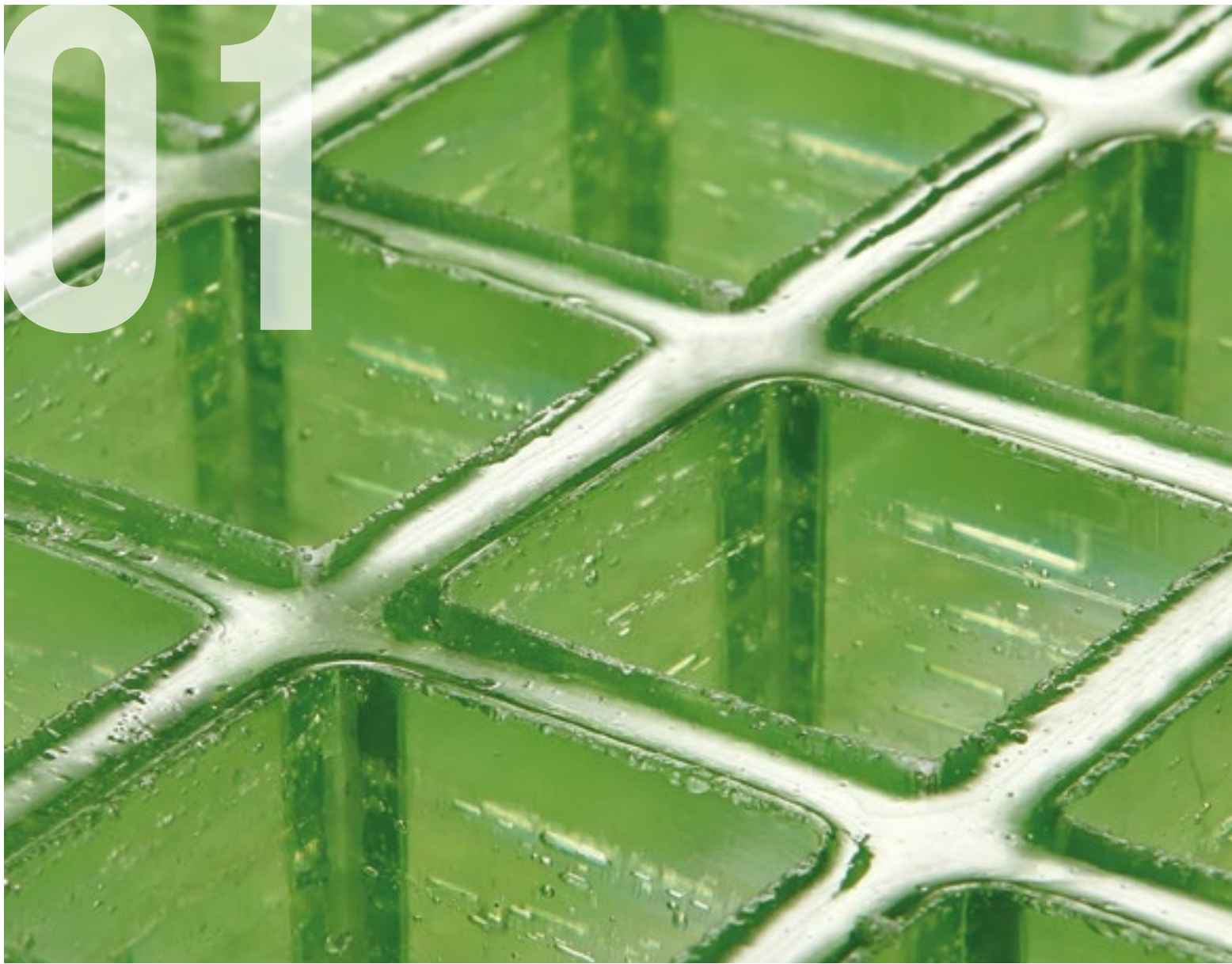


Fiberglass Reinforced Polymer
CATALOGUE

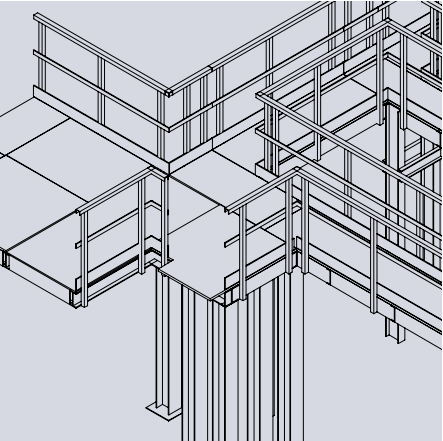


01



SERVICES

ENGINEERING



MECHANICAL TESTS



CHEMICAL RESISTANCE TEST



ABOUT US



Since its inception in 1977, M.M. has been operating in the **glass fibre reinforced plastics (FRP)** industry, producing **high quality gratings and structures** (handrail systems, walkways, stairways, ladders, fences, gates, etc.). The intrinsic properties of FRP allow to create light, resistant and easy to install structures that do not require maintenance and are characterised by great versatility of use.

The company offers **customized solutions and additional services** such as technical design, structural calculation for composite materials, chemical and mechanical resistance tests, any type of cut to size, shaping and finishing.

Every phase of the company process, from design to production, from the quotation to the follow-up service, is focused on **customer satisfaction**.

