



  
**SARCLAD** TECHNOLOGY FOR THE METALS INDUSTRY





Sarclad seeks to be the supplier of choice within the markets we serve, working in partnership with metal producers throughout the world. We will provide unique technical solutions which add value and improve quality to our customers' products while ensuring the highest commitment to the health and safety of everyone involved.

Richard Cowlshaw  
Managing Director

## A new era in technology

Established in 1977, Sarclad's continuing goal is to be the world leader in the provision and support of unique technologies and solutions for the metals industry. To achieve our vision, we have developed a range of products and services which consistently exceed client expectations and lead the market in innovation. We continue to actively develop new products that offer the same best in class solutions in order to extend the areas in which we can assist the metals industry become more productive and profitable.

Our employees are empowered to be responsible and proactive in their everyday activities, creating a culture of striving for and achieving excellence in all aspects of the business.

Never compromising on our commitment to health and safety, quality, or environmental responsibility, Sarclad is a business that encourages creative thinking, and we have built a strong, passionate team that develops innovative products and solutions for the future of the industry.

Having been associated with Sarclad for over 20 years I have seen the company grow and develop, and I am proud to now be leading the business forward into a new era, creating customer focused solutions for businesses the world over.

**Richard Cowlshaw**  
Managing Director







## **Sarclad is a dynamic global company providing advanced technology products to the metals industry**

Our experienced and skilled workforce combine leading technology with innovative design to provide custom-built solutions to fulfil our customers' individual requirements.

By committing to superior product quality and total customer satisfaction, we have been able to grow our business around the world, supplying equipment to both leading metals manufacturers and OEM suppliers of steel manufacturing and processing equipment.

Supplying to 46 different countries for over 40 years and supported by regional offices in the USA, China and India, along with an extensive network of local agents, we are able to provide world class products, services and support with total confidence.



# Who we are

## **Sarclad is part of a strong family owned global group giving us a secure base to build for the future**

Sarclad's headquarters are located in the UK and the company is part of the US based Heico Companies group, a family owned business employing over 9000 people around the world. In addition to our UK base where we manufacture all our equipment, we have sales and service offices located to support our customers in the USA, China and India.

Our employees' experience and commitment are the foundation of our company's success and many of our key staff have been with us over 20 years. We are the worldwide market leader for roll texturing machines and monitoring equipment for continuous casters and we maintain our competitive edge by a constant improvement in our designs and support for our customers.

We are committed to expanding our range of products and services and dedicate a significant investment every year to such development work – often cooperating with major steel producers in such work to ensure our focus matches that of our customers.

Central to this long-term view and continued success is our ownership structure. The resources of our ultimate parent company ensure that we have a stable base for our expansion plans as well as guarantees that we can support our customers for the lifetime of their equipment – as we have already been doing for over 40 years.







# What we do

**Our aim is to be a world leader in the provision of new technologies for the metals industry**

Since we were established in 1977, our goal has always been to provide technical solutions that add value to, and improve the quality of, our customers products. To achieve this, we have developed technologies that lead the market in innovation, reliability and value. We continue to actively research and develop new products to increase the range of areas we can help the metals industry improve productivity and safety.



# Our History

At Sarclad we understand that our future is built on the knowledge we have gained in the past

## Sarclad founded

The company was founded in Sheffield, England. Our original business, now no longer part of our portfolio, was to provide equipment for Submerged ARCLADing—which is the origin of our name.



1977

## Delivery of the first Rollscan

The first Mk I Rollscan was delivered to provide a fast and reliable method of detecting cracks and bruises in steel rolling mill rolls. There have been several versions since – most recently we have launched our first fully digital unit, the Mark VII.



1980

## Opening of Sarclad North America

Our office in Duquesne, Pittsburgh PA was opened to serve our expanding customer base in the USA. We continue to operate from this area – the home of American steelmaking.



1981

## Delivery & installation of the first EDT

Our first Electro-Discharge Texturing machine was supplied to a customer in Germany – another 100+ machines have been supplied since this first unit.



1988



Sarclad was originally formed as an offshoot to British Steel's technology development division and since then it has grown into a worldwide business serving the metals production industry at over 300 separate locations. The timeline below shows some the key milestones in our history.

