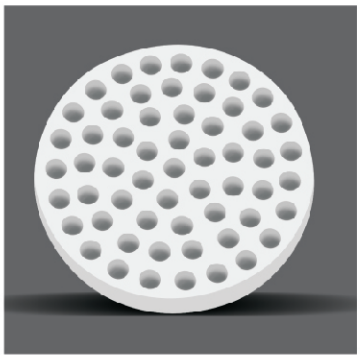


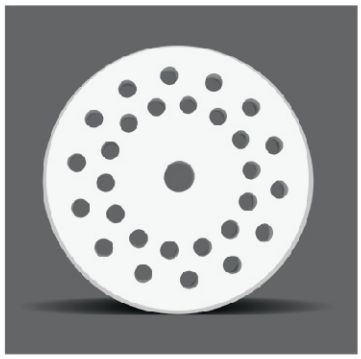




| Item Code | Dimensions | | Number Of Hole | Hole Dia (mm) | Open Area % | Pouring Area ($mm^2$) |
|---|---|---|---|---|---|---|
| | Nominal | Thickness | | | | |
| FF-201 | 50x100 | 20 | 1325 | 1 | 21 | 1040 |
| FF-202 | 50x100 | 20 | 219 | 3.5 | 43 | 2106 |
| FF-203 | 50x100 | 12 | 305 | 2.25 | 24 | 1212 |
| FF-204 | 50x100 | 21 | 507 | 2 | 32 | 1592 |
| FF-205 | 50x75 | 20 | 105 | 4.25 | 40 | 1489 |
| FF-206 | 50x75 | 20 | 200 | 2.5 | 26 | 981 |
| FF-207 | 50x75 | 20 | 171 | 2.8 | 28 | 1052 |
| FF-208 | 50x75 | 15 | 374 | 2.17 | 37 | 1382 |
| FF-209 | 50x75 | 22 | 374 | 2.17 | 37 | 1382 |
| FF-210 | 50x75 | 15 | 377 | 2 | 32 | 1184 |
| FF-211 | 55x60 | 15 | 385 | 2 | 37 | 1209 |
| FF-212 | 75x100 | 22 | 850 | 2 | 36 | 2669 |
| FF-213 | 90x100 | 20 | 42 | 4.5 | 9 | 668 |

# Round Ceramic Filter



| Item Code | Dimensions | | Number Of Hole | Hole Dia (mm) | Open Area % | Pouring Area ($mm^2$) |
|---|---|---|---|---|---|---|
| | Nominal | Thickness | | | | |
| FF-301 | 35 | 8 | 39 | 3 | 29 | 276 |
| FF-302 | 37 | 7 | 49 | 2 | 14 | 154 |
| FF-303 | 38 | 8 | 35 | 3.75 | 34 | 386 |
| FF-304 | 40 | 8 | 9 | 5.5 | 17 | 214 |
| FF-305 | 40 | 22 | 117 | 2 | 29 | 367 |
| FF-306 | 40 | 22 | 63 | 3 | 35 | 445 |
| FF-307 | 47 | 7 | 58 | 3 | 24 | 410 |
| FF-308 | 47 | 7.5 | 58 | 3.75 | 37 | 640 |
| FF-309 | 47 | 10 | 58 | 3.75 | 37 | 640 |
| FF-310 | 47 | 10 | 169 | 2 | 31 | 531 |
| FF-311 | 47 | 10 | 63 | 3 | 26 | 445 |
| FF-312 | 47 | 10 | 127 | 2.3 | 30 | 527 |
| FF-313 | 47 | 7 | 63 | 3 | 26 | 445 |
| FF-314 | 50 | 15 | 58 | 3.75 | 33 | 640 |
| FF-315 | 50 | 10 | 41 | 4.5 | 33 | 652 |
| FF-316 | 50 | 10 | 58 | 3.75 | 33 | 640 |
| FF-317 | 50 | 10 | 197 | 2 | 32 | 619 |
| FF-318 | 50 | 10 | 73 | 3 | 26 | 516 |
| FF-319 | 55 | 10 | 29 | 5.5 | 29 | 689 |
| FF-320 | 60 | 10 | 95 | 3 | 24 | 671 |
| FF-321 | 60 | 10 | 104 | 3 | 26 | 735 |
| FF-322 | 60 | 10 | 144 | 2 | 16 | 452 |
| FF-323 | 60 | 10 | 73 | 3.75 | 29 | 806 |
| FF-324 | 66 | 15 | 61 | 4.5 | 28 | 970 |
| FF-325 | 67 | 10 | 106 | 3.75 | 33 | 1170 |
| FF-326 | 68 | 10 | 145 | 3 | 28 | 1024 |
| FF-327 | 70 | 10 | 106 | 3.75 | 30 | 1170 |
| FF-328 | 70 | 20 | 145 | 3 | 27 | 1024 |
| FF-329 | 70 | 20 | 238 | 2 | 20 | 747 |
| FF-330 | 80 | 10 | 39 | 5.5 | 17 | 926 |
| FF-331 | 100 | 10 | 308 | 2.15 | 14 | 1118 |
| FF-332 | 120 | 15 | 386 | 1.5 | 6 | 681 |
| FF-333 | 140 | 10 | 217 | 3.5/2.3 | 12 | 1800 |
| FF-334 | 150 | 15 | 638 | 1.5 | 6 | 1127 |

