K.E.G.
Molten Technology, Inc
Advantages Over Competitor's Pumps

1. **K.E.G. pump posts require no cement.**

2. **This means as soon as you assemble the pump it is ready to use, because there is no cement to bake out.**

3. **K.E.G. pumps do not require rods to burn out and springs to mess with.**

4. **Also K.E.G. pumps are self aligning and do not have to be dialed in after assembly. Less than 8 minute assembly time. No Cement to bake out.**

K.E.G.
Molten Technology, Inc

K.E.G

History of K.E.G. Molten Technology. Inc.

K.E.G.
Molten Technology, Inc

Owner : Karl E. Greer

Resume:

- In 2002, I received my first patent, I just had shaft/impeller assemblies and couplings in various aluminum facilities around the country
- Gillespie and Powers', Dan Corley, helped get my first complete transfer pump went into Rollex Aluminum in 2007
- 2007 K.E.G. transfer pump pumped twice the volume than the Metalullics L-25 pumps at Rollex Aluminum according to Rollex Manager Johnny Bryant
- 2007 K.E.G. Installed in Ryobi Shelbyville, IN
- This pump has a 7-1/2" diameter impeller,
- Ryobi pulled out a MMEI "Workhorse" transfer pump with a 10" diameter impeller and put my pump in the very same spot.
- The K.E.G. Mustang 7-1/2" diameter impeller filled Ryobi's 3,000 lbs cruse 7 seconds faster than MMEI's 10" diameter Workhorse.

Pictures of K.E.G. Mustang 7-1/2” Diameter Impeller Transfer Pump

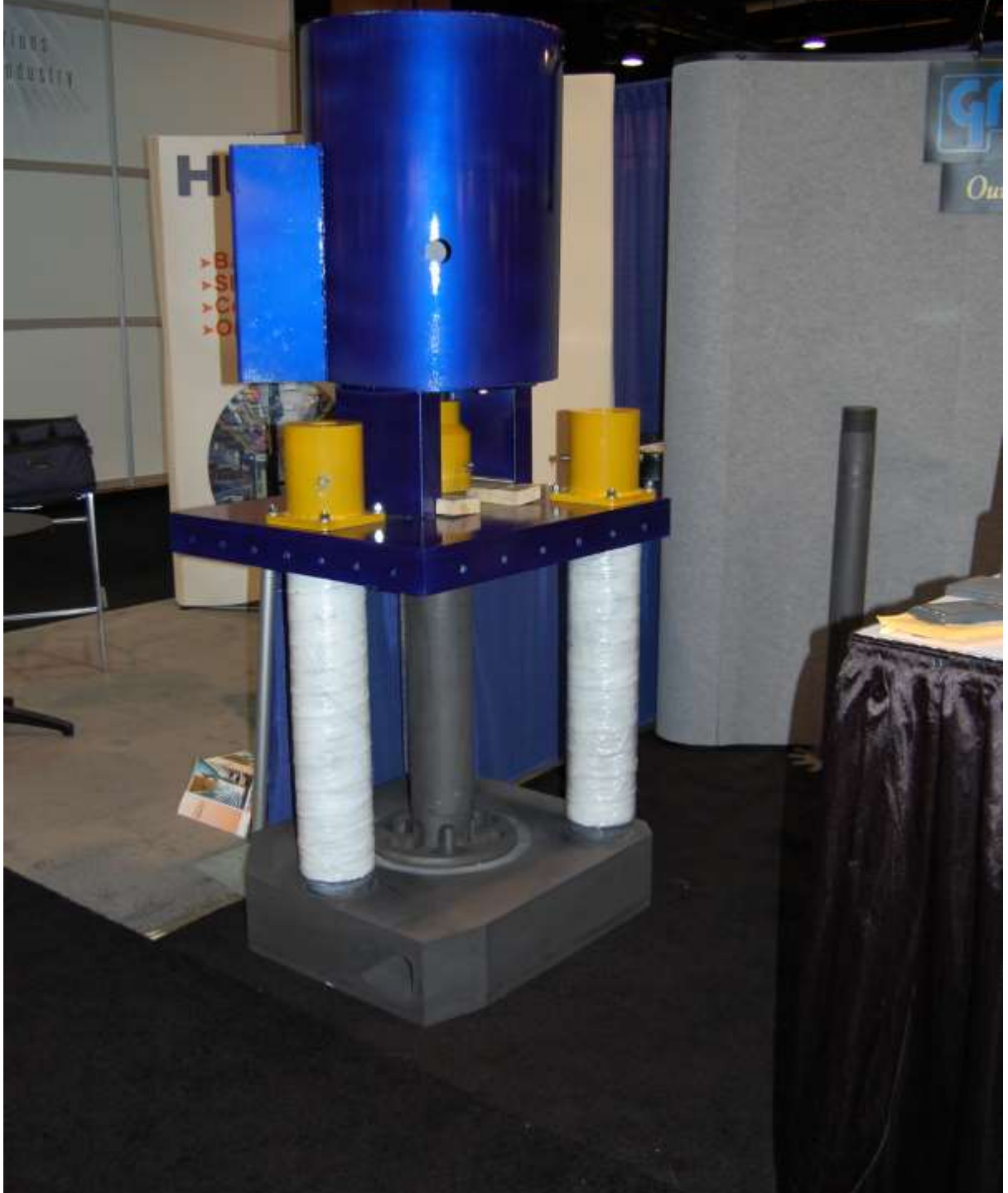
- Picture # 1 shows K.E.G. patented post sockets
- Picture # 2 shows the left side of K.E.G. transfer pump
- Picture # 3 shows the front of the pump with the easy change riser
- Picture # 4 shows the back side of the pump with easy access to coupling for easy shaft replacement.

