

# (inside) marine

## OWNERS AND OPERATORS

*An encouraging view from the bridge*



### CANFORNAV

*Boutique shipping to and from the Great Lakes*

### TAMAR SHIP MANAGEMENT

*Ship management success in diversity and values*

### ALL AMERICAN MARINE

*Hydrogen fuel cells powering a Sea Change in US shipping*

# THERE IS **NO ALTERNATIVE** TO **CONTINUOUS** **DEVELOPMENT**

Marine engines and engine control systems specialist PBM Group is an organisation that encourages its employees to think outside the box and welcomes innovation to increase the level of service to its customers “We stick to our values, we deliver on our promises and we do our best to walk the talk,” stated Aljoša Pavelin, CEO of PBM, in conversation with Jo Cosgrave.



WE KEEP YOUR  
ENGINES RUNNING

**pbm**  
GROUP



The best ideas start with a vision; such was the case with the PBM Group. Davor Tudor is a man of action, and in 1995 he decided that it was the right time for him to put his experience and knowledge to the test by establishing his own marine engines and control systems business.

Having served previously as the Head of the Diesel Engine test station at the 3 Maj Shipyard, as well as the Chief Engineer at the renowned Scorpio Group, Mr Tudor decided that he would be able to innovate and deliver more if he had his own company. Popravak Brodskih Motora LLC, known as PBM, was founded in Rijeka, Croatia in 1995, setting up a base of operation in the country's largest intermodal port, and since then, has achieved steady sustainable growth, with rapid expansion in recent years.

It is the organisation's values and vision, also introduced in 1995 and focusing on honesty, knowledge, and commitment, which have led to this sustainable and continuing growth. These values are demonstrated by every employee in the day-to-day operations of the company, and provides them the tools needed

to overcome the many challenges they face with the range of jobs they undertake.

The culture that this creates within the company ensures PBM always gets the job done, with a focus on quality and timeliness.

### Keeping engines running

Simply put, the company mission is to keep its clients' engines running. This means that engineers need to be available 24/7, and to ensure this, PBM has workshops and local engineering teams throughout several maritime hotspots in addition to its headquarters in Croatia.

As per Aljoša Pavelin, CEO at PBM: "24/7 is not a marketing trick any more. You need to provide and you need to provide fast. Clients' expectations are rising and staying in business requires responsiveness, commitment and knowledge. Having the tools for the job are irrelevant unless you know how to use them. We do!"

PBM's network is a combination of its own independent operations and a few reliable partners, covering locations including



*Vellibor Vuckovic, CTO*

*Hana Tudor, Managing Director*

*Davor Tudor, Owner*

*Aljosa Pavelin, CEO*

Bulgaria, Romania, Slovakia, China and Turkey. The company's recent expansion in the Baltics region was realised through PBM Baltmarine, a joint venture with Baltmarine Trading Company.

Starting out as a governor and remote-control systems service company, PBM Group's portfolio today encompasses a range of services for marine engines. Providing services and genuine spare parts to renowned global shipping companies, PBM Group overhauls more than 500 governors per year and, since 2019, has overhauled more than 100 electronically controlled MAN B&W, ME-B and ME-C engines.

"As a top specialist for Sulzer remote-control systems, we face an increased demand for overhauls and troubleshooting, despite, or perhaps because of, the outdated technology," commented Mr Pavelin, who said a few companies within PBM Group are Woodward Authorised Independent Service Facilities.

When making the decision of stepping down as Managing Director in 2020, Davor Tudor did not have to look far to find someone who shared his passion and vision for the company. Having worked in a number of roles at the company and learning the business inside and out, the next person to take the helm was his daughter, Hana Tudor. Ms Tudor has ensured the company continues to live up to its first-class reputation, while bringing a contemporary vision and innovation to the operations.

### **Innovation comes from within**

Mr Pavelin believes there is no alternative to a continuous development, and there is no development without innovation. Key innovations come from the real need.

The CEO stands behind the founder's vision. "When we recruit people, we look at their drive and passion," he said. "Our people love engines and enjoy solving problems. They are excited by hardships; relentless in spirit and always trying to make things better. When one hires such people and gives them the means, innovation and improvement come as a natural consequence."

Troubleshooting a problem on the vessel regularly requires simultaneously dealing with several issues to isolate the root cause. PBM's Marine Black Box is a portable marine engine data logger, able to monitor and record up to 10 signals from a vessel's engines, in real-time. This means that the root cause of a problem will be isolated and identified in shorter time and with less effort.

In addition to those innovations already mentioned, PBM's engineers are also exploring augmented reality and its possibilities in troubleshooting and providing remote assistance.

Just coming out from PBM's workshop is its own FIVA/ELFI valve test stand.

"While overhauling main engines of our clients, we understood that these new devices will soon be needing overhauling and testing. Our engineers put their heads together and designed the

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The pandemic has given us a new way of thinking and looking at challenges, and so far, we have weathered the storm by keeping true to our vision and values

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test stand, including our proprietary software. We're looking forward to seeing it in practice," Mr Pavelin said.

PBM has received an EU grant from the European Regional Development Fund to develop an artificial intelligence module for its dual fuel blending solution. This project is exploring the blending of two streams of natural gas (low and high heating value), in real-time, to exploit the high ratio of LHV gas, while maintaining maximum power output of a genset. Instead of burning it, PBM's solution puts this gas into a revenue-generating use and, at the same time, protects the environment.

### Looking ahead

"The maritime industry is in a state of transition, embracing digital solutions," stated Mr Pavelin. When asked to expand further on this observation, he went on to explain that besides new digital services creating new opportunities, everyone is always being expected to provide more with less.

Therefore, emerging technologies such as automation, robotics, Internet of Things, autonomous vessels, Artificial Intelligence, Virtual Reality blockchain and are warmly welcomed within the broader shipping business community and they are slowly reshaping the industry.

However, According to Mr Pavelin: "Harnessing the power of new technologies to gain the most value from them is not possible without the right people. Our people have the knowledge to leverage and utilise these technologies to continue delivering a first-class service to our customers; this is our strength, and the key to our success."

Over the last 14 months, the world has seen unprecedented restrictions on travel and movement, however, the pandemic did not change human needs and the necessity for transporting goods. Despite the pandemic, the demand for vessels remained and well running engines are key to efficient operations.

"The pandemic has given us a new way of thinking and looking at challenges, and so far, we have weathered the storm by keeping true to our vision and values - especially mirrored in our commitment to complete any job we take on," Mr Pavelin concluded. ■

