



# AMI® Feeding System Products

(Insulating Exothermic Sleeves, Breaker Core, Exothermic Core, Pouring Cup)

AMI provide series of Feeding System Products for investment casting industries.

- Insulating Sleeve
- Exothermic-Insulating Sleeve
- Exothermic Sleeve
- Breaker Core
- Exothermic Core
- Poring Cup



With advantages for users:

- Save manufacturing cost, energy cost, cleaning and fettling cost.
- Avoid shrinkage defects, improve and increase casting yields.
- Ensure the good quality of the casting products.
- Various sizes and shapes, customized design is available.



## Technical Parameters

- Insulating Sleeve, Exothermic-Insulating Sleeve, Exothermic Sleeve

- General Performance:

Low thermal conductivity

Good heat preservation

High mechanical strength

Easily operation

Low cost

Environmental protection products

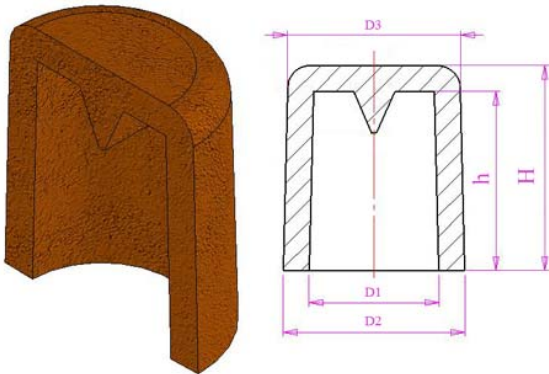
- Insulating Sleeve: Density  $\leq 0.55\text{g/cm}^3$ , Modulus Expanding Coefficient =1.2  
Refer to Drawing No. 1-5 and Table No.1-4.
- Exothermic-Insulating Sleeve: Modulus Expanding Coefficient =1.5  
Refer to Drawing No. 1-5 and Table No.1-4.
- Exothermic Sleeve: with high caloricity, high strength, low contact area with the cast,  
best for high pressure moulding production.

Refer to Drawing No. 6-7 and Table No.5



1. M1-Series

Drawing No.1 M1-Series



Drawing No.2 M2-Series

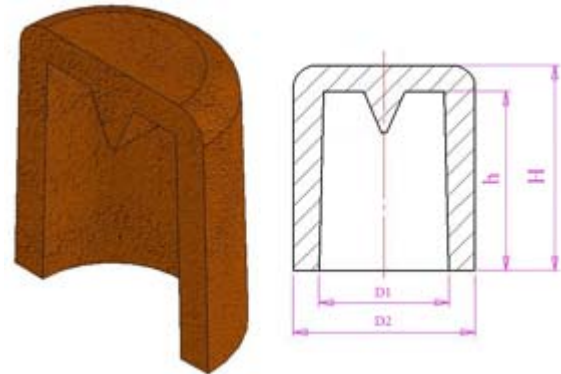


Table No.1 refer to Drawing No.1

Code	Actual Module	Geometrical Module	Dimension (mm)					Sleeve Cubage	Metal Weight in Sleeve (kg)	
			D1	D2	D3	H	h		Steel	Iron
M1-Series	cm	cm	D1	D2	D3	H	h	cm <sup>3</sup>	Steel	Iron
35/50	1.00	0.60	35	53	48	50	40	30	0.22	0.21
40/70	1.20	0.75	40	62	58	70	62	70	0.52	0.49
50/80	1.50	0.95	52	74	69	80	70	130	0.96	0.91
60/90	1.90	1.05	58	80	75	91	78	180	1.33	1.26
70/100	2.00	1.25	70	94	89	87	99	300	2.22	2.10
80/110	2.25	1.40	79	102	99	108	97	420	3.11	3.94
90/120	2.50	1.55	89	115	109	120	105	580	4.29	4.06
100/130	2.80	1.75	99	128	118	133	118	800	5.92	5.60
120/150	3.20	2.00	119	155	147	150	130	1350	9.99	9.45

Re: Molten Steel: 7.4g/cm<sup>3</sup>, Molten Steel: 7.0g/cm<sup>3</sup>.