#### Delivery & installation of the first SCM

The first automated roll gap checker for continuous casters was supplied to a customer in Canada. The Sarclad Strand Condition Monitor or SCM has evolved significantly since then but has always been recognized as a uniquely robust and reliable measurement device.



1988

#### Sarclad is acquired by the Heico Companies

Our company was acquired by a privately owned, US based group joining their successful portfolio of industrial companies. Heico have continued to actively support and improve our business from this time and provide a strong base for our global activities.

THE  
**HEICO**  
COMPANIES LLC

2000

#### Opening of the Sarclad China facility

To support our activities in the rapidly expanding Chinese steel sector, Sarclad opened an office in Shanghai. We lead the market in China for EDT machines thanks to our focus on providing increasingly sophisticated texturing technology to the key steel producers – in turn allowing them to supply high quality steel product to the world's leading auto manufacturers.



2012

#### Opening of the Sarclad India facility

Sarclad has been active in India for many years and supplies equipment to all the major steel producers. The opening of an office in Bengaluru was a natural progression to allow us to better serve these customers and to continue to grow our business activity across the subcontinent.



2012



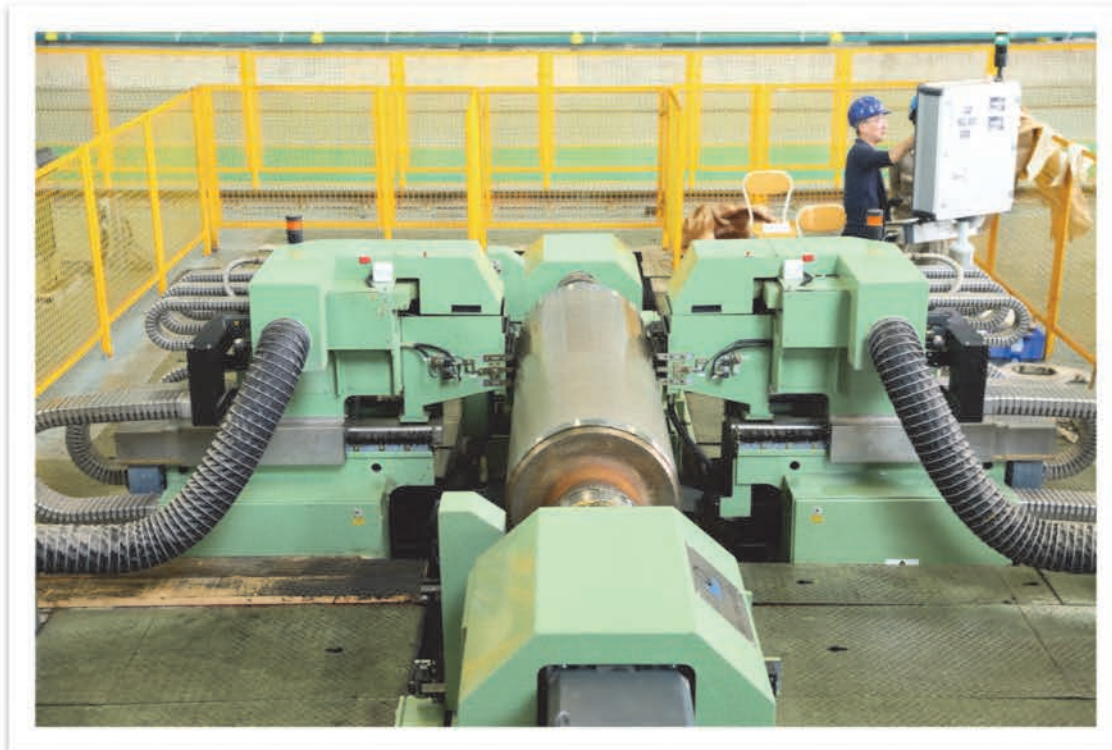


# Specialist Products

Sarclad provides technology based products to assist metal producers, reduce manufacturing costs and improve product quality. Our aim is to be a world leader in the provision of high-technology products for the roll surface texturing, roll inspection and continuous caster monitoring, providing unique services and solutions with pace, passion and pride. Always.



