

**Innovation
through
Integration**

Our Vision

Metallurg Aluminium will dominate the markets it serves by becoming the global partner to the world's aluminium industry through commitment to quality people, technical leadership, product innovation, service excellence and by providing the highest value for money.

Our Commitment

1. Metallurg Aluminium brings together the global strengths of the Metallurg Group with the goal of enhancing our strong partnerships with our customers, helping them achieve higher levels of quality, productivity and profitability.
2. Metallurg Aluminium provides the world's aluminium industry with the highest quality grain refiners, metal treatment alloys, master alloys and compacted alloying products.
3. Metallurg Aluminium delivers a commitment to quality products, with all group members registered to one or more of the following quality standards: QS 9000, ISO 9001 and ISO 9002.
4. Metallurg Aluminium is committed to developing innovative metallurgical products and bringing them to market.
5. Metallurg Aluminium delivers technical expertise and support to its customers, providing complete solutions through modern, efficient production facilities, a skilled team of technical experts and in-house laboratory services.
6. Metallurg Aluminium is committed to providing the highest value for money.

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**Perspectives
on
quality**

We're staying ahead of international quality standards.

Product quality is the single most important factor in doing business today, says Dr. Paul Cooper, Technical Manager – Aluminium Division at London & Scandinavian Metallurgical Co Limited (LSM), a Metallurg Aluminium group member.

"The demands being placed on primary and secondary aluminium producers today are greater than ever," says Paul. "It's a competitive industry, and standards are being raised all the time."

"Metallurg Aluminium is committed to delivering the highest quality products in our industry because we understand the impact that quality has on our customers' operations. We are their partners, so our product quality must not be compromised."

Paul notes that everyone in the Metallurg Aluminium organization is held responsible for quality. All of Metallurg Aluminium's group members are registered to one or more of the following quality standards: QS 9000, ISO 9001 and ISO 9002.

He adds that achieving ISO certification alone doesn't assure quality.

"ISO is a standard focused on product consistency, but in and of itself does not guarantee good quality," Paul explains. "Our commitment to quality goes beyond ISO."

"Our LSM facility, for instance, was the first of its kind in the world to achieve QS 9000, which brings defined

quality management and more measurable continuous improvement systems into play."

Dr. Cooper notes that Metallurg Aluminium producers world-wide are virtually ready for the implementation of tough new international quality standards, that will be known as TS standards, scheduled for implementation in 2002.

"TS will be more like QS, but our facilities are already there and will easily achieve the new standards once they are introduced. We have always been committed to continuous improvement, especially when it comes to quality."

Part of the quality commitment stems from Metallurg Aluminium's collaboration with major aluminium producers and university researchers.

"We are working with leaders in the field in the development of innovative new products and at finding ways of improving casthouse processes," notes Paul. "That keeps our people focused on quality because we spend so much time seeing the process through the eyes of our customers."

Seeing the importance of quality from the customer's perspective is essential to all members of our global technical, sales and management teams. Learn more about our technical team, and the role they play in maintaining our commitment to quality, on page 3.



Product Profile:

8BAITM

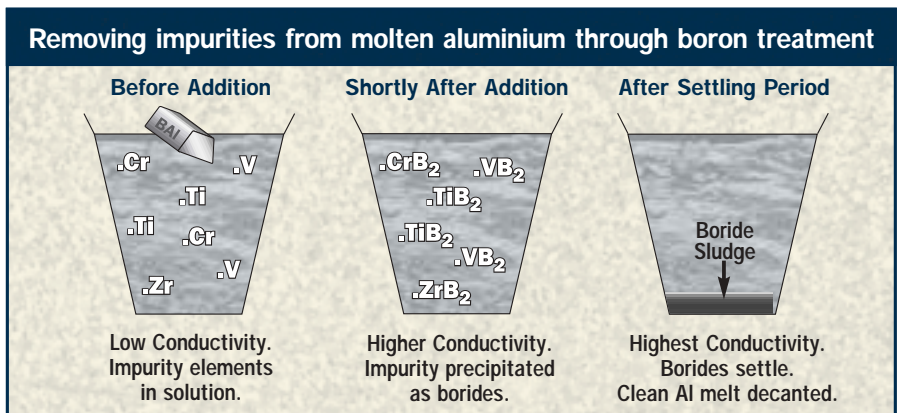
High-energy innovation

Metallurg Aluminium is breaking new ground in cost-effective transition metal removal for EC-grade applications with its unique 8 percent boron aluminium master alloy known as 8BAITM.

