ATB GROUP Corporate Magazine

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ATB GROWS IN THE NUCLEAR SECTOR

SMART REPOWERING DEMANDS MEET ATB'S KNOW-HOW

#### ATB MAG

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ATB GROUP Corporate Magazine December 2019 Issue 06

Cover picture: TNG3 Cask at Cladding Workstation in the New ATB Nuclear Hub

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01 HE

## ATB GROWS IN THE NUCLEAR SECTOR



New spaces, technologies and innovative processes. A workshop dedicated to manufacture casks. Production enhanced with ATB Manufacturing System.

iversification is a key concept in the strategies that the ATB Group has prioritised in its development process with the reorganisation that took place in January 2019. In the last ten months, this has also translated into the practical evolution of its production capacity, in terms of both quality and quantity. And the nuclear field was the area that brought a wind of change as well as interesting and long-lived



business prospects. Nowadays, in fact, ATB is manufacturing the next-generation cask prototypes requested by the French Orano TN, thanks to the expertise of the Heavy Equipment Division. This is considered such a noble product that Sergio Trombini, President of the ATB Group, decided to make important investments in the last two years aimed at expanding spaces and enhancing the technologies required by this new industrial challenge. The last concrete step in this direction was building a warehouse, specifically designed to make the steel containers used for storing and dispose of waste fuels from nuclear power plants.

«The cask is an innovative product that needs standardised production. Therefore, we have created a tailor-made organisation, that is, a nuclear division with people focused exclusively on this activity, and a dedicated line in the area of warehouse 1,' explains Luigi Redaelli, Managing Director of the Heavy Equipment Division. «That is the reason why we designed a layout that minimised set-up and handling times. Everything is designed to guarantee standardised processes and to make personnel's work easy».

There are two areas is the new nuclear warehouse: a first section in which all the semi-finished products are made plus taping and welding operations, and a second part for monitoring, welding of copper heat sinks, resin coating and helium tests.

A tailor-made organisation with people focused exclusively on this activity.

The workshop, formerly used for light structural steelwork, was reinforced to accommodate the cask making process. In addition to a new 100-ton overhead crane, the 'clean room' to manufacture steel components was equipped with new and high-productivity machinery. The equipment of the work stations, on the other hand, has been manufactured in-company as modules that can be adapted to different types of casks.

The technological upgrade was accompanied by a reorganisation of the planning and production logics. «We shifted from a centralised system managed following an MRP logic to a lean manufacturing model», continues Redaelli. «We called it the 'ATB Manufacturing System', and it is the plus that helps stabilise our production system, optimising the times needed to process orders and assigning clear objectives and responsibilities to the people who are increasingly involved, and at the centre of our processes».

01



✓ TN17 Cask, Copper Conductors Assembly at Roncadelle Plant, italy

 ∧ TNG3 Cask **Conductors Fins** 

Machining, Pama Speedram 2000 at Roncadelle Plant, Italy

#### Pages 5 - 6

The new Nuclear Hub at Roncadelle plant, Italy





Over 6,300 tons of steel components were sent to refineries in Asia, Africa and Europe.

## FROM TCO TO SK ENERGY, 21 REACTORS SHIPPED IN 7 MONTHS



rom January to July 2019, twenty-one ATB reactors set sails from the dispatch bay at dock of the Marghera harbour bound for some of the world's major oil refineries. This figure is enough to explain how the previous year and the current

one have been particularly challenging for the Heavy Equipment Division of ATB Group. More than 6,300 tons of steel in total were shipped from the Venetian port to be distributed among Asia, Africa and Europe. «We are experiencing a very intense period of work that has required, and is still requiring, exceptional efforts from all of us. On average, we can say that we have sent one device a week in eight months». For Salvatore Poddighe, Operations Manager in the Heavy Equipment Division, the result 'is a tangible sign of an important competitiveness'. It is also a sign of a production capacity that permits the company to tackle articulated projects, from a technical and a logistical point of view. For example, TCO, Zeeland, and SK Energy. Let's start with this last order, with which ATB has set another small but significant record: the four VRDS hydrotreating reactors made for the petrochemical complex in Ulsan, South Korea, were loaded onto the Big Lift Happy Star last June in just twenty-four hours! Taking the equipment to the harbour area was successfully achieved taking full advantage of the strategic position of the Marghera plant and the skills of the workers. This success adds further value to the reputation of ATB in this segment of the Asian market. «We have worked for a Korean EPC contractor on a Korean project, demonstrating, as usual, total reliability and double strengthening our presence and references in that area», underlines Francesco Squaratti, Director of Sales and Business Development of Heavy Equipment.

In July, four other pressure vessels were shipped: three for the Atyrau plant in Kazakhstan, and one for the Vlissingen refinery in the Netherlands.