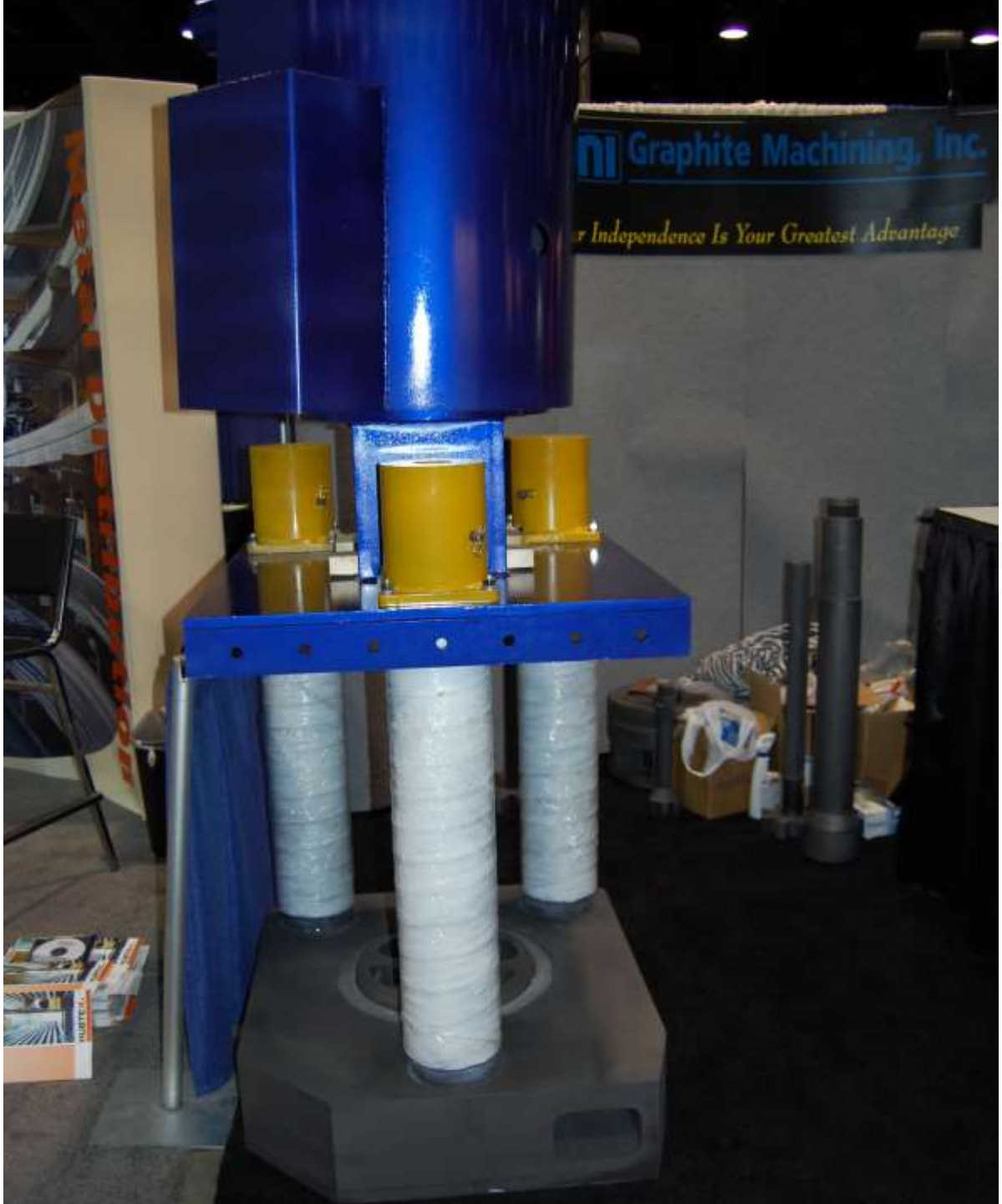

K. E. G.
Molten Technology
Inc.
Mustang 750
Rapid Fill Pump


Mustang 750
Rapid Fill Pump

K.E.G.
Thoroughbred pump with 14” diameter impeller

Next Pictures At a Trade show

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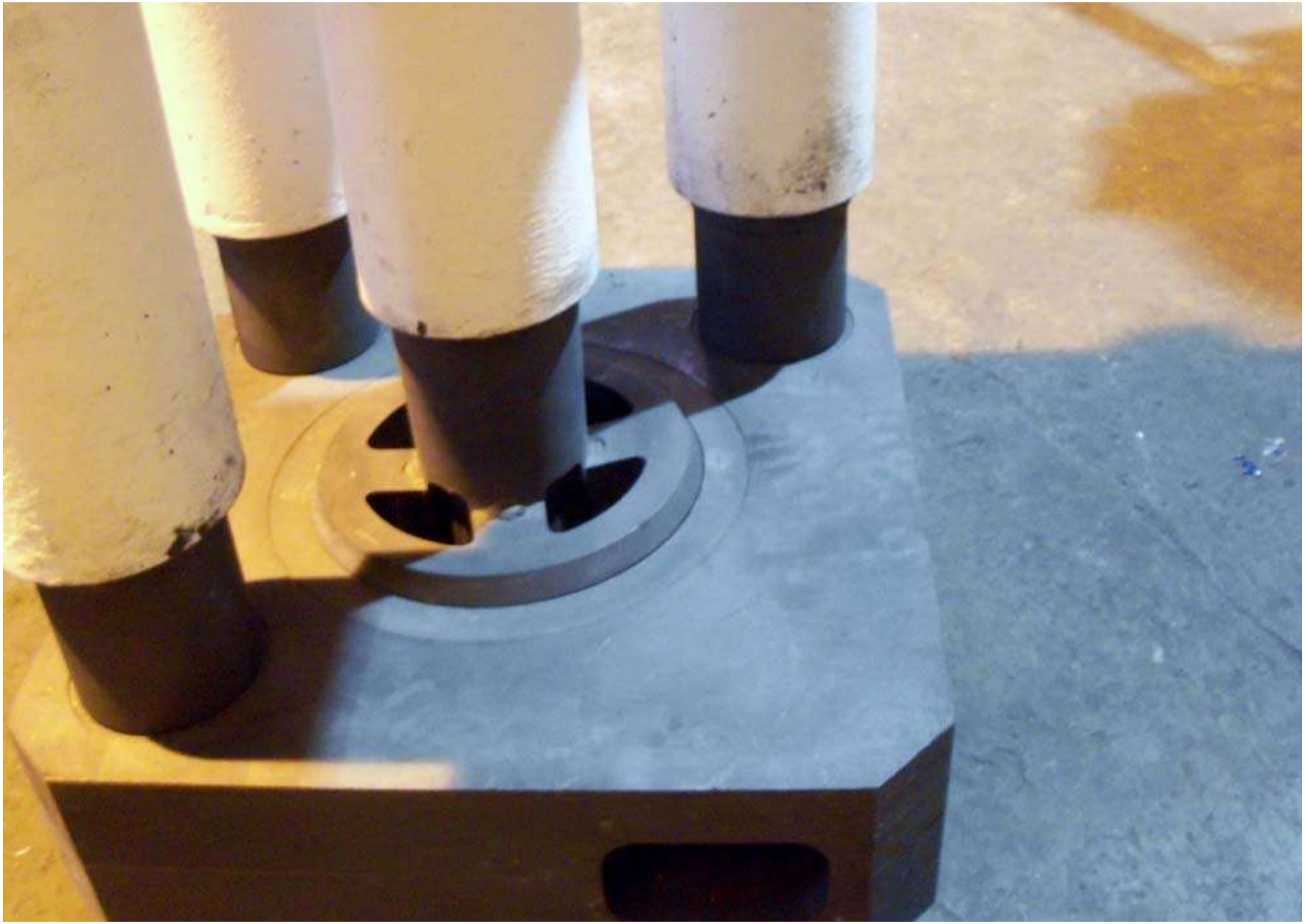
K.E.G.
Molten Technology, Inc

BRONCO CIRCULATION PUMP

- 2008 Bronco circulation pump at Superior Industries Fayetteville, AR, when we were there, they told me that they only have to run my pump at 300 rpms to have more circulation than what they have had with Pyrotek and MMEI pumps using the same size impeller.
- One of their furnaces that they had used a Metaullics Lotus bowl. The operators told me that with their Pyrotek and MMEI pumps that they were having to run them at 420 to 430 rpms.
- The pump man said my pump is the easiest pump he has ever seen to put together.

