



Registered Office:

Vijay Industries, Post Box 12, Belgaum Road,
Bailhongal - 591102, Belgaum District,
Karnataka, India.

Raghu V.

Executive Director
Basava Metal Technology LLP.

+91 - 97314 40683

raghuvmay@gmail.com

Shivam Sunil Metgud

Head Of Business Development
Basava Metal Technology LLP.

+91 - 81055 87095

shivammetgud@gmail.com



basava
Casting Solution Technologies



www.hernmes.com



www.sunnsun.net/+91 9799161616

BASAVA METAL TECHNOLOGY LLP.

(An ISO 9001:2015 certified company.)

Our vision

"Adopting sustained research and technology to provide better casting solutions."

At Basava Metal Technology LLP, our vision drives continuous innovation in ceramic materials, filtration technology, feeding solutions and application engineering - helping foundries achieve consistent quality and improved productivity.



We are committed to produce high quality ceramic foam filters and riser sleeves.

Basava Metal Technology LLP. (BMTL) using the brand name **basava** is involved in the manufacturing of foundry consumables viz. ceramic foam filters and foundry riser sleeves. **basava** can be categorized as an import substitute driven company as currently 90% of the ceramic foam filters are being imported. It is one of the very few companies that manufacture ceramic foam filters in India.

basava not only manufactures foundry consumables; but also help its customers: either to standardize the casting process or provide customized casting solutions as the situation may warrant.

basava

"Adopting sustained research and technology to provide better casting solutions."

At **basava** our vision drives continuous innovation in ceramic materials, filtration technology, feeding solutions and application engineering - helping foundries achieve consistent quality and improved productivity.

basava is an engineering-focused organization specializing in advanced foundry process solutions that enhance casting quality and operational efficiency. Guided by sustained research, materials science expertise, and manufacturing excellence, we deliver high-performance products designed to meet the demanding requirements of modern foundries.

Our Core Competencies

basava combines deep expertise in materials science, controlled manufacturing processes, and comprehensive application support to provide reliable, consistent, and cost-effective solutions for both ferrous and non-ferrous foundries across diverse casting industries.

Product Portfolio

1. Ceramic Foam Filters

Our advanced ceramic foam filters are engineered to remove non-metallic inclusions from molten metal, significantly improving casting quality. Through precision manufacturing and rigorous quality control, these filtration products deliver consistent performance that foundries can depend on.

2. Foundry Riser Sleeves

Our high-performance foundry riser sleeves are manufactured using carefully formulated insulating and exothermic slurry compositions. Designed to improve feeding efficiency, enhance casting quality, and reduce metal wastage, these foundry riser sleeves provide reliable performance for today's demanding foundry applications.

Our Commitment

- **Quality Consistency:** Rigorous manufacturing standards ensure dependable product performance
- **Technical Support:** Comprehensive application engineering and process optimization assistance
- **Customization:** Tailored solutions to meet specific foundry requirements
- **Innovation:** Continuous research and development to advance foundry technology

Ceramic foam filters

basava ceramic foam filters are designed to provide efficient inclusion removal while maintaining smooth and controlled metal flow.

Our product range includes:

1. Silicon Carbide based ceramic foam filters
2. Alumina based ceramic foam filters
3. Zirconia based ceramic foam filters

each developed for specific foundry applications and operating conditions.



Why ceramic foam filters from basava ?

Application Engineering Support

Our technical team assists customers with:

- Filter grade and size selection
- Gating and filter placement optimization
- Trial evaluation and performance analysis
- Casting defect reduction support

Quality & Manufacturing

basava follows strict quality and process controls to ensure consistent product performance:

- Controlled raw material sourcing
- Process-controlled manufacturing and firing
- Dimensional and visual inspection
- Batch-wise property testing

Industries Served

- Automotive castings
- Aerospace and defence components
- Pumps and valves
- General engineering castings
- Heavy engineering and infrastructure



Silicon Carbide based ceramic foam filters



Application

Designed for filtration of grey iron, ductile (SG) iron, and cast iron, where high thermal shock resistance and mechanical strength are essential.

Key Benefits

- Excellent thermal shock resistance
- High mechanical strength at elevated temperatures
- Stable chemical performance with molten iron
- Improved casting cleanliness and yield

Material Characteristics

Silicon carbide based ceramic foam filters provides high thermal conductivity and low thermal expansion, making it ideal for iron casting applications involving rapid thermal cycling.