HIGH QUALITY RAW MATERIALS

CUSTOMIZED SOLUTIONS

RESEARCH AND INNOVATION

CUTTING AND SHAPING



SURFACE TREATMENTS

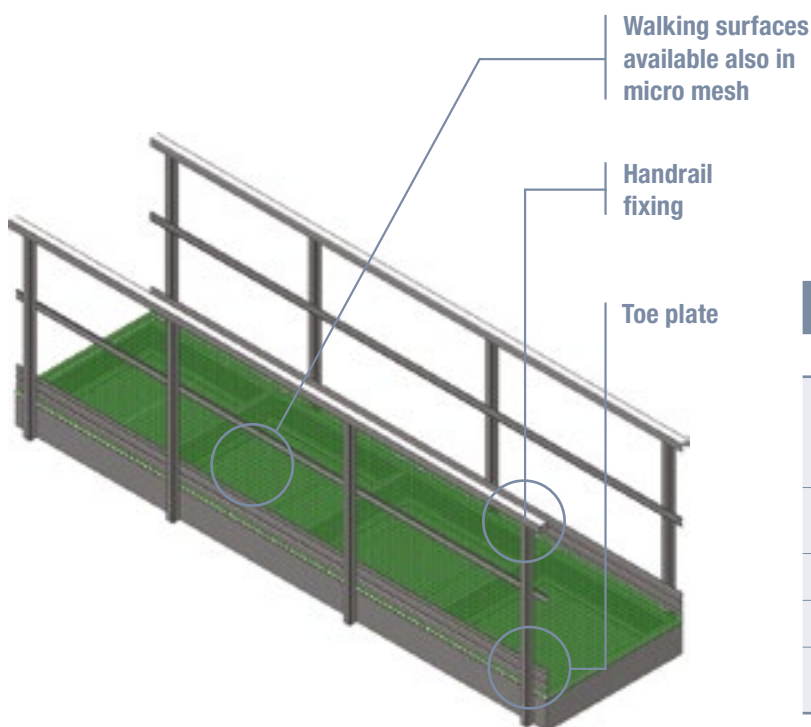


VERIFICATION OF PRODUCT CONFORMITY





WALKWAY



WALKWAYS

STRUCTURE	"C" type profile	300x100x15 mm
	"C" type profile	150x45x8 mm
	"I" type profile	200x100x10 mm
	"I" type profile	150x75x8 mm
HANDRAIL	"C" type profile	60x50x5 mm
	ergonomic profile	60x60x5 mm
HANDRAIL STANCHION	"Square" profile	50x50x5 mm
TOE PLATE	"Shaped" profile	150x5 mm
KNEERAIL	"Shaped" profile	55x5 mm
	"Tubular" type profile	Ø 26x19 mm

STRUCTURES



Stairways, walkways and work platforms are built with pultruded profiles, FRP gratings and stainless steel accessories in accordance with EN ISO 14122 standard (Permanent means of access to machinery) within the framework of Directive 2006/42/EC (Machinery Directive).

They have been conceived and designed to meet the needs of each customer. They are entirely prefabricated in the factory and supplied in pre-assembled modules.

