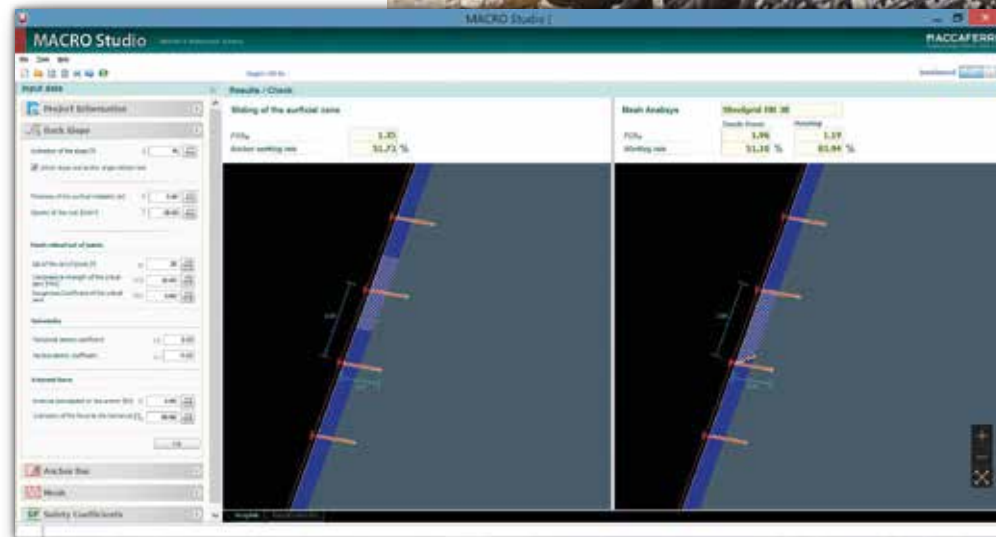


MACRO STUDIO

Maccaferri solutions are designed using state-of-the-art modelling software and techniques. Whenever possible, full-scale testing is carried out to model the real-world situations and load conditions as accurately as possible.

The combination of the performance data determined from these tests has been included within Maccaferri's design software, MACRO Studio. Started from tests realised following international standards, our software enables the users to properly dimension slope stabilisation measures, considering all the relevant parameters and the behaviour of the mesh.



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Engineering a Better Solution

Maccaferri's motto is 'Engineering a Better Solution'; We don't merely supply products, but work in partnership with our clients, offering technical expertise to deliver versatile, cost effective and environmentally sound solutions. We aim to build mutually beneficial relationships through the quality of our service and solutions.

OFFICINE MACCAFERRI GROUP PROFILE
Founded in 1879, Officine Maccaferri soon became a technical reference in the design and development of solutions for hydraulic works and retaining structures.