# Round Taper ceramic Filter

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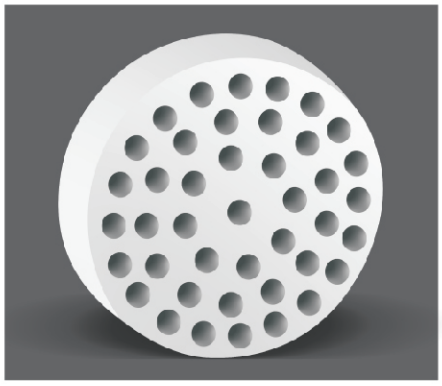
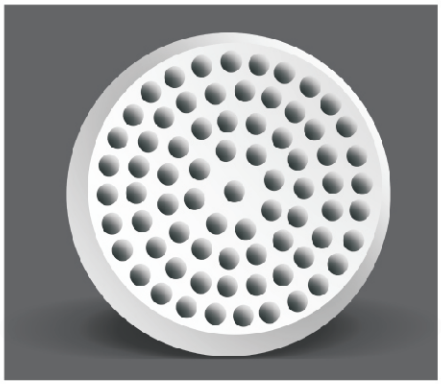
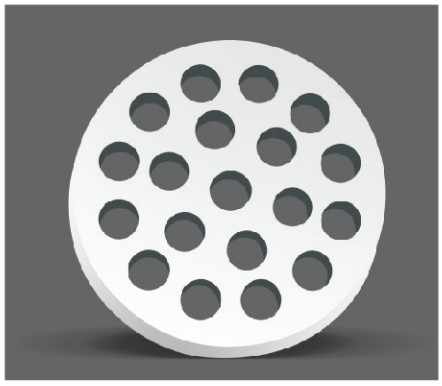
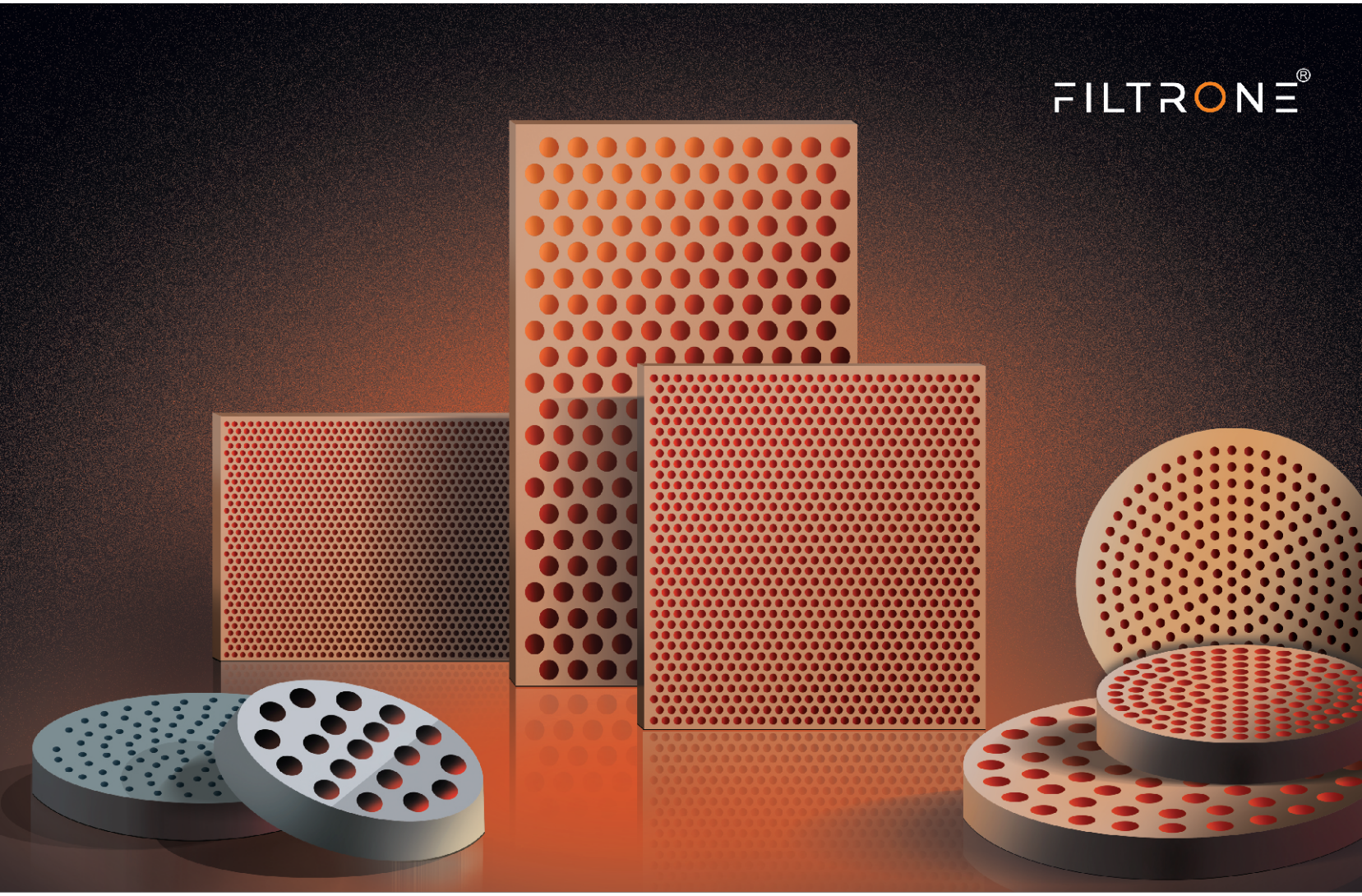