**Rolltex**



**Rollscan**





We offer cutting-edge products and solutions in the areas of rolling mill roll texturing (**Rolltex**), non-destructive roll inspection (**Rollscan**) and continuous caster strand measuring (**Strand Condition Monitor** & **In-Chain SCM**).



### **Strand Condition Monitor**



### **In-Chain SCM**







# Rolltex

## Electro Discharge Texturing. World leading technology for applying texture to rolling mill rolls

Sarclad Rolltex EDT machines deliver a fast and reliable process to provide surface textures on cold mill rolls to outstanding accuracy and consistency. This achieved with lower operating costs and improved environmental conditions compared to other texturing processes such as shot or grit blasting.

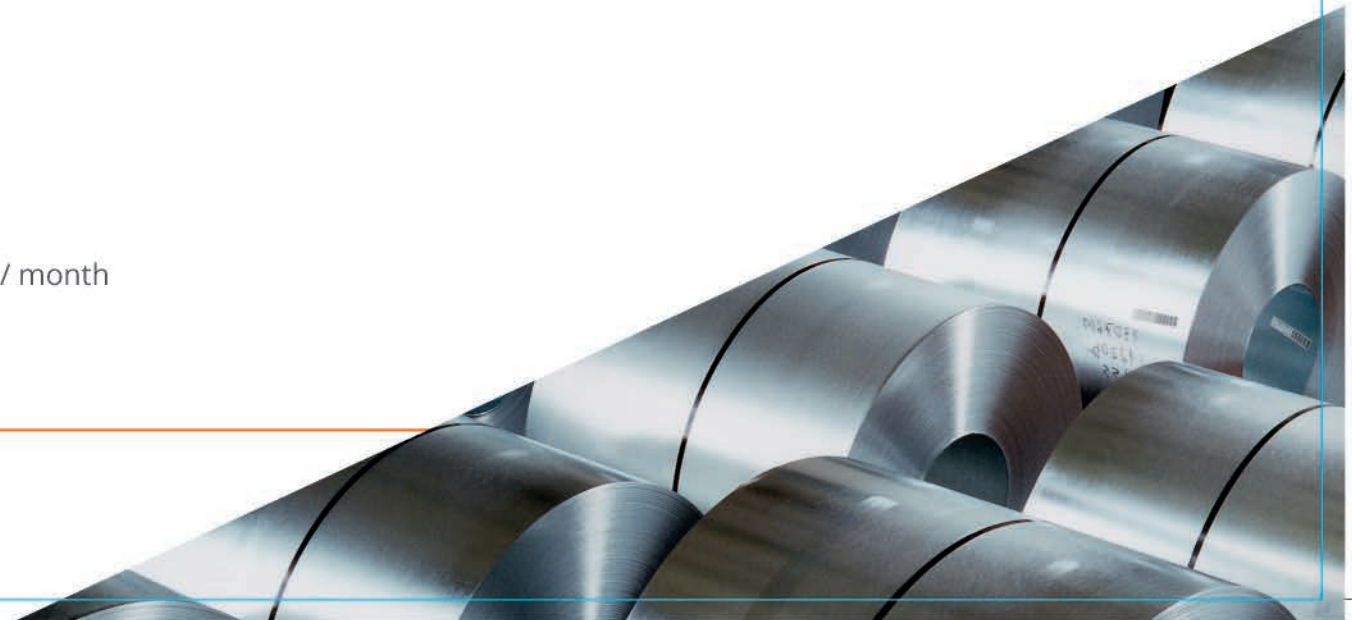
Advanced electronic control provides independent selection of surface roughness (Ra) and Peak Count (PC) values over a wide range of roll textures, to suit a vast range of applications. Waviness (Wa) values are maintained well within the limits specified by major automotive companies.

With texture ranges from Ra 0.5 to 12  $\mu\text{m}$ , regardless of roll hardness, the most stringent requirements for coated and uncoated strip qualities can be satisfied. Machines of various sizes and specifications operate continuously to provide textured rolls for Tandem, Temper, Skin pass, Sendzimir, reversing mills and speciality strip producers. Varying roll shapes, such as parallel, CVC and cambered can be easily textured.

Integrated automatic roll loaders and roll shop management software provides texturing capabilities of +1000 rolls/month.

