

# Setting the supplier standard

Luvata has been established for hundreds of years and has contributed to a host of products, some familiar some not so well known. In the 1990s Luvata pioneered technology that made automated mass-production of photovoltaic solar panels possible by enabling automatic ribbon soldering. In this revealing Q&A, Justin Roux, Luvata's Senior Vice President of Communications, explains how the company came into being and what it is doing now to create opportunities for itself in the 21st century.



Justin Roux,  
Senior Vice  
President of  
Communication  
at Luvata

**PES:** Luvata has a long history under various names. Could you tell us something of it, and what you do now?

**Justin Roux:** Yes, Luvata is proud of its long history – we like to say that it has hundreds of years of history and one united future.

When Luvata began producing cannons in Sweden, the Renaissance was sweeping across Europe, Leonardo da Vinci was painting the Mona Lisa, Columbus had recently landed in America and Shakespeare was yet to

be born. Since then, Luvata has made history of its own by bringing together 40 different companies that have pioneered many modern technologies.

Formerly known as Outokumpu Copper Products and acquired from Outokumpu OYJ by Nordic Capital in 2005, today the diverse cultures and capabilities of these companies are united under the Luvata name. Although you may not realise it, it's hard to look more than 100 metres in any direction without seeing something that Luvata has contributed to, from zippers to caskets, batteries to welding

electrodes to superconducting wire for MRI. Luvata sets the standard for the way in which fabricators do business with their customers.

Our customers have asked us to go beyond just supplying metal products and become more of a business partner - to use our capabilities and experience to identify solutions for their businesses. Specifically we help our customers address three primary business goals: improving their operational efficiency, helping to improve products and reducing their tied-up capital. Luvata's strategy has opened a new era of opportunity by creating stronger partnerships throughout the value chains in which we operate.

With this fundamental business strategy and our traditions of delivering results, honouring our promises and staying open-minded, we can unlock a new world of opportunity to the industry. We have called this approach "Partnerships Beyond Metals".

**PES:** Solar ribbon is one of your areas of speciality – can you tell us a little more about this sector of your business?

**JR:** The sun is a giant fusion power plant. Year after year the earth is supplied with more than 219,000 billion kWh of energy – all free of charge. Photovoltaic is the technology that transforms sunlight straight into electricity. With the limited supply of fossil energy sources, market segments with renewable power sources are booming.

In the early 90s Luvata pioneered the technology that made automated mass-production of photovoltaic solar panels possible by enabling automatic ribbon soldering. The solution, branded Sunwire, is a copper-based ribbon used to create high performance connections to the silicon cells at the heart of photovoltaic modules.

Our Sunwire production technology can easily adjust to dimensions that historically prohibited the development of new photovoltaic cells. The manufacturing process allows for short lead times and simplified start-up capabilities, resulting in a level of responsiveness and geographic flexibility not previously available.

**PES:** We understand that you're planning to triple production capacity by next year – how will you achieve this?

**JR:** In early 2008 Luvata announced a €20million planned investment in photovoltaic wire production. Production

of the wire is to double in Europe followed by significant expansions in the emerging markets of Asia and the US. Production is measured in the amount of generating potential of solar electricity. Luvata will double production at its plant in Pori, Finland from 500MW to 1GW by 2009. In the latter half of 2008, work will begin at our Pasir Gudang facility in Malaysia for an added 500MW capacity and continue in 2009 with expansion of production capabilities at existing Luvata plants in the US for another 500MW.

**PES:** Is demand for thin film modules a threat to your business?

**JR:** No, our technology enables us to work closely with our customers to meet their exact needs, whether for traditional photovoltaic solar panels or the innovative new products such as those using thin film technology. Many thin film technologies require some type of current collecting ribbon, like Sunwire. The main difference is that not as much ribbon per MW is needed as with crystalline silicon modules.

**PES:** How critical is the quality and tolerances of your solder ribbon to the module manufacturing process?

**JR:** Manufacturers are demanding photovoltaic wire in smaller dimensions to maximise efficiency, minimise shadowing on the silicon cells and ensure that the expensive crystalline silicon is not damaged during the soldering process. Most of our customers use automatic soldering lines, which require tight dimensional tolerances and uniform mechanical properties (yield, tensile, strength and elongation) along with perfect and straight spooling from spool to spool and from delivery to delivery. Luvata's production technology is recognised for its high quality and fine dimensional accuracy exactly suited to meet these needs.

**PES:** What measures do you have in place to ensure consistency?

**JR:** The Sunwire product has established new benchmarks for quality and reliability. Increased automation in module production demands the highest reliability and quality of the materials used. Luvata has developed a fully-automated manufacturing method to produce rolled and plated flat copper wire for use in-cell and angled connector links in photovoltaic modules.

We are certified ISO 9001 and utilise extensive in-line measurement technology during manufacture to ensure exact and consistent quality. We use an independent, internal quality laboratory to check our products and issue corresponding certificates.

**PES:** You have a campaign called 'Think About It', which issues tough environmental challenges. Can you tell us more about this campaign and how it has helped to shape your environmental strategy?

**JR:** The "Think about it" campaign introduced just a few of the areas in which Luvata helps its customers to come up with solutions that shape not just their industries, but the world around us. We highlighted just three of our key markets: Automotive, HVACR and Power that each has enormous impact on the world around us.