| Item Code | Dimensions | | Number Of Hole | Hole Dia (mm) | Open Area % | Pouring Area ($mm^2$) |
|---|---|---|---|---|---|---|
| | Nominal | Thickness | | | | |
| FF-401 | 40/42 | 10 | 139 | 2 | 32 | 436 |
| FF-402 | 40/42 | 10 | 27 | 4 | 24 | 339 |
| FF-403 | 48/50 | 15 | 42 | 3.5 | 21 | 404 |
| FF-404 | 56/58 | 15 | 58 | 3.5 | 21 | 558 |
| FF-405 | 50/56 | 10 | 74 | 2.7 | 17 | 423 |
| FF-406 | 50/52 | 10 | 15 | 4 | 9 | 188 |
| FF-407 | 50/52 | 15 | 170 | 2 | 25 | 534 |
| FF-408 | 50/52 | 15 | 42 | 3 | 14 | 297 |
| FF-409 | 58/60 | 12 | 333 | 1.7 | 27 | 755 |
| FF-410 | 58/60 | 12 | 223 | 2 | 25 | 700 |
| FF-411 | 61/63 | 10 | 107 | 3 | 24 | 756 |
| FF-412 | 62/64 | 15 | 242 | 2 | 24 | 760 |
| FF-413 | 62/64 | 10 | 196 | 2.1 | 21 | 679 |
| FF-414 | 70/66 | 10 | 24 | 5 | 12 | 471 |
| FF-415 | 70/72 | 15 | 86 | 3.5 | 20 | 827 |
| FF-416 | 70/66 | 10 | 27 | 5 | 14 | 530 |
| FF-417 | 73/75 | 10 | 19 | 9 | 27 | 1208 |
| FF-418 | 74/76 | 15 | 366 | 2 | 25 | 1149 |
| FF-419 | 80/82 | 15 | 122 | 3.5 | 22 | 1173 |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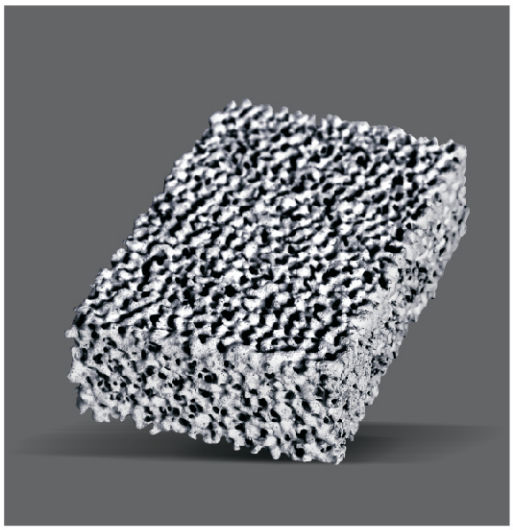
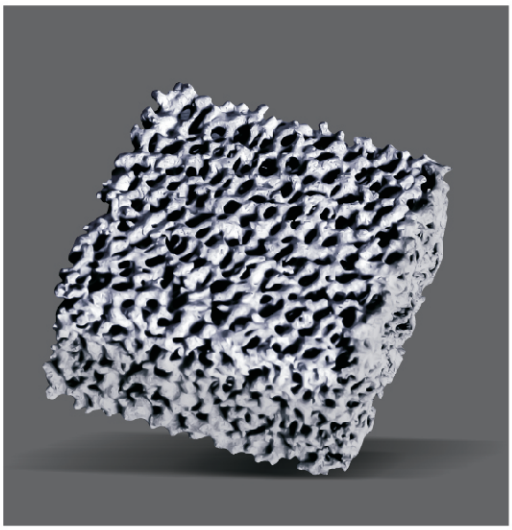
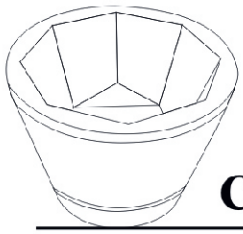
# Silicon Carbide Foam Filter