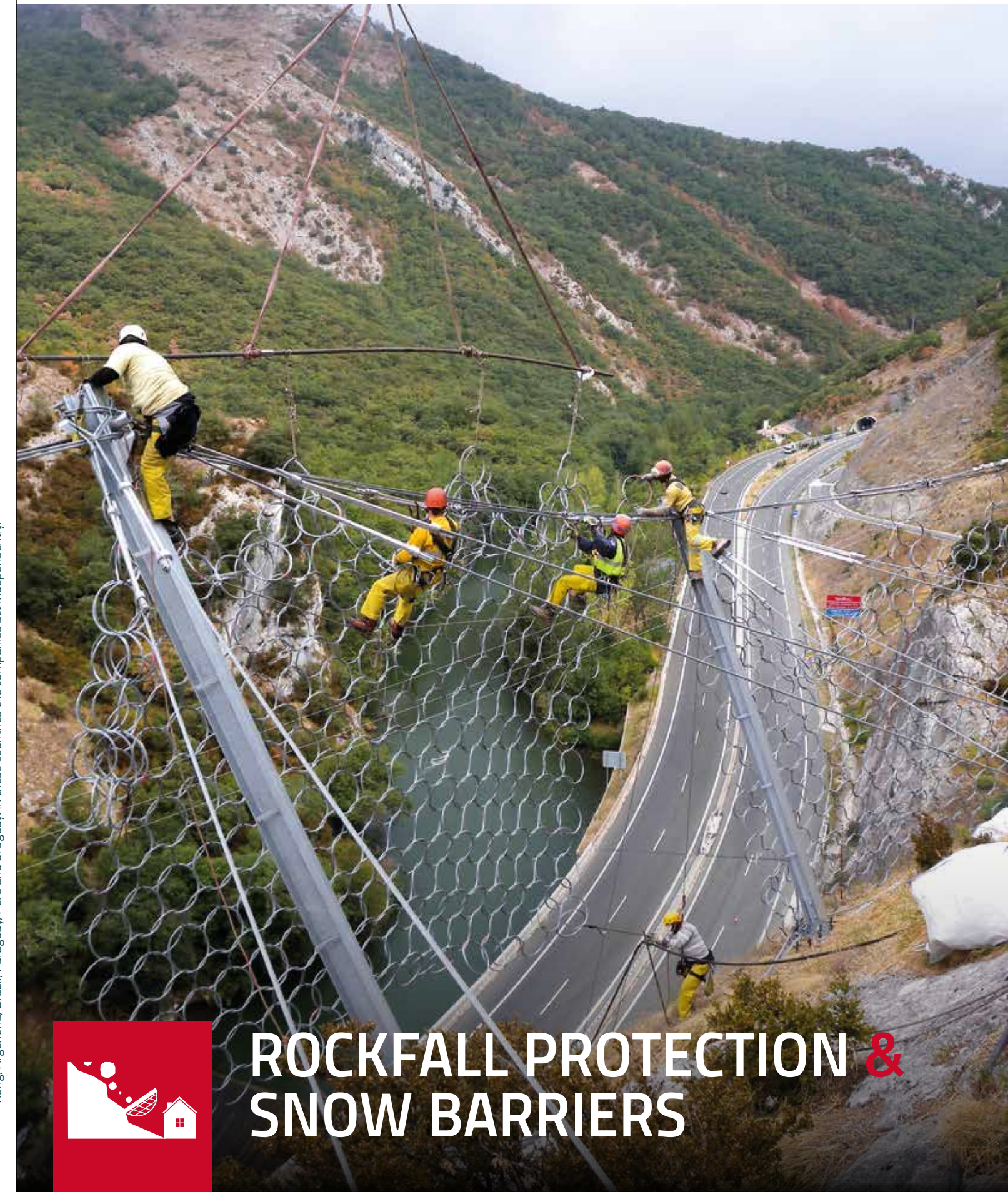
Since then, through technological innovation, geographical expansion and focussed diversification, Maccaferri now offers solutions at a global level for a wide range of civil, geotechnical and environmental engineering applications.

ORGANIZATIONAL STRUCTURE
Officine Maccaferri is at the heart of the Maccaferri Industrial Group, a corporation with revenues of €1.2B, operating in mechanical engineering, real estate & construction, energy, food & agro-industry and tobacco.

Officine Maccaferri's vision is to become a leading international provider of advanced solutions to the civil engineering and construction market. With nearly 3000 employees, over 30 manufacturing facilities and local operations in 100 countries around the world, Maccaferri can truly claim to have a global presence with local focus.

MACCAFERRI APPLICATIONS

- RETAINING WALLS & SOIL REINFORCEMENT
- SOIL STABILIZATION & PAVEMENTS
- DRAINAGE OF STRUCTURES
- FENCING & WIRE
- HYDRAULIC WORKS
- BASAL REINFORCEMENT
- TUNNELLING*
- AQUACULTURE NETS/CAGES
- ROCKFALL PROTECTION & SNOW BARRIERS
- COASTAL PROTECTION, MARINE STRUCTURES & PIPELINE PROTECTION
- LANDSCAPE & ARCHITECTURE
- CONCRETE FLOORING, PRECAST & OTHER USES*
- EROSION CONTROL
- ENVIRONMENT, DEWATERING & LANDFILLS
- SAFETY & NOISE BARRIERS



* In 2014, Maccaferri and Bekaert entered a global sales and distribution joint venture: Bekaert Maccaferri Underground Solutions serves all markets except China, Hong Kong, Argentina, Brazil, Paraguay, Peru and Uruguay. In these countries the companies act independently.



