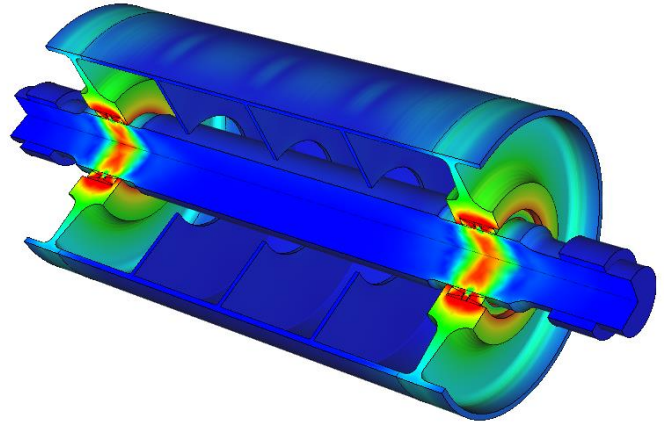# PAX — Pulley Analysis Software for Peace of Mind

The PAX software is a full 3D finite element software program for conveyor pulley analysis. AC-Tek's principle engineers have been preforming finite element analysis on conveyor pulleys for over 25 years. They have been involved with the design and optimization of some of the world's largest pulleys. Previously, detailed pulley analysis could only be done using complex and expensive finite element analysis software. Even then the effort, expertise, and time required to correctly model and interpret the results for a pulley was extensive.

For years AC-Tek has envisioned developing a fast, accurate, and easy to use software program for manufactures, conveyor designers, and end users. The PAX software is the result of that vision. As an add-on to our Sidewinder software, PAX contains a plethora of features covering almost any pulley design!

Key Features

- ✓ Optimized for conveyor pulley design
- ✓ Extremely fast & accurate 64 bit solver
- ✓ Detailed stress analysis
- ✓ Analysis of critical weld locations
- ✓ Locking device selection & verification
- ✓ Verify bending moment across locking device
- ✓ Verify pulley design at the engineering stage
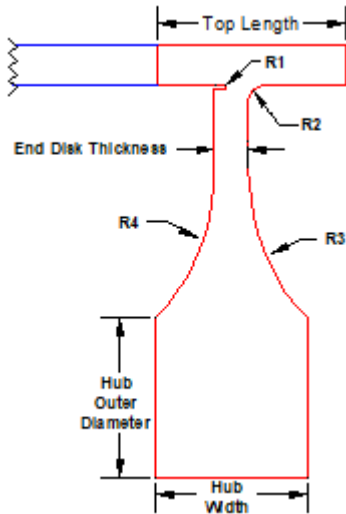- ✓ Shaft deflections and slopes

Accurately compare end disk and shell designs
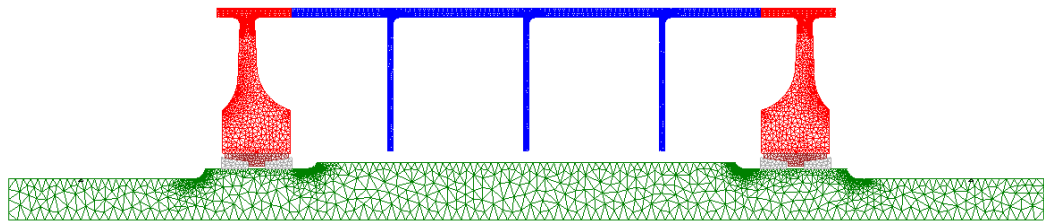
Over 20 end disk profiles to choose from

Easy Inputs & Auto Mesh Generation

- ✓ Fully parametric 3D models for easy user input
- ✓ Transfer design loads & geometries directly from Sidewinder
- ✓ Over 20 different end disk configurations
- ✓ Complete control over FEA meshing of critical areas
- ✓ Data for XT, B-LOC, BIKON, TAS, MAV, and others built in
- ✓ Overhung load calculations
- ✓ Quick summary grid highlighting results and problem areas
- ✓ Professional Microsoft Word editable output reports
- ✓ CAD exporting of pulley geometry and details