## specification

| | |
|---|---|
| Content | Sic |
| Colour | Gray |
| Porosity ( PPI) | 10-30 |
| Temperature | 1500 $^{o}$C |
| Compressive Strength (Mpa) | 1. 3 |
| Bulk Density (Glcm3) | 0. 45 ± 0. 2 |



# Ceramic Pouring Cup

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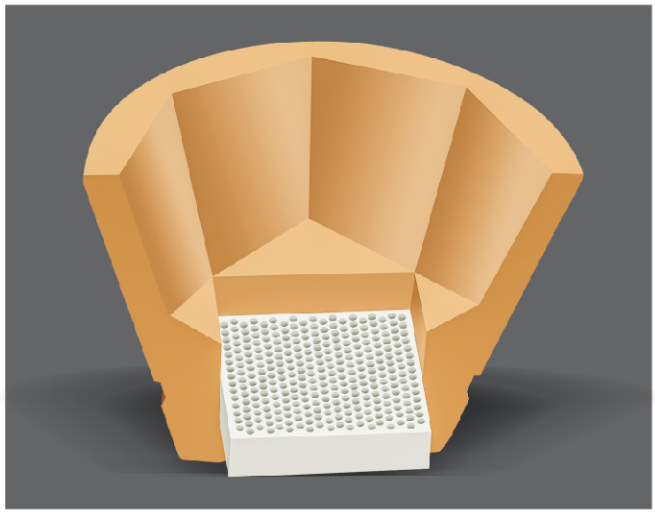
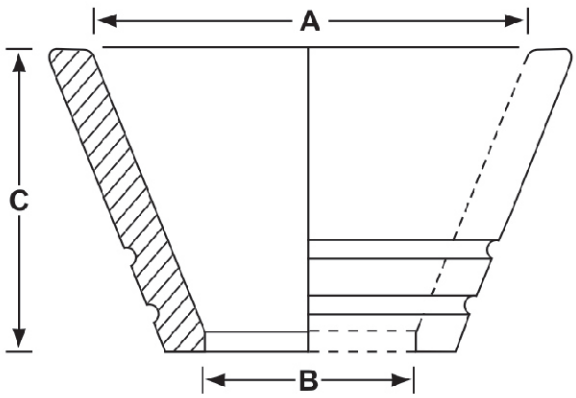
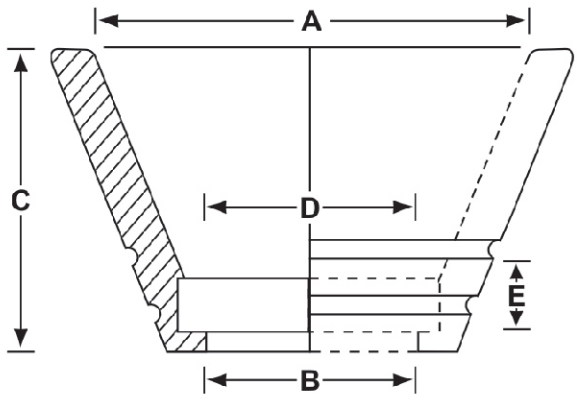