### Advantages of Rolltex

- > Wide range of textures. Ra 0.5 to 12  $\mu\text{m}$
- > Fast and efficient roll texturing, +1000 rolls / month
- > High quality textured strip surface







**Sarclad is proud of its history and reputation for providing high quality, reliable products that enable our customers to receive the best value and performance for their investment.**



# Rollscan

## Automated rolling mill roll inspection systems for surface and subsurface defect detection

Advanced digital signal processing technology combined with highly innovative data analysis software and intuitive user interface, the current generation of Rollscan is the most capable and reliable automated roll inspection system available. Rollscan comes with cutting-edge, application specific eddy current probe technology and a choice of ultrasonic technologies, making the Rollscan the preferred inspection system, exceeding all modern mill roll maintenance requirements.

The roll grinder mounted Rollscan systems can be used during and after grinding activities to detect and quantify, in real-time, surface defects, such as roll cracks and bruising, as well as subsurface flaws, such as shell core interface defects, non-metallic inclusions and porosity.

Roll stock removal during grinding is kept to an absolute minimum, while optimum roll condition and performance is achieved. Defect free rolls can be quickly returned to the mill with confidence of them delivering effective operation and high end product quality.

### Advantages of Rollscan

- > Real-time roll condition evaluation
- > Fully automated operation and defect analysis
- > Increased roll life









# Strand Condition Monitor

## The original off-line Strand Condition Monitoring system for continuous casting

Sarclad Strand Condition Monitor's (SCMs) are widely recognised as the world's leading off-line continuous slab caster measuring systems, which provide rapid and accurate measurement and assessment of critical strand parameters essential for the production of high quality steel.

Strand condition measuring systems are installed onto the dummy bar chain in place of the dummy bar head and are passed through the caster strand during machine outages. Measurements are collated and recorded automatically from on board sensors which is then downloaded via a cable or Wi-Fi to a laptop for analysis and presentation.

The comprehensive range of measurements offered by SCM systems include; Roll gaps, roll and segment alignment, outer roll condition, roll bend, roll rotation and water spray analysis.

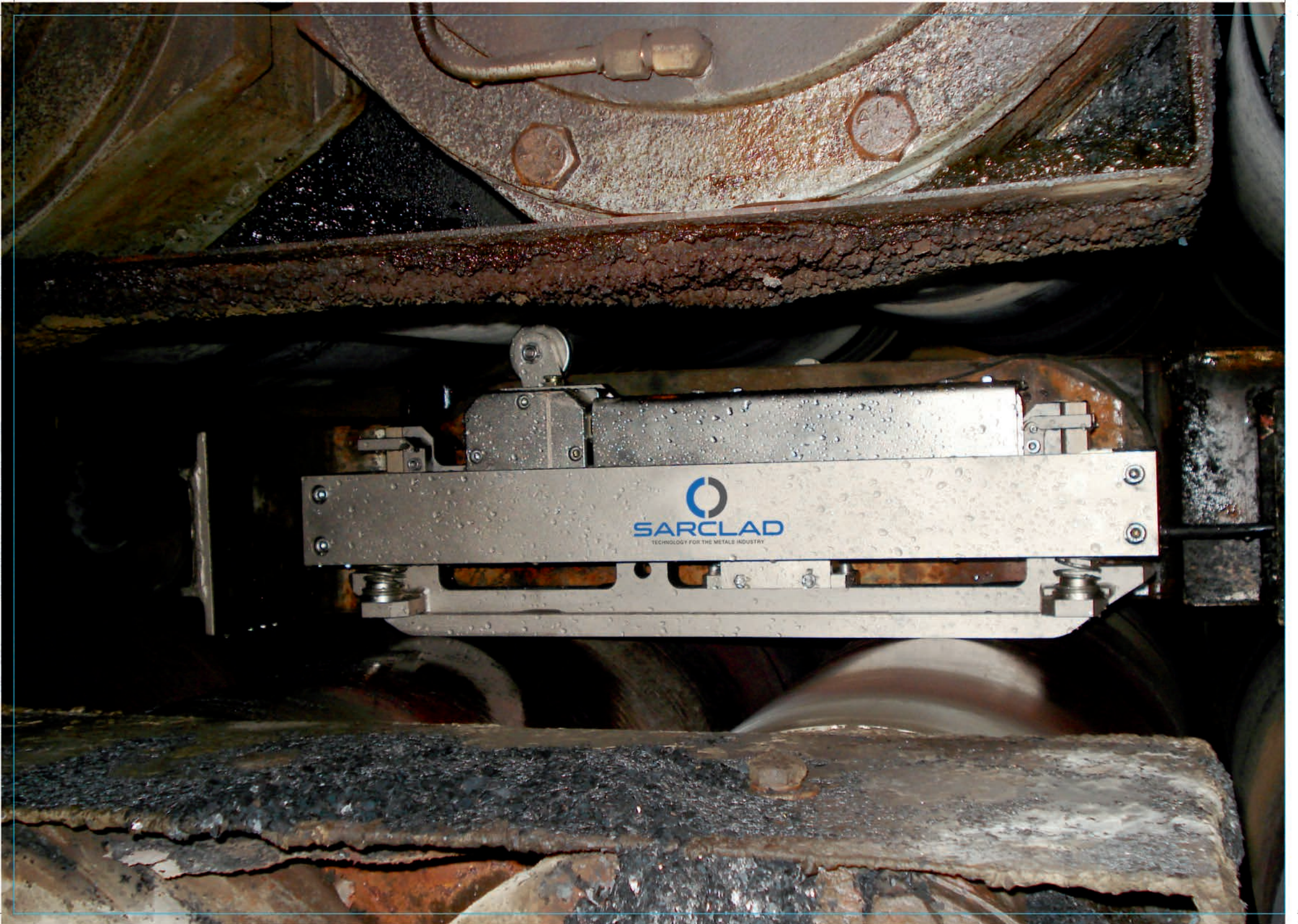
With the use of these systems, mechanical caster strand parameters can be monitored and maintained to ensure that quality cast slabs are efficiently produced, while sub-standard and scrap product is reduced.

