

# MAN Energy Solutions Efficiently Delivers Reliable Parts

With Creo High-Speed Milling extension, MAN Energy Solutions creates parts quickly, eliminates rework and cuts cost.



With [Creo HSM], it took MAN Energy Solutions 60% less time to perform the roughing operations to manufacture the part.

Mathias Reiter, Team leader NC programming,  
MAN Energy Solutions

## Challenges:

With the requirement of zero-part failure and the high cost of raw parts, MAN Energy Solutions needed to ensure that each part they produced was reliable and efficient for their customers. And with competitors offering lower cost options, MAN Energy Solutions needed to figure out a way to create parts quickly and inexpensively.

## Results:

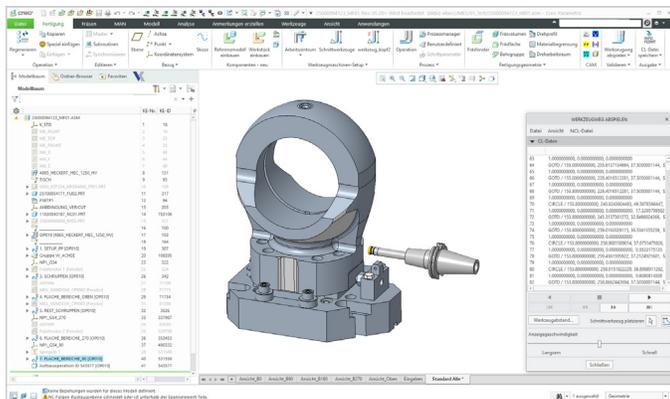
By using an advanced toolpath, part of Creo High-Speed Milling (HSM), and a reliable and efficient manufacturing process, MAN Energy Solutions was able to save 60% on the time it took to perform the roughing operations and several weeks on manufacturing a part.

## Products Used:

Creo  
Creo High-Speed Milling Extension (HSM)

## MAN Energy Solutions Puts Sustainability First

MAN Energy Solutions, a member of the Volkswagen Group, is a multi-billion-dollar company dedicated to enabling their customers to achieve sustainable value in the transition towards a carbon neutral future. Primarily producing diesel and gas engines as well as turbomachinery like compressors, gas turbines and steam turbines, MAN Energy Solutions addresses challenges within the marine, energy, and industrial sectors. Leading the way in advanced engineering for more than 260 years, MAN Energy Solutions engineers systems for deep decarbonization in the shipping, power generation and industrial processes.



## No Room for Error

For MAN Energy Solutions, reliability is key. Every part and process must be standardized—with no room for error. Because of the great cost associated with these large raw parts, they needed to establish a reliable toolpath so that they don't damage the

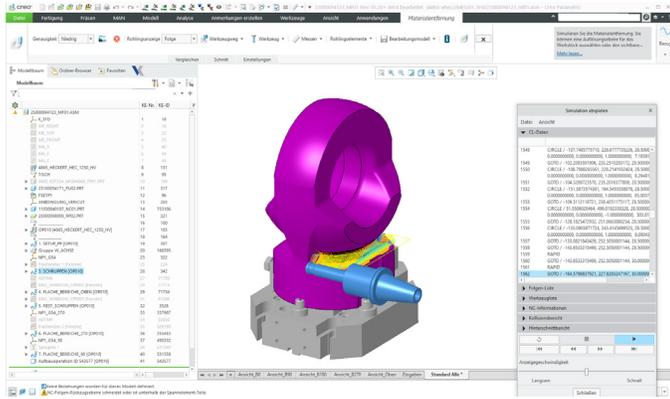
part or machine or waste time and money reworking from scratch.

MAN Energy Solutions realized that their traditional roughing toolpaths took a long time to machine a part, and as a result, was a costly process. And if it was a costly process for MAN Energy Solutions, it would, in turn, be an expensive purchase for their customers and an opportunity for competitors to take advantage. Due to the large size of these assemblies, such as a two-meter-long connection rod, they could only produce one prototype.

## Streamlining Production Time with Creo HSM

With Creo NC established within their processes, it only made sense for MAN Energy Solutions to leverage the new capability of [Creo High-Speed Milling \(HSM\)](#). By utilizing this feature, they applied powerful 3-axis NC milling capabilities to efficiently generate toolpaths that improve product quality, manufacturing consistency, and costs. As a result, MAN Energy Solutions saved 60% on time to perform the roughing operations to manufacture the part.

Now that MAN Energy Solutions successfully streamlined the time and cost it takes to create a part, they can apply this to optimize other parts, creating more and more use cases. After this, they are faster than competitors and can produce the part locally. Because MAN Energy Solutions is creating hundreds of parts a year, through the integration of Creo HSM, they save weeks on manufacturing.



## Conclusion

MAN Energy Solutions' success in applying Creo HSM to their production process creates opportunity for them to roll out this solution to other machines as well as other areas of the company. With the possibility of part failure being zero, MAN Energy Solution is confident in their ability to quickly deliver reliable products for a multitude of use cases across a number of industries.

© 2024, PTC Inc. (PTC). All rights reserved. Information described herein is furnished for informational use only, is subject to change without notice, and should not be taken as a guarantee, commitment, or offer by PTC. PTC, the PTC logo, and all PTC product names and logos are trademarks or registered trademarks of PTC and/or its subsidiaries in the United States and other countries. All other product or company names are property of their respective owners. The timing of any product release, including any features or functionality, is subject to change at PTC's discretion.

425200\_MAN\_Energy\_Solutions\_03\_24