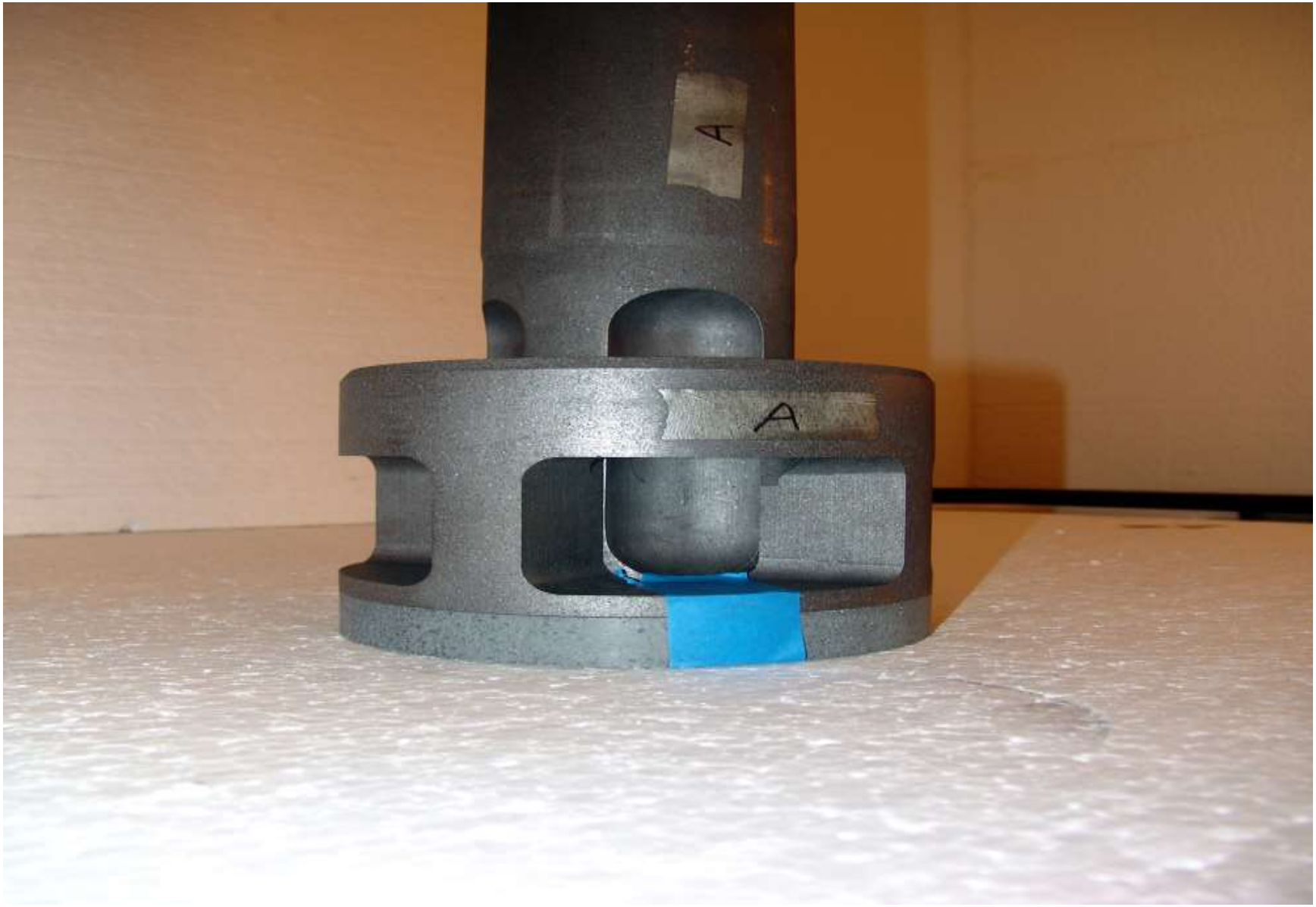


K.E.G.
Molten Technology, Inc

Next Pictures of Improved Impeller

- Patented impeller; the one in the picture is a 7-1/2" diameter.
- This size pumps over 6300 lbs per minute and is the size used in my medium transfer pumps.
- Please notice that it has a super strong joint at between the shaft and impeller, while enhancing the flow of the pump. Unlike Pyrotek and MMEI, I incorporate the shaft to facilitate the flow and allow the solids to go through.

