

Issue 02 December 2016

# LET'S ROLL

News and reports on technology from  
the people at Union Electric Åkers

**Union Electric Åkers**  
Forged and Cast Rolls



## **DEAR VALUED CUSTOMER,**

The end of a challenging year for the steel industry is already upon us. Thankfully, there appears to be more optimism in the air as we start 2017. Inside the Union Electric Åkers organization, we continue to work hard on our integration. Our primary focus is to provide you with the very best service; both in technical expertise and in the supply of quality products, on time, and according to your requirements.

I have come to realize that the management structures and operations of the past no longer support the competitive nature of the steel industry of today. I firmly believe that to be successful, the future of our leadership must consist of those who see themselves as players on a team. Leadership is now about enabling players to perform and execute and flourish. It might sound a bit philosophical, but this is the type of leadership we endorse within the Union Electric Åkers Team. Our success will depend on how quickly we can transform into a company of highly engaged and motivated employees at all levels.

I would like to take the opportunity to briefly inform you about our very recent acquisition of ASW Steel Inc., a specialty steel maker in Ontario, Canada. This acquisition is a very exciting development for Union Electric Steel as it provides us with additional capabilities in markets related to our Forged Engineered Products (FEP) markets, as well as supporting the Union Electric Åkers forged rolls product segment. We expect to see great things from our partnership with ASW in the years ahead.

In conclusion, I would like to thank you for giving us the opportunity to serve you! As Union Electric Åkers strives to excel in the roll industry, we are truly honored to have customers like you.

I wish you all a joyous and peaceful holiday season and all the best in the New Year.

Ladies and Gentlemen, Let's Roll into 2017!

Rodney Scagline  
President, Union Electric Steel Corporation





## BILATERAL TECHNICAL EXCHANGE DRIVES PRODUCTIVITY

*On November 3rd and 4th, 2016, ArcelorMittal Flat Carbon Europe and Union Electric Åkers met for a Technical and R&D Meeting in Gateshead, United Kingdom.*

Held at different times throughout the year, discussions center on technical exchange to match the ever increasing demand for end-user products for the rolling mills, with roll properties fit for the purpose in all different application areas.

A transparent, facts-based dialogue around themes such as roll performances, productivity, and total cost of ownership, ensure that Union Electric Åkers has its Research and Development program aligned and prioritized accordingly, and meeting customer expectations. Also, there is the additional benefit of the mutual exchange regarding quality and improvement program agendas related to the cast and forged rolls manufacturing processes, roll maintenance, and similar topics.

“At ArcelorMittal Flat Carbon Europe, we are confident that a regular and structured exchange with leading suppliers of strategic products is key to constantly push ourselves and the supplier to improve our productivity through roll grade and roll use optimization,” concludes Sigurd Vanrysselberghe, Lead User Rolls.

Meeting participants from left: Pierre Jolivet, Jean-Baptiste Dufour, François Perrin, Sigurd Vanrysselberghe, Will Garrett, Ron Webber, Jason Sychterz, Shaun Mantle



## COOPERATION STIMULATES PROGRESS

*The Hot Strip Mill and Plate Mill at SSAB Raahe has long since been a development partner for Union Electric Åkers. Developing and testing out new roll grades to fit the needs and expectations of performance and total cost of ownership can only be achieved through close cooperation and long-term commitment from both parties.*

We currently have several new products in development, subject to prototype testing and evaluation in the Hot Strip Mill Early and Late stands at SSAB Raahe.

“Considering the latest roll grade SPECRA P (High Speed Steel) was successfully implemented in the Plate Mill, which resulted in double campaign length, and a remarkable improvement in terms of total cost of ownership, we are assured that the close cooperation between SSAB Raahe and Union Electric Åkers will continue to pay off with regards to the pending Hot Strip Mill projects,” says Jaakko Korteniemi, Development Engineer at SSAB Raahe.

A “development partner” has:

- efficient follow-up performance
- an existing technical level relationship
- a high reputation among all customers
- awareness of the risks implied in testing
- the opportunity to benefit from these activities.



## LIFELONG UNDERTAKING

*It has been almost two years since Union Electric Åkers received very special news; dr. Angelo Pesce, Official Historian of Scafati, a town located in southern Italy, informed us that the Naples Port Authority had donated four naval cannons to the municipality of Scafati.*

The date on the bearing of each cannon read “1773” and on the gun and the trunnion’s face, the monogram “ÅB” was clearly visible. The ÅB stands in relief for “Åkers Bruk” and was Åkers Sweden’s logo between 1772 and 1974. From 1580 to 1866 today’s Åkers Sweden was a leading manufacturer of cannons for the Swedish military and export markets.