The first to leave the ATB Marghera facilities were the three reactors, part of the supply (12 molecular sieve vessels and 6 injection compressor suction drums) requested by Tengizchevroil (TCO). The shipping of the vessels began in 2018, organised and subdivided into six stages. The equipment of the last lot, now ready to go into operation, will allow the Kazakh plant to increase the production by 12 million tons of crude oil per year.

A few hours after the TCO trio left the harbour, the pressure vessel made on behalf of Total and Lukoil was also shipped: a hydrotreating reactor, designed to improve the hydrocracking unit of the Zeeland refinery in Vlissingen, where this summer ATB installed the thermocouples and completed the insulation.

Work is in progress at the Roncadelle and Marghera workshops to advance in two other supplies for leading customers in the Oil & Gas sector. During 2020 three reactors will be shipped to Cepsa (Spain), and three more to Thai Oilone of them is 1,700 tons, one of the largest ever produced by the Brescia-based company.



Pages 8 - 9

The Hydrotreating Reactor for Zeeland Refinery in Vlissingen, the Netherlands, leaving the ATB Porto Marghera workshop

- Loading operations
   of reactors
- commissioned by
- → Tengizchevroil (TCO)







## WORK IN PROGRESS: MOVING FORWARD WITH CANADA SITE C PROJECT

## The first two gates of the package requested by BC HYDRO are about to be completed.



ts name is 'Site C' and in fact, it is the key with which ATB Group has opened the doors to its own business horizons in a tangible way as well as to commercial opportunities in the North American market. The agreement signed in April of this year with BC Hydro - the utility that generates and distributes electrical energy to 95% of the population of the province of British Columbia (Canada) - gave us the green light to start organising the supply of all the hydro-mechanical parts of the 1100 MW hydroelectric system being built along the course of the Peace River. By 2024, it will distribute a total of 5100 gigawatts of electricity every year over the whole geographic area of the province. ATB will also make their contribution to realize this development plan: the Hydro Mechanical Equipment Division of the company led by Sergio Trombini was chosen by the client as the main supplier of HME Package of the project. ATB was entrusted the entire process, from engineering the hydro-mechanical parts to making them, from transporting them to the site to the final inspection as well as commissioning.

So far, the project is progressing perfectly in line with the deadlines agreed upon with the client. The works are progressing, especially on the first two INO-Gs (Intake Operating Gate)- 130 tons each-, that are taking shape in these weeks at the Roncadelle workshops in Brescia. In fact, this type of gate is among the most complex components included in the package. The complete set of INOGs is due to be delivered within the first half of 2020. Afterwards, we will start manufacturing the rest of the elements, starting with the SPOGs (spillway operating gates) and LLOGs (low level operating gates).

«We are talking about components that require welding and high-precision mechanical machining», explains Gianluca Raseni, Operations Manager of the Hydro Mechanical Equipment Division. «To optimise deadlines during the assembly process, we have decided to push prefabrication to the most by high productivity cutting systems». The fixed parts of the first stage have been assigned to the ATB Colombian plant, whereas the ones being made at the Artogne hub, in Valle Camonica, Province of Brescia, are the fixed parts of the second stage. «Meanwhile, in Canada», concludes Raseni, «our customer is starting the first operations to assemble the pieces sent while the winches for the radial SPO-Gs and the 8 DTMG (Draft Tube Maintenance Gate) gates are being produced».

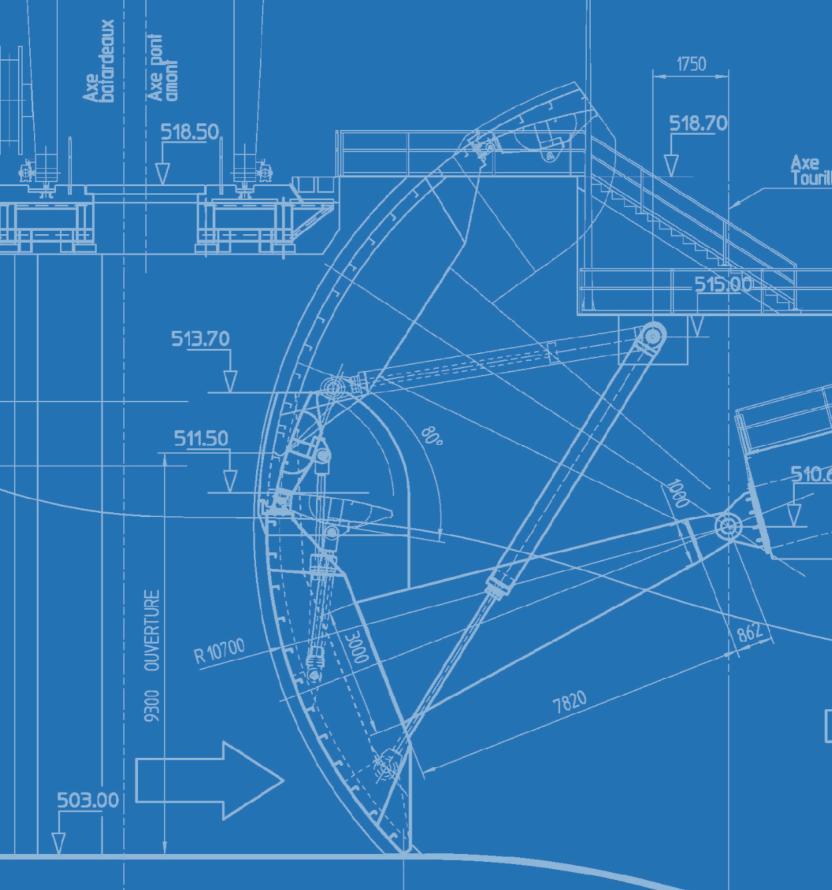
Nearly complete Gate
 Fabrication Phase
 at ATB Roncadelle
 facility, Italy

