

ADDING VALUE TO WASTE MANAGEMENT

Sepor is one of Italy's leaders, delivering multi-level solutions in waste treatment, pollution prevention and tank cleaning. The jewel in its crown is a recently opened multi-purpose, sustainable solid and liquid waste hub in the port of La Spezia. Andy Probert discovered more from Business Development Director Mattia Mori.

IT is probably unusual to find a solid and liquid waste treatment plant located at the heart of a major trading port – let alone a few steps from a cruise terminal and less than 500m from a city centre.

But therein lies the ingenuity of the ambitious Mori family that stands behind Sepor, a 70-year-old, family-owned business, and owners of their April 2021 opened commercial treatment plant at the head of Molo Garibaldi in La Spezia port.

La Spezia, the second-largest city in the Liguria region, is located on the Ligurian Sea and one of the main Italian military and commercial harbours.

Sepor's waste treatment plant, or port reception facility – is a realisation of everything the Mori's stand for in their life-long understanding and knowledge of waste treatment solutions.

The company, founded by Cesare Mori in 1952, specialised in supplying port services to commercial ships in transit through La Spezia. However, over the years, Sepor's services have subtly turned more towards the ecological sector for the port and the industrial sector.

These services extended to tank cleaning and industrial and naval high-pressure washing for refineries, depots and the oil and gas industry in general. Sepor built its first port reception facility

for wastewater treatment in La Spezia in 1988, later enhancing that with the construction of a waste sterilization plant.

Today the business is considered an industry leader in industrial and naval decontamination, tank cleaning, waste recovery and treatment, pollution prevention, and land and marine oil spill response.

Unique plant operations

The new facility is a batch and biological chemical-physical plant with ultrafiltration, authorised to treat 75,000 tonnes of liquid waste annually. The plant is powered most of the year by an impressive photovoltaic system built on its roof.

"The plant's uniqueness is that it operates totally in vacuum conditions to avoid any odours escaping to the outside environment," commented Business Development Director Mattia Mori, grandson of Cesare.

Plant management is fully automated: a single operator from a control room can manage every single process. It can treat up to six types of contaminated liquids simultaneously, each with different treatment processes, plus two other processes for the management of oil treatment lines.

He added: "It is the result of our 40-year experience in the port reception facility sector. It represents excellence in technology, sustainability and environmental protection compared to similar plants at ports in Italy and across Europe."

The plant is authorised to carry out operations and treat liquid waste produced onboard ships, and is also equipped with a sterilization system to eliminate any pathogenic microorganisms, viruses and bacteria from the solid waste delivered by ships before being sent to landfill.

Sepor currently operates four divisions, the biggest being the port and non-port related waste disposal services which accounts for 48% of turnover. It has a reclamation division of tanks and naval units (25%), a port services division (20%) and land and maritime environmental emergency services (7%).

Turnover in 2020 surpassed €11 million following five years of constant growth.

"We believe our results are among the best for Italian companies that operate in the management of port reception facilities and in the environmental sector," Mr Mori asserted. "Our company is not in debt, and we use almost exclusively equity capital for our investments."

He added: "We believe the greatest growth opportunity in the next few years will come from the waste disposal sector. Thanks to the new port reception facility, we hope to triple the amount of waste managed annually.

"Waste comes from the port and largely from various production plants located throughout Italy. We are also receiving significant waste streams from Southern Italy."

Greater scope of work

Customers range from public bodies, such as port authorities and the Military Arsenal of La Spezia, to maritime terminals, shipping companies, oil and gas multinationals in Italy, multi-utility companies and customers in the manufacturing industry.

"Our strength is that we have managed to establish ourselves widely across Italy and have large numbers of satisfied customers. In 2020, we counted 352 customers."

Sepor also operates eight vacuum trucks and other trucks/cranes mostly to Euro 6 emission standards. Also on the company's books are ten barges of various sizes; seven recently built with double hulls to ensure greater safety against the risk of spills, and with a company-invented system of easily removable crates to allow faster reclamation operations.

It also has two tugs, two vessels for collecting garbage from ships, and the Optimist and Acqua Azzurra dedicated to oil spill responses. ▀



The 2003-built Optimist is a versatile catamaran for a marine environmental emergency, such as the recovery of accidentally spilt petroleum products and small-sized floating solid waste from the sea surface. It can be disassembled, transported and re-assembled in an emergency location within hours: making it suitable for quick transportation across lakes or rivers in case of need.

The Acqua Azzurra is Sepor's best performing catamaran for emergency responses. National and international clients have chosen the vessel to manage environmental emergencies in very delicate situations. The first time it was used was after the sinking of Costa Concordia at Isola del Giglio and is still considered the best catamaran of its type offered by Italian suppliers.

Mr Mori added that Sepor, in 2005, innovated its tank cleaning division with the acquisition of the company's first "No Man Entry", a device for the automatic fluidisation of the storage tank sludge and the enhancement of the petroleum product content.

This followed with the "Lombrico" robot (Earthworm) for the extraction of sludge from containers and tanks, and a "Spider" robot for vertical washing of tank shells.

"We also have machines to perform hydro-cuts in environments at risk of explosion and mobile machinery to minimise sludge and for water treatment," he emphasised.

"The ultimate goal is to minimise disposal and use of water, recovering and enhancing petroleum products during reclamation works. These are becoming complementary operations to our tank cleaning procedures that oil companies really appreciate."

Continual investment and innovation

Mr Mori acknowledged that Sepor, whose CEO is his father, Giorgio, cannot stand still in investment and innovation.

"All our innovations of the last few years result from careful technical and economic research. This has been carried out by our internal management, of which both my brother Jacopo and I are part, and which includes people of different age groups and diverse technical-cultural backgrounds.

"Our equipment is always at the forefront: we cannot run the risk of being left behind in a constantly evolving market that increasingly rewards sustainability and innovation."

Entering the electric powered vessels market

Testament to that is the recent commissioning of Sepor's first fully electric-powered vessel to collect garbage from ships. Designed with a fibreglass hull, the 18m vessel will be delivered in early 2022 to replace an existing diesel-powered vessel.

"This new unit will be used to sort garbage into different bins and transport these bins to the berth," detailed Mr Mori. "To recharge the electric engines, which will occur at night, we have equipped our berth at La Spezia with a charging column. We anticipate it will be the first port in Italy to adopt such a solution."

He added: "Our goal by 2026 is to replace all our diesel-fuelled ships with electric or mixed propulsion vessels. We also plan to replace our land fleet with more modern Euro 6 emission standards and, where possible, with suitable hybrid electric vehicles."



In recent years, Sepor has made improvements in the field of self-produced energy from renewable sources. It has installed photovoltaic plants for a total of 110kw and seeks to increase this in coming years. The company is planning an annual sustainability report and considering applying for a B Corp Certification which measures a company's entire social and environmental performance.

Sepor's ambitions are to operate beyond Italian borders in time. Occasionally it performs work in the tank cleaning oil field in Croatia, Israel and previously Libya.

"We would like to expand abroad in the port and waste treatment sectors, but these activities are highly capital intensive and require



the right partners," Mr Mori remarked. "At present, we concentrate on our national market as it still gives us great satisfaction."

Mr Mori acknowledged "the world is changing faster than ever before and we are experiencing an epochal moment of transition as our stakeholders are increasingly attentive to the environment and sustainability."

He concluded: "Sepor will continue to focus on environmental and sustainability solutions. What makes us proud and certifies our success are our financial results. They are our guarantee that the market rewards and appreciates us. But what makes us unique is our spirit of innovation: we are always in constant search for excellence and improvement." ■