

Centrifugal Pump Development

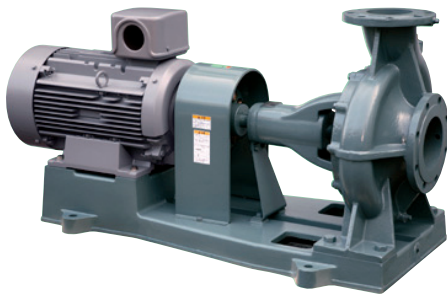
Case Study - Teral Inc.

SC/Tetra contributes to more efficient development process

Centrifugal Pump

Fluid analysis combined with structural analysis, 3D CAD, 3D measurement and 3D printer lead to the development of high-value-added products.

TERAL



For Hot & Cold Water Circulation

For General Supply

For Supplying Industrial & Sewage Water

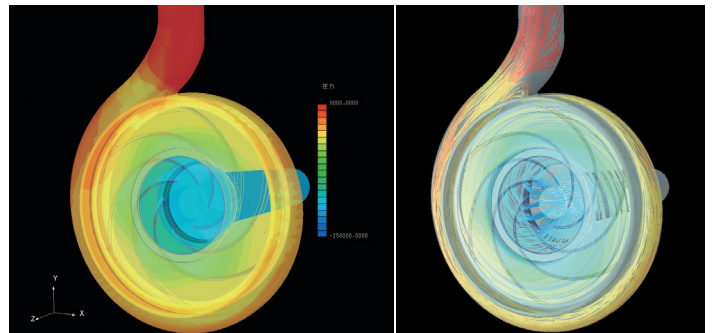
- Advanced Research, Designing & Development
- Responding to Sophisticated Needs
- Maintaining Quality Products

Simulation Model



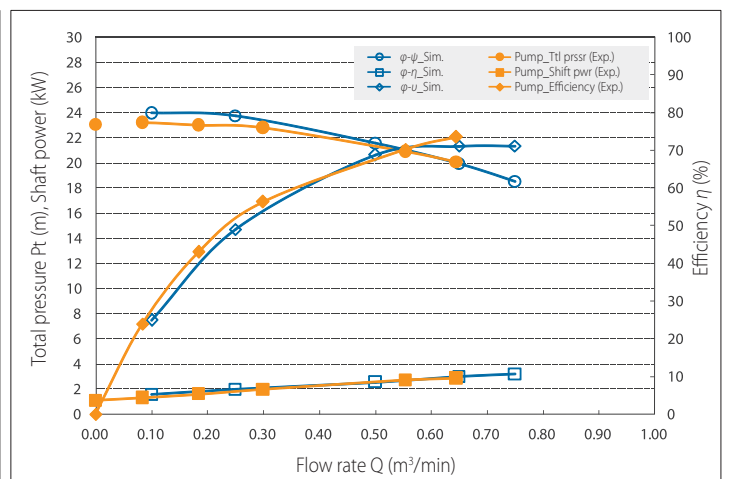
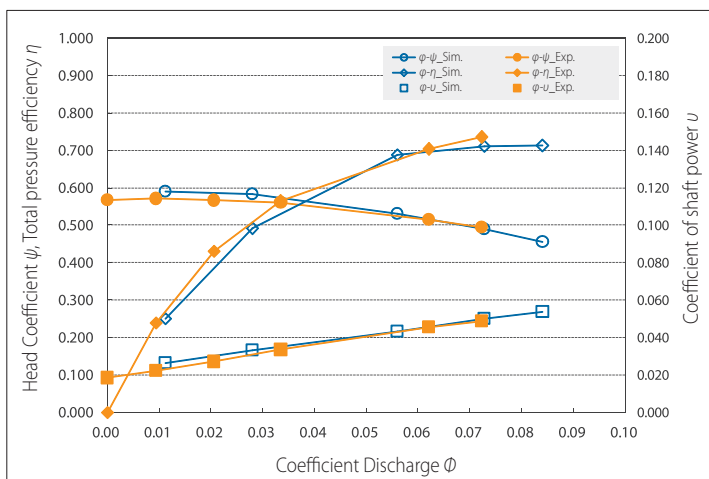
Approx. 7.74 million elements
Approx. 2.2 million nodes
Steady-state analysis
ALE for rotating and stationary regions

Simulation Results



Flow patterns and pressure distribution can be examined visually for better understanding. Also, comparison of simulation results can assist in determining better designs before prototyping.

Result Comparisons



Close correlation between simulation results & experimental results

Customer Comments

SC/Tetra accelerates the pump development processes in areas such as performance evaluation and visualization of internal flow. This results in a reduction in development time (25-65 %) and cost. In addition, engineers can be actively involved in the evaluation of the simulation results regardless of experience or skill level.