→ Rendering of the Site C Dam Project, Canada



03

# 04<br/>HMEATB IN CAMEROON<br/>TO SUPPLY THE HME<br/>PACKAGE OF NACHTIGAL



## The 17 m by 120 tons gates become part of the hydroelectric plant property of NHCO, a company owned by EDF.



Rendering of the Nachtigal Dam Project, Camerun

nce the Nachtigal hydropower plant is fully operational, it will be the largest dam in Cameroon, and will inject more than 420 MW of electricity to the national network. According to the plans, this plant, that is being built in the

town of Ndokoa, Lekie Division, on the Sanaga river, and near the capital city of Yaoundé, will start operating within 2023. ATB Group will also contribute to building this important infrastructure. A contract was signed a few weeks ago authorising the Brescia-based company to be in charge of supplying the hydro-mechanical package needed so that the dam can start operating. This dam is owned by NHPC, a company currently run by Electricité de France (EDF) and formed by International Finance Corporation (IFC), the Republic of Cameroon, the African Development Bank (AfDB) and STOA Infra & Energy. The project is part of a wider hydroelectric development plan which will allow the African country to obtain the necessary energy for the population, for the industrial activity and also for export. Within the project, ATB Riva Calzoni will be the sub-contractor of the Consortium made up of NGE Contracting (France), Besix (Belgium) and SGTM (Morocco). «To speed and simply all our moves, as it is usually the case in a situation like this one, ATB set up a company in Cameroon which will be in charge of all the local aspects and works related to fitting the gates», stresses Enrico Camparada, Managing Director

of the Hydro-Mechanical Equipment Division. Paolo Zenocchini, Engineering Manager of the HME Division of ATB, is the person in charge of looking deeper into the technical side of the contract. «We are talking about quite large components», he explains. «The gates are 17 metres wide, more than 10 m tall, and weigh approximately 120 tones. For this reason, the works will require space at the facilities and ability to move significant weights».

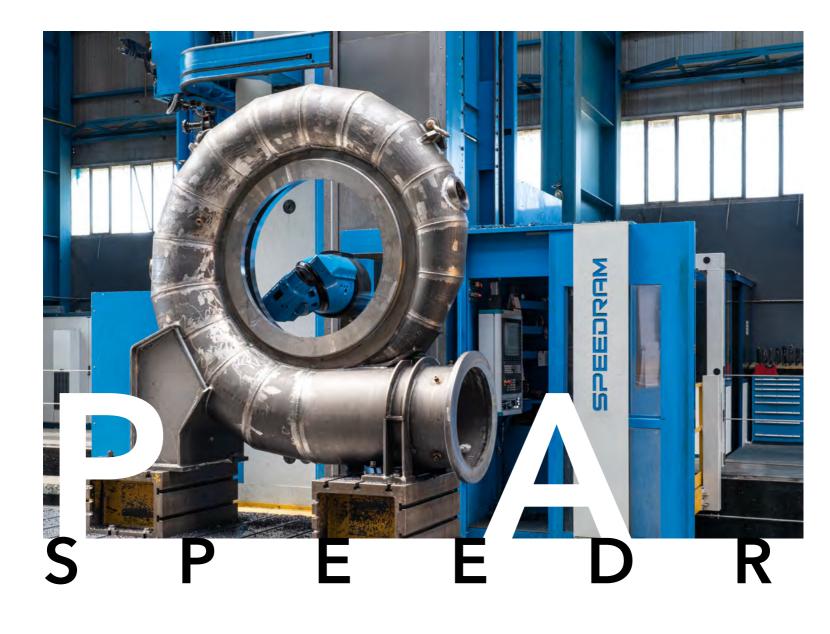
Another challenging aspect of the project are the programs: «These gates are essential so that the customer can proceed to the subsequent stages», adds the engineer. Besides designing and building the gates, ATB will be in charge of assembling and commissioning them. This last step should be completed by mid-November 2020».