## Advantages of the SCM

- > Caster thickness measurements from 55mm to 450mm+
- > Accurate and repeatable measurements
- > Improved slab quality











## In-Chain SCM

### World leading on-line measuring system for continuous slab casting

The In-Chain Strand Condition Monitor is a precision, online measurement system for continuous casting machine rolls.

Permanently installed into existing dummy bar chains so measurements are performed automatically at the start of every cast, to provide quality critical roll data.

To integrate seamlessly into existing production activities the Sarclad In-Chain Strand Condition Monitor system offers fully automated functions including data collection, wireless data transfer, analysis and presentation of results and fully automated, contactless battery charging.

This essential everyday maintenance tool uses a unique patented measuring principle to provide simultaneous measurement of roll gap and fixed roll alignment, to superior accuracy and repeatability.

Each system is robustly engineered to endure the most hostile casting environment, while its modular concept allows it to be quickly and safely removed for off-line maintenance and calibration activities.



### Advantages of the In-Chain SCM

- > Fully automated operation
- > On-line caster measurements every cast
- > Wide measuring range, +80mm





# Our services

**Sarclad is proud of its history and reputation for providing high quality, reliable products that enable our customers to receive the best value and performance for their investment**

Due to the ever increasing demands for quality in the metals industry, it is of the highest importance that your Sarclad product continues to operate as accurately and efficiently as the day it was first commissioned. Sarclad has a dedicated Customer Service team, offering you the support and the peace of mind that you deserve. Should you require assistance due to a machine related issue or have a service enquiry, our Customer Service team are here to support you throughout the process.

