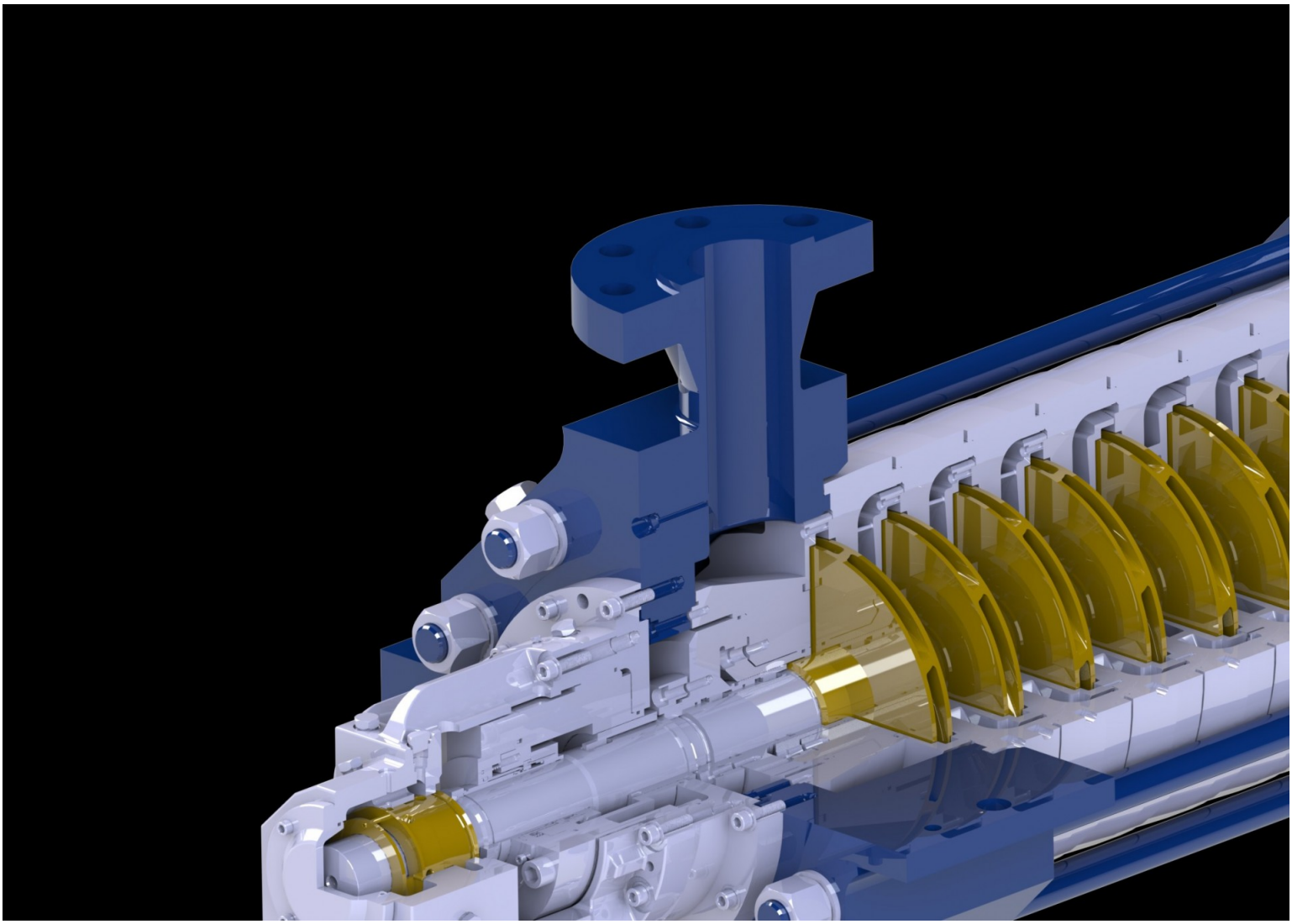
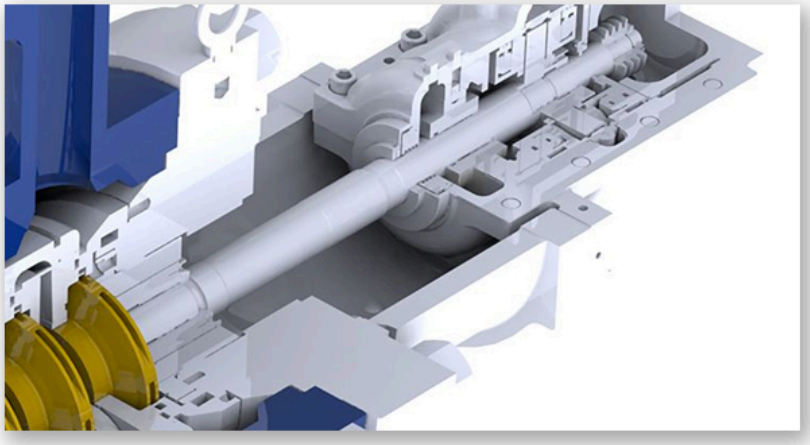
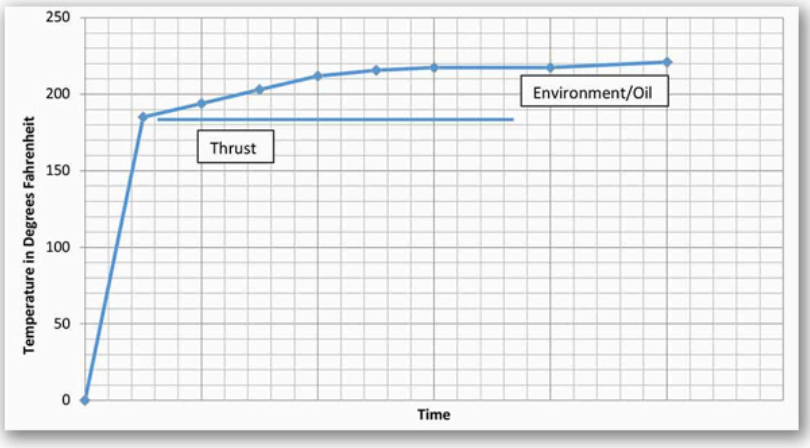
How to Diagnose Thrust Pad Failure





Many high-energy multistage machines use thrust compensation devices to limit the amount of axial thrust a bearing must accommodate.



The BB3-style machine (axially split pump) uses its opposed impeller construction to limit thrust, while a BB5 machine (radially split pump) uses a balance drum or disc arrangement to fix the issue.

At the higher end of the pump energy spectrum, despite the use of thrust-limiting devices, there is a need to employ a sleeve tilting pad thrust bearing and lubrication system to handle the axial thrust.

Source: https://www.pumpsandsystems.com/hidden-dangers-shaft-stiffness