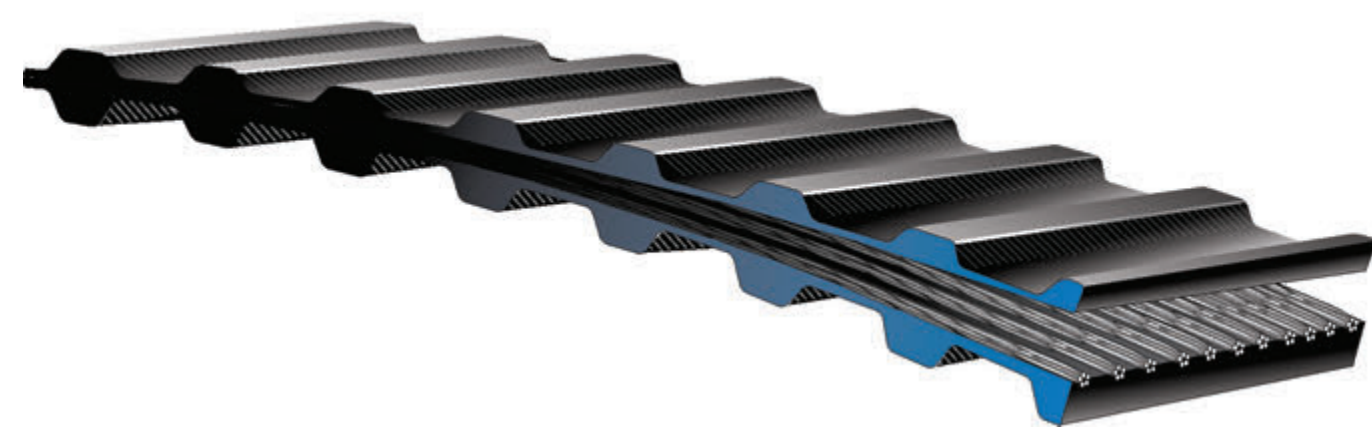




SYNCHRONOUS DRIVE FAILURE ANALYSIS

ACCURATELY IDENTIFY AND TROUBLESHOOT SYNCHRONOUS DRIVE PROBLEMS AND FAILURES.