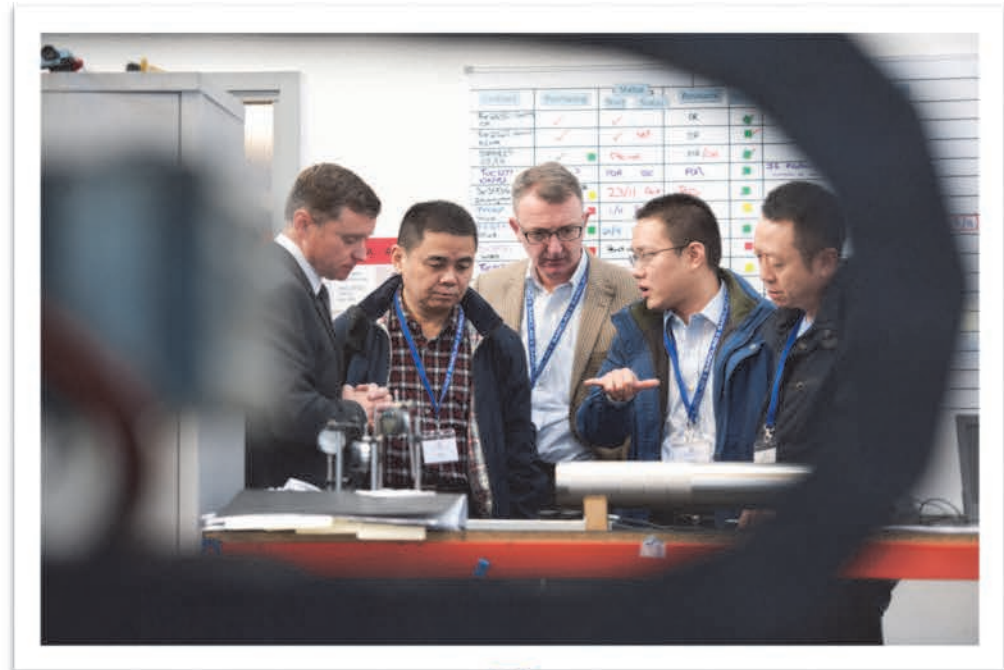
Our team of highly qualified and skilled engineers support you through the life time of ownership of our equipment, providing expert advice and services that keep your business moving. Our in-house team of specialists based in the UK is also available to provide support as required and can be accessed directly through our Customer Service Department.





Our network of people positioned strategically around the globe provide a local point of contact and in many cases access to local service engineers. We offer a variety of individually tailored services including:

- > **Annual service and maintenance contracts**
- > **Operator and maintenance training**
- > **Emergency breakdown support**
- > **Telephone and web support for operation advice, data interpretation and fault diagnosis**
- > **Supply of spares and consumables**
- > **Through life product support with upgrade and improvement options**
- > **Technical support for special requirements or product development**









# EHS&S and Quality

**Our EHS&S management is part of the fabric of what we do. Our employees are actively engaged in ensuring that what we do every day is safe – whether at our own facilities or on our customers’ sites – and we celebrate our safety record**

We operate an integrated management system which combines aspects of quality, environmental risk management with health and safety and our responsibilities to wider society. We actively review the needs of our customers and employees so that we continually improve and implement any changes required to our processes to meet and exceed the expectations of all our stakeholders.

Our employees are actively engaged in ensuring that what we do every day is safe and this applies to everyone who is involved with Sarclad – employees, contractors and visitors. Prevention is an essential element of any health and safety programme and we aim to recognize risks at an early stage and eliminate potential hazards before any actual harm can occur. Furthermore, we continuously monitor the impact on the environment that our operations cause and seek to minimize any adverse effects.

To ensure that high quality standards are maintained, our actions always focus on our customers and their requirements. Our quality management system guides us to deliver the right product at the right time, every time and we monitor feedback from our customers and our suppliers so that we are alert to anything that is not 100% correct. Furthermore, we monitor our own procedures to ensure they deliver what is required and reflect best practice.

Our commitment to this integrated approach is demonstrated by the fact that we are certified to ISO9001 for quality management, ISO14001 for environmental management and OHSAS 18001 for health and safety.







# Locations



## 📍 Sarclad UK | Head Office

Sarclad Ltd.  
Advanced Manufacturing Park  
Whittle Way  
Rotherham  
S60 5BL  
United Kingdom



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Email: [sales@sarclad.com](mailto:sales@sarclad.com)

### Available Services

- > Sales
- > Service
- > Spares
- > Repairs
- > Support
- > Training
- > Research & Development



## 📍 Sarclad North America

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USA



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### Available Services

- > Sales
- > Service
- > Spares
- > Repairs
- > Support
- > Training





### Sarclad China

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#### Available Services

- > Sales
- > Service
- > Spares
- > Repairs
- > Support



### Sarclad India

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#### Available Services

- > Sales
- > Service
- > Spares
- > Repairs
- > Support