ROCKFALL PROTECTION & SNOW BARRIERS

INDUSTRY PIONEERS

With over 60 years' experience, our rockfall protection and natural hazard mitigation systems are key elements in the security and safety of people, roads, railways, mining operations and property.

We offer a wide range of engineered systems, certified and tested by leading institutes, in accordance with the latest standards.

Developed in conjunction with engineers and contractors, Maccaferri's Rockfall Systems are durable, effective, and simple to install.

Operating in over 100 countries and with 30 factories worldwide, we can provide engineering support and product availability across 5 continents.

Maccaferri's wide variety of systems offer the highest level of performance in the industry, allowing designers to select the optimum solution for their specific application. While Maccaferri offers an array of standard products for the most common applications, our flexible manufacturing capabilities allow for custom solutions designed for unique conditions.



Our products are certified and tested by leading institutes and in accordance with the latest guidelines and standards (ETAG027, EN10223-3, ISO 17746, ISO 17745). Product certifications include CE mark, BBA Agrément Certificate, NF mark, COPRO mark, and BAFU-FOEN homologation for snow-barriers. For more information contact our certification office.



NATURAL HAZARD AND ROCKFALL MITIGATION SYSTEMS

M STRENGTH: our simple and pinned drapery systems offer the highest tensile and punch resistance, with the lowest deformations in the industry.

M PERFORMANCE: our European Technical Approval Guideline (ETAG) tested rockfall barriers provide the best performance on the market.

M DURABILITY: our polymer coated products provide superior chemical/mechanical resistance to withstand aggressive environmental conditions.

M PROVEN: our products are independently tested and certified in accordance with the strictest international standards.

M QUALITY: our solutions use the highest quality raw materials and provide world-class engineering with custom design and manufacturing capabilities.



Simple Drapery

Our steel wire double twist drapery mesh is flexible and conforms easily to the rock slope to contain loose and falling rock debris. For higher slopes and increased debris loads (or snow/ice loads), Maccaferri **Steelgrid® HR** high strength drapery mesh can be used.



Surface Strengthening & Soil Nailing

Our range of high strength meshes are designed to work in conjunction with anchorages, to form a system that increases the stability of the unstable surficial layer of the rock slope. Our solutions can also include the use of soil nails in conjunction with **HEA panels** or **Steelgrid® HR mesh**, or with **MacMat® R** or **MacMat® HS** when slope revegetation is required.

Dynamic Rockfall Barriers

Our dynamic barrier systems have rating capacities ranging from 100 to 8500 kJ to intercept falling rock and boulders. Easy to install also on vertical rockslopes, Maccaferri's barriers are the safest on the market, minimising the risk related to installation activities.



Rockfall Embankments

Scalable to suit each hazard, embankments are used where large or repeated impacts are expected, including landslides, rockfalls, and avalanches. Rockfall embankments can have stone or vegetated face to meet project aesthetics requirements. Embankments can be designed to sustain impact energy capacities of over 20,000 kJ.



Debris Flow & Shallow Landslide Barriers

Our **Debris Flow Barriers** are custom designed to the dimensions of each project, anticipated debris characteristics, and expected flow volume. We can offer the most resistant debris flow barrier on the market, able to withstand 283 kPa/m².



Snow fences & Avalanche Protection

Our snow fences and snow nets are designed to stabilise the layer of snow at the potential avalanche initiation zone, thereby preventing triggering of the avalanche. We offer both single anchor retaining structures and certified barriers to reduce the avalanche hazard risk.