We all have a responsibility towards the future of the planet. That means less waste, less pollution and using less energy

For example, roughly half of the energy in a barrel of oil is spent extracting and distributing the other half. Is that acceptable? No. By 2020 one billion vehicles will drive on a planet with one billion more energy consumers while almost half of the energy used in our cities will cool or heat the buildings. It will be engineers and scientists who find better ways for us to live. Luvata is uniquely positioned to help its customers find a more responsible future.

We all have a responsibility towards the future of the planet. That means less waste, less pollution and using less energy. It means taking responsibility for the long-term effects of our decisions. Honouring that responsibility should not mean that we have to compromise on performance, or upon the health of our businesses. Not if we think and act together. The principals of our campaign, "Think About It" recognise we can't do it alone, so let's think about it together.

**PES:** The company's expertise is in many fields, but particularly that of copper. How sustainable is copper mining, and what are Luvata's environmental policies with regard to this?

**JR:** Luvata is not a miner/producer and I can't comment on the mining processes themselves. However, Luvata aims to

reduce the environmental impact of all its activities. It is acutely aware that every decision and action can have an impact on the planet and all its other inhabitants. We do our utmost to work only with subcontractors or suppliers who adhere to international human rights and environmental laws and practices. We aim to stay aware of the ethical performance of our suppliers and will take immediate and thorough steps in cases where the ethical performance of a supplier comes into question. Luvata requests that its suppliers avoid raw material procurement from any source where there are clear environmental, human or animal rights violations, or where the method of procurement or distribution is illegal.

**PES:** Can you describe what the 'Villa Luvata' project is about?

**JR:** The 2008 Holiday Housing Fair was held June 13 – July 6, 2008 in Reposaaari, Finland and included around 40 new housing units. It is visited by approximately 40,000 – 50,000 people each year. Luvata became interested in this year's fair due to its theme "Building in Demanding Circumstances". This theme was a perfect match for copper.

Villa Luvata demonstrates the versatile applications of copper in modern architecture and interior design. In particular it showcases the true potential of copper in roofing, walls, rainwater systems, and solar thermal technology. The solar collector system that blends seamlessly with the copper roof, matching design and sustainability with outstanding performance, and of course, free hot water!

Inside Villa Luvata the custom-made soap stone fireplace is surrounded by blue prepatinated copper offering a beautiful centrepiece to the home. The natural blue prepatinated copper, Nordic Blue, combined with the thermal properties of copper, results in an attractive and comfortable living area. Villa Luvata is an excellent proof point that highlights various copper applications for simple and comfortable, yet sustainable, living.

**PES:** What measures do you take to reduce your carbon footprint as a business?

**JR:** Consideration of the environment is an integral part of everything we do. We are committed to continual improvement and will be introducing a KPI-based approach to drive us further.

We also help our customer to develop products and solutions that improve efficiency, reduce consumption or enable sustainability while minimising their footprint on the environment.

**PES:** How does Luvata as a whole expect to perform over the next five years, and where do you hope to be by then?

**JR:** The current global economic climate is as filled with opportunities as it is with challenges. Luvata expects to stay ahead of these challenges and remain flexible enough to take the opportunities. Luvata stated its strategy in 2006 – one of industry consolidation, forward integration and diversification. We strongly believe that this strategy will be right for the company and its customers. Although we have courageous ambitions for financial growth, it is important for us to be seen as the badge of excellence in production and technology. Across our divisions of Special Products, Rolled Products, ACR Tubes and HVACR, we intend to be market leaders – obviously that is measured in terms of revenue or market share, but we are focussed on other metrics, too, such as being the employer of choice, looking after customers and people, and setting an example in good corporate conduct.

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**PES:** As a company, what do you think the benefits of having close community links are?

**JR:** Luvata has more than 8,500 employees and 37 production facilities in 18 countries. Our global reach and continued success begins with our employees. Many of our manufacturing

facilities such as Pori (Finland), Pocenja (Italy) and Grenada (Mississippi, USA) are among the largest employers in their respective communities.

Maintaining a close relationship with local residents and officials is imperative. Local Interaction concerning the environment, health and safety as well as labour issues are of mutual concern. Several of our manufacturing units offer annual open houses to promote understanding and goodwill between local communities and Luvata. As the competition for skilled and competent workers is fierce, Luvata takes special care to maintain its reputation as a desirable employer in their local communities.

In many communities, Luvata has developed long-standing relationships with local universities and colleges that help support our research and development initiatives. Luvata as well as many of its employees also contributes their time, resources and money to local community and charitable organisations.

**PES:** The theme of this issue is the rising price of oil and how it will affect the renewables industry. Do you feel it will impact upon your business? How?

**JR:** With the rising price of oil, manufacturers are looking in other places to decrease costs, increase efficiency and reduce waste in addition to finding renewable energy solutions. Being a leading international supplier of solutions, services, components and materials for manufacturing and construction, we believe that this will ultimately have a positive impact on our business.

Our expertise allows us to work with our customers to find solutions that reduce reliance on non-renewable energies. We must push for renewable energy and, although it's seen as gloomy news for many, the rising price of oil is a strong driver for this to happen sooner rather than later. Copper can play a vital role. It is low maintenance, 100% recyclable, and has properties that make it particularly efficient in so many applications. It is just one of the metals we work with and Luvata is keeping its eyes open for every opportunity to make tomorrow even better than today for everyone. ▲

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