# adroitec Case Study



**VetcoGray** 

### Background

Vetco Gray is one of the world's leading supplier of systems, products and services for onshore and offshore oil and gas drilling and production. The scope of services and support was subsequently extended to VG Norway Montrose and Singapore, and also expanded the scope of cooperation to include dedicated offshore support from India and ANSYS (finite element analysis) support for R&D.

#### Mission

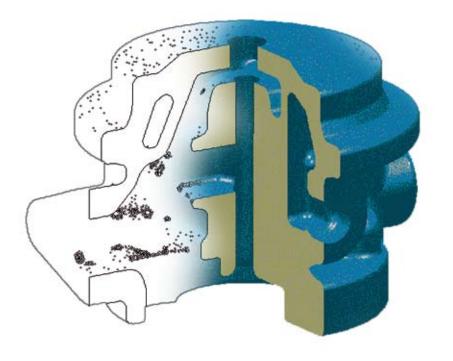
Upgrade Design Practices, and seamlessly integrate with manufacturing.

Engineering & Manufacturing Support Activities

### Scope of Work

### **Engineering / R&D**

- 1. Conversion of Legacy Drawing (ACAD) to Pro/E 3D models.
- 2. Audit and modification of Pro/E 3D models for Pro/NC compliancy.
- 3. Creation of UDF's for VGS specifications.
- 4. FEA/FEM Support



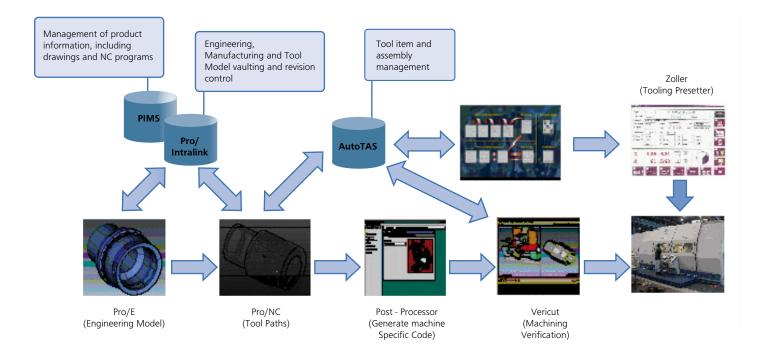
#### **Manufacturing**

- Creation of 3D models for tooling to be used for Pro/NC
- 2. Creation of Vericut models

## Global CAD / CAM Integration Initiative

- 1. Support for Global standardization of CAD/CAM approaches.
- 2. Creation of Global Standards for Modeling Practices
- 3. Investigation & definition of best fit modeling strategy for various Part families and implementation

#### **Adroitec Solution**



- Understanding the specifications & processes, standards used in ABB-VG.
- Conversion of Legacy 2D AutoCAD data to Pro/E 3D. Model Audit of Legacy 3D Pro/E model for Pro/NC compliancy.
- Pro/E Modeling for Engineering
- Conversion of AutoCAD to Pro/E for Pro/NC Compliance
- Audit/Modification of Pro/E Legacy Data for Pro/NC
- Modeling of Parts/Assemblies for Sales Order
- Creation and maintenance of VGS-UDF's.
- Tool Modeling for Pro/NC and Vericut Simulation, which includes cutting tools, fixtures and work holding devices.
- Investigation & definition of best-fit modeling strategy for various Part families and implementation.
- NC Programming on Pro/NC
- CAD-CAM rationalization and standardization activities.
- Support for Operations in Houston/Aberdeen/Singapore/ Norway
- Rated "Excellent" in terms of cost, quality, turnaround time and responsiveness
- Onsite Team of 7 Engineers led by a Project Manager & 20 man dedicated Support Team in India.
- Working inside and tightly with (offshore) different engineering groups.

### Value addition

Standardized Practices

Error Free Programming With Automation

### Business Impact/ Benefits to client

- Engineering Design Time Reduced
- Round The Clock to increase availability capacity
- Reduced Programming Time
- Simulation Prior To Machining For Consistent Quality

## Cost Advantages

The offshore cost of creation and delivery supported with on-site Knowledge based high level project management and coordination has yielded significant benefits on an annual basis

Increasing the ratio of offshore support to On-site presence will yield additional benefits in terms of increased cost savings.

