

S-SERIES

Mini Exothermic Riser Characteristics:

- * Simple mounting-easily adaptable to current gating system
- * Ignites at 1700F and will burn at 3000F.
- * Outstanding binding strength - will not crush under high pressure.
- * Will not contaminate sand system.
- * Environmentally safe.
- * Guaranteed Yield Improvements.
- * Reduction in cleaning costs.

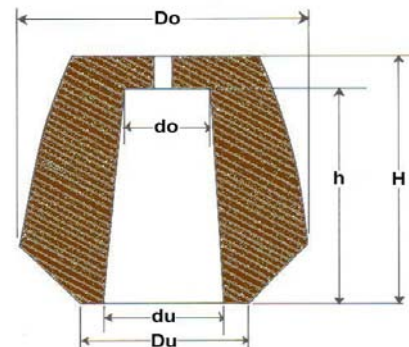


Exothermic Mini Riser Reference Table

Type	Riser Wt/lbs	Modulus		Contained Metal Weight and Volume				Pallet Qty.
		Inches	cm	Lbs	Vol (in3)	Kg	Vol (cm3)	
S-5	0.23	0.30	0.76	0.13	0.49	0.06	8	1200
S-12	0.32	0.33	0.84	0.22	0.85	0.10	14	945 / 4128
S-19	0.43	0.37	0.94	0.43	1.65	0.19	27	630 / 3080
S-20	1.05	0.51	1.30	0.53	2.04	0.24	33	1440
S-30	1.12	0.41	1.04	0.85	3.25	0.38	53	1120
S-54	1.10	0.55	1.40	1.44	5.54	0.65	91	1233
S-58	1.32	0.67	1.70	1.30	5.00	0.59	82	980
S-74	2.58	0.76	1.93	1.70	6.53	0.77	107	580
S-111	2.97	0.87	2.21	2.52	9.70	1.14	159	378
S-133	4.50	0.98	2.49	3.03	11.66	1.38	191	245
S-164	2.73	0.87	2.21	3.78	14.52	1.71	238	378
S-193	4.05	1.10	2.80	4.38	16.84	1.99	276	245
S-237	4.52	1.26	3.20	5.38	20.69	2.44	339	240
S-286	7.52	1.34	3.40	6.47	24.90	2.94	408	180
S-532	10.51	1.65	4.19	12.23	47.05	5.55	771	136
S-655	9.55	1.65	4.19	14.84	57.06	6.73	935	136
S-1183	21.68	1.89	4.80	26.18	100.69	11.87	1650	60
S-1730	55.00	2.05	5.21	39.21	150.79	17.78	2471	22

Exothermic Mini Riser Dimension Chart

Type	Do (in.)	Du (in.)	H (in.)	h (in.)	du (in.)	do (in.)
S5	1.97	1.10	2.24	1.97	0.63	0.51
S12	2.36	1.46	2.36	1.97	0.83	0.71
S19	2.36	1.60	3.16	2.76	0.98	0.79
S20	3.04	1.43	3.98	3.34	0.85	0.74
S54	3.27	2.30	3.54	2.76	1.57	1.38
S58	3.43	2.24	4.21	3.82	1.42	1.18
S74	4.29	2.56	5.31	4.33	1.57	1.18
S111	5.12	3.54	4.92	3.94	1.97	1.57
S133	5.51	3.94	5.51	4.92	1.97	1.57
S164	5.12	3.54	4.92	3.94	1.97	2.36
S193	5.51	3.94	5.51	4.92	2.28	1.89
S237	6.3	3.74	5.71	4.72	2.56	2.17
S286	5.91	2.87	8.91	6.89	2.32	1.97
S532	6.69	2.36	8.27	6.69	2.36	3.54
S655	6.69	2.36	8.07	6.50	3.15	3.54
S1183	9.25	2.95	9.53	7.56	2.95	5.98
S1730	11.14	3.94	14.37	11.22	3.94	4.33



SPHERICAL SERIES

- * **Patented High Exothermic Blend**
- * **3000 degrees Fahrenheit burning temperatures**
- * **Optimum feeding conditions**
- * **Natural, low cope height molding equipment**
- * **High Volume**

Available With, or Without Breaker Core

- * 2" Sphere
- * 3" Sphere
- * 4" Sphere
- * 5" Sphere
- * 6" Sphere
- * 8" Sphere