Property	Typical Value
Material	Silicon Carbide (SiC)
Color	Grey / Black
Pore Size	8 - 30 PPI
Porosity	80 - 85 %
Bulk Density	0.55 +/- 0.05 g/cm ³
Compressive Strength	≥ 1.0 MPa
Max. Working Temperature	1500 °C
Thermal Shock Resistance	Excellent
Recommended Metals	Grey Iron, SG Iron, CI

* Available Shapes: Square, Rectangular, Round

* Custom sizes available on request

Alumina based ceramic foam filters



Application

Designed for filtration of **aluminium and aluminium alloy melts**, effectively removing oxides, slag, and non-metallic inclusions.

Key Benefits

- Improved surface finish
- Reduced porosity and inclusions
- Enhanced mechanical properties
- Stable performance at aluminium pouring temperatures

Material Characteristics

Alumina-based ceramic foam filters offers **excellent chemical stability and uniform pore structure**, ensuring reliable filtration and controlled metal flow.

Property	Typical Value
Material	Alumina (Al_2O_3)
Color	White
Pore Size	10 – 30 PPI
Porosity	75 - 80 %
Bulk Density	0.45 +/- 0.05 g/cm ³
Compressive Strength	≥ 0.8 MPa
Max. Working Temperature	1100 °C
Thermal Shock Resistance	Good
Recommended Metals	Al-Si, Al-Mg, Al-Cu

* Available Shapes: Square, Rectangular, Round
* Custom sizes available on request

Zirconia based ceramic foam filters



Application

Designed for steel, stainless steel, alloy steel, and high-temperature casting applications, where extreme thermal stability and chemical resistance are required.

Key Benefits

- Exceptional high-temperature stability
- High resistance to molten steel attack
- Superior mechanical strength
- Efficient removal of non-metallic inclusions

Material Characteristics

Zirconia-based ceramic foam filters provides **excellent refractoriness and thermal shock resistance**, ensuring reliable filtration under severe operating conditions.

Property	Typical Value
Material	Zirconia (ZrO_2)
Color	Grey / Off-white
Pore Size	8 - 20 PPI
Porosity	75 - 80 %
Bulk Density	1.25 +/- 0.05 g/cm ³
Compressive Strength	≥ 1.5 MPa
Max. Working Temperature	1700 °C
Thermal Shock Resistance	Excellent
Recommended Metals	Steel, Alloy Steel, SG Iron

* Available Shapes: Square, Rectangular, Round
* Custom sizes available on request

Foundry riser sleeves

basava foundry riser sleeves are designed to provide improved feeding efficiency, enhanced casting quality and reduce metal wastage.

Our product range includes,

1. Insulating Sleeves
2. Exothermic Sleeves

basava foundry riser sleeves ensures reliable performance for today's demanding foundry applications. With a strong commitment to quality consistency, customization, and technical support, we cater to both ferrous and non-ferrous foundries across a wide range of casting industries.



Insulating sleeves



Insulating sleeves reduce heat loss from the riser without exothermic reactions, extending solidification time efficiently.

Key Benefits

- High thermal insulation efficiency
- Stable and consistent performance
- Clean knock-off after solidification

Suitable For

- Cast iron and non-ferrous castings
- Cost-effective feeding applications

Properties	Typical Value
Compressive Strength of Sleeve	Min. 5.5 kg/sq.cm
Baked permeability	AFS 20 to 30
Metal Feeding Efficiency	30% min
Density of Sleeve	0.58 to 0.7 gm/cc
Moisture content when packed	1.5% Max.

Exothermic sleeves

Exothermic sleeves generate controlled heat during solidification, keeping the riser molten for an extended period and ensuring effective feeding.

Key Features

- High exothermic energy for prolonged feeding
- Uniform and controlled ignition
- Reduced riser size with higher casting yield
- Suitable for steel, cast iron, and alloy castings

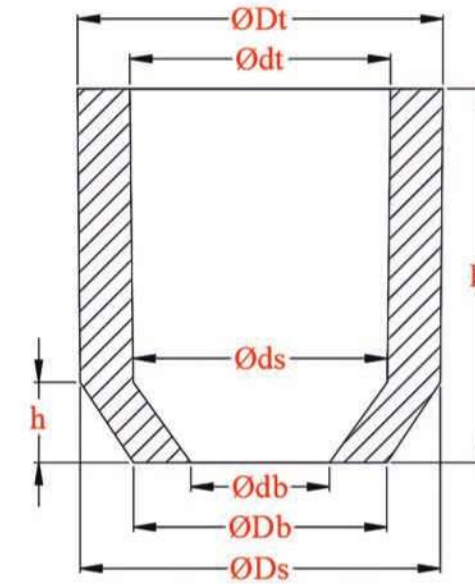
Benefits

- Improved directional solidification
- Reduced shrinkage and porosity defects
- Lower overall metal consumption



Properties	Typical Value
Compressive Strength of Sleeve	Min. 5.5 kg/sq.cm
Baked permeability	AFS 20 to 30
Metal Feeding Efficiency	30% min
Density of Sleeve	0.58 to 0.7 gm/cc
Moisture content when packed	1.5% Max.