Another variable, certainly not a minor one, will have to be taken into account during the execution of the works: weather. In the period when the gates will be fitted, humidity levels may reach 100% due to the rainy season. These variables will turn installation into a complex task. «We also bear in mind that we are in a faraway, wild area, with malaria and tropical infections», stresses Zenocchini. «Another particular aspect of the project worth mentioning is the painting cycle; quite a challenging task as it involves the hot metallising of the surfaces and requires qualified operators certified on this type of operations».

In the meantime, a second offer is cooking at the engineering and commercial departments of ATB. This time for the lot that comprises all the penstocks of the hydroelectric station.

*The project is part of a wider hydroelectric development plan.* 

04























Picture Gallery Snapshots by Anne Baumgarten

PAMA Speedram 3000: the new Boring & Milling Machine that has upgraded ATB's mechanical department.



## ALTO MAIPO: AFTER THE SHAFTS, THE GATES

More than fifty components will depart from the ATB GROUP facilities heading for the Chilean plant.

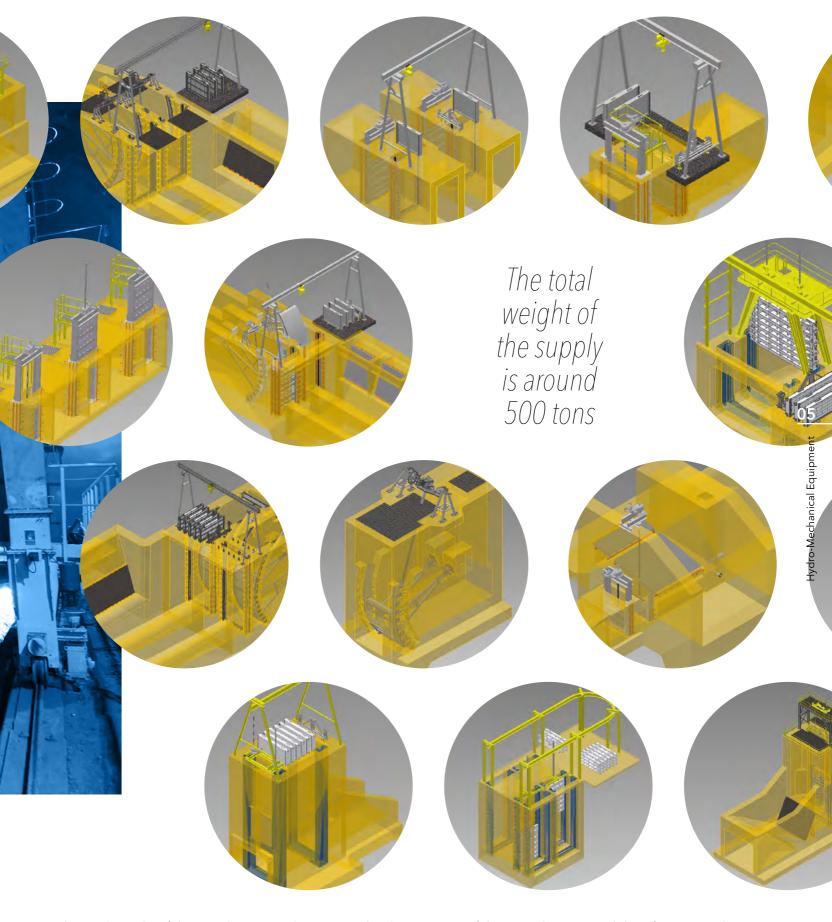
> nother confirmation that comes from South America, where ATB has been present for over a century. There are many hydroelectric projects that have been developed in this geographical area and in which the company has successfully

applied its know-how. The latest of such projects is: Alto Maipo. Since 2017 ATB have been established in Chile to work on the construction of the penstocks for three vertical shafts of AES Gener, hydropower plant. ATB Riva Calzoni was chosen by Strabag, the Austrian general contractor, to manufacture these penstocks. The performance in the first tranche of the work has led ATB to win a new order, this time to design, build, and commission a large package of hydro-mechanical components: a total of forty-six gates (flat, sliding, fixed-wheel, radial) and 13 grids, plus the electrical distribution works. «In this case we have a turnkey order too», stresses Enrico Camparada, Managing



↑ Alto Maipo Hydroelectric Project (Chile) N.2 Penstocks: ID 3,700 mm and 2,400 mm Vertical shaft 551m depth Material EN10025-6 S690QL

Director of the Hydro-Mechanical Equipment Division. «To coordinate all works best, we will use the organisation that we have already implemented at the site, and that today manages all the activities at the site, installation in particular». The manufacturing stages, instead, will be subdivided between the facilities in Italy and in Colombia.



The total weight of the supply is around 500 tons. The deadline of the works is expected by the spring of 2021. «The components will be part of the intake structures at the service of Las Lajas (267 MW) and Alfalfal II (264 MW) plants. The gates will be deployed in remote areas and at high altitudes, under extreme weather conditions, hit by the snow of the austral winter, and therefore, areas that cannot be reached during some periods of the year», adds Paolo Zenocchini, Engineering Manager of the HME Division. «The installation program will therefore have to take into account the logistics factors, since we are aware that some areas are impassable during the winter months».