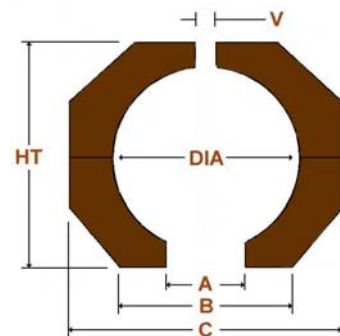


High Exothermic Sphere Contained Metal Specifications

Type	Riser Wt/lbs	Contained Metal Weight and Volume				Pallet Qty.
		Lbs	Vol (in3)	Kg	Vol (cm3)	
2" Sphere	0.83	1.83	7.02	0.83	115	Call
3" Sphere	1.80	5.24	20.14	2.38	330	504
4" Sphere	3.63	8.72	33.52	3.95	549	246
5" Sphere	4.85	18.06	69.48	8.19	1139	150
6" Sphere	9.47	30.91	118.90	14.02	1948	100
8" Sphere	21.50	69.73	268.20	31.63	4395	33

Spherical Series Dimension Chart

Type	DIA (in.)	HT (in.)	A (in.)	B (in.)	C (in.)	V (in.)
2" Sphere	2.375	3.000	1.562	2.625	3.750	0.438
3" Sphere	3.375	3.625	1.750	3.750	4.875	0.438
4" Sphere	4.000	5.000	2.000	4.125	6.000	0.500
5" Sphere	5.125	6.000	2.750	5.125	7.000	0.750
6" Sphere	6.125	7.125	3.000	6.250	8.625	0.750
8" Sphere	4.000	9.250	3.750	8.375	11.125	0.750



Typical Equivalent Size and Contained Metal Comparison

<u>High Exothermic Sphere</u>		<u>Insulating Sleeve (With hot top)</u>		<u>Green Sand Riser (No hot top)</u>	
Size	Lbs. Metal	Size	Lbs. Metal	Size	Lbs. Metal
2" Sphere	1.8	3" x 5"	9	4" x 6"	20
3" Sphere	5.2	5" x 7"	35	6" x 8"	59
4" Sphere	8.7	6" x 8"	59	8" x 12"	156
5" Sphere	18.1	7" x 10"	100	9" x 13"	215
6" Sphere	30.9	8" x 12"	156	10" x 15"	306
8" Sphere	69.7	10" x 14"	285	12" x 18"	528

EXO-TOP High Exothermic Insertables

Available With, or Without Breaker Core



- * 1-1/4" x 2"
- * 1-5/8" x 2-1/2"
- * 2" X 3"
- * 2-1/2" x 3-3/4"
- * 3" x 4-1/2"
- * 3-1/2" x 5-1/4"

High Exothermic Contained Metal Specifications

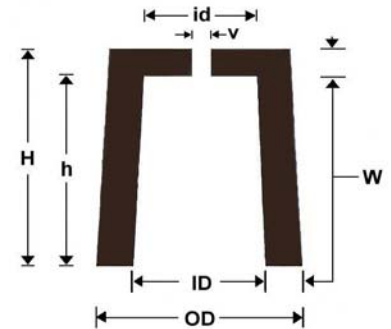
Type	Riser Wt/lbs	Contained Metal Weight and Volume				Pallet Qty.
		Lbs	Vol (in3)	Kg	Vol (cm3)	
1-1/4" X 2"	0.34	0.51	1.98	0.23	32	792
1-5/8" X 2-1/2"	0.46	1.08	4.17	0.49	68	504
2" X 3"	0.68	1.94	7.48	0.88	123	336
2-1/2" X 3-3/4"	1.03	4.10	15.75	1.86	258	180
3" X 4-1/2"	1.60	7.31	28.10	3.31	460	100
3-1/2" X 5-1/4"	2.25	10.93	42.02	4.96	689	350

Equivalent Low Exothermic Contained Metal in Lbs.