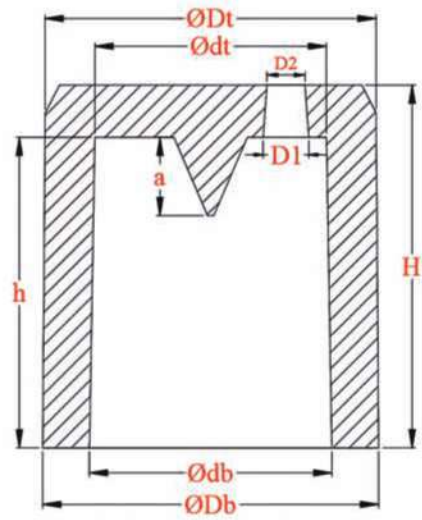
Neckdown sleeves



Ordering Code	Dimensions (mm)								Vol. of Liq. Metal in Sleeve (cc)	Geometric Modulus (mm)	Effective Modulus (mm)		Pack size (Nos.)
	Ødt	ØDt	Ødb	ØDb	Øds	ØDs	H	h			Insulating Sleeve	Exothermic Sleeve	
ND 2	50	72	25	58	45	66	60	24	87	8.75	13.12	14.17	160
ND 2.5	59	83	31	58	58	82	85	18	207	11.82	17.72	19.09	96
ND 3	74	98	40	73	70	89	87	16	325	14.09	21.13	21.74	84
ND 4	99	124	46	90	94	117	116	28	745	18.46	27.70	29.63	25
ND 5	125	158	49	87	118	151	141	55	1313	21.90	32.85	34.79	16

1. Bottom surface of the foundry riser sleeve riser is taken as cooling surface.
2. Full height of the foundry riser sleeve is considered in calculating the volume of metal inside the foundry riser sleeve.
3. Dimensions given above are nominal. Tolerance of 2 mm in diameter and height may occur.

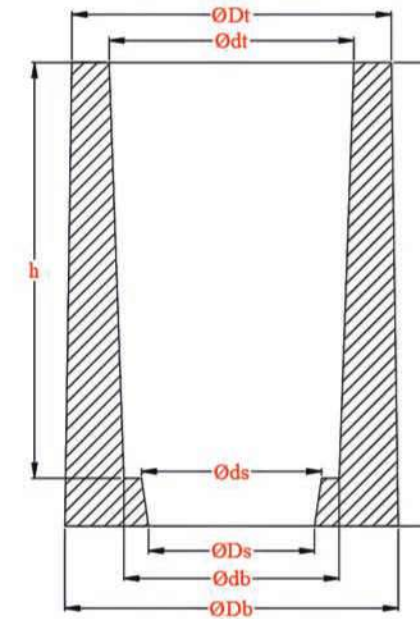
Blind sleeves



Ordering Code	Dimensions (mm)									Vol. of Liq. Metal in Sleeve (cc)	Geometric Modulus (mm)	Effective Modulus (mm)		Pack size (Nos.)
	Ødt	ØDt	Ødb	ØDb	h	H	a	D1	D2			Insulating Sleeve	Exothermic Sleeve	
4 x 7 B	36	58	40	60	59	71	13	11	9	65	7.49	11.23	12	200
5 x 8 B	48	70	51	72	67	83	16	13	9	123	9.57	14.36	15.17	144
6 x 9 B	56	75	56	77	75	91	18	14	9	174	10.47	15.71	16.4	112
7 x 10 B	64	91	67	92	86	100	22	13	10	272	12.27	18.4	20.07	84
8 x 11 B	73	98	79	102	93	111	22	10	10	405	14.5	21.75	23.29	36
15 x 15 B	146	193	145	183	153	177	23	30	29	2499	27.8	41.69	44.43	9

1. Bottom surface of the foundry riser sleeve riser is taken as cooling surface.
2. Full height of the foundry riser sleeve is considered in calculating the volume of metal inside the foundry riser sleeve.
3. Dimensions given above are nominal. Tolerance of 2 mm in diameter and height may occur.