The use of 8BAITM is the most direct route to lowering the cost of boron treatment in the casthouse, which has made this innovative product popular around the world.

The production of high-conductivity aluminium for wire and cable depends on the removal of transition metals.

Titanium, vanadium, chromium, zirconium and other elements – present within the aluminium as smelter impurities – will impede the electrical conductivity of aluminium. These solute impurities are generally precipitated from molten aluminium through the addition of boron aluminium master alloys.



Following the addition of boron aluminium, metallic impurities in the melt react with the aluminium borides, and these heavier particles will settle to form a boride sludge. High-purity, highly conductive aluminium can then be decanted. The reacted borides are trapped in the sludge at the bottom of the furnace.

Since its introduction, 8BAITM has received tremendous attention on the world-wide stage. As a boron additive, 8BAITM allows for the same level of impurity removal as lower-concentration alloys, but with a reduced boron unit cost.

“We’re seeing outstanding interest in this product,” says Antonio Jacob, Commercial Director for Companhia Industrial Fluminense (CIF) in Brazil. CIF’s production facilities provide high-quality master alloys for Metallurg Aluminium, including production of 8BAITM.

“It’s highly efficient, and this means reliable impurity removal with a lower cost than other

types of boron additives,” he notes.

Adds Dr. Paul Cooper, Technical Manager – Aluminium Division for London & Scandinavian Metallurgical Co Limited (LSM): “8BAITM works in exactly the same way as four or five per cent products for boron treatment. The benefits of 8BAITM are its higher concentration and its cut-bar form known as CastcutTM, giving the customer the benefits of less working capital tied up in stocks, reduced manual handling and shorter furnace cooling time, as less product is added to the furnace.”

8BAITM in CastcutTM form offers the additional benefits of better weight accuracy than other product forms, easier handling and a higher metallurgical cleanliness than that offered by waffle products.

Customers are responding to 8BAITM for all these reasons, notes Antonio. “8BAITM is a winner, and is serving in demanding EC-grade applications around the world.”

CIF turns 90!

Metallurg Aluminium group company Companhia Industrial Fluminense (CIF) in Brazil will celebrate its 90th anniversary in 2002.

Founded in 1912 as a manufacturer of matches, the company began processing tin, niobium and tantalum ores in 1960.

CIF also acquired a power company that still supplies the company's electricity.

Metallurg, Inc. acquired CIF in 1979 and transferred the technology to produce aluminium master alloys, alloying tablets, and tantalum and niobium oxides.

CIF's main objective is to constantly improve quality and to respond rapidly to changing customer requirements – a goal supported by a strict quality assurance program.

Today with its competitive position and commitment to quality well known in metals markets, CIF is established as the major producer of aluminium grain refiners in South America.



Tech Team Portraits

We're proud to spotlight some of the leaders of our international technical support team.



Dr. Paul Cooper

Technical Manager,
Aluminium Division – LSM

Paul received a B.Sc. (Engineering) in Metallurgy from Imperial College London, England in 1981, and a Ph.D in Metallurgy at Imperial College in 1984.

Beginning his career with LSM in 1988 as a Development Metallurgist, Paul has also worked as Quality Assurance Co-ordinator and Technical Services Manager of the Aluminium Division. The last two years have seen him in the senior role of Technical Manager, Aluminium Division. Paul was responsible for implementing both the ISO and QS quality systems at LSM.

Paul has authored numerous technical papers, and is a regular presenter at light metals conferences throughout the world.



Dr. Gregorio Borge

Technical Manager – Bostlan, S.A.

