

Digitization of Engine Testing Cells

Customer:

Large engine manufacturer.

Business Need:

The customer wanted to digitalize their entire engine testing cells into Virtual environment to adopt Virtual Engine Installation concepts. Set-up lead time was to be reduced and test cell utilization needed to be increased to meet the raising demand

Challenge:

Testing is all about making DATA give us meaningful insights. However, the customer had no data available in digital (drawings) format. Data was captured manually and then converted into the virtual environment which required high configuration computers.

Solution:

AXISCADES partnered with the customer to understand and develop a process by adopting available technologies. AXISCADES developed a digitalizing process by using current modelling practices. Faro Scanners were used to capture the data instead of manual data capturing. Scane LT was used to process data for user interface. Processed data was then fed into modelers to create virtual models to real testing cells. A process was developed to merge virtual models into a different CAD software which was then compared with point cloud for merging virtual models into another CAD software. This was again compared with point cloud. This process ensured the need for physical quality checks at the customer location.

Key Benefits to Customer

- Automated input capturing process developed
- In-house Quality check process developed
- Project lead reduced by developing in-house QC
- Testing cell prepare lead time reduced to 2 days from 2 weeks

Why partner with AXISCADES?

AXISCADES is a leading product engineering partner with deep domain expertise which can provide the upstream capability, product realization, design automation and integration. Our certifications coupled with center of excellence positions AXISCADES as the innovation and design partner for global product development programs.