

# Japan Marine Technologies

## Building customer satisfaction through trouble-free reliability

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Fig. 1 JMT manufacturing facility in Toyama, Japan.

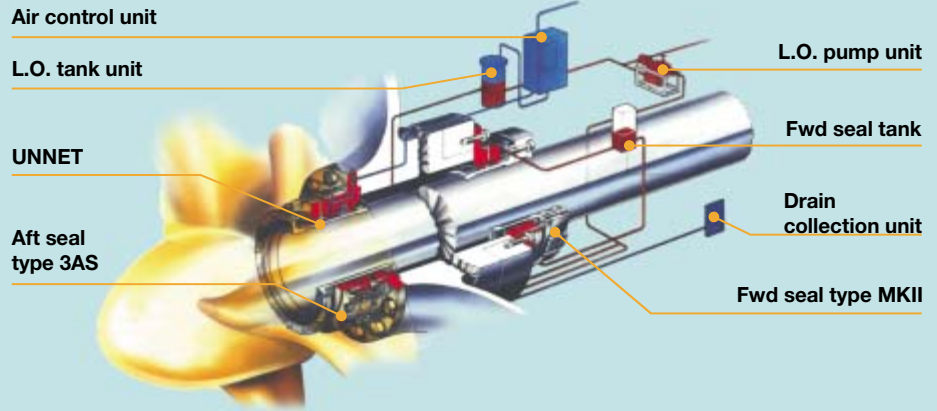


Fig. 2 JMT Airguard anti-pollution stern tube sealing system.

**Japan Marine Technologies Ltd. (JMT), acquired by Wärtsilä in 2002, has acclaimed expertise in air seal technology. With Wärtsilä as its parent, JMT now enjoys the most stable position in its history.**

JMT was created under its original name Chuetsu-Waukesha Co. Ltd. as a joint venture of Chuetsu Alloy Castings Co. and Waukesha Bearings in the USA in 1965. Since then it has had five parent companies, the most recent being Wärtsilä Corporation. JMT became a listed company in 1970.

In 1981, the name was changed to Dover Japan, Inc. when the Dover Group in the USA acquired Waukesha's marine division. In 1991, the UK-based TI Group and then the Smiths Group, also in the UK, became JMT's parent companies. During this period, in 1993, the company took its present name, Japan Marine Technologies Ltd. In 2002, JMT was acquired from the Smiths Group and became a subsidiary of Wärtsilä.

In spite of these four changes in ownership, Wärtsilä is JMT's first parent that manufactures marine equipment as its core business. As JMT's President, Mr Takao Suzuki, comments, "Considering the fact that Wärtsilä is growing worldwide as a specialized marine equipment business, we believe they are a very suitable parent company." This also means that "JMT now enjoys the most stable position in its history."

### **JMT's air seal technology widely acclaimed**

JMT has annual sales of approximately 4 billion Japanese yen. Marine business revenues account for three-quarters of this amount, and its Land business for the remainder. In its Land business, JMT is involved in work that requires advanced engineering capabilities, such as development of large-scale welding jigs for the H-II rocket and design of environmental protection equipment for nuclear power plants.

In its core Marine business, JMT manufactures and sells stern tube seals, stern tube bearings, intermediate shaft bearings, rudder seals, and specialized seals for contra-rotating propellers. Among these, the air seal for use in stern tubes is a particularly strong product.

This system, named Airguard, uses compressed air to effectively seal out seawater, and is a pollution-free type seal system that not only stops seawater ingress but also prevents leakage of lubricating oil outboard. Since JMT began marketing this unique system in the latter half of the 1980s, use has steadily expanded to include large containerships and LNG carriers. As a result, Airguard has now grown to become the mainstream technology for stern tube seals.

In JMT's analysis, "these strong sales are supported by our reputation for trouble-free reliability, combined with

rising awareness of the problem of marine pollution."

### **High expectations for new dredger seal**

JMT also has high expectations of a new product, a dredger seal named Sandguard, an improved version of the company's air seal. Although vessels in dredging service raise mud and sand, and wear-out of rubber seal rings is severe, the Sandguard system prevents both outboard lubricating oil leakage and inboard seawater ingress by using an outflow of air and fresh water. As a result it also minimizes wear to the rubber seal rings.

At the end of the first one-year trial period for the first vessels fitted with this system in October 2002, the rubber seal rings showed virtually no wear. Based on this demonstration, JMT plans to begin full-scale sales. They are strongly confident in this new technology, saying "it should win high marks in the dredging industry."

As part of its overseas sales network, JMT has established a local office in Pusan, Korea, and a local corporate subsidiary in Singapore. In China, the company has traditionally relied on agency sales through local trading houses. However, with growing demand predicted in this key market, JMT's future policy is to expand sales through Wärtsilä China's sales network, taking advantage of the parent company's existing offices and ample human resources. ■