



Del Sol proudly represents D&E Foundry Ladles. D&E is known for making high quality, robust ladles. D&E uses Dodge gearboxes as standard featuring an automatic locking mechanism to keep the ladle from freewheeling.

D&E makes lip, t-pot, and bottom pouring ladles. Additionally, D&E makes u-shaped, tundish, ductile iron treatment ladles, custom process ladles, and the battery operated LITTLE DIPPER.

Questions or need a quote?  
Call us at 830-935-4430.



# FOCUS

"In the issue of FOCUS, Del Sol is introducing you to a different way to look at ladle refractories. We have many options, but what we have always found to be the most successful in our business is to sell a really great product that reduces your labor and operations trouble. This is a product brochure that supports only products that will improve your melt and metal transfer practice..."

Lee White  
President - DelSol Services

Office: (830) 935-4430  
Fax: (830) 935-4048  
[www.DelSolServices.com](http://www.DelSolServices.com)

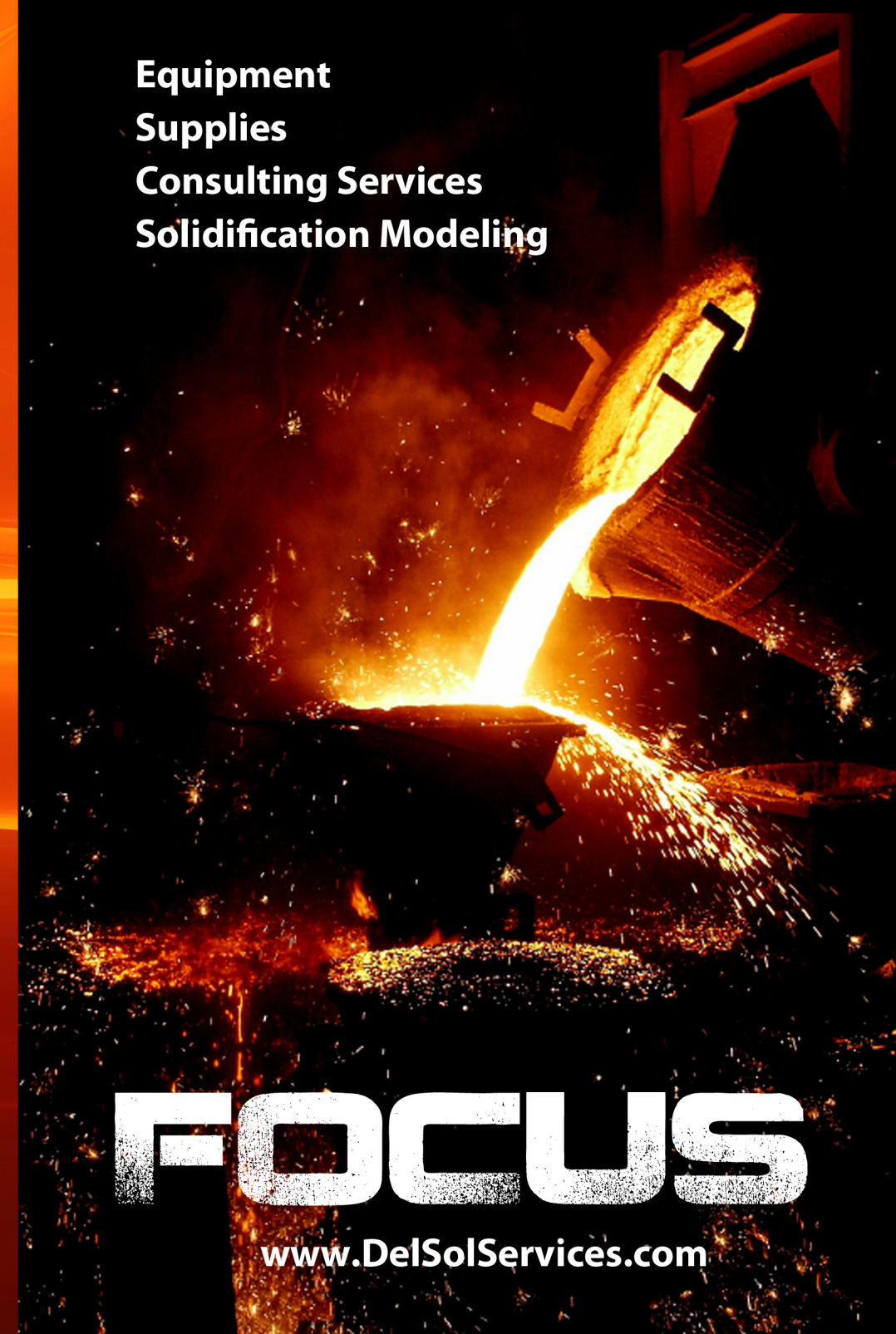


CAPITAL REFRACTORIES LIMITED



INDUSTRIAL SERVICES INC.

Equipment  
Supplies  
Consulting Services  
Solidification Modeling



# FOCUS

[www.DelSolServices.com](http://www.DelSolServices.com)



## STEEL

### Option 1 – RAM

We supply from Capital Refractories a product called WS-90. It is not what you would consider a traditional plastic refractory. I see many of you using “high alumina” products. But I also see that they are commonly really wet. This product is a different animal. It is a 92% alumina refractory with a very low moisture content. You have to ram the heck out of it, but it really, really lasts. Lower water content means more working refractory and components. The density after ramming is extremely high. More dense = less penetration.

### Option 2 – CASTABLE

We supply from Capital Refractories a low cement castable called Caprax 1750 LCF. We have seen this product outlast other castables by 2x the life. Why? Admittedly, it has a lot to do with the methods that we use to mix and install. Coupled with supplying you a very good product, we will also teach you how to properly mix, install, and vibrate. Why? If we teach you how to do it well, you get the added benefit of reduced cleaning and improved ladle life.

### Option 3 – Disposable ladle liners.

Del Sol supplies both segmented large ladle liners and single piece vacuum formed liners. So what? On our Exochem segmented liners, we have seen life increase of 3x over other major brands. How? Better stuff. The Exochem liner features better refractories, wire mesh substrate, and a very dense vacuum process. All of these features add up to improved density and life. We also sell single piece vacuum formed liners. Our liners, once again, feature better materials, higher density, and longer life. This has been a great addition to our product line.