I use this impeller for circulating pumps and transfer pumps with various size diameters. The edges of the impeller do not wear off and the impeller does not get clogged up as easily as my competitor's.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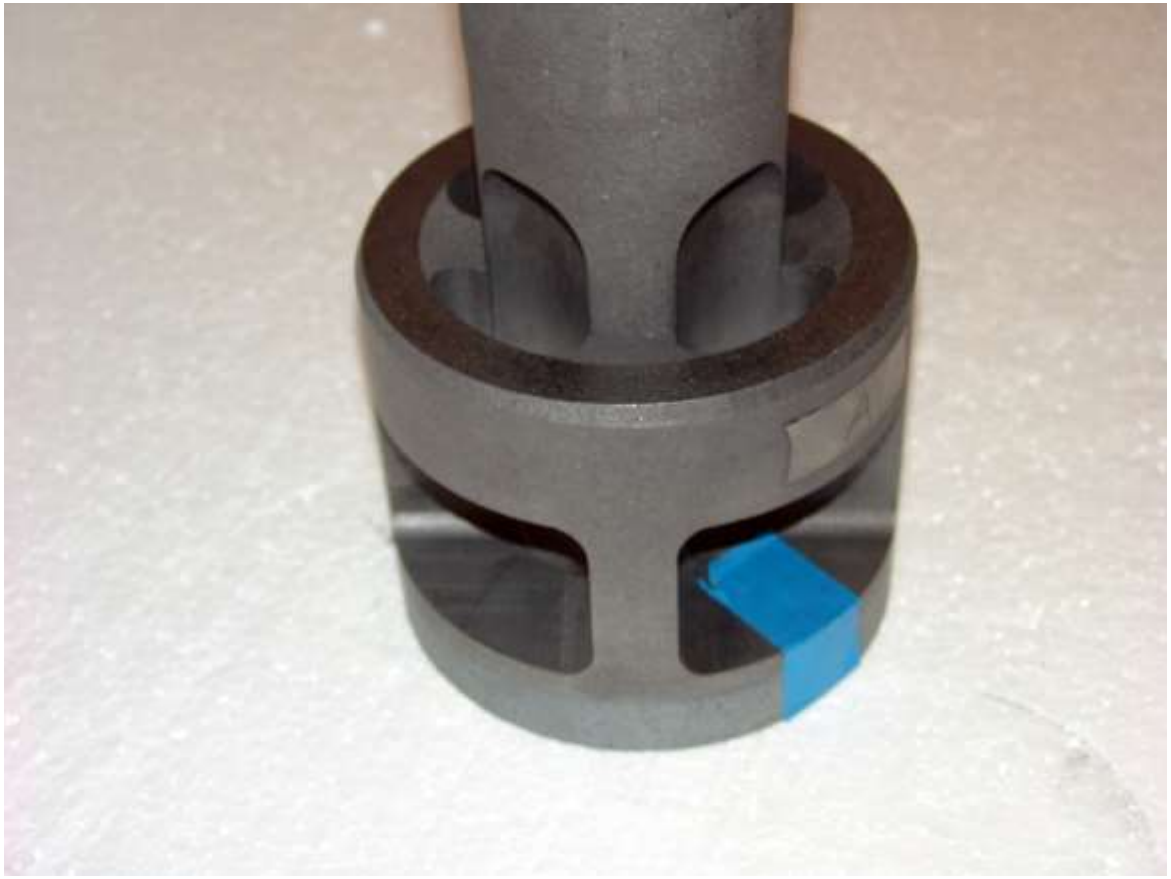


K.E.G.
Molten Technology, Inc

WHY did I make an Improved Impeller ?

- Because MMEI had vanes that wore down and broke the shafts Metaullics came up with the “Six Barrel” impeller. The “Six Barrel” is not an impeller that has vanes to wear down, but notice how easily it stopped up.

- Because I had worked with Metaullic/Pyrotek and MMEI impellers, I had a vantage point of view to see what was needed to improve them. I was either pulling a pump to clean out the stopped up impeller or to replace the shaft and impeller because the vanes had worn down or shaft broke prematurly.

