



### FEATURES

- *Available in one-piece, split two-piece or multi-segmented designs*
- *Replaceable rope groove lining systems in either polyurethane or steel segments*
- *All sheave weldments to be thermally stress-relieved prior to machining*
- *Sheave construction materials to be ultra-sonic inspected - 100% surface coverage*
- *All weld application to be NDE inspected using magnetic particle techniques*
- *Final paint coating application to consist of two-coat epoxy paint system over a sandblast prepared substrate.*

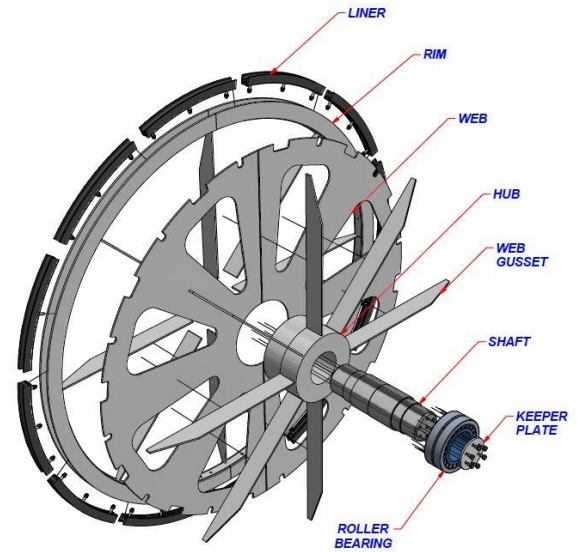


## DESIGNED FROM THE PEDESTAL UP

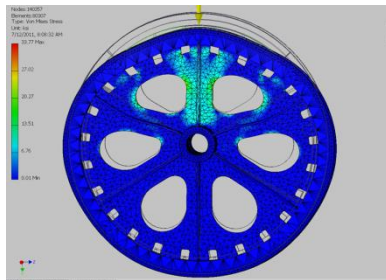
Wabi's Head Sheave design undergoes a thorough analysis using 3-D modelling and finite element analysis (FEA) software. Both product engineering and installation interface engineering are evaluated in Wabi's design process. Key areas of this analysis involve :

- FEA Modelling Under Hoist Rope Breaking Strength Load Equivalent
- L10 Bearing Life Analysis
- Fleet Angle Clearance Determination
- Shaft / Hub Press Fit Requirement
- Rope Groove Lining Compressive Strength Requirement
- Machining Tolerances on Rim Run-Out and Concentricity

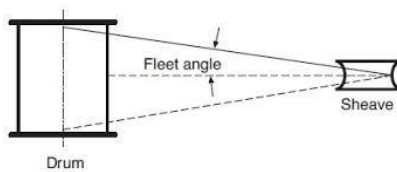
## SIMPLIFIED CONSTRUCTION



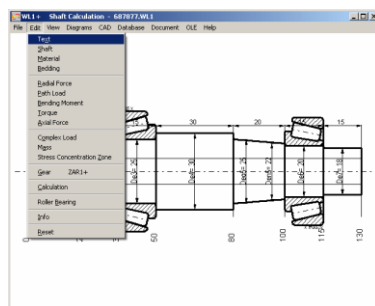
- FULL PENETRATION WELDS ON RIM
- SOLID HUB - CUT FROM ASTM A36 PLATE
- ASTM 4140 SHAFT
- ALL MATERIAL INSPECTED USING ULTRASONIC NDT TECHNIQUES - 100% COVERAGE