## IRON

### Option 1 – RAM FOR IRON

Many of you use an 85ish ram. From what I have seen, the base refractory is often of low quality and very, very wet. We sell a different animal. We supply a product called Capram 60. It is a Alumina / Silica / ZIRCON blend which is ideal for reducing slag sticking and ultimately reducing ladle clean and repair labor. We have an iron foundry customer in Texas that used to use a cheap alumina ram – pretty much the cheapest money could buy. They had a full time (8-10 hours per day) employee doing nothing but cleaning and patching ladles. We converted them to Capram 60 (after about 5 years of trying ) and that man now only spends 4 hours per day in the ladle room. We have also recently started selling them the next product to help even more....

### Option 2 Black Wash

Capital Refractories has developed a high quality ladle wash designed to be used as a daily defense against sticking slag. Black Wash comes premixed ready to use. Simply brush or spray it on your clean ladle. After the ladle cools, adhered slag starts falling off. Is it cheap? No. but it drastically reduces labor, sometimes the best things in life come with a price.



## ALUMINUM

### Option 1 – ALUMINA RAM

We supply from Capital Refractories a product called WS-90. It is not what you would consider a traditional plastic refractory. I see many of you using “high alumina” products. But I also see that they are commonly really wet. This product is a different animal. It is a 92% alumina refractory with a very low moisture content. You have to ram the heck out of it, but it really, really lasts. Lower water content means more working refractory and binder. The density after ramming is also extremely high. More dense, less penetration and sticking. Why would you use this form aluminum? This lining would last a very long time since you are nowhere near the working temperatures of this material.

### Option 2 – ALUMINA / SILICA / ZIRCON RAM

What? Okay, most of you use an 50-70 ish ram. From what I have seen, the base refractory is often of low quality and very, very wet. We sell a different animal. We supply a product called Capram 60. It is a Alumina / Silica / ZIRCON blend which is ideal for reducing dross buildup and ladle cleaning labor. Dross will simply peel off rather than have to get hammered off. Try it, it works....

