STORIES ABOUT TRUST





ITER PROGRAMME

The Sun and the stars, new sources of energy

housands of scientists, engineers and technicians have been involved in designing the world's largest tokamak, since the late 1980s. The ITER experimental reactor, under construction since 2010, intends to demonstrate that

hydrogen fusion, the energy of the Sun and stars, can be used as a sustainable energy source to generate electricity on a large scale. For more than ten years, CNIM has been contributing its expertise to the ITER programme in the following fields: the study, design, development and manufacture of highly secure handling solutions as well as the industrialization and manufacture of large-scale equipment with high added value.

So far, CNIM has been awarded nearly 20 contracts for which the industrial company is constantly investing to strengthen the expertise of its teams and its industrial facilities. The recent contract to develop the manufacturing and production process for the nine pre-compression rings reflects CNIM's pioneering spirit in meeting ITER's technological challenges. These glass/epoxy rings are designed to reduce the fatigue incurred by toroidal field coils subjected to strong magnetic forces. The solution proposed by CNIM - a particularly innovative manufacturing process based on pultruded composite material* - has shown its worth in terms of technology and reliability.

* Pultrusion (a term made up of the words "pull" and "extrusion") is a process for the continuous processing of composite tubes and profiles.



Bernard Bigot, Chief Executive Officer, ITER Organization

"An unparalleled scientific and technological research facility such as ITER needs industrial partners who are not only outstanding experts in existing technologies, but also pioneers in the technologies of the future that we need right now. CNIM, which came up with a highly innovative, first-of-its-kind solution in response to one of our needs, is one of the project's major partners and proved itself equal to the challenge: to pave the way for a new, secure energy source based on a virtually inexhaustible resource and with virtually no environmental impact."