2. M2-Series

Table No.2 refer to Drawing No.2

Code	Actual Module	Geometrical Module	Dimension (mm)					Sleeve Cubage	Metal Weight in Sleeve (kg)	
			D1	D2		H	h		Steel	Iron
M2-Series	cm	cm	D1	D2		H	h	cm <sup>3</sup>	Steel	Iron
40/70	1.20	0.75	40	62		70	62	70	0.52	0.49
50/80	1.50	0.95	52	74		80	70	130	0.96	0.91
60/90	1.90	1.05	58	80		91	78	180	1.33	1.26
70/100	2.00	1.25	70	94		87	99	300	2.22	2.10
80/110	2.25	1.40	79	102		108	97	420	3.11	3.94
90/120	2.50	1.55	89	115		120	105	580	4.29	4.06
100/130	2.80	1.75	99	128		133	118	800	5.92	5.60
120/150	3.20	2.00	119	155		150	130	1350	9.99	9.45

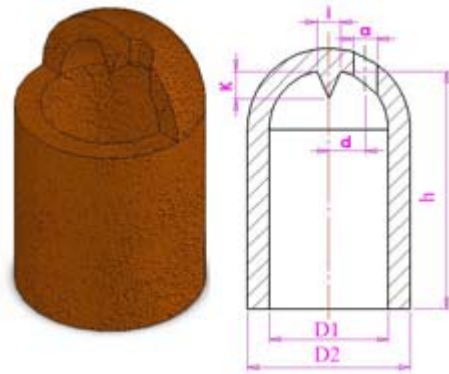
Re: Molten Steel: 7.4g/cm<sup>3</sup>, Molten Steel: 7.0g/cm<sup>3</sup>.

Drawing No.3 U-Series

3. U-Sereis

Re:

Drawing No.3 U-Series are available.



Drawing No.4 H-Series

4. H-Series

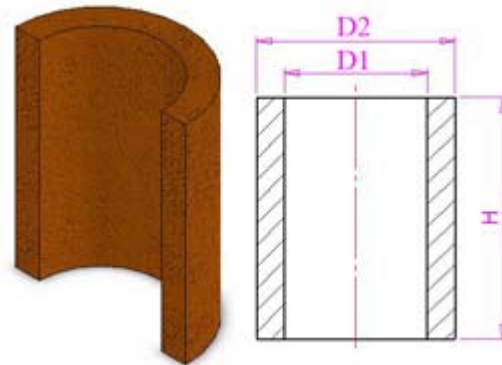


Table No.3 refer to Drawing No.4 H-Series

Code	Actual Module	Geometrical Module	Dimension (mm)			Sleeve Cubage cm <sup>3</sup>	Metal Weight in Sleeve (kg)	
			D1	D2	H		Steel	Iron
H-Series	cm	cm	D1	D2	H	cm <sup>3</sup>	Steel	Iron
150/220	4.20	2.80	150	190	200	3774	27.93	26.42
180/260	4.60	3.30	180	230	260	6800	50.32	47.60
200/300	5.60	3.80	200	250	300	9900	73.26	69.30
225/330	5.80	4.20	225	280	330	13500	99.90	94.50
250/375	6.58	4.70	250	306	375	19100	141.34	133.70
300/450	8.10	5.70	300	360	450	32000	236.80	224.00
350/525	9.00	6.56	350	415	525	51000	377.40	357.00
400/600	9.70	7.50	400	465	600	77000	569.80	539.00
450/675	11.00	8.45	450	515	675	109000	806.60	763.00
500/750	12.00	9.38	500	570	750	149000	1102.60	1043.00
550/825	13.20	10.30	550	630	825	197000	1457.80	1379.00
600/900	14.30	11.30	600	680	900	258000	1909.20	1806.00