Thanks to their lightweight (the specific weight of fibreglass is about 1/5 of that of steel) they can easily be installed on existing structures, without these having to be modified. The absence of maintenance and durability ensure a drastic reduction in operating costs.

The characteristics of the materials used and the careful planning allow to create safe structures in compliance with the latest regulations in the field.

DESIGNED TO MEET SPECIFIC NEEDS

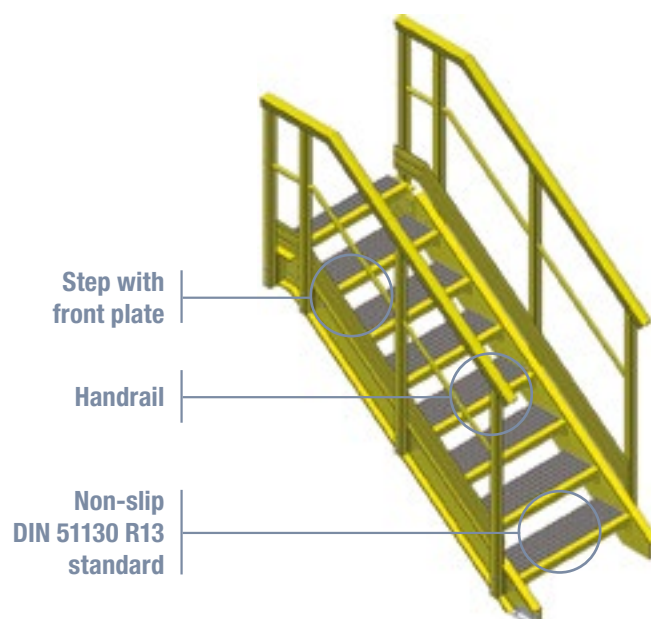
PREFABRICATED

PRE-ASSEMBLED MODULES

STAIRWAY

STAIRWAYS

STRINGERS	C" type profile	300x100x15 mm 200x60x10 mm 150x45x8 mm
HANDRAIL	"C" type profile ergonomic profile	60x50x5 mm 60x60x5 mm
HANDRAIL STANCHION	"Square" profile	50x50x5 mm
TOE PLATE	"Shaped" profile	150x5 mm
KNEERAIL	"Shaped" profile "Tubular" type profile	55x5 mm Ø 26x19 mm



TECHNICAL AND ENGINEERING SERVICES

Safe access to machinery and/or parts of plants could be a difficult problem to solve.