Gregorio combines an academic background in chemistry with his experience in the metals industry to provide comprehensive technical solutions to Metallurg Aluminium's customers. Gregorio has been with Bostlan, S.A. since 1998. As Technical Manager, he oversees product development, technical assistance, and ongoing research.



Eivind Bondhus

Technical Sales Executive – Hydrelko AS

Eivind started with Hydrelko AS in 1997 as a metallurgist, after studying physical metallurgy at the Technical University in Trondheim, Norway. He has been involved in several aspects of Hydrelko's aluminium business, including product and process development, and technical assistance.

When Hydrelko joined the Metallurg Group, Eivind took on his current role of Technical Sales Executive, focusing on the Scandinavian market. His work also includes the foundry products area.



Dave Boot

Process Metallurgist – LSM

Dave earned an Honours degree in Metallurgy and Microstructural Engineering from Hallam University in Sheffield in 1984, and joined LSM that year. He joined the Technical Team early in 2000 with a realistic approach to production issues, a thirst for knowledge, and great confidence in Metallurg Aluminium's products and services.



Ed Burhop

Foundry Products Manager – Metallurg Aluminium

Ed holds a B.Sc. in Metallurgical Engineering from the University of Wisconsin – Madison, and an MBA from Lakeland College. His experience ranges from primary aluminium to finished products, giving him a complete perspective on customer requirements. Ed draws upon his knowledge of process and metallurgical engineering, and his business experience, to provide foundry customers with exceptional technical sales support.

Allan Barber

Technical Sales Executive – LSM



Allan has worked at LSM for over 27 years, starting in the chemical lab and moving to metallography. His work on microstructures and preparation techniques are now used as international standards. Allan joined LSM's newly formed Aluminium Division in 1994, developing technical specifications and providing support to sales staff and customers. In 2000, Allan became Technical Sales Executive, serving customers in Europe, the Gulf, the Middle East, Asia and the U.S.



Marianne Odden

Technical Leader – Hydrelko AS

Marianne graduated in 1998 from the Norwegian University of Science and Technology (NTNU) with a M.Sc. in metallurgy. Her final thesis was a collaboration between NTNU and CMI-

Tech Center, Inc., in Detroit, Michigan, entitled 'Mechanical Properties of AlSiMg Cast Alloys'. She started with Hydrelko AS early in 1999 as a Process Metallurgist, and became Technical Leader in August 2000.



Steve Danilak

Technical Manager – SMC

A 1987 graduate of Drexel University with a B.Sc. in Materials Science and Engineering, Steve began his career as a process engineer for Howmet, developing and improving casting processes for single-crystal turbine blades. Steve has also worked on space shuttle turbine blades, resulting in a NASA award.

Steve joined SMC in 1990 as a process metallurgist. He developed melting practices for TiCAL™ and strontium products and improved those of other master alloys. Last year, Steve became SMC's Technical Manager.



Pete Fisher

Technical Sales Executive – LSM

Pete began his career in the metals sector in laboratory and production supervision roles within the steel industry.

He has spent 27 years with LSM, supervising production, quality assurance, and product development. Pete's role now involves customer technical support and trouble-shooting as a Technical Sales Executive.



Leonardo Guimarães

Aluminium Alloys Plant Chief – CIF

Leonardo joined CIF in 2001 to oversee production of aluminium master alloys. In 1992, he received a degree in Industrial Mechanical Engineering at FUNREI – Fundação de Ensino Superior de São João del Rei, Brazil. His experience in product development for firms in Germany and Brazil, including Robert Bosh Ltd., has given Leonardo an exceptional understanding of leading-edge industrial applications for aluminium alloys, particularly in the automotive sector.

InProfile

Metallurg Aluminium's expertise bridges many continents and disciplines. We're proud to profile key members of our global team.

We regret to note that former CIF Aluminum Plant Chief, Adriano Detomi, passed away recently. He will be deeply missed. Adriano's work serves as a standard of excellence for his colleagues.