The 60 kW turbine returns data well above expectations. Ready with the 100 kW one to aim at the Italian and the international markets.

> ood winds blow on ATB wind power. The turbines installed last year started to give back very positive data that, together with the prospects opened by the recent publication of the Decree on Renewables in Italy as well as a

growing need of energy independence, especially in the international scenario, portray an encouraging context for the development of this business. The technology develo-

ped by the ATB Group Renewables Division shows excellent performance, especially as regards the ATB 60.28, a direct transmission turbine with a nominal power of 60 kW and a Ø28 m rotor. This is evident from the annual data taken from the Cancellara wind site, in the Province of Potenza, collected from June 2018 to May 31st 2019, one of the five systems installed last year between Campania and Sicily. After the first set-up stage, the machine started to be fully operational, generating in this area, where the average wind is around 6 metres per second, almost 3200 hours per year, with a capacity factor close to 40%. Based on the statistics supplied by the GSE (Italian Energy Service Manager), the system is included in that 10% of wind farms that today represents excellence, in terms of production reached, with a power up to 60 kW that are currently operational in Italy. «We are proud of the results obtained which are perfectly in line with the expectations; expectations based on theoretical models but that are also now materialised by the operation of the machine«, explains Marco Corsetti, General Manager of the Wind Power Division of ATB Re-

newables. The numbers also reflect efficient and proactive management of the maintenance that, if any type of stop occurred, has been able to reduce as much as possible the response times thanks to the remote and direct support on site: enhanced responsiveness translates into greater availability and production of the turbine. «This is reward for the enormous efforts made in research and development to constantly upgrade products». «According to the findings we can see that the machine manages to reach a nominal power of 60 kW already at 6/6.5 metres per second, doing better than the theoretical power curve (graph 1)», continues Corsetti. According to the monthly production table (graph 2), the Cancellara system reached the peak of production in March 2019, when 25 thousand kW per hour was reached, while during the rest of the year, the mean had been around 20 thousand per hour monthly. The characteristics of ATB's 'small one' perfectly satisfy the requirements of demanding clients that cannot allow any machine downtime or inefficiencies at all.

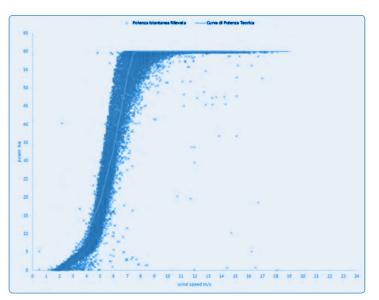
«After a long wait, the ministerial decree was finally approved in Italy; it encourages the production of energy from renewable sources», adds the manager. The provision has revised the power classes, raising the levels of excellence from 60 to 100 kW, and from this point of view, we as manufacturers have arrived with a good preparation. When we developed the concept of the ATB 60.28, we started from the idea of offering the market a robust turbine, scalable in terms of power and highly technological. The turbine was oversized to be able to respond to the different energy demands, and therefore, we did not have any problems to adapt the turbine to the new size». The 60.28 and the 100.28 are in fact two identical machines, except for the power of the generator and of the inverter. Furthermore, in the engineering departments of the Renewables Division, we have worked a lot of work in the last couple of months in order to optimisation of these machines technologically speaking. Among the most evident improvements, we can mention the increase of the machine cut out, which went from 19 to 25 metres per second.

The 2019 edition of Key Energy, the international renewable energy fair hosted in Rimini, from 5th to 9th November, will be the first, great opportunity to take the pulse of the sector after the novelty introduced by the decree. «What do we expect in the future? We are sure that we will be able to create a product that, as it already happened with the 60 kW, will feature excellent performance and will fully satisfy the market demands, concludes Corsetti. «Confident of the prospects, we have already started the production of the new machines that will be installed in 2020».

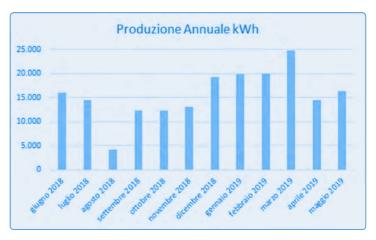


 The wind farm in Cancellara, Italy

↑ ATB 60 kw Wind Turbine: installation operations in Cancellara, Italy



Graph 1







## SMART REPOWERING DEMANDS MEET ATB'S KNOW-HOW

ENEL's new design approach that the Renewables-Small Hydro Division of the Group has successfully interpreted and fulfilled.