1. DELAMINATION



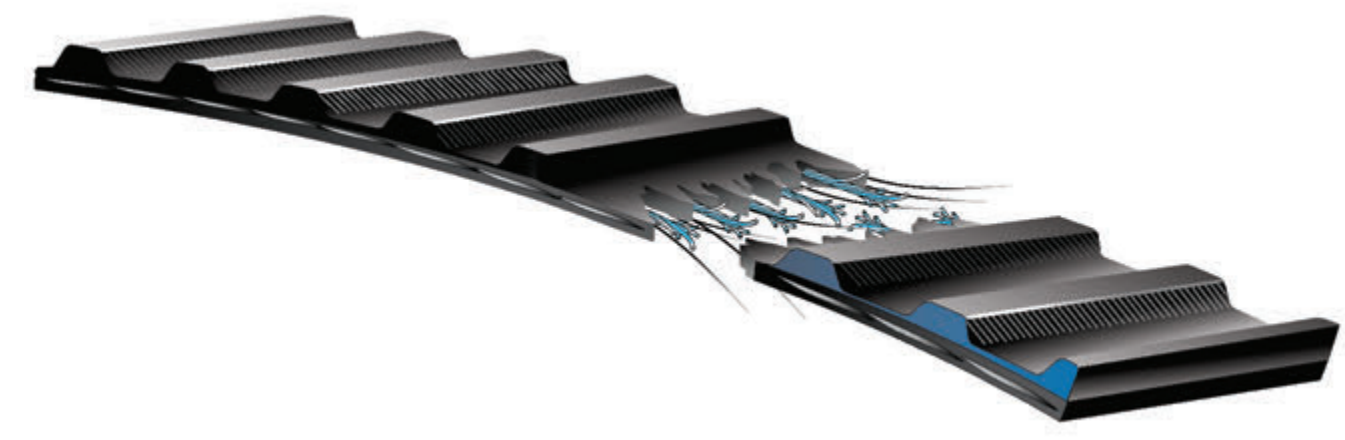
2. TRACKING



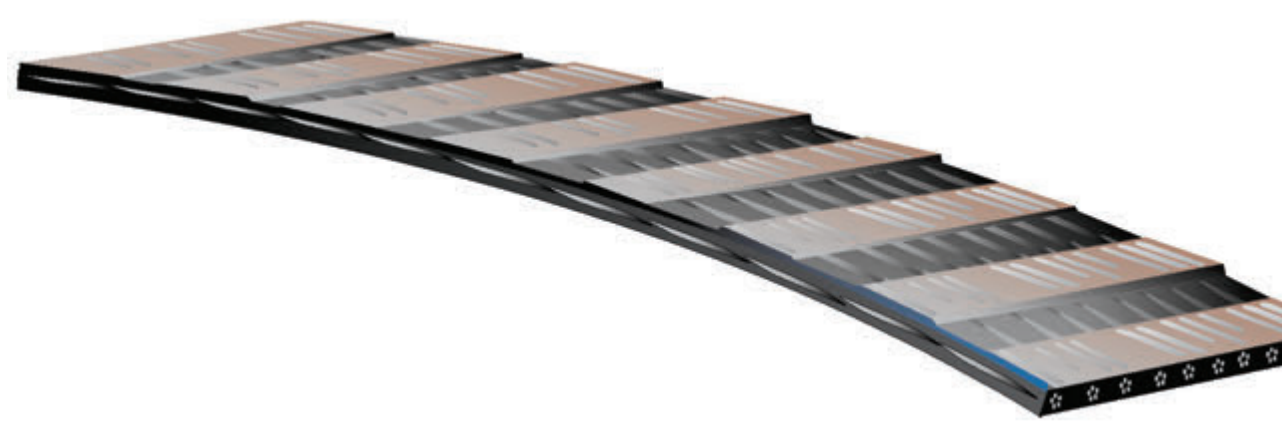
3. EXCESSIVE BELT EDGE WEAR



4. EXCESSIVE TOOTH WEAR



5. TENSILE BREAK



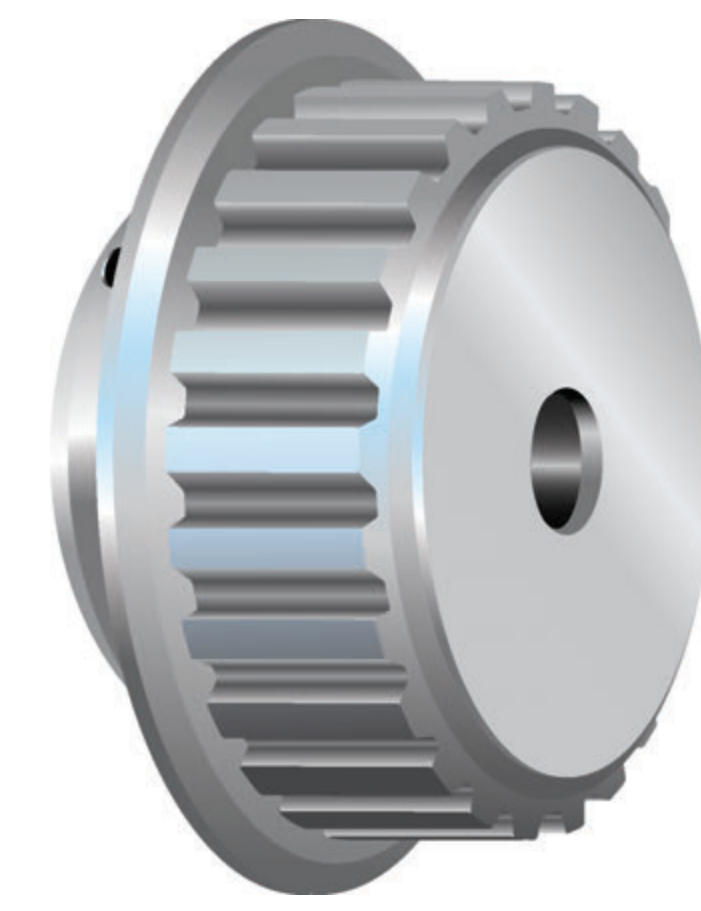
6. TOOTH SHEAR



7. LAND AREA WORN