Confidential Material From K.E.G. Molten Technology, Inc. 06-25-06

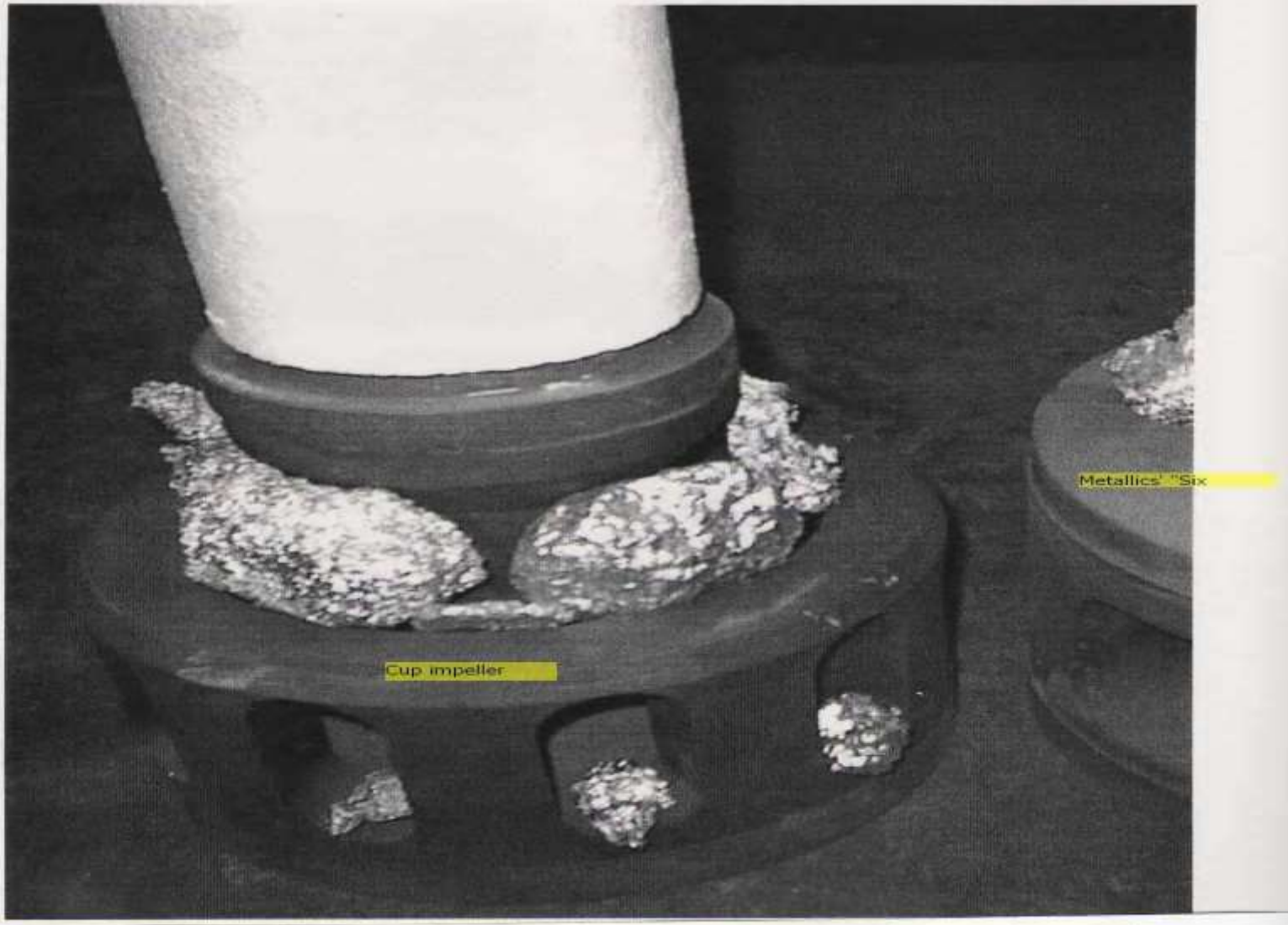
This is a picture of a vaned or bladed rotor it is MMEI's triangular rotor. The one is a new rotor and the other is one after the rocks damaged it. Notice that the shaft broke right above the rotor. The shaft should have broke at the metal level after a long use

This is a circulation pump that has a big rock that was found in another pump that came out of a furnace. A Molten Metal Equipment and Innovations (MMEI) triangular rotor is sitting beside it. This rotor is referred to as a vaned or bladed rotor. This type of rotor does not stand up well with rocks.

