

Client Specific Propeller Design

CSPDP

Covering industrial design and selection processes

This program has been developed apply to client specifications and to fulfil the requirements of integration in industrial design and manufacturing processes. It offers the user a quick design and selection tool for three types of propellers: Open propellers, Nozzle propellers and Tunnel thrusters.

Geometrical options

This program is able to calculate a propeller with the optimum efficiency and offers the designer a lot of selections to adapt geometrical aspects like skew, rake and pitch distribution (within limits).

Pitch distribution can be modified to unload tip and/or hub by adapting the idea of virtual pitch. The user is supplied with several geometrical data required for classification calculations as described in the so called ABS rules.

Geometrical output for drawing and milling

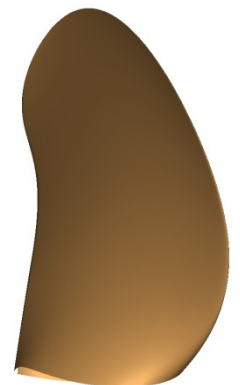
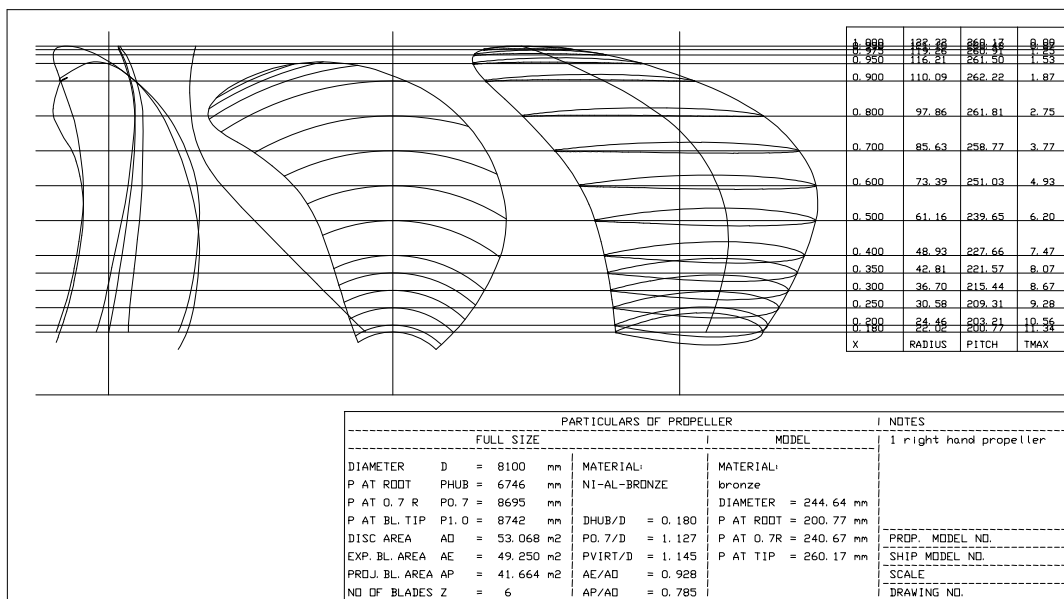
The resulting design is fully described in two ways: Standard Propeller File (2D) where the complete geometry is defined in tables and a 3D geometry file for fabrication processes. Both files are in ASCII format. The program also supplies the user with a script file to generate a propeller drawing with AUTOCAD (not part of this program).

The approach is founded on the direct use of several systematic MARIN propeller series. The Reynolds effect was assumed to be not useful due to uncertainty of the wake.

For more information please contact the department Maritime Simulation & Software Group;

T +31 317 49 32 37

E msg@marin.nl



Providing a script file for Autocad