1 - 1/2" x 2 - 1/4"	0.80
2" x 3"	1.90
2 - 1/2" x 3 - 3/4"	3.80
3" x 4 - 1/2"	6.50
3 - 1/2" x 5 - 1/4"	10.30
4" x 6"	15.40

ExoTop Dimension Chart

Type	ID (in.)	OD (in.)	H (in.)	id (in.)	h (in.)	v (in.)	W (in.)
1-1/4" X 2"	1.250	2.250	2.375	1.062	1.875	0.250	0.500
1-5/8" X 2-1/2"	1.562	2.625	3.000	1.375	2.500	0.250	0.500
2" X 3"	2.000	3.062	3.562	1.562	3.000	0.312	0.562
2-1/2" X 3-3/4"	2.437	3.562	4.125	2.250	3.650	0.437	0.562
3" X 4-1/2"	3.000	4.000	5.125	2.625	4.500	0.312	.5 - .625
3-1/2" X 5-1/4"	3.500	4.750	5.750	2.937	5.125	0.312	0.625



J-SERIES

- * **Patented High Exothermic Blend**
- * **3000 degrees Fahrenheit burning temperatures**
- * **Optimum feeding conditions**
- * **Natural, low cope height molding equipment**

Available With, or Without Breaker Core

** Nominal Inside Dimensions

- * J1 ** (2-3/4" X 4-1/4")
- * J2 ** (3-1/4" X 5")
- * J3 ** (4" X 6")
- * J8 ** (3-3/4" X 8")

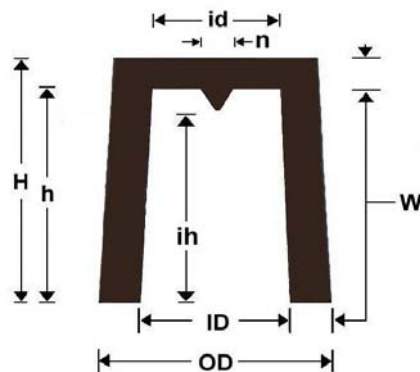


J-Series High Exothermic Contained Metal Specifications

Type	Riser Wt/lbs	Contained Metal Weight and Volume				Pallet Qty.
		Lbs	Vol (in3)	Kg	Vol (cm3)	
J1	1.61	5.23	20.12	2.37	330	Call
J2	2.05	8.72	33.52	3.95	549	Call
J3	2.40	14.76	56.76	6.69	930	200
J8	3.09	19.62	75.48	8.90	1237	Call

J-Series Series Dimension Chart

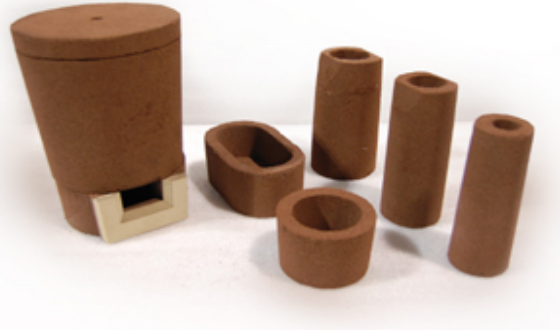
Type	H (in.)	h (in.)	ih (in.)	OD (in.)	ID (in.)	id (in.)	n (in.)	W (in.)
J1	4.750	4.187	3.625	3.812	2.687	2.312	0.687	0.562
J2	5.562	4.937	4.375	4.312	3.187	2.750	0.687	0.562
J3	6.375	5.813	5.250	4.937	3.812	3.312	0.687	0.562
J8	8.437	7.875	7.312	5.000	3.750	3.250	0.687	0.625



Custom Formed Sleeves

- * **Manufactured To Customer Specifications**
- * **Patented High Exothermic Blend**
- * **3000 degrees Fahrenheit burning temperatures**
- * **Optimum feeding conditions**

Our Custom Formed High Exothermic insulating sleeves are just that - custom formed. Our experts will customize the right solutions to save you time, money and headaches in all your exothermic needs.



Custom - Series High Exothermic Contained Metal Specifications

Type	Riser Wt/lbs	Contained Metal Weight and Volume				Pallet Qty.
		Lbs	Vol (in3)	Kg	Vol (cm3)	
1" x 6"	1.61	1.05	4.03	0.48	66	1760
1-1 / 2" x 6" M	2.05	2.36	9.08	1.07	149	1295
2" x 6" M	2.40	4.05	15.59	1.84	255	770
2-1/2" x 2-1/4"	3.09	1.94	7.48	0.88	123	324
OV-214	3.09	4.37	16.80	1.98	275	216
SG-10	3.09	11.56	44.46	5.24	729	300