Re: Molten Steel: 7.4g/cm<sup>3</sup>, Molten Steel: 7.0g/cm<sup>3</sup>

## 5. V-Series

Drawing No.5 V-Series

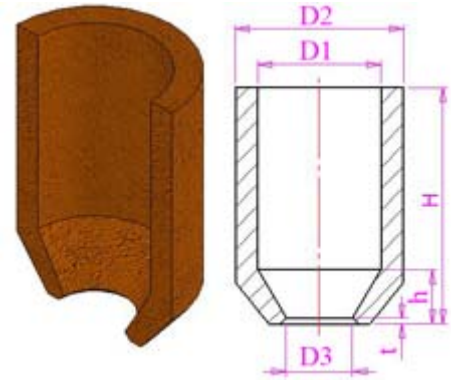


Table No.4 refer to Drawing No.5

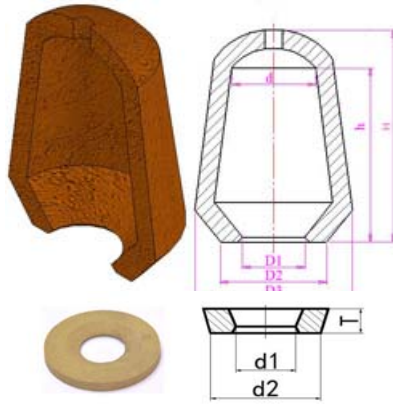
Code	Actual Module	Geometrical Module	Dimension (mm)					Sleeve Cubage	Metal Weight in Sleeve (kg)	
			D1	D3	H	h	t		Steel	Iron
V-Series	cm	cm	D1	D3	H	h	t	cm <sup>3</sup>	Steel	Iron
180	4.20	2.90	180	90	200	90	6	4229	31.29	29.60
200	4.80	3.40	200	100	222	100	8	5053	37.39	35.37
225	5.50	3.80	225	113	250	113	8	6166	45.63	43.16
250	5.99	4.28	250	125	280	150	8	7320	54.17	51.24
300	7.00	5.02	300	150	310	150	8	9719	71.92	68.03
350	8.30	5.90	350	175	410	175	8	12240	90.58	85.68

Re: Molten Steel: 7.4g/cm<sup>3</sup>, Molten Steel: 7.0g/cm<sup>3</sup>

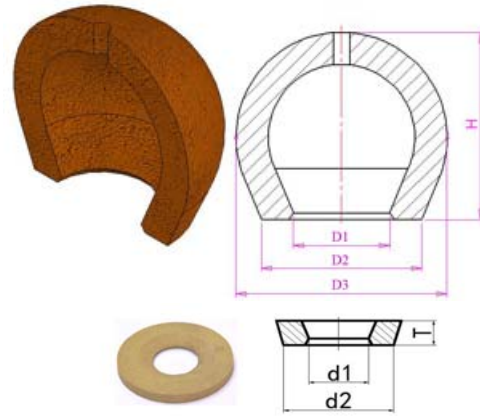
## ★ Special instruction

- 1) For Insulating Sleeve, Exothermic-Insulating Sleeve and Exothermic Sleeve, customized sizes are available.
- 2) For Exothermic-Insulating Sleeve and Exothermic Sleeve, the special requirement of caloricity is available, welcome to discuss with our technician.
- 3) Special formula and materials are available, welcome to discuss with our technician.
- 4) For Breaker Core, customized sizes are available
- 5) For Exothermic Core, the special requirement of caloricity is available.
- 6) For Poring Cup, customized sizes are available.

