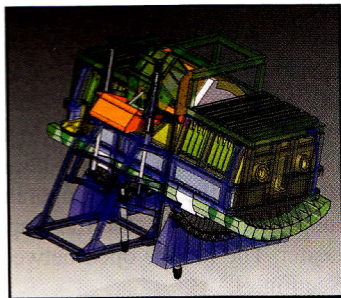


## PRODUCTS

### New charging system more efficient for copper scrap refining furnace

Italy's Continuus-Properzi SpA reports that it has developed a new charging system for a copper scrap refining furnace with a capacity of 250 metric tons (mt) that can be used with the company's CCR line, which is able to produce 30 tons of Fire Refined High Conductivity (FRHC) copper rod per hour.



Represented in North America by Properzi International Inc., the company reports that the furnace represents a major step forward as its prior largest size furnace was 150 mt. The daily cycle of such furnaces traditionally follows a schedule of eight hours for charging and melting, eight hours for refining and eight hours for casting and rod rolling. When designing a new furnace of 250 mt, the challenge was to design a system (loading device and charging door) able to contain the charging and melting time of loose scrap within eight hours.

The company said that many concepts were considered but none worked until a new idea came to light: change the geometrical configuration of the furnace by placing a very large door in an elevated position served by a skip-charging machine (pictured). "It worked. Not only is loading of the loose scrap easier and faster, we are able to achieve significantly improved thermal efficiency due to the enormous quantity of scrap inside the fire room."

The new approach did not change the footprint of the furnace but it is about 3 m taller, the release said, adding that the concept has been used in an order for a 250-ton furnace/30-ton-per-hour rod line that will soon be in operation.

The full advantages of the system are still being determined, but they are believed to include an increase of the system's thermal efficiency as well as some time savings in the loading and melting cycle, the company said.

Contact: **Properzi International Inc.**, tel. 443-212-4320, [info@properzi.us](mailto:info@properzi.us); **Continuus-Properzi SpA**, tel. 39-02-98-84-92-1, [sales@properzi.it](mailto:sales@properzi.it), [www.properzi.com](http://www.properzi.com).

### Acid purification technology offers multiple advantages

U.S.-based PRO-pHx, Inc., supplies Pro-pHx acid purification technology that it reports offers multiple

advantages for wire companies that use hydrochloric acid for pickling wire. A press release said that the technology, commercialized 11 years ago, produces a catalytic reaction that causes heavy metals and organics to become insoluble in any type of acid. The insoluble particles, it said, are removed with a Siebec filtration system that can remove up to 10-12 kg of solids per L-TECH cartridge, it said, adding that the cartridges are washable and reusable. The high solids retention means longer filter runs, requiring less time devoted to changing the cartridges, it said.

Previously, acid concentrations were maintained at 160 g/l and the pickle tanks were purged periodically to control the iron at 80 g/l, the release said. Now, the acid levels are maintained at 80-100 g/l and the iron concentration maintained at 70-75 g/l with no "blowdown," it said. Further, lower iron and acid concentrations are drug out into the rinses because the iron is removed in the acid tank and the acid concentration in the pickle tank is 80 g/l instead of 160 g/l. Process savings are due to reduced virgin acid purchases, reduced caustic purchases for neutralization and reduced volumes of filter cake from the wastewater treatment system, it said.

Contact: **PRO-pHx, Inc.**, tel. 501-609-9808 or cell 501-282-3699, [prophxinc@aol.com](mailto:prophxinc@aol.com), [www.pro-phx.com](http://www.pro-phx.com).

### New dosing unit can process multiple free-flowing materials

Germany's Woywod GmbH & Co. KG has launched a new model, the PLASTICOLOR 2500 Dosing Unit, that has a capacity up to 150 kg/h and can process all free-flowing materials such as powders, granules, regrinds, flakes and agglomerates.

A press release said that the 2500 model has a redesigned material inlet that results in a more precise and constant dosing. The quick discharge from the larger diameter and easy action slide offers clear advantages in the unit's handling capabilities, it said, adding that an option allows the discharge to be upgraded to a pneumatic-operated version. The neckpiece slide's larger diameter allows materials that are more coarse to flow without any problems while there is also more dust content control through modification of the sealing at the screw shaft, it said. The motor and gearbox have been installed with newly designed backpressure protection and a time-delaying pling was used for better centering, it said. Finally, optional automatic screw identification could be used to prevent dosing error by using the wrong screw.



Contact: [www.plast...](http://www.plast...)

### Ultraso

U.S.-based Head Split ultrasonic represents breakthrough dependable ing.

A press release that the wire can easily wire bundle cross-section of 48 to 100 well as well other ultrasonic ultrasonic assembling trial machine

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