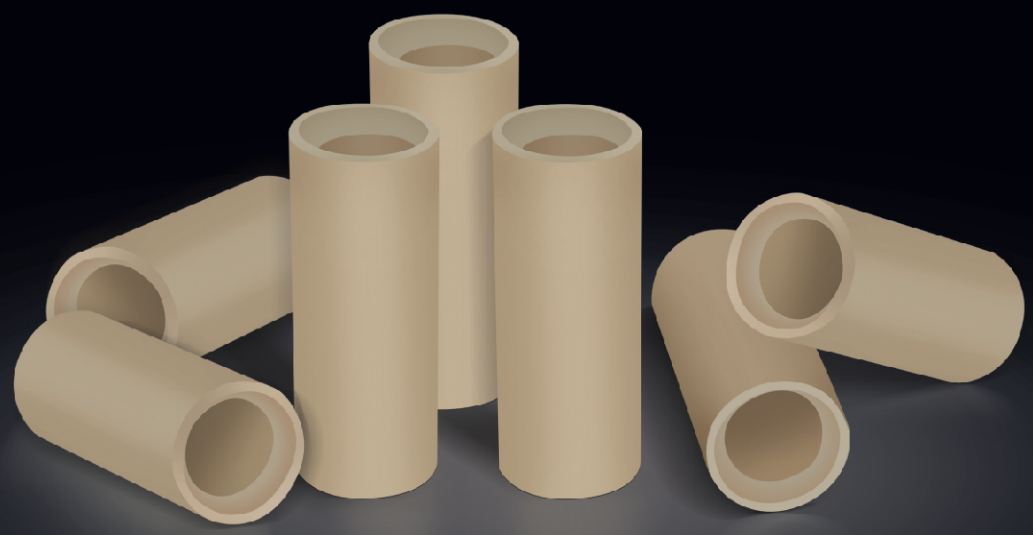


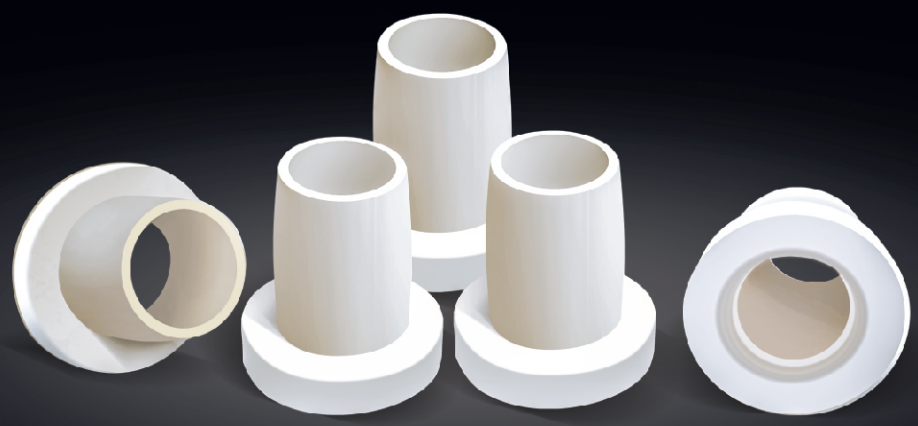

**Use the image above and supply your required dimensions for a custom quote.**

The use of pouring cup in foundry Casting is the Part of Casting system. Puts the molten metal in the Pouring cups, which are made from high quality material, we will create pouring cup as per your requirements.

## Ceramic Tube for Temperature Tips



## Ceramic Bush



FILTRONE®

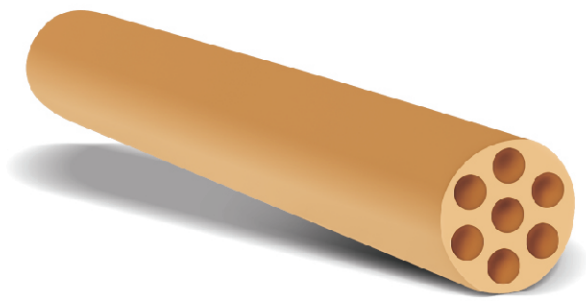
# Heating Elements ( Heat Resistance)

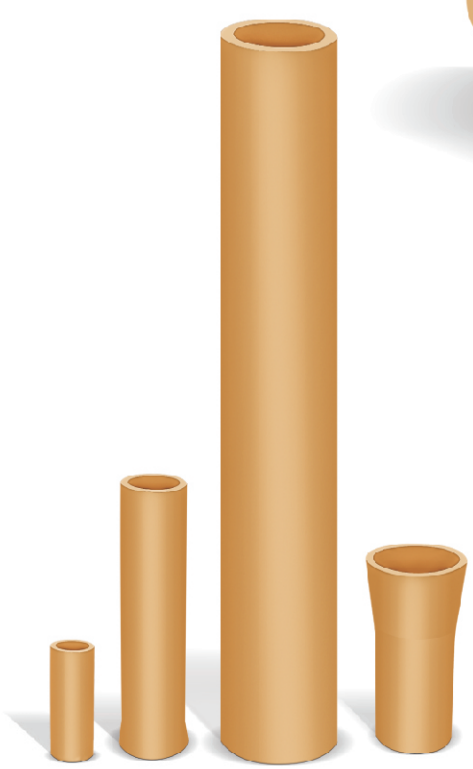
- Prepared under high 1250°C Temperature
- Prepared under high Pressing
- Dimensionally Accurate
- Chemical elements - Silica Oxide ($S_iO_2$) and high Aluminum Oxide ($Al_2O_3$)
- Different Shape and Size
- Good Heat resistance

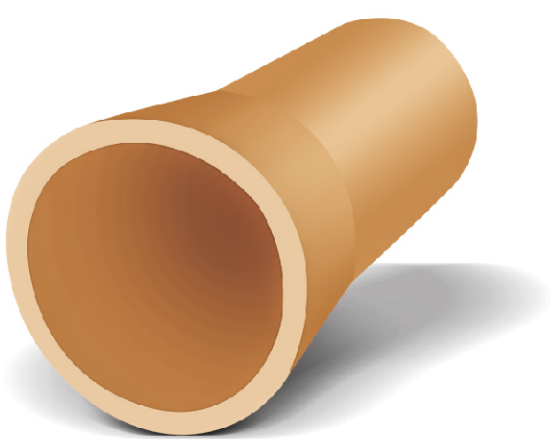
**Suitable for**

- Electric Heater
- Plastic Industrial Heater
- Room Heater
- Water Geyser
- Plastic sealing Machine
- Shrink Machine etc.