**Drawing No.6 A-Series**



**Drawing No.7 C-Series**



**6. A-Series**

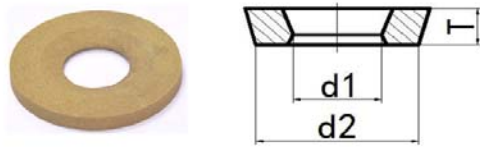
Table No.5 refer to Drawing No.6

Code	Module	Cubage	Dimension (mm)								
			D1	D2	D3	D	h	H	d1	d2	T
A075	0.75	8	16	30	50	13	50	60	10	26	7
A085	0.85	16	21	38	56	19	50	62	14	34	8
A095	0.95	28	25	40	59	20	70	82	15	36	8
A120	1.20	22	21	40	68	18	70	85	15	36	8
A130A	1.30	36	25	54	76	23	81	96	15	38	12
A130B	1.30	38	25	42	76	23	85	100	15	36	8
A130C	1.30	41	27	54	70	24	85	105	15	38	12
A130D	1.30	45	25	46	56	23	100	114	16	42	8
A140A	1.40	56	32	60	87	28	80	97	17	56	10
A140B	1.40	81	40	60	86	37	70	90	17	56	10
A150	1.50	82	36	70	83	32	95	112	17	56	15
A170	1.70	88	36	60	88	32	97	108	17	56	10
A190	1.90	121	40	66	104	35	110	135	18	62	11
A220A	2.20	159	50	82	115	40	103	120	19	78	11
A220B	2.20	238	60	90	126	50	100	125	20	86	11
A250	2.50	191	50	90	133	40	120	140	20	86	11
A270	2.70	267	65	100	120	60	89	115	21	94	11
A280	2.80	276	58	100	136	48	120	140	21	94	11
A320	3.20	339	65	98	133	55	122	145	21	94	11
A330	3.30	240	45	78	140	37	180	206	18	60	15
A340	3.40	415	60	110	143	50	175	200	25	95	18
A360	3.60	590	80	110	142	75	125	150	25	95	18
A420A	4.20	770	80	110	170	75	165	205	25	95	18
A420B	4.20	780	80	128	170	75	165	205	28	115	18

● Breaker Core

Chose the correct design and model of the Breaker Core can remarkably reduce the contact area between the feeder and the casting, and significantly lower down the fettling and cleaning process charge, then optimize the feeding procedure.

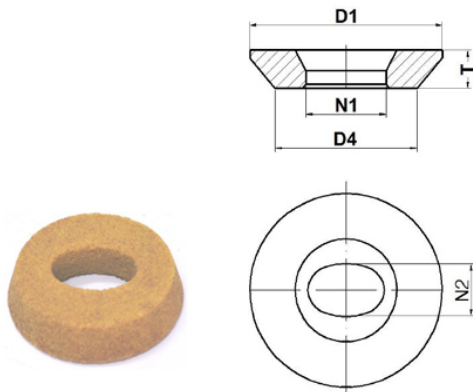
1. Round Shape: BC-R Series



Drawing No.8

Code	Dimension (mm)			Corresponding Sleeve :A series
	d1	d2	T	
BCR40	25	60	11	40/70
BCR50	30	72	11	50/80
BCR60	30	82	11	60/90
BCR70	35	94	13	70/100
BCR80	40	102	13	80/110
BCR90	45	115	13	90/120
BCR100	50	128	13	100/130
BCR120	60	115	15	120/150

