



# Database, Optimization and Engineering Services

## Built-in Database Support

Embedded database is a version-controlled central data storage placed on the network that facilitates the saving and reuse of design, test data, geometry models and UDFs across your organization.

- Any TurboTides objects (components, machine, curves, fluid models etc.) can be saved to the database and reloaded to the current designs.
- Object-oriented database records support complicated data structure from performance map to components, machines, geometry and flow models.
- Allow user to define any user record types and specify their behavior through scripting.
- Everything stored in the database is searchable, recoverable and reusable.

## Easy Optimization Setup

TurboTides built-in optimization capability allows users to conduct optimization at every stage of the design process.

- Optimizer can access any operating mode of TurboTides, including cycle, 1D, 2D, 3D CFD and 3D FEA separately or in combination.
- Multidisciplinary optimization and other complex optimization processes can be supported with TurboTides full support of scripting.

## Engineering Services

TurboTides offers complete engineering design services to our clients, which include:

- Aerodynamic/hydrodynamic design and analysis of compressors, turbines, pumps and fans.
- Structural analysis of rotor and other stationary components.
- Rotodynamic analysis for the rotating system.
- Mechanical design, CAD, and solid modeling.

