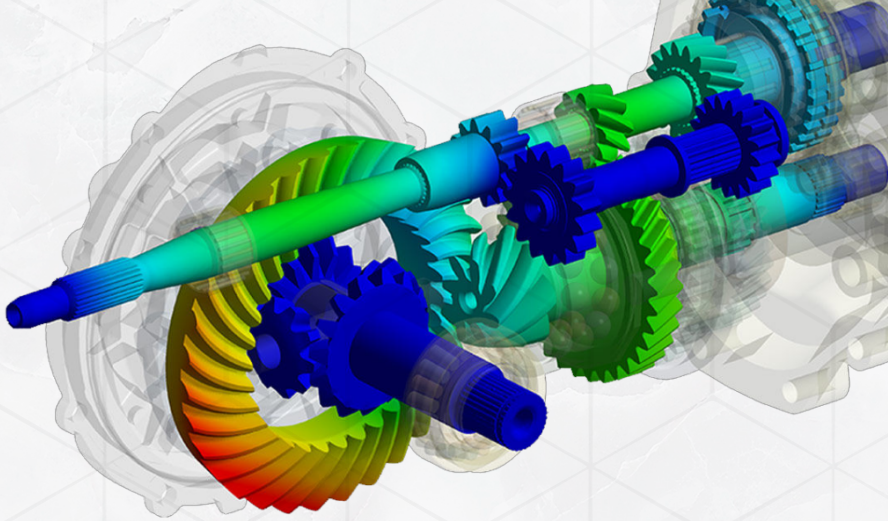

CASE STUDY

FLUIDCODES

SOFTWARE SUPPORT TRAINING CUSTOMIZATION

CONTACT OUR LOCAL OFFICES

UNITED ARAB EMIRATES	+971 4330 8666
SAUDI ARABIA	+966 13 8318182
EGYPT	+971 4330 8666
BULGARIA	+359 88 8813820
UNITED KINDOM	+44 20 3753 4607

sales@fluidcodes.com

consulting@fluidcodes.com

fluidcodes.com

FLUIDCODES

CASE STUDY

OCEAN OILFIELD DRILLING

BARGE STOP

CHALLENGES

The goals of this study were:
- To verify a new barge stopper designed to withstand the impact of the barge at 10 km/h
- To examine the dent in stopper due to impact
- To judge the strength of the steel to be used.

ENGINEERING SOLUTION

A 3D model of the stopper was created according to the 2D drawings provided. Nonlinear material properties for the stopper was used for the analysis. The simulation was performed with varying initial velocities. The contact forces and the stress distribution in the stopper plate were used to verify if the design could withstand loading conditions in the field.

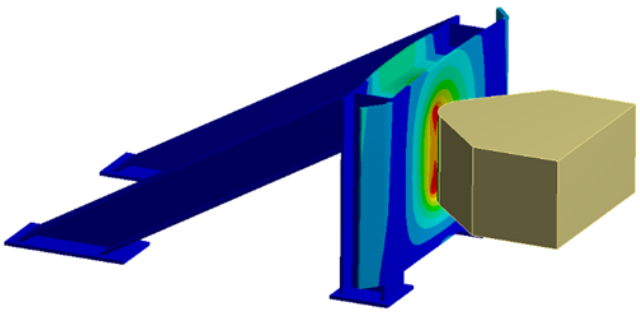

Figure 1. *Imported Pressure distribution from CFD*

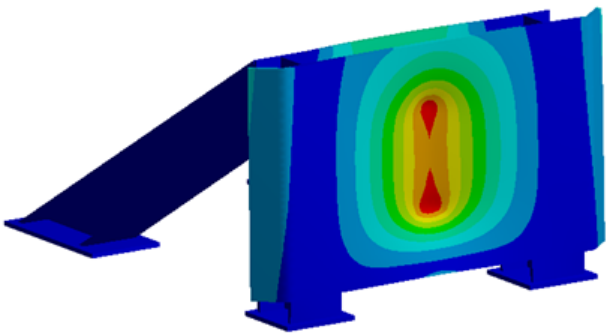

Figure 2. *Deformation plot of Rotor Blades*

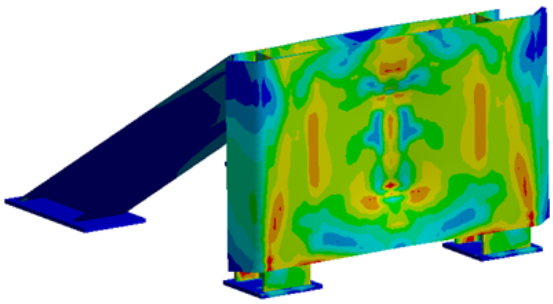

Figure 3. *Stress contour plot of Rotor Blades*