2. Elliptical Shape: BC-E series



Drawing No.9

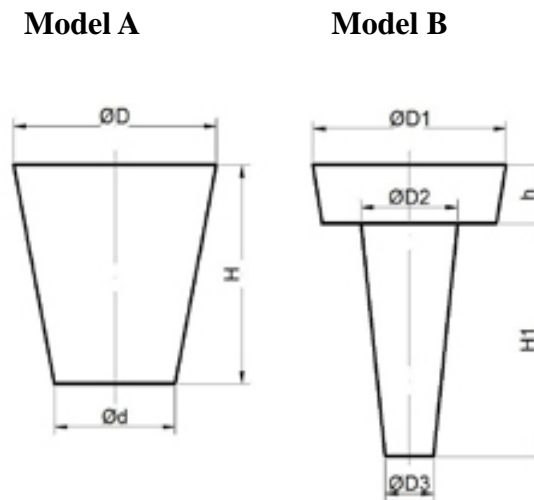
Code	Dimension (mm)				
	N1	N2	D1	D4	T
BCE130	16	26	54	40	12
BCE140	16	26	60	40	12
BCE170	20.5	30	60	40	12
BCE190	20.5	30	66	46	12
BCE220	20.5	30	82	60	12
BCE250	20.5	30	90	66	14
BCE320	20.5	30	98	70	14

Re:

Customized sizes are available.

- Exothermic Core

Exothermic Core is put on the top of the sleeve of exothermic sleeve, it create huge heat after touch the molten iron/steel and let the metal on the top of the sleeve curdled lastly. By using the Exothermic Core, the advanced encrustation of the sleeve top and the negative pressure can be avoided during the shrinkage compensate, the channels for shrinkage compensate can be kept unimpeded, and achieve the better temperature gradient and pressure in the sleeve.



Drawing No.10

Code	Dimension (mm)							
	D1	D2	D3	H1	h	D	d	H
EC-A, EC-B								
EC-A01						42	20	30
EC-A02						42	25	45
EC-A03						33	27	52
EC-B01	35	19	6	30	10			
EC-B02	40	20	10	48	12			
EC-B03	52	40	12	50	17			
EC-B04	50	36	22	22	10			
EC-B05	48	32	27	37	13			
EC-B06	66	37	36	32	20			
EC-B07	70	40	30	95	20			

Re:

Customized sizes are available.

### ● Pouring Cup

Use Pouring cup or insulating/exothermic sleeve plus ceramic Foam filter to compose Filter-Feeder Unit.

The application of the Filter-Feeder Unit direct pouring can improve the casting quality, significantly reduce the production cost by increasing the casting yield.

Choose the suitable Filter-Feeder Unit according to the Modulus and shrinkage of the casting.



**Pouring Cup**

### Technical Parameter

Item	Parameter
Al <sub>2</sub> O <sub>3</sub>	>40%
Density	>2.1 g/cm <sup>3</sup>
Max Working Temperature	1700 °C

Code	Bottom Exit	Upper Entry	Height	Weight
	Dia./mm	Dia./mm	mm	kg
PC01	35	100	115	1.0
PC01	40	120	120	1.5
PC01	50	140	150	2.3
PC01	60	150	150	2.5
PC01	70	180	200	4.2
PC01	80	235	200	5.0
PC01	100	350	300	11.8

Re:

- 1) Customized sizes are available.
- 2) Above mentioned diameter is the inner diameter.
- 3) Tolerance: +/-2mm,

- Welcome to contact us for more details.

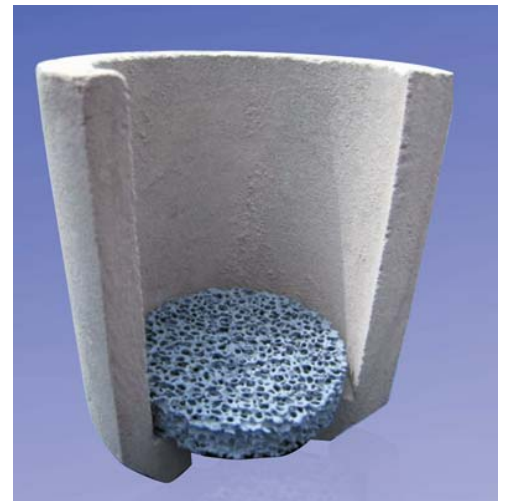
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**Filter-Feeder Unit**

(Ceramic Foam Filter-Pouring Cup)

(Ceramic Foam Filter-Sleeve)