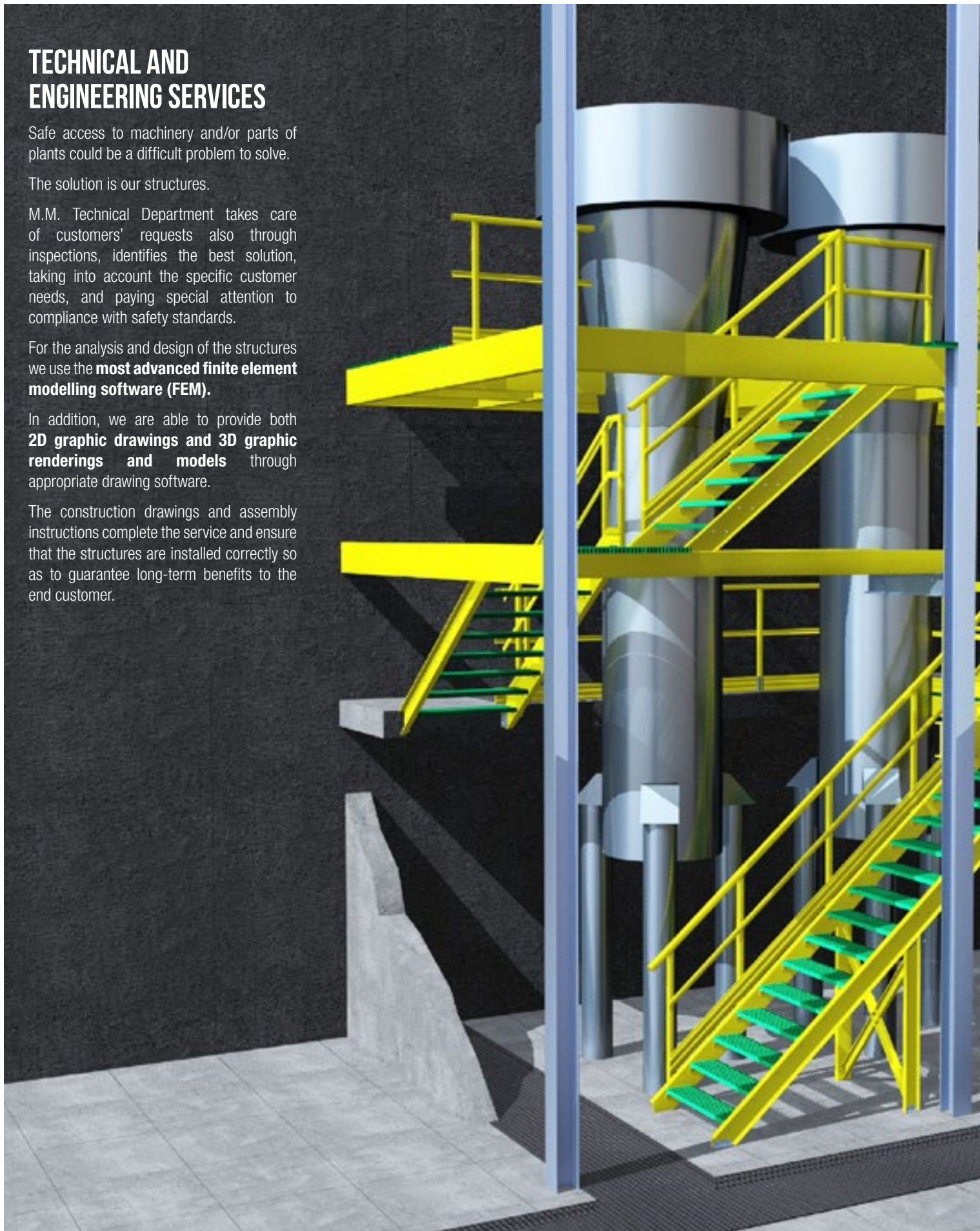
The solution is our structures.