Dr. Pesce’s very first email read:

*“I am aware that Åkers Bruk ended cannon production in 1866, and that significant corporate changes have taken place ever since, but having read all pertinent material available on the web, I dare all the same to kindly ask you whether Åkers still holds archival documents of any type that might be helpful in the compilation of a planned brochure on this new, most valuable property of our city.”*

Indeed, we couldn’t resist dr. Pesce’s humble request, and within a matter of days, we were happy to inform him that we had found the following original documents about the naval cannons in our historical archive:

- The original drawing which measured 4 m in length
- Purchasing contract
- Memo which identified the name of the officer, who had test shot each of the four cannons

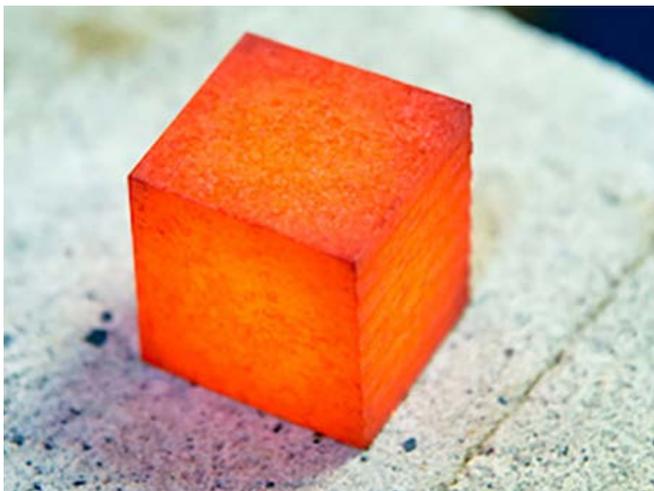
Upon the receipt of the documents dr. Pesce was overwhelmed and replied:

*“Thanks for your instantaneous, encouraging answer to my query. In truth, I was thoroughly flabbergasted to get such a detailed reply in just a few hours’ span – something we are not particularly accustomed to in this part of the world. I hastened to print your email and flutter it around: to family, neighbors and passers-by alike, as if it were a message coming at light speed from another world in our galaxy. Seriously, I am so happy at the prospect that something is bound to come out from Åkers Archive to suit my research.”*

We have established a personal and genuine contact with dr. Pesce, who from time to time sends us a report on the on-going cumbersome work to restore the cannons and other artifacts of our industry. Dr. Pesce plans to go to the National Archives in Naples to search for transaction records on the cannon purchase. If successful, he will have completed his research and will then produce an extensive booklet on the subject.

In summary, customer satisfaction is very important to us and in addition to delivering the highest value products available in the industry, Union Electric Åkers has proven 100% Product Traceability, even as far back in history as over 200 years.





## CHANGING THE WORLD OF ROLLS FOREVER

*For many years, the metallurgical principles and nanotechnologies applied to steel and iron making, the formation of the roll blank, and heat treatment has been subject to extensive research and development at Union Electric Åkers. Today, we continue to look at new technologies that will change the world of rolls forever.*

Existing boundaries of roll grades, production techniques, and the end use rolling applications are being challenged and broken where a new concept deriving from combinations of alloy and process design, never seen before, has resulted in a brand new family and generation of steel grades for rolling mill roll applications.

“This is the most important and exiting technology shift in 25 years,” comments Tom Adams, R&D Director, and one of the architects behind the breakthrough concept of Enhanced ICDP which was introduced in the 1990’s.

“The world premiere and introduction of the Union Electric Åkers Hybrid Steel Family will be done next year in both Hot and Cold rolling applications, and will initially cover Hybrid High Speed Steel grades,” says Stefan Wahlund, Director of Product Management and Marketing.