....and much more

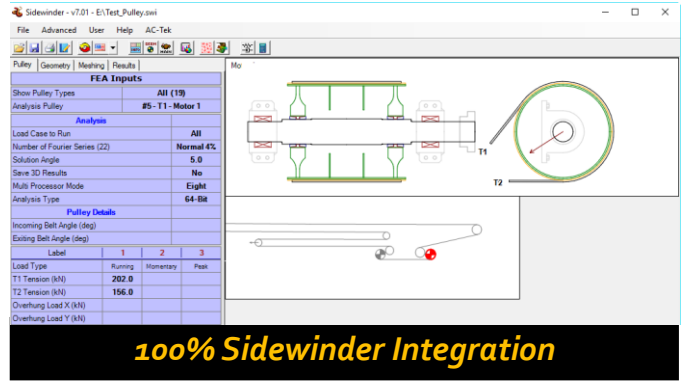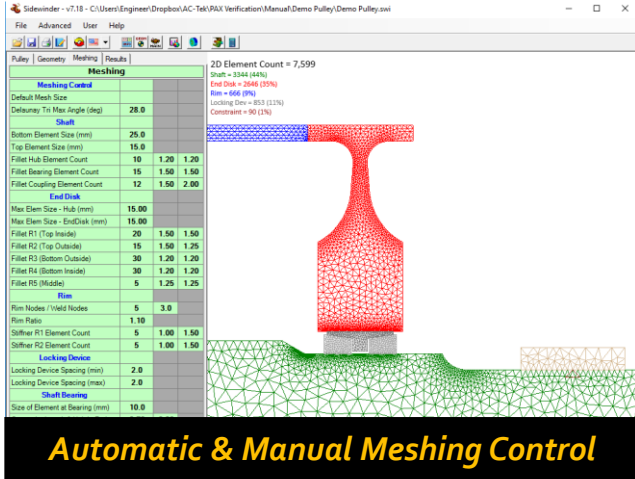*Complete control of mesh generation for all parts & weld locations*

www.actek.com

Advanced Conveyor Technologies, Inc.
19415 594th Avenue
Mankato, MN 56001 USA

AC·Tek
Advanced Conveyor Technologies

PAX
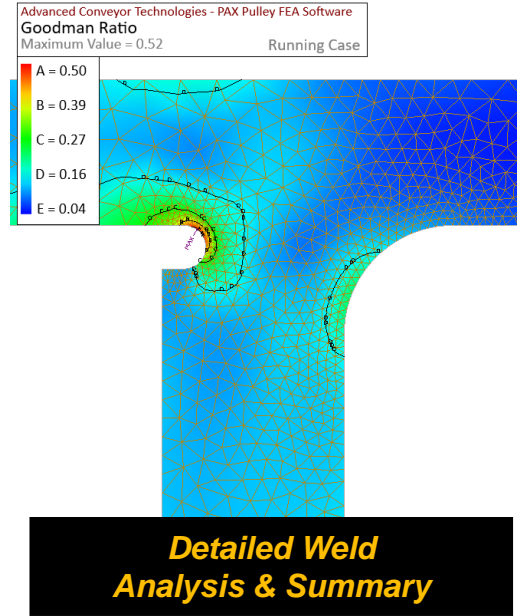# Pulley Analysis Software for Peace of Mind

Benefits
- ✓ Compare manufacture's designs
- ✓ Prevent costly failures & downtime
- ✓ Improve pulley life
- ✓ Peace of mind for pulley design

100% Sidewinder Integration

Automatic & Manual Meshing Control

Post-Processing
- ✓ Locking device analysis
- ✓ 3D Von Misses and other stress results
- ✓ Goodman & yield ratio analysis
- ✓ Summary of key areas and weld locations
- ✓ Animation of deflections and stresses
- ✓ Save individual pulleys or entire conveyors

PAX Software	Basic	Pro
Pricing (USD) ①		
Standalone User License	$ 3,495	$ 6,995
Network User License	-----	$ 8,495
Additional Network License②	-----	$ 2,495
Annual Maintenance Fee③	$ 695	$1,295
Features		
Full 3D FEA Solver	Yes	Yes
Sidewinder Integration	Yes	Yes
Full Locking Device Library	Yes	Yes
Automatic Shaft Sizing & Radii	Yes	Yes
Geometry		
Elements (Symmetric Pulleys)	3,000	20,000
Elements (Non-Symmetric Pulleys)	4,500	20,000
Automatic & Custom Meshing	Yes	Yes
Import External Profiles	No	Yes
Solver		
Multi-Core Processing Support	2	Up to 18
Solver	32-bit	32 / 64 bit
Post-Processing		
Summary Analysis & Word Reports	Yes	Yes
2D & 3D DirectX Graphics	Yes	Yes
Detailed Advanced Design Reports	No	Yes

① A valid Sidewinder license is required to purchase the PAX add-on
② Valid on the same network dongle with two or more Sidewinder licenses.
③ Annual maintenance for both PAX & Sidewinder is required for continued PAX use.

Detailed Weld Analysis & Summary

For more information visit
www.conveyorsoftware.net

Questions?
info@actek.com

Advanced Conveyor Technologies, Inc.
19415 594th Avenue
Mankato, MN 56001 USA

www.actek.com

AC·Tek
Advanced Conveyor Technologies