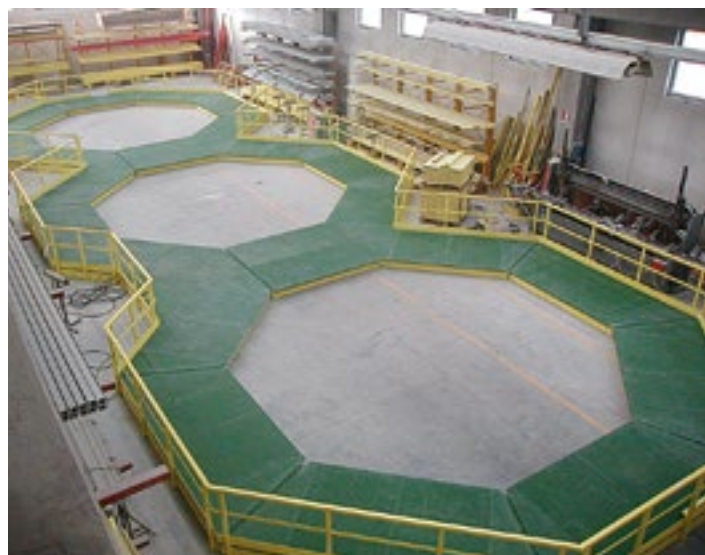
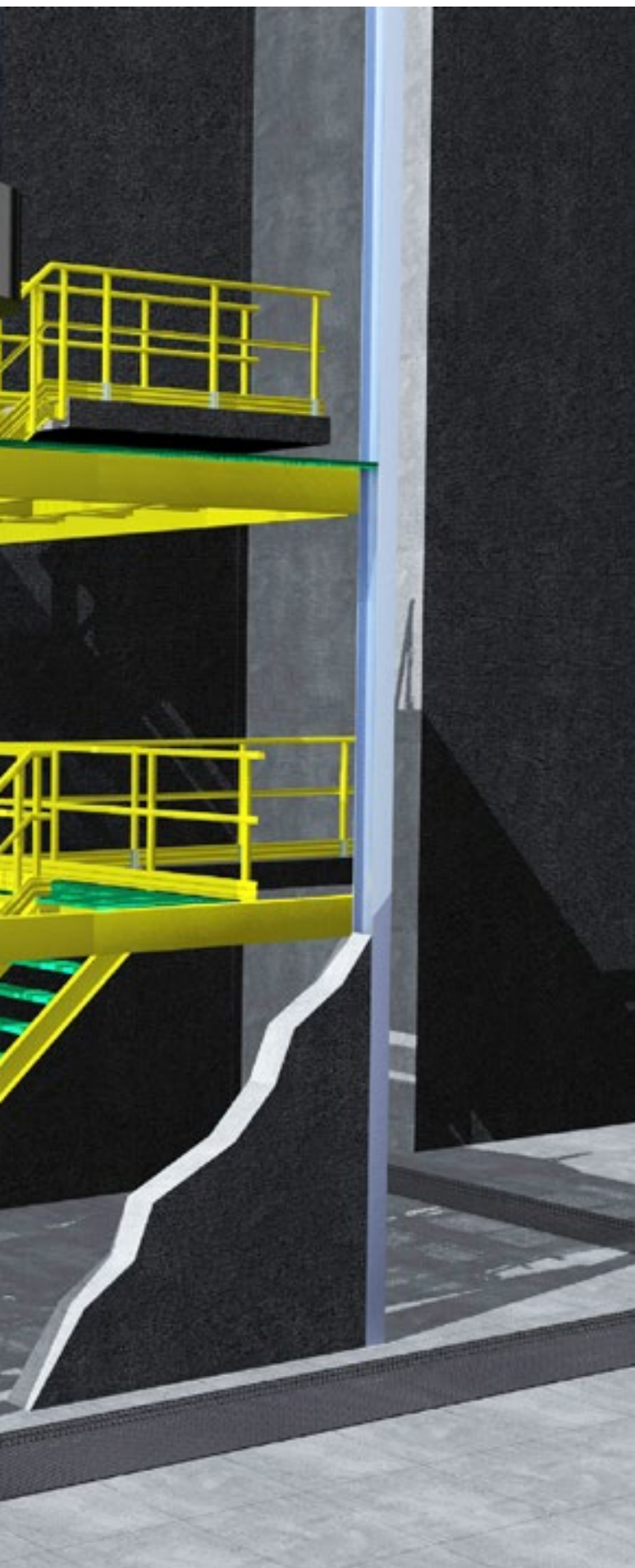
M.M. Technical Department takes care of customers' requests also through inspections, identifies the best solution, taking into account the specific customer needs, and paying special attention to compliance with safety standards.

For the analysis and design of the structures we use the **most advanced finite element modelling software (FEM)**.

In addition, we are able to provide both **2D graphic drawings and 3D graphic renderings and models** through appropriate drawing software.

The construction drawings and assembly instructions complete the service and ensure that the structures are installed correctly so as to guarantee long-term benefits to the end customer.





THE BENEFITS OF FRP STRUCTURES



LIGHTWEIGHT

A lower load on the substructures means that they can be installed on existing structures without requiring their modifications. The reduced weight to handle makes moving and installation easy.



ABSENCE OF MAINTENANCE

They ensure a reduction in operating costs due to their resistance to chemical and atmospheric agents. Always available and safe for operators.



SAFETY

The non-slip walking surfaces, the certified handrail systems, the scrupulous design with attention to ergonomic principles, make them very safe for the operators.



DIELECTRICITY

They do not require earthing or protection against electric shock.



PREFABRICATION/PRE-ASSEMBLY

The structures are verified in the factory due to their complete prefabrication. The supply in preassembled modules simplifies and speeds up installation times.



WORKABILITY

Any adjustment on site is simple and fast using just ordinary tools.



COST-EFFECTIVENESS

Considering the significantly lower installation and management costs, they are economically more convenient than similar structures in different materials.

M.M. SRL

ADMINISTRATIVE OFFICE AND PRODUCTION PLANT
Via Antonio Zanussi, 300/302, 33100 Udine - Italy
ph. +39 0432 522970 - fax +39 0432 522253

info@mmgrigliati.it - VAT No. and Tax Code: 02984500302

PRODUCTION PLANT

Via Antonio Zanussi, 311, 33100 Udine - Italy

WWW.MMGRIGLIATI.COM