## UNION ELECTRIC ÅKERS AT ABM WEEK 2016

*ABM (Association of Brazilian Metallurgist) Week 2016 was held in Rio de Janeiro from September 27-29. The ABM Conference is the largest in Latin America. Over 550 papers and 362 presentations were given, on a full range of steel industry topics, from Blast Furnace, to Logistics.*

Union Electric Åkers used displays and technical presentations so that visitors were able to gather information about the products, solutions, and services that comprise the Union Electric Åkers portfolio. A video on roll manufacturing, and brochures about the new Union Electric Åkers, were also available. Attendance was down from previous years, due to the current challenging economic conditions across Latin America. Despite this, the Brazilian Steel Mills were still well represented with many Roll Shop and Hot and Cold Mill operators in attendance. Visitation to the booth was high with many attendees inquiring about the new Union Electric Åkers. There were also students in attendance, asking questions in an effort to develop a better understanding of the industry. “It was excellent to see so many young, intelligent, inquisitive people interested in our industry,” commented Ron Webber, Technical Services Manager at Union Electric Åkers.

The Conference was beneficial for many reasons. Union Electric Åkers personnel were presented with the latest developments in the roll industry by attending the conference technical sessions. Union Electric Åkers also had an opportunity to promote the strengths of having two of the leading roll companies combined into a single organization that can better serve the customer’s needs. The next ABM Conference (ABM Week 2017) will be in Sao Paulo from October 2-6, 2017. We look forward to seeing you there!

Image: Four Union Electric Åkers colleagues attended and manned the exhibit booth: Daniela Vendramini (UEÅ-Brazil), Carlos Morone (UEÅ-US), Gustavo Nunes de Castro (UEÅ-Brazil), and Ron Webber (UEÅ-Canada).



## NEW HEAT TREATMENT FACILITY ADDS CUSTOMER VALUE

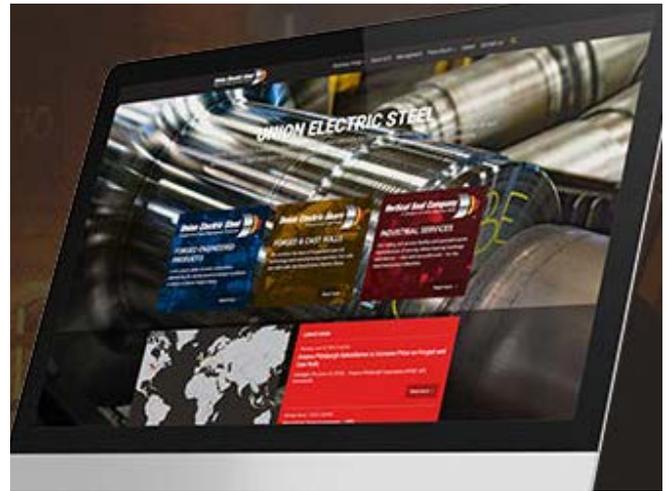
*In late November 2016, Union Electric Steel announced the completion of a new heat treatment facility, located within the existing Harmon Creek Plant, in Burgettstown, Pennsylvania. Limited production commenced in early December.*

Gary Cercone, Director of Engineering at Union Electric Steel, directed the engineering and design work for the approximately \$9 million project. Construction of the nearly 16,000 square foot structure broke ground in the spring of 2016.

The new facility will produce a more uniform product with improved qualities and specifications, through a highly engineered system comprised of precision heating and horizontal quenching technologies. Additionally, the level of control in the heating and cooling of this configuration is improved and tighter than industry standards.

This additional heat treatment within our Harmon Creek plant allows us to provide more completed products from this location, with a quicker lead time.

*“We are extremely pleased with the progress we have made with the heat treatment project,” said Gary Cercone. “This new facility has state of the art equipment that will deliver precise and targeted heating and cooling processing of our material, and produce a high-quality product for our customers as a result.”*



## UNION ELECTRIC STEEL CORPORATION LAUNCHES NEW WEBSITE

*Union Electric Steel Corporation is in a phase of expansion, with the purchase of Åkers AB and certain of its affiliates in March 2016, and more recently, the acquisition of ASW Steel Inc. (ASW), a specialty steel maker based in Ontario, Canada, which was completed in November.*

Of the many integration projects on the horizon, one of our most exciting is the launch of the new UES website. We are pleased to announce that the website will be live on 22 December 2016.

The new site will provide easy access to information on our entire product portfolio, as well as contact information for the global UES sales organization, easily searchable by location. You will also find that our newsletter and specific articles are conveniently posted on under the tab, “Press Room.”

Union Electric Steel is driven by innovation and is always looking for improved, more efficient ways to answer our customers’ challenges. This website is just one way we are utilizing technology to go above and beyond.

Please be sure to visit the new website at [www.uniones.com](http://www.uniones.com).