

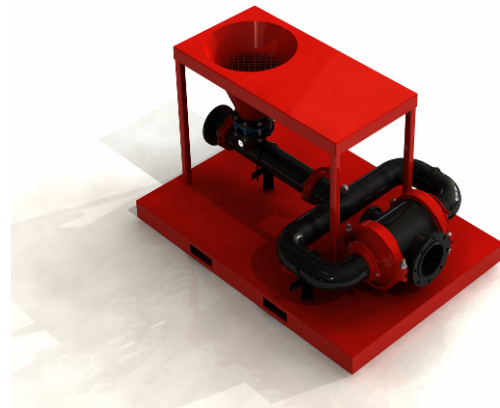
Design Consultancy

Flash Engineering Pte Ltd is a design consultancy focused on Factory Automation, Avionics and Oil & Gas field development. We offer engineering design and analysis solutions in the area of 2D to 3D modeling and virtual simulation of 3D models for Finite Element Analysis (FEA). With a combined experience of over 40 years in mechanical and construction design, Flash Engineering offers outsourced support to engineering departments worldwide...

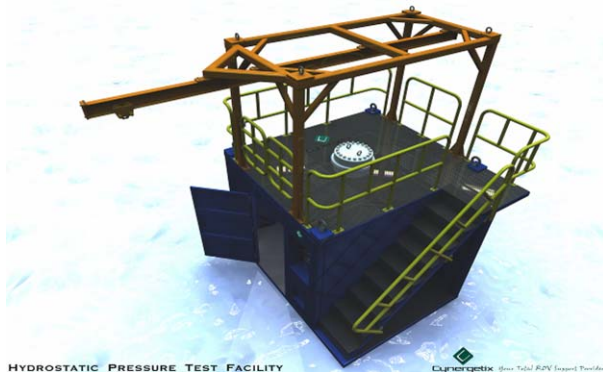
We develop our models based on real data. We will develop 3D CAD models to run FEA/CFD (Finite Element Analysis and Computational Fluid Dynamics) test scenarios based on your needs.

Our services include:

- Mechanical Design & Detailing
- Photorealistic rendered images
- 3D Animation
- Finite Element Analysis (FEA)
- Computational Fluid Dynamics (CFD)
- 2D to 3D Legacy Data Conversion
- Rapid Prototyping
- Hydraulic System Design
- Pipe System Isometrics



Mud separation system, developed 3D model for Photo Rendering



Hydrostatic Test Chamber, designed totally in 3D

3D Modeling enables:

- Design feasibility study
- Construction conflicts and collision
- Quick design modification and replacement
- Production of Part fabrication drawings
- Conceptual presentation to clients
- Photo rendering for marketing and sales
- Testing and Analysis of designs

For more information or to arrange for a presentation at your convenience, contact our Flash Engineering sales team

Tel: (+65) 6372-1416

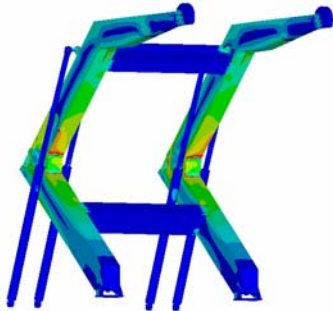
Email: sales@flash-eng.com

Website: www.flash-eng.com

3D Design and Analysis

Flash Engineering provides fully qualified, degree holding, skilled and certified professionals, able to meet the demanding requirements of our clients for their rapid development and design needs.

Design and Analysis

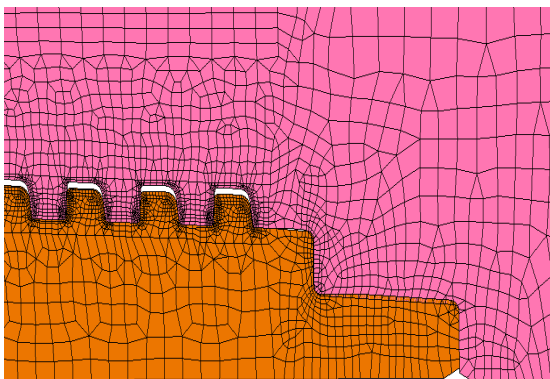
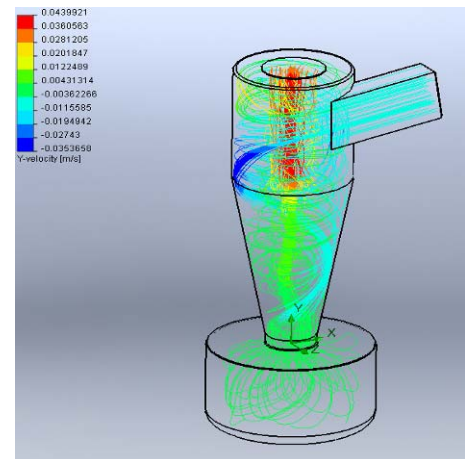


Virtual Testing for Maximum Design Performance

- Force, Pressure, temperature and stress loadings
- Stress, Strain and Displacement
- Vibration
- Thermal Stress and Buckling
- Heat Dissipation

Fluid or Gas flow rates

- Examine effects of Density and viscosity on Fluid/Gas rates
- Examine effects of sensitivity/flow rates for design changes
- Bottle Necking or restrictions
- Volumetric flow calculations
- Temperature dependent Velocity/Mass or Volumetric Flow rate
- Simulate internal pipe roughness
- Simulate various material properties



Pipe System design

- FEA on Casing and Tubing Connections as per ISO 13679
- Pipeline sizes
- Flow and behavior through pumps
- Flow and behavior through mixing vessels or valves
- Pipe stress
- Piping Isometrics

Full analysis reporting on each test parameter:

Conversion to Video (AVI) of test performances

Internet (HTML) and Word document results for easy transfer of data between departments

No complex software packages needed

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