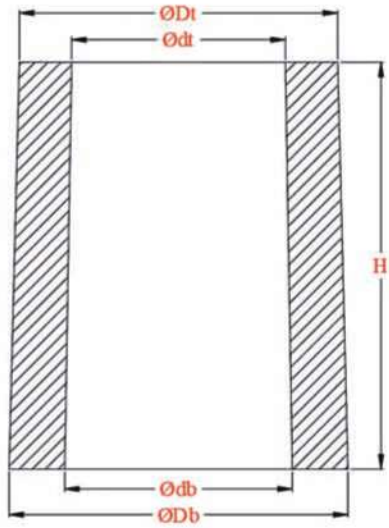
Direct pour sleeves



Ordering Code	Dimensions (mm)								Vol. of Liq. Metal in Sleeve (cc)	Geometric Modulus (mm)	Effective Modulus (mm)		Pack size (Nos.)
	Ødt	ØDt	Ødb	ØDb	Øds	ØDs	h	H			Insulating Sleeve	Exothermic Sleeve	
30 x 100	39	58	33	66	23	23	89	98	94	8.34	12.51	13.34	198
40 x 125	43	71	44	76	32	29	109	121	171	10.45	15.68	16.72	64
50 x 125	59	81	55	87	41	40	111	126	300	13.34	20.02	21.34	49
50 x 150	59	81	53	88	40	37	134	147	342	13.09	19.63	20.94	49
60 x 150	70	93	65	100	51	47	135	148	506	15.59	23.39	24.94	36
70 x 175	79	105	73	112	58	54	154	171	738	17.78	26.68	28.44	30
90 x 200	100	126	94	137	69	65	179	197	1396	22.23	33.35	35.56	20

1. Bottom surface of the foundry riser sleeve riser is taken as cooling surface.
2. Full height of the foundry riser sleeve is considered in calculating the volume of metal inside the foundry riser sleeve.
3. Dimensions given above are nominal. Tolerance of 2 mm in diameter and height may occur.

Open sleeves



Ordering Code	Dimensions (mm)					Vol. of Liq. Metal in Sleeve (cc)	Geometric Modulus (mm)	Effective Modulus (mm)		Pack size (Nos.)
	Ødt	ØDt	Ødb	ØDb	H			Insulating Sleeve	Exothermic Sleeve	
1.0 x 3	27	44	23	48	75	37	5.74	8.61	9.0	336
1.5 x 3	38	60	36	63	73	80	8.22	12.33	13.25	198
2.0 x 3	52	72	49	78	76	152	10.74	16.11	17.1	128
2.0 x 4	50	71	46	75	99	179	10.59	15.88	16.69	128
2.5 x 3	63	84	59	88	75	221	12.59	18.88	20.17	96
2.5 x 4	63	85	60	91	99	295	13.23	19.84	20.94	92
2.5 x 6	62	83	59	92	144	412	13.58	20.37	21.77	42
3.0 x 4	78	103	76	107	101	465	16.05	24.07	25.65	60
3.0 x 6	78	103	73	110	147	652	16.52	24.78	26.76	30
3.5 x 6	88	115	87	122	147	885	19.03	28.55	30.5	25
4.0 x 6	103	133	102	141	148	1220	21.81	32.72	34.37	16
5.0 x 6	123	155	120	163	150	1733	25.11	37.67	40.43	12
6.0 x 6	149	185	144	190	151	2543	29.29	43.94	47.59	9
7.0 x 6	178	214	180	224	151	3800	34.61	51.91	55.39	6
8.0 x 6	198	238	201	248	148	4628	37.47	56.21	59.93	5

1. Bottom surface of the foundry riser sleeve riser is taken as cooling surface.
2. Full height of the foundry riser sleeve is considered in calculating the volume of metal inside the foundry riser sleeve.
3. Dimensions given above are nominal. Tolerance of 2 mm in diameter and height may occur.

Why foundry riser sleeves from basava ?



- Advanced slurry-based manufacturing technology
- Custom sizes and formulations available
- Consistent performance across batches
- Technical support for feeder and riser optimization
- Competitive pricing with dependable delivery

Customization & Technical Support We provide:

- Customized sleeve dimensions
- Tailored exothermic and insulating formulations
- Application support to improve casting yield and reduce defects



Industries Served

- Automotive castings
- Aerospace and defense components
- Pumps and valves
- General engineering castings
- Heavy engineering and infrastructure

