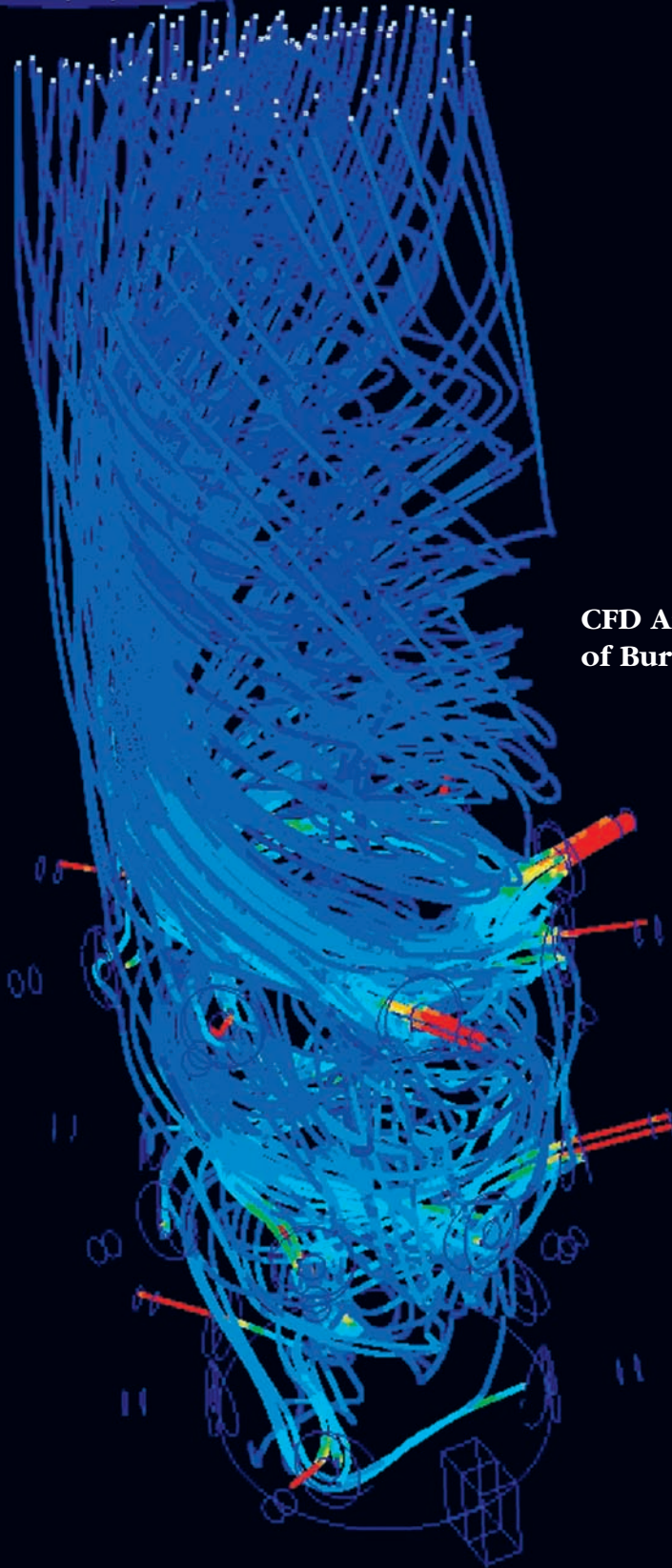




SCR Vortex Burner



**CFD Analysis
of Burner Flow**

SCR Vortex Burner System

Efficiency is paramount in today's competitive market place. Through suggestions from our licensees and SCR's continued pursuit for improvement, further enhancement in our Shaft Furnace design has been achieved. It is commonly known in the industry that preheating the charge material with the exhaust gases can increase the Shaft Furnace efficiency. But, how do you maximize this? Vortex

So what is the SCR Vortex Burner System?

Through the shared knowledge pool of SCR licensees, came a concept on how this type of efficiency might be accomplished. SCR engineering expanded on the concept through the use of special software and developed an evaluation of the conventional flow of gases within a shaft furnace. From this SCR was able to determine what effect each burner has on the one adjacent to it. Then, using the same software the optimum location and position for each burner was determined. The results? Gases forming a Vortex pattern resulting in improved melting efficiency. In one application a 3% savings in fuel consumption was achieved with one row of the Vortex Burner System.

How can I get the Vortex System?

All new systems sold by SCR come standard with the Vortex System. For those licensees with older furnaces SCR can provide a retrofit to your existing furnace allowing you the same efficiency and savings.



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www.southwire.com

**For more information and pricing contact
SCR Technologies at www.southwire.com**



SCR Vortex Burner

Southwire At-A-Glance

- Southwire knows the rod making business because we're in it.
- We are a large producer of copper and aluminum rod, and wire and cable in the United States.
- Southwire was the first to make the continuous casting of copper rod a commercial reality with our SCR® systems.
- We have more than 40 years experience in engineering, producing and operating SCR systems.
- Southwire offers assistance in setting up your system as well as other start-up services.
- We provide training, continued technical support, maintenance guidance and parts replacement.

Important Advantages of the SCR Shaft Furnace

- High thermal efficiency
- 75% fewer control points
- Quieter burners
- Reliable flashback prevention system
- Easier to operate and maintain
- Touch screen human-machine interface for local control or remote monitoring
- Much faster gas sampling response time
- Water-cooled burners
- No air pre-heater required
- Maximum component reliability
- Easy to convert existing furnaces
- Quieter fuel efficient covered launders



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Surface of constant velocity in a Furnace



Give us a call with your system requirements and we can provide you with a custom engineered system that meets your needs.

Technical Assistance

- Operator training
- Start-up assistance
- Field services
- Operating manuals
- Over 60 installations worldwide
- Customized equipment arrangements

SCR Shaft Furnaces Handles a Wide Variety of Copper Charge Materials

- Full Plate Cathode
- Rodmill Scrap
- Clean Copper Scrap
- Wire Bar
- Scrap Billets
- Billet Butts
- Saw Chips
- Cakes
- Blister Copper