mportant news on ATB's Renewables front. More specifically in the world of Small Hydro. It has been almost a year now that the Group has been working fruitfully with ENEL on different Smart Repowering projects. But what is meant by 'Smart Repowering'? What exactly is it? It is an innovative design approach that has been developed by ENEL to renovate small-and middle-sized equipment installed while observing increasingly tight budgets and minimising the impact on any civil engineering structure present. A cross between revamping and supplementary maintenance of the installation. In practical terms, the criteria for this kind of renovation implies replacing one of the units installed- the oldest or the least efficient- whereas the rest are retrofitted. «This is not a true reconstruction, which sometimes may affect the civil works of the structure and the execution times» says Stefano lorda, Sales Manager of the Renewables-Small Hydro Division of the ATB Group. «The works are usually specific and targeted to specific parts of the installation, a sort of 'nip

→ Turbines of the Lima hydroelectric plant in the province of Pistoia, Italy

 Smart repowering activities in the Sestaione power plant, Pistoia, Italy







& tuck' for the hydroelectric plant». The added value that ATB can guarantee compared with competitors in today's market lies in the company's industrial expertise. Thanks to transversal competences and sound know-how in manufacturing equipment for the hydro-power sector, the Group can successfully meet both needs that this kind of projects require. «We have not only the skills and the tools to design, build and install new turbines and hydro-mechanical components, but also the expertise necessary to guarantee tailored-made maintenance for each component», stresses lorda. This is a potential that ATB have already shown that they do possess in the last two smart repowering projects executed in Italy. The first of these works was at the Lima power station (total power: 7.0 MW) in the Pistoia Apennines. It consists of three Francis machines, one of which was fully replaced while the other three were reconditioned. Last spring, and just a couple of months after that ATB had worked at the site, the installation started to operate again at full power. The same occurred for the Sestaione power

plant (total power: 7.5 MW). This is another generation site in Tuscany, a few kilometres away from Lima, that has three Francis turbine, one of which was replaced permanently by a Pelton one.

«The advantage is that given similar hydraulic operation conditions, the efficiency of the generation units was enhanced by wheels featuring optimised and highly-efficient hydraulic profiles. ATB have been investing in R&D for these wheels in order to compete with the best international players», adds the Sales manager. ENEL has been making important investments in this new design and operative model, not only in Italy but also abroad. As regards investments, the company has already approved some other smart repowering projects of a similar scale. An interesting business horizon for the Group led by Sergio Trombini that is ready to develop new international commercial opportunities for the Renewables - Small Hydro Division of the ATB Group.

## **08 CC&IS SAFETY AND DIVERSIFICATION: THE FIRST RESULTS AFTER 10 MONTHS**

## Safety improves and business opportunities are on the up. The partnership with new customers is getting stronger.

en months after the new ATB Group-based organisation was implemented, it is already time to draw the first conclusions for the Civil Construction and Industrial Services Division. Managing Director Danilo Serioli had included two

objectives at the top of the list of strategic growth priorities: safety and diversification. As per safety, ATB Group confirm once again that the primary objective for the coming years is still to significantly reduce accidents rates. «We told ourselves that to do that, we needed a change in mind frame that involved everyone, from the top to the base», explains Serioli. «Despite of the fact that our daily activities make us move in environments hostile to safety, we are approaching the goal we set back in January 2019. The number of accidents has decreased, but there is still a lot to do and we must not give up».

The 'Plain Safety' project has led the division to strengthen the staff of the offices assigned to safety duties and, at the same time, has contributed to spread and enhance awareness of the importance of the aspects related to the safety and health of personnel at the workplaces, throughout the company.

«We want to make all our employees and collaborators understand that there are many ways to do things», adds the manager, «but only one to do them well: by acting in total safety.

It is not an immediate process, not even a simple one, but it is certainly the obligatory path and we will keep on so that everyone, from the top management to operators, will understand this concept and fully respect and follow such strategy». Thanks to the new organisational logic, ATB Group have consolidated partnership with new customers, demonstrating them that the company can be a reliable partner and expert in the field of maintenance and industrial buildings. «Our customers recognise us as a strategic partner and is entrusting us with important works - stresses Serioli -. Not only that, more and more we are given the chance to expand to the market of their global cluster; this means having the chance of collaborating with other facilities in Europe, and we are already presenting offers to some of them».



The results in the second development path- diversification-have been almost immediate too. This process is being carried out in two directions: getting new customers, both within the steel industry - Pittini, Marcegaglia, Feralpi - and in other sectors, and by integrating new companies which let the Group expand the range of services offered and entering new markets. After the entry of Sid, a Brescia-based company specialised in demolitions and land reclamation works, it is the turn of another company in Montichiari, present for many years in the civil and industrial construction



#### sector.

To face increasing production and the heterogeneity of the markets in which the division is moving, «we have to further increase the team of professionals at the service of the company», concludes Serioli, «in terms of both quantity and quality, adding new resources and updating the skills of internal staff to make the organisational structure consistent with what our customers ask from us».