# Ceramic Tubes







# Ceramic Tubes

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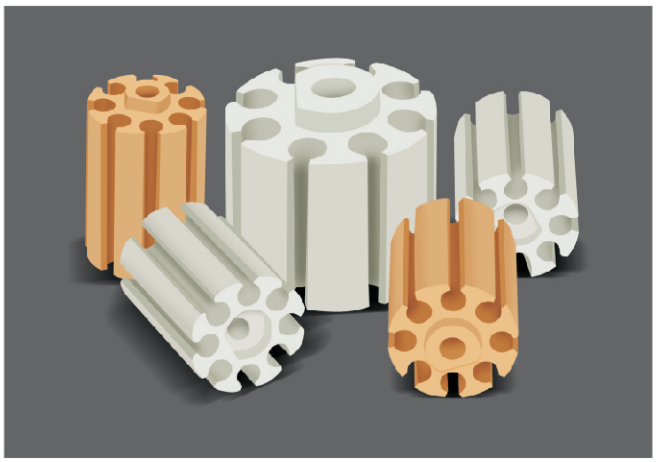
| Item Code | Size | Number of Hole |
|---|---|---|
| FT-601 | 2mm - ID x 4mm - OD x 50mm - L | 1 |
| FT-602 | 3mm - ID x 5mm - OD x 50mm - L | 1 |
| FT-603 | 4mm - ID x 6mm - OD x 50mm - L | 1 |
| FT-604 | 5mm - ID x 7mm - OD x 50mm - L | 1 |
| FT-605 | 8mm - ID x 11mm - OD x 25mm - L | 1 |
| FT-606 | 8mm - ID x 12mm - OD x 300mm - L | 1 |
| FT-607 | 12mm - ID x 20mm - OD x 300mm - L | 1 |
| FT-608 | 15mm - ID x 25mm - OD x 300mm - L | 1 |
| FT-609 | 14mm - ID x 23mm - OD x 63mm - L | 1 |
| FT-610 | 20mm - ID x 30mm - OD x 300mm - L | 1 |
| FT-611 | 21mm - ID x 30mm - OD x 75mm - L | 1 |
| FT-612 | 10mm - ID x 18mm - OD x 300mm - L | 1 |
| FT-613 | 35mm - ID x 50mm - OD x 300mm - L | 1 |
| FT-614 | 30mm - ID x 50mm - OD x 300mm - L | 1 |
| FT-615 | 25mm - ID x 50mm - OD x 300mm - L | 1 |
| FT-616 | 25mm - ID x 35mm - OD x 300mm - L | 1 |
| FT-617 | 4mm x 150mm | 2 OR 4Hole |
| FT-618 | 6mm x 150mm | 2 OR 4Hole |
| FT-619 | 8mm x 150mm | 2 OR 4Hole |
| FT-620 | 9mm x 150mm | 2 OR 4Hole |
| FT-621 | 10mm x 150mm | 2 OR 4Hole |
| FT-622 | 11mm x 150mm | 2 OR 4Hole |
| FT-623 | 12mm x 150mm | 2 OR 4Hole |
| FT-624 | 13.5mm x 150mm | 2 OR 4Hole |
| FT-625 | 14mm x 150mm | 2 OR 4Hole |
| FT-626 | 19mm x 150mm | 2 OR 4Hole |
| FT-627 | 20mm x 150mm | 2 OR 4Hole |
| FT-628 | 20mm x 50mm | 4Hole |
| FT-629 | 19mm x 50mm | 4Hole |
| FT-630 | 16mm x 50mm | 4Hole |
| FT-631 | 18mm x 50mm | 4Hole |
| FT-632 | 10mm x 150mm | 7Hole |
| FT-633 | 11mm x 150mm | 7Hole |
| FT-634 | 12.5mm x 150mm | 7Hole |
| FT-635 | 13.5mm x 150mm | 7Hole |
| FT-636 | 14mm x 150mm | 7Hole |
| FT-637 | 16mm x 150mm | 7Hole |
| FT-638 | 17mm x 150mm | 7Hole |
| FT-639 | 19mm x 150mm | 7Hole |
| FT-640 | 21mm x 150mm | 7Hole |
| FT-641 | 22mm x 150mm | 7Hole |
| FT-642 | 25mm x 150mm | 7Hole |
| FT-643 | 28mm x 150mm | 9Hole |
| FT-644 | 32mm x 50mm | 9Hole |
| FT-645 | 34mm x 50mm | 9Hole |
| FT-646 | 37mm x 50mm | 9Hole |
| FT-647 | 44mm x 50mm | 9Hole |
| FT-648 | 46.5mm x 150mm | 19Hole |
| FT-649 | 60mm x 150mm | 19Hole |