Tony Rewers

Territory Manager,
Metallurg Aluminium

Based in Michigan, Tony's territory extends throughout the central U.S. His casthouse and foundry customers rely on the powerful global resources Metallurg Aluminium offers. "Proven products, production from five sources, technical support around the world and a total commitment to our customers all add up to make us a leader."



Itamar Resende

Director President, Companhia Industrial Fluminense (CIF)

"CIF brings unique strengths to the Metallurg Group," says Itamar. "Our highly competitive labor costs and integrated raw material supply make us unique."

Renowned in the group as a natural leader, Itamar oversees every aspect of CIF's operations. Under his direction, CIF has made significant advances in low-cost specialty alloy production, including 8BAI™ and TiBAI™, for markets around the world.

"2002 will be the 90th anniversary for CIF," notes Itamar. "We've made tremendous progress, and our outlook is better now than at any time in our history."



Mona Pinette

Inside Sales Representative,
Metallurg Aluminium

Mona serves Canadian customers from Metallurg Aluminium's offices in Burlington, Ontario. Her focus is on outstanding personal service.

"To me, the best customer service means knowing my customers' needs, treating them like friends and going the extra mile."



Elizabeth Thompson

Sales Manager – Aluminium Division,
London & Scandinavian Metallurgical
Co Limited (LSM)

Elizabeth oversees a vast and demanding international territory that spans four continents. A solid understanding of international business and a command of several languages are just two of the skills that Elizabeth relies upon as she coordinates sales from LSM's head office in Rotherham, England.

Elizabeth sees expanded capacity for TiBAI™ as a key to international success for Metallurg Aluminium.

"Customer response to our new TiBAI™ rod mill has been very positive," she notes. "They're pleased to see a proactive increase in capacity to match demand. This capacity assures customers of a stable supply. It's just one of the ways in which we continue to differentiate ourselves from other suppliers."

Metallurg Aluminium Events

Recent Events

Sept 23-26 2001 7th Australian Asian Pacific Conference, Hobart, Tasmania. LSM presented a technical paper: "The Real Cost of Alloying in the Casthouse".

Upcoming Events

Feb 1-3 2002 Indian Foundry Conference, Goa, India. Metallurg Aluminium presenting: "A Review of Melt Treatment in the Aluminium Foundry."

Feb 17-21 2002 2002 TMS, Seattle, Washington. Metallurg Aluminium exhibiting and presenting two new papers: "A Comparison of Grain Refiner Master Alloys for the Foundry" and "Recent Studies of Compacted Additives Including Industrial Scale Tests."

May 4-7 2002 AFS 106th Casting Congress and CastExpo, Kansas City, Missouri. Metallurg Aluminium exhibiting.

July 2-5 2002 8th International Conference on Aluminium Alloys, Cambridge, U.K. Dr. Paul Cooper of Metallurg Aluminium presenting new paper: "The Variable Potency of TiB₂ Particles in the Grain Refinement of Aluminium by Al-Ti-B Additions."

Sept 18-20 2002 Aluminium 2002, World Trade Fair & Conference, Essen, Germany. Metallurg Aluminium exhibiting.

November 2002 Aluminium South America 2002. Metallurg Aluminium/CIF will be exhibiting at this event as CIF celebrates 90 years of operation.

metallurgicaluminium.com

Bringing our customers closer

The people, products and vision of Metallurg Aluminium are online.

You can find us on the Web at either metallurgicaluminium.com, metallurgaluminium.com or metallurg.com.

Our comprehensive site reinforces our commitments to the world's aluminium industry – quality, technical leadership, innovation and value.

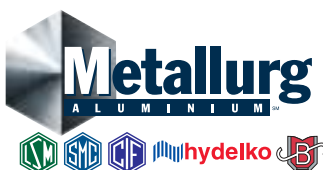
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The site contains a complete listing of available technical publications, and you can even request copies with an online form.

Additional interactive features include online Request for Quote and Technical Query features. Links to other Web sites within the



Metallurg Group of companies, including metallurg.com, are all easily accessible.



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