

bmw powertrain goes from manual to automatic calibration with asam aci

“I choose ASAM, because it guarantees user driven standards, not supplier specific solutions.”

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i Summary

The challenge of the Powertrain Development department from the BMW Group was to migrate from manual to automatic calibration for their gasoline engine test benches. The solution for the BMW Group was to use a product from the market that uses an ASAM-ACI interface. The key benefit the BMW Group has received is an independency from supplier specific interfaces.

ii Situation

To increase efficiency of calibration process, the Powertrain Development department at the BMW Group wanted to switch from manual calibration to automatic calibration operation for their gasoline engine test benches. The search criteria began with finding a solution that was easy-to-use, intelligent and contained high quality tools to do so. The BMW Group knew that it was important to avoid problems with interfaces between calibration tools and automation systems on the test bench, as well as to keep independency from suppliers; which are both benefits of using the ASAM-ACI standard interface.

iii Success strategy

Upon research, the decision was made to use a product from the market that provided an ASAM-ACI interface. The BMW Group succeeded in performing automatic calibration work, with use of ASAM-ACI. If today the BMW Group finds another intelligent tool that provides advantages for the Powertrain Development department and

uses ASAM-ACI, it can be sure to switch to it very easily.

iv Challenges Faced

During the project coordination with the supplier was necessary, because the ASAM-ACI standard was interpreted by BMW and its suppliers in a different way. Together with the suppliers these challenges and different interpretations were solved, which resulted in a maintenance process within ASAM to refine the specification, benefiting all those who use the ACI standard.

v Business Benefits

The main business benefits the BMW Group gained was an independency of supplier specific solutions and a high level certification process. They have also gained a high influence to the functionalities of this standard from being contributing members of the ASAM-ACI working group.