↑ Man at work in a steel plant

## The piezometric tower of the Verona steel mill demolition







It only took few seconds to see one of the piezometric towers of the Verona steel mill disappearing. A concrete structure of about 30 meters high which, for the refurbishing of the plants arranged by the owner of the steelworks, the Pittini Group, had to be demolished, together with the twin one which will soon come to the same end. The operations, coordinated by the Police Authority, was handled by Sid Srl - Società Italiana Demolizioni, part of ATB GROUP Spa.

In order to bring down the tower, 18 loads of TNT gel had been placed, for a total of about two kilos of explosive.

The intervention lasted for five days: two for the preparatory stages, one for detonation, and other two days for the crushing and disposal of demolished items.

**08** 

## IN EUROPE, AT THE SERVICE OF THE STEEL INDUSTRY

The Civil Construction and Industrial Services Division has successfully completed a new series of works in Italy, France, Belgium and Germany.

ven outside the former Ilva plants in Taranto, the Civil Construction and Industrial Service division continues to grow. The activities of the ATB Group in the industrial building sector are further consolidating both in Italy- as the result of having acquired new customers- and abroad- in France, Belgium and Germany, where joint work with the steel sites of the Riva Acciaio Group is further strengthened. In Italy,

the Group has been focused on two project in particular

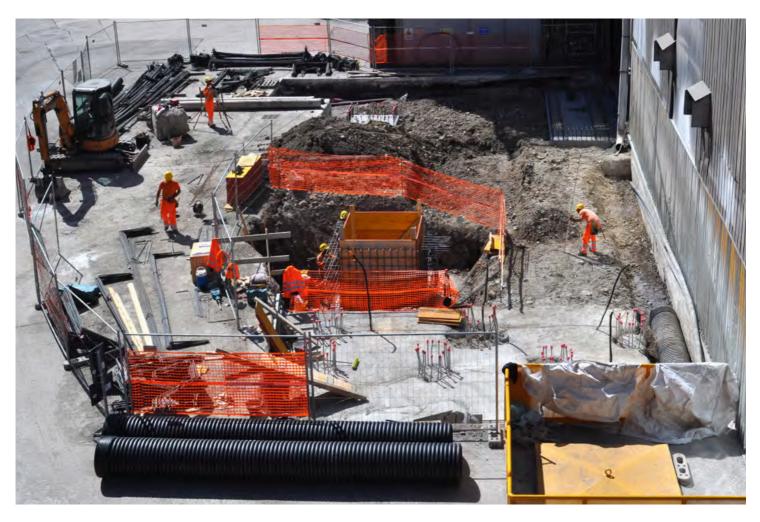
in the last few months. The first one involves building the foundations of the new oxygen system and the new water treatment system, osmosis area, of the Ferriere Nord plant of the Pittini Group in Potenza. Works began in the first days of last summer and ended in mid-October, and twenty technicians and workers had to be full time present at the construction site. On the other side, the works carried out at the Saluggia Eurex plant, in the province of Vercelli, were of an entirely different nature: the plant, managed by Sogin since 2003, had to be decommissioned.

The technicians of the CCIS division were in charge of finishing the temporary nuclear waste repository, a temporary solution until the Government finds a final measure for storing radioactive waste materials. At the site, ATB is building the reinforced concrete walls and the floor of the repository. «A special structure with a clear 15-meter light with self-supporting REP beams», explains Anastasio Intini, Project Manager, CCIS Division. According to the time schedule, the deadline for completing all works is February 2020. Meanwhile, the works at the iron and steel plants where ATB have been operating for some time now have required some special and out-of-the-ordinary efforts in the last few months. In Lesegno, Province of Cuneo, the works to demolish and rebuild the foundations of the sizing mill and the rolling mill stands were finished a few days ago. A quite similar work was completed in Cerveno, Brescia, where the foundations of the flying shears and the feeder were also reconditioned. «We started our underpinning job from these job orders», explains Angelo Damioli, Industrial North General Manager of the CCIS Division. «First, non-destructive demolitions in order to eliminate what had to be fully remade and to keep the existing parts intact».

A very similar procedure was also implemented at the Montereau-Fault-Yonne steel plant in France, where preparing the foundations was key so that the foundations of the coil handing foundations, the pump tank, and the welding machine could be built again. At this site, given the depths to be reached and the hydrogeological characteristics of the land (located right at the junction of the Seine and Yonne rivers), «we had to find a technical solution to prevent water seeping: sheet piles and jet grouting, concrete columns made from the ground floor to compact the underlying soil; they were vital for the success of the work», adds Damioli. The downtime period instead was enough to finish modernising the beam furnace at the Hennigsdorf site in Germany. «In this case we also had to modify the existing foundations, maintaining what had to be preserved, and then rebuilding the new ones», continues the manager. «For all these projects, we had to proceed at a fast pace, with shifts covering the 24 hours of the day». Efficient organisation and excellent performance also at safety level plus an accident rate reduced to zero.

