Insulating and Exothermic Riser Sleeves

Offering both CF Series of <u>Insulating</u> riser sleeves and CFX series of <u>exothermic</u> riser sleeves to provide the foundry with a reliable cost effective approach for optimizing feeding efficiency, improving quality, and lowering cost. Stringent manufacturing procedures and quality control standards ensure that your risering needs will be met on a continual basis.

Both these series feature a wide variety of standard riser sleeve shapes and sizes. We also have internal tooling capability, so prototypes of custom shape and sizes can be produced quickly. Costs to prove out new designs are minimized. Scale up time to full production can be greatly reduced.

BENEFITS:

- Reduction of heat loss allowing smaller risers to be used
- Improved casting yield
- Reduction of melting and cleaning room costs
- Reduction of piping and shrinkage
- Maintain integrity will <u>not</u> contaminate sand system
- Improved soundness of castings
- Light weight yet strong compositions to withstand molding forces
- Low smoke and fumes
- Reduction of remelt volumes
- · Easily modified to create special feeding effects while maintaining thermal performance

OFFERED SHAPES

LOW PRESSURE:

• Low Density Insulating & Exothermic Straight Sleeves

- Reduction of heat loss allowing smaller risers to be used
- Improved casting yield & improving soundness of castings
- Reduction of melting, cleaning room costs, piping and shrinkage
- Maintain integrity will not contaminate sand system
- Light weight yet strong compositions to withstand molding forces
- Low smoke and fumes, while reducing remelt volumes
- Easily modified to create special feeding effects while maintaining thermal performance

Round Neckdowns Sleeves and Collars

- Reduce contact area to facilitate riser removal
- Eliminate need for metal padding of casting to accommodate riser
- Eliminate need for breaker cores & Reducing metal volume while maintaining head height
- Available with embedded woven cloth to further facilitate riser removal

• Blind Risers - Insulating and exothermic blind riser sleeves offer the following advantages:

- Reduction of heat transfer compared to sand risers, allowing the use of smaller riser heads & Reduced casting contact area for easier removal
- Reduction of piping and shrinkage
- Manufactured to closely controlled external dimensions to allow insertion into a preformed mold cavity
- Ideal for high production applications & Contain a "wedge style" firecracker core
- Customizable: Available with 40% or 50% breaker core & can be gauged to specific heights per your application

HIGH PRESSURE:

- Domes & Exothermic Tops
- **Pour Sprues and Cups** These pouring aids provide the metalcaster an economicalmeans to ensure a smooth pouring process with the following advantages:
 - Insulating to ensure that the

hottest possible metal reaches the foam runner system

- Elimination of a foam downsprue, thus reducing both the amount of decomposition products created during the pouring process and metal temperature loss resulting from decomposition of the foam sprue
- Rapid build-up of head pressure with an adequate volume of metal to properly "pressurize" the system for controlled foam/metal displacement
- Elimination of inclusions caused by sand erosion in the sprue area

These riser sleeves are available in a variety of compositions to meet your casting needs. Ask about the technical bulletin on "Ceramic Fiber Compositions" for specific application information, or contact your Asbury Wilkinson team member for assistance.





Dip Ladles & Liners



A variety of ceramic fiber dip ladles for use in all metal types. Our insulating CF300W rigidized composition is used for maximum service temperature and strength. These thermally efficient ladles and skimmers offer an economical and effective alternative to metal ladles and skimmers. Their durability enables the foundry to use them over and over again with little or no maintenance. Joy-Mark dip ladles and skimmers feature the following characteristics:

BENEFITS:

- Lightweight for maneuverability and ease of handling No coating necessary
- Highly insulating to reduce heat loss to atmosphere
 Economical compared to metal and full
- Strong and durable to allow multiple reuses
- Non-wetting to molten metal
- No preheating necessary after first use
- ceramic ladle and skimmer alternatives
- Low thermal mass to reduce heat loss from metal to ladle or skimmer

Joy Mark	(inches)					(pounds.)				
Part No.	TID	BID	Ins Ht.	Frame	Features	Alum	iron	Steel	Copper	Brass
DL-2	2	2	2	½" Metal Ring	5" Handle	0.5	1.6	1.5	1.3	1.5
DL-2.5	1.75	1	3.5	½" Metal Ring	5" Handle	0.5	1.4	1.3	1.1	1.2
DL-3	3.25	2	3.5	½" Metal Ring	5" Handle	1.5	4.5	4.4	3.9	4
DL-5	5.12	4	5	1" Metal Ring	5.5" Handle	6.4	20.4	19	17	18
DL-6	5.12	4	6.5	1" Metal Ring	5.5" Handle	8.3	26.6	25	23	23.4
DL-6.5	9.5	3.5	6	Metal Bracket	L Bracket	17.0	55	51	44	49
DL-7	9.5	7	7	Metal Bracket	L Bracket	29	93.1	87	78	84

FILTERS - 10 ppi, 15 ppi, 25 ppi

SiC



IC iron filters are ceramic foam filters for nodular, gray, and malleable iron castings. Ceramic foam filters effectively remove nonmetallic inclusions including slag and dross from the molten metal stream when properly placed within the gating system. Aiding in reducing turbulence in the gating system and are designed to withstand the high temperatures required in an iron foundry. Available in many standard sizes, square, rectangular and round. Custom sizes are available upon request. To ensure proper filtration for each iron type. (Available in three pore sizes.)

Alumina Silicate



Ideal for for aluminum foundry applications. Ceramic foam filters effectively remove non-metallic inclusions from the molten metal stream when properly placed within the gating system. Aiding in reducing turbulence in the gating system and are designed to withstand the temperatures required in an aluminum foundry. Available in many standard sizes, square, rectangular and round. Custom sizes are available upon request. To ensure proper filtration for aluminum alloys. (Available in three pore sizes.)

Zirconia Ceramic Foam Filters



A proven cost effective means of improving steel casting quality. The wide range of grades including plain carbon, alloy and stainless steels. Plastic gating prints for standard filter sizes are stock items. In addition, our in-house engineering staff can assist in the design of custom gating systems tailored to the requirements of virtually any application.

These filters are available in a variety of compositions to meet your application needs. For specific application needs, contact your Asbury Wilkinson team member for assistance.

Please contact canadainfo@asbury.com today, for the solutions of tomorrow.