Rocks like the one that is sitting in the inlet of this pump, is what can cause the impeller to be worn away or failure to the pump. Sometimes even causing damage to the base.

Old design cup impeller, clogs easily. When it get clogged the efficiency of the pump go down. When this happens the pump will have to pulled and in most cases the impeller taken out of the pump. This cuts into production time.

Confidential Material From K.E.G. Molten Technology, Inc. 06-25-06



These are rocks that were taken out of a use impeller and place in this new cup impeller to demonstrate how an impeller can get clogged. There is a Metaullics "Six Barrel" impeller, sittting off to the side with the same size rocks to demonstrate that it clogs just as easily.

K.E.G. Gas Injection Circulation Pump Being Assembled Showing Gas Injestion Tube.pdf

Metaullics®

Systems for Molten Metal Processing

L-SERIES TRANSFER PUMPS

Metaullics developed the L-Series Transfer pumps - then perfected them in aluminum plants incorporating many suggestions from operating personnel. This refinement process focused on reliability, high performance, ease-of-use and low maintenance. You can expect effective solutions from these pumps and responsive customer service from Metaullics, the people who designed and support them.

Transfer Pump Features

L-Series transfer pumps retain many of the advantages of the L-Series circulation and gas injection pumps. All Metaullics L-Series pumps use oversize components, open top construction, non-clogging impellers, high performance materials, and are designed for ease of maintenance.

Oversize components are used for added strength and life. The larger impellers also allow them to pump the same volume of metal at slower speeds than the pumps they replace. Open top construction reduces the amount of maintenance required and enhances metal flow through the pump. Metaullics' patented impellers won't fill up with rocks and are less prone to jamming. The shaft and impeller assembly is up to four times stronger than conventional threaded shafts and impellers. L-Series pumps feature ZX™ graphite for the best possible oxidation resistance and use high performance ceramic (HPC) sleeves on the shaft. HPC bearings are used in the base and HPC sleeves can also be specified for the posts. The pinned coupling and post clamps allow the pumps to be repaired or rebuilt quickly and easily.

L-Series transfer pumps have additional features specific to the riser. L-Series transfer pump risers have been designed to be easily replaced. They use a larger I.D. so they are less prone to plug up, and the integral pipe flange has been beefed up to make a more rigid assembly.

L-2ST PUMP
L-Series pumps use a unique impeller which resists dross buildup and jamming. High performance ceramic sleeves, non-wetting coatings, and Metaullics' ZX grade graphite are used to further increase components' life.

The pumps require a minimum of regular maintenance. Repairs are simple and when the pump finally does need to be rebuilt, the job is fast and easy and only the parts that are worn out need to be replaced.

Six-Barrel Impellers**

Metaullics six-barrel impellers are standard on L-Series transfer pumps. These impellers are designed to prevent rock damage while eliminating the need for an inlet grate or baffle plate. A ceramic wear plate on the top of the impeller

**Patent Pending

Six-barrel impeller with wear plate minimizes wear and limits the size of rocks and other solids that can enter the pump.

Notice the top or inlet of the impeller the hole are very small and can clog

K.E.G. 14 Inch Diameter Looks Brand New After 30 Days

Gas Injection Pump On Heater

T-750 Transfer Pump With Electric Motor

K.E.G. C-750 Circulation Pump

Pony C-550 Transfer Pump At Nissin Brake Georgia

Y-550 Pump Pumps 4,100 Pounds Per Minute

Pump Man At Commonwealth Aluminum With 14 Inch Pump

PUMP ASSEMBLY

- Bronco Molten Aluminum Circulation Pump

Mustang In 45,000 LB FURNACE

- Mustang Low Rpm High Volume Pump

QUICK BASE REFUBISHMENT