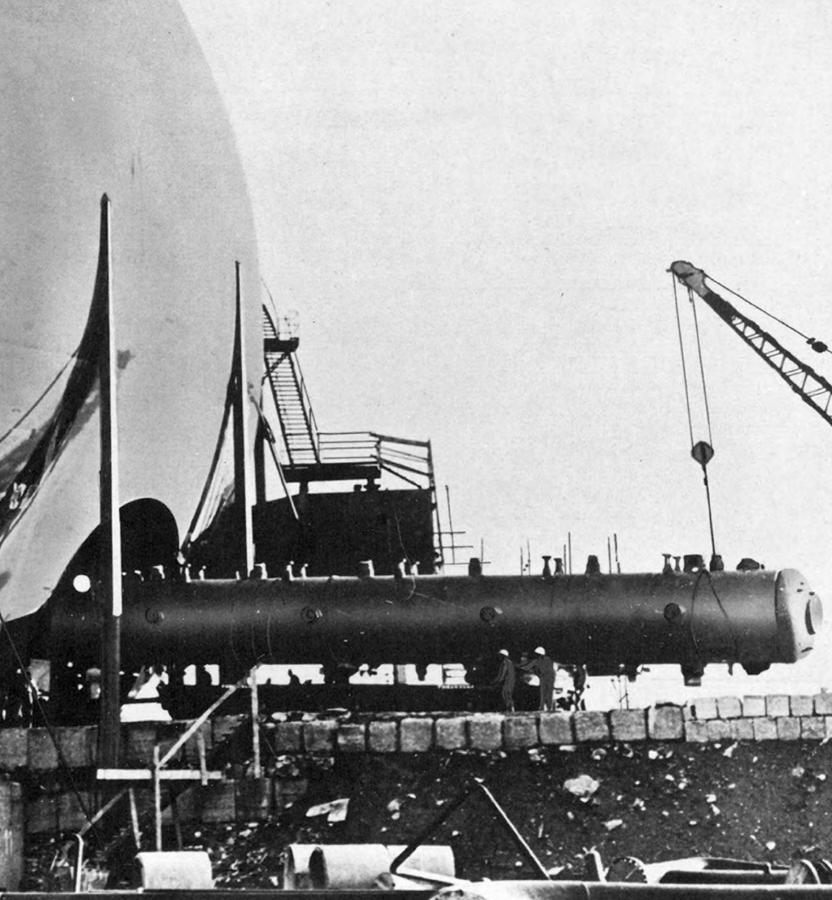
> The construction site within the Sogin site in Saluggia for the completion of the temporary storage of nuclear waste

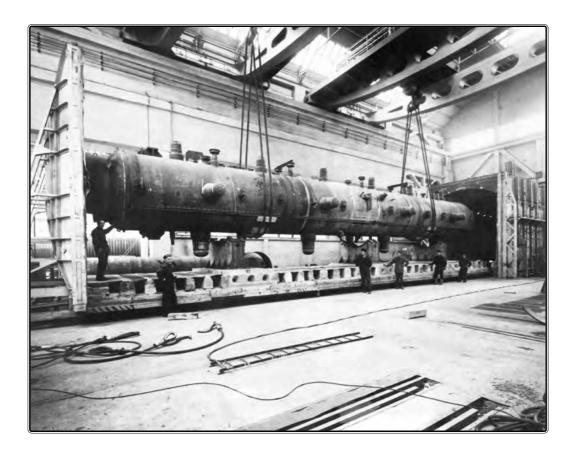
> Works for the construction of the foundations of the new OSMOSI water treatment plant at the Pittini Ferriere Nord steelworks in Potenza



09

## A History for the future







## 1969 Garigliano Italy

It's 1969. The shot shows one of the Nuclear Island components in the old ATB factory in Via Folonari, Brescia. One of the many that the company has built over the years to meet the demand of the nuclear market. In particular, this Primary Steam Drum has become part of the Garigliano Nuclear Power Plant, built in the early sixties in Sessa Aurunca, Caserta. A plant equipped with a single 160 MWe Boiling Water Reactor of the first generation GE BWR.

A history for the future

In the second half of the sixties, ATB became one of the best renowned international companies specialized in the design and construction of components for nuclear power plants, equipment at the forefront of technology and extremely complex.

In recognition to these technical capabilities, ATB had the opportunity to collaborate with the world's leading nuclear engineering companies, like Westinghouse, Framatone, GE.

 Primary Steam Drum being transported inside the Reactor Containment Sphere ↑ ↑ Primary Steam Drum fabrication and transportation

## TRADE FAIRS

#### Key Energy ECOMONDO

2019 November 5 - 8 Rimini (Italy)



#### 9th Small Hydro Latin America

2019 November 27 - 28 Medellin (Colombia)







## WORLDWIDE PRESENCE



#### ATB Holding S.p.A.

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