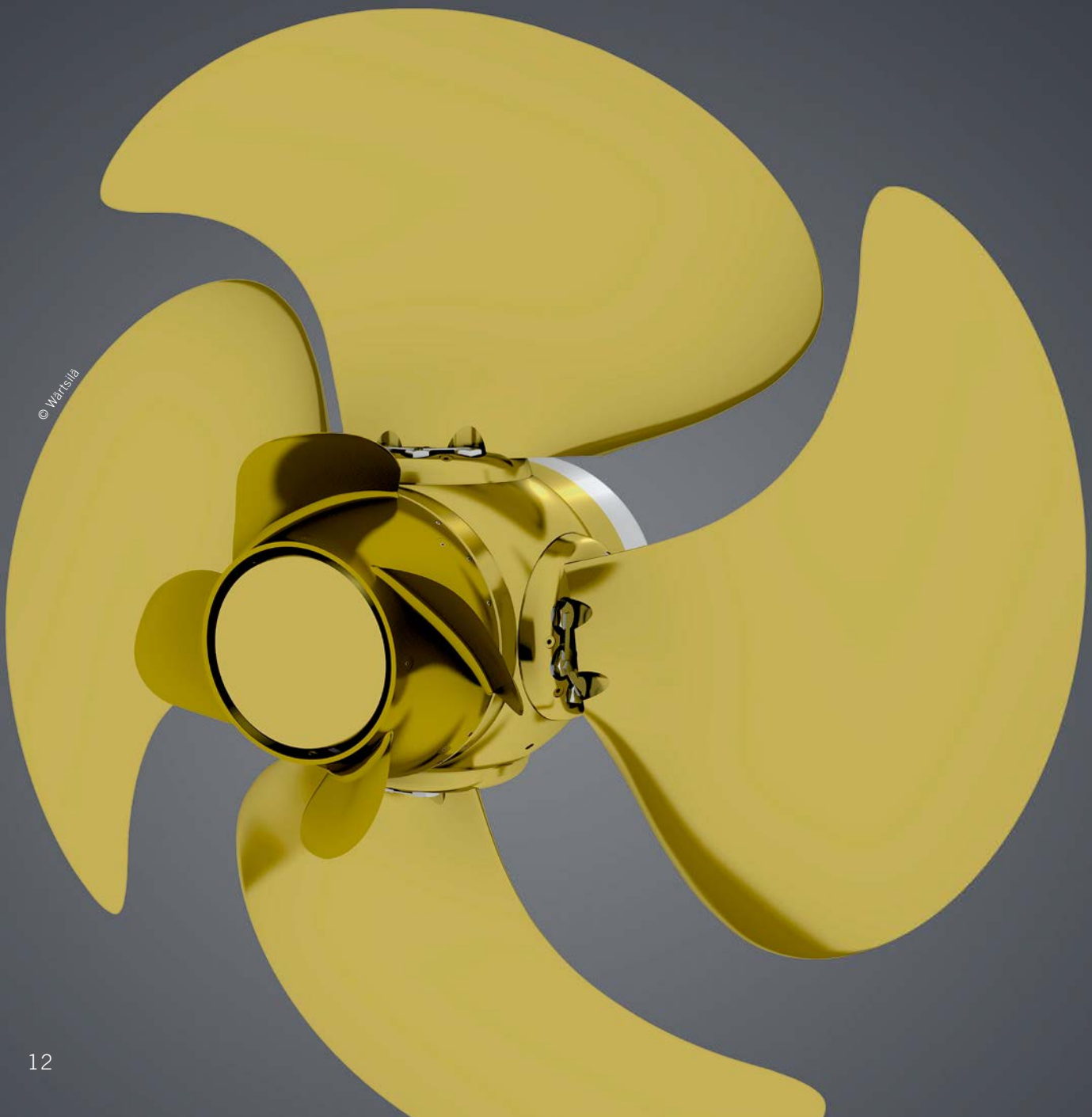
COVER STORY

Technology Transfer, System and Component Progress



Taking the expression at its most literal, technology transfer is arguably at the centre of every business model. In its simplest form, the act is implemented when an engine is sold to a customer who can then apply the technology in the pursuit of his business.

The need to transfer technology has never been greater. Whether we believe global warming is anthropogenic or not, the worst option is to do nothing. And it is clear that the engine industry is a central stakeholder in this vital matter.

It is encouraging, then, to read about the increasing success of the various ways in which the latest engine technology is being introduced in regions wishing to develop their engines up to world standard in terms of specific output, fuel efficiency, tractability, ratios of weight and space to power, and emissions. The efforts take several forms, including joint ventures and licensing at the corporate levels and the purchase of consultancy services as a commodity.

In this way, engine development can make quantum leaps, leading to improvements in all the key in areas in the products of the engine builders involved. And having attained the state-of-the-art, it will be feasible to maintain that level of technology in at least the medium term. In the best case, of course, the manufacturers will continue the momentum gained and pull their local suppliers with them.

The role of suppliers is obviously critical in enabling both the quantum leaps and the incremental changes which follow. Each new and further developed component or system which improves engine performance, in particular fuel economy and emissions, represents is an important enabler. Also, given that emissions legislation affects generally new engines, it is always encouraging to learn that a product can be retro-fitted to improve engines already in the field.

Accordingly, the growth in the market for gas engines has led to the emergence of both new suppliers of systems and components as well as makers of traditional diesel equipment extending their ranges. They can look forward to a challenging time, as the gas engine faction responds to expanding market needs and looks to make good all or part of the recent step change in diesel engine performance. One great hope will be advances in the admission/injection of gas so that engines which are intrinsically clean can also become inherently more powerful.

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