FEA Model Output



Hoist Rope Fleet Angle

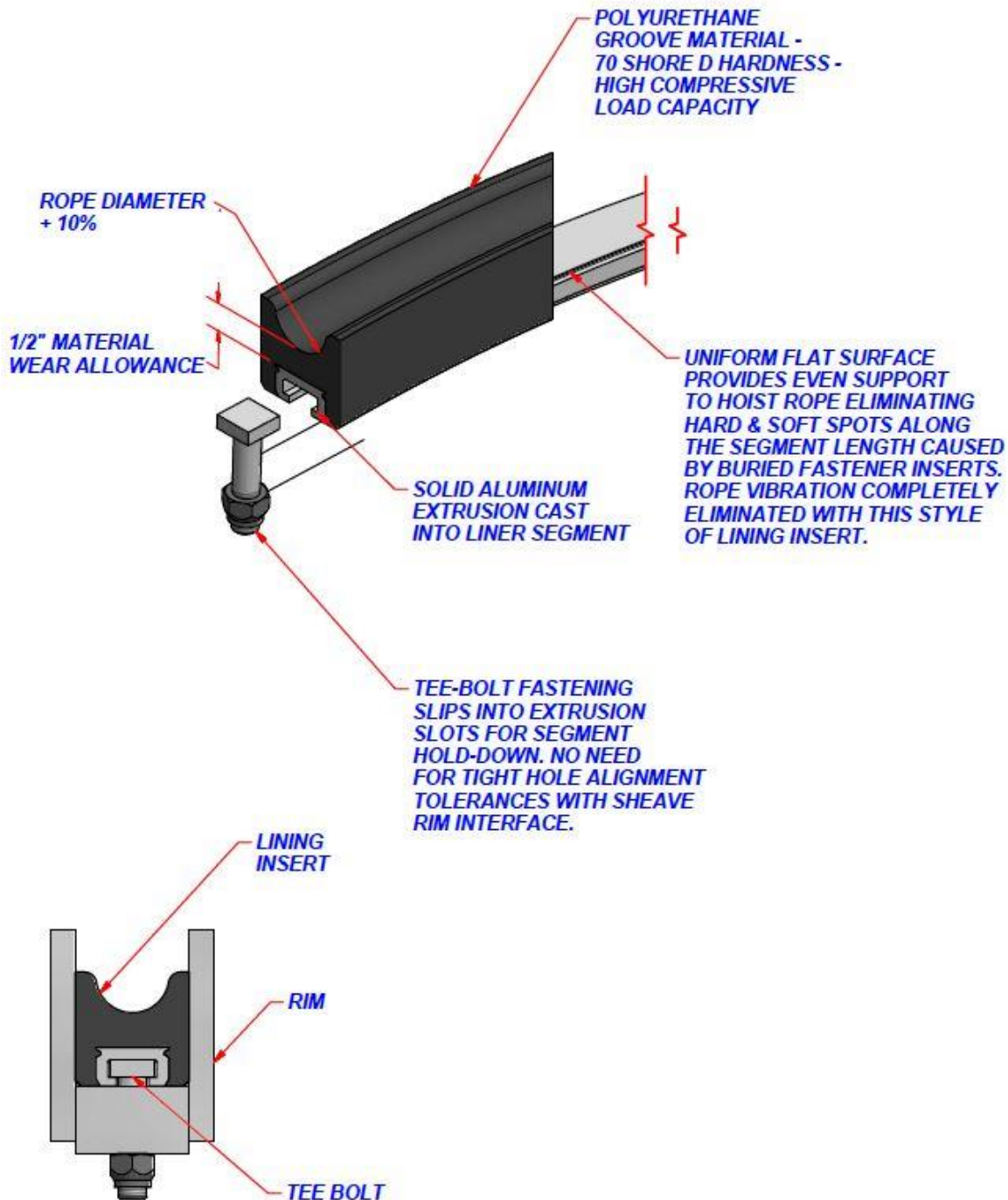


L10 Bearing Life Software

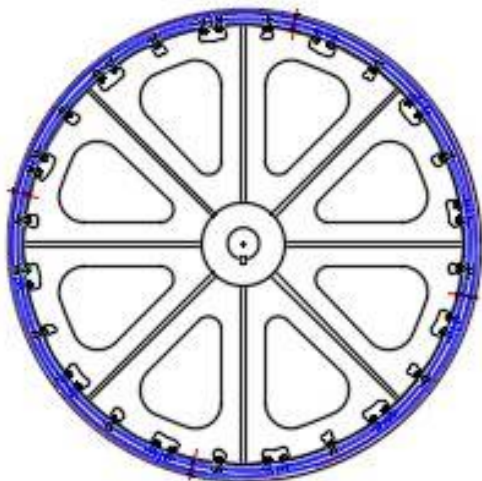


Split 2-Piece Sheave

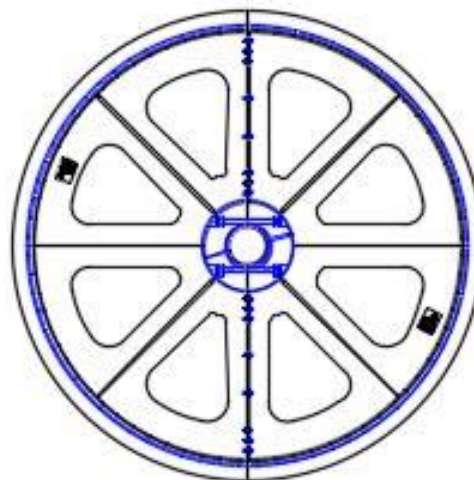
## VIBRATION ELIMINATING LINING



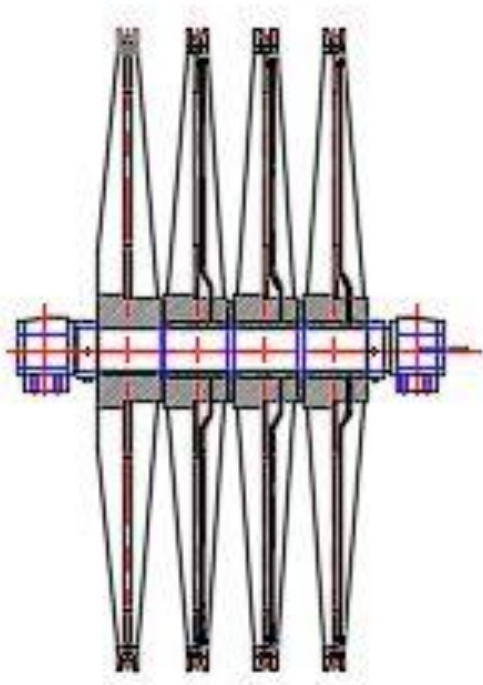
COMMONLY PRODUCED SHEAVE CONFIGURATIONS



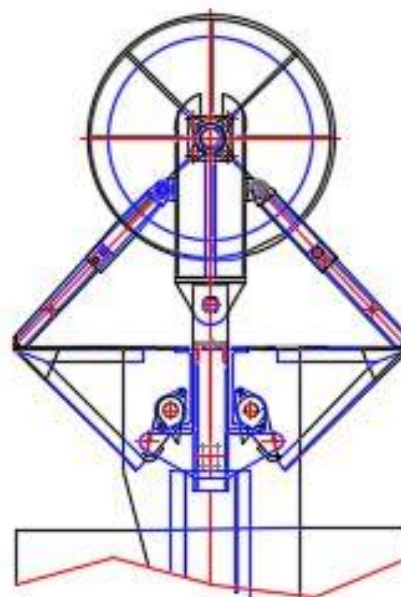
One-Piece Single Head Sheave



Split 2-Piece Single Head Sheave



Head Sheave or Deflector Sheave Bank  
One Piece or Split Design – Friction Hoist Application



"Doubling-Down" Sheave Arrangement  
Conveyance Mounted