# Ceramic Bobbin



| Item Code | Size (mm) |
|---|---|
| FB-501 | 20 x 50 - 6 Hole |
| FB-502 | 26 x 50 - 6 Hole |
| FB-503 | 29 x 50 - 8 Hole |
| FB-504 | 32 x 50 - 8 Hole |
| FB-505 | 34 x 50 - 8 Hole |
| FB-506 | 34 x 50 - 12 Hole |
| FB-507 | 37 x 50 - 8 Hole |
| FB-508 | 37 x 50 - 12 Hole |
| FB-509 | 38 x 50 - 8 Hole |
| FB-510 | 41 x 50 - 8 Hole |
| FB-511 | 44 x 50 - 8 Hole |
| FB-512 | 44 x 50 - 6 Hole |
| FB-513 | 44 x 50 - 12 Hole |
| FB-514 | 47 x 50 - 8 Hole |
| FB-515 | 50 x 50 - 8 Hole |
| FB-516 | 51 x 75 - 8 Hole |
| FB-517 | 55 x 50 - 12 Hole |
| FB-518 | 62 x 50 - 8 Hole |
| FB-519 | 76 x 50 - 12 Hole |

# Ceramic Stripes

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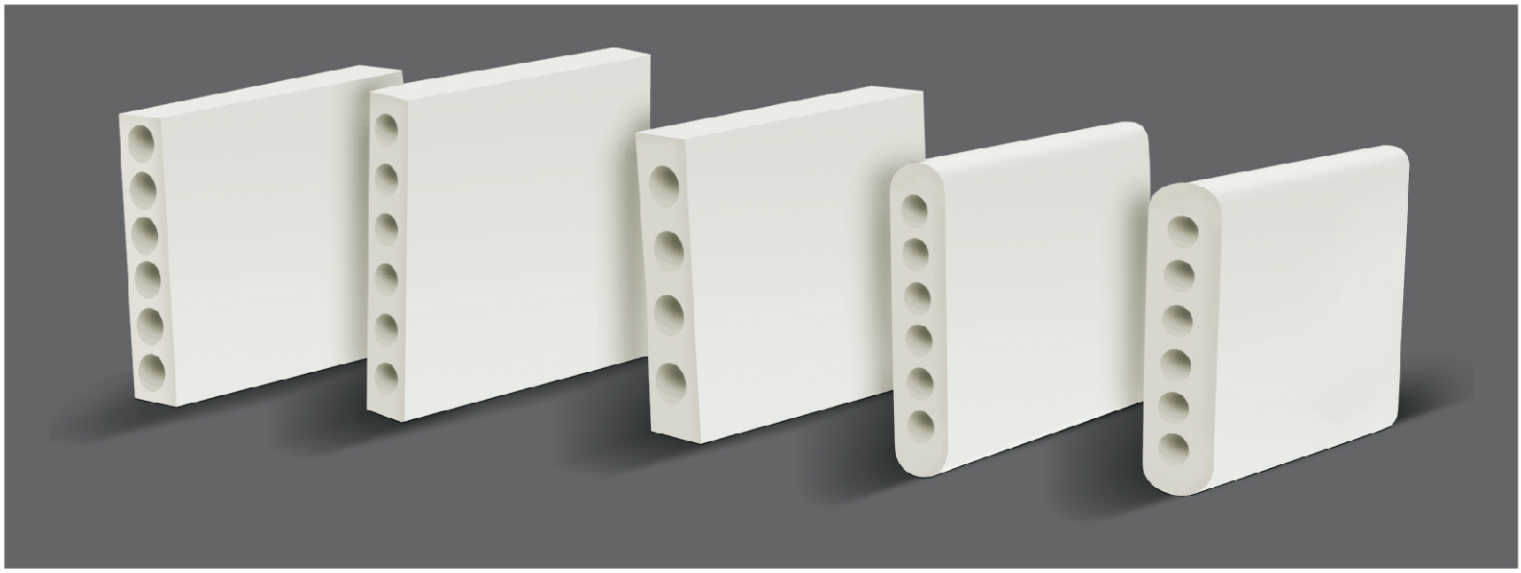
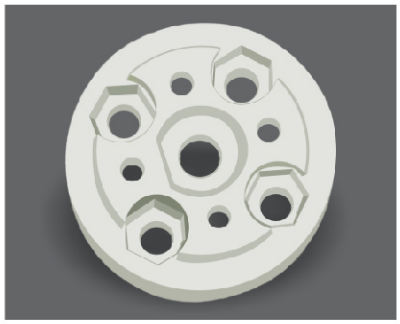
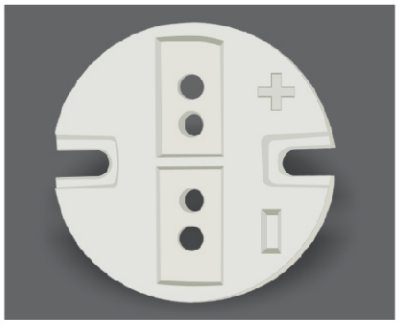
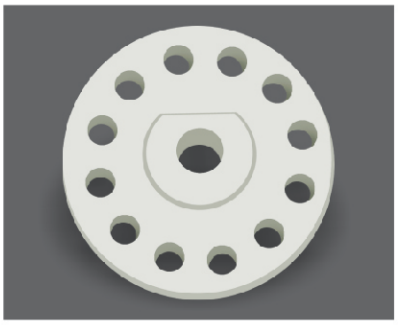


| Item Code | Size | Number of Hole | Shape |
|---|---|---|---|
| FS-701 | 21mm x 50mm | 4 | Round |
| FS-702 | 32mm x 50mm | 6 | Round |
| FS-703 | 35mm x 50mm | 6 | Round |
| FS-704 | 38mm x 50mm | 6 | Round |
| FS-705 | 41mm x 50mm | 6 | Round |
| FS-706 | 41mm x 50mm | 4 | Square |
| FS-707 | 44mm x 50mm | 4 | Square |
| FS-708 | 50mm x 50mm | 6 | Square |
| FS-709 | 50mm x 50mm | 10 | Square |
| FS-710 | 32mm x 50mm | 6 | Square |
| FS-711 | 22mm x 120mm | 4 | Round |

# Cearmic Connector / Terminal




| Item Code | Item Name |
|---|---|
| FCT-801 | 32mm Top |
| FCT-802 | 35mm Top |
| FCT-803 | 37mm Top |
| FCT-804 | 44mm Top |
| FCT-805 | 50mm Top |
| FCT-806 | 29mm Bottom |
| FCT-807 | 32mm Bottom |
| FCT-808 | 35mm Bottom |
| FCT-809 | 37mm Bottom |
| FCT-810 | 44mm Bottom |
| FCT-811 | 50mm Bottom |
| FCT-812 | 32mm Steep Terminal |
| FCT-813 | 35mm Steep Terminal |
| FCT-814 | 37mm Steep Terminal |
| FCT-815 | 41mm Steep Terminal |
| FCT-816 | Coffi Roster |

# Ceramic Furnace Bricks

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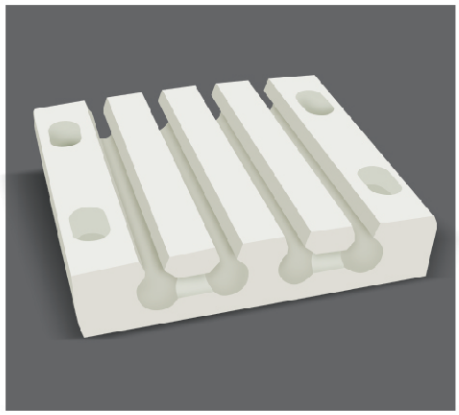
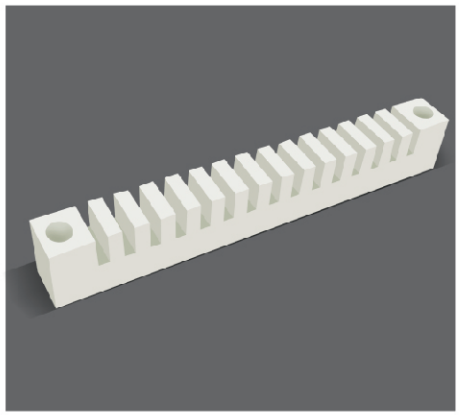


**Bricks**

**G Huck**



**Rank**

**Cup Lock**

| Item Code | Item Name | Item Size |
|---|---|---|
| FFB-901 | Bricks | 46mm x 76mm (4 Hole) |
| FFB-902 | Bricks | 42mm x 105mm (2 Hole) |
| FFB-903 | Bricks | 55mm x 95mm (4 Hole) |
| FFB-904 | Bricks | 110mm x 110mm (4 Hole) |
| FFB-905 | Bricks | 115mm x 225mm (6 Hole) |
| FFB-906 | U.Bricks | 45mm x 120mm |
| FFB-907 | Bricks | 120mm x 260mm (10 Hole) |
| FFB-908 | Cup Lock | 51mm x 60mm |
| FFB-909 | G Huck | |

Tolerance - 1mm to 50mm ± 1mm
51mm to 100mm ± 2mm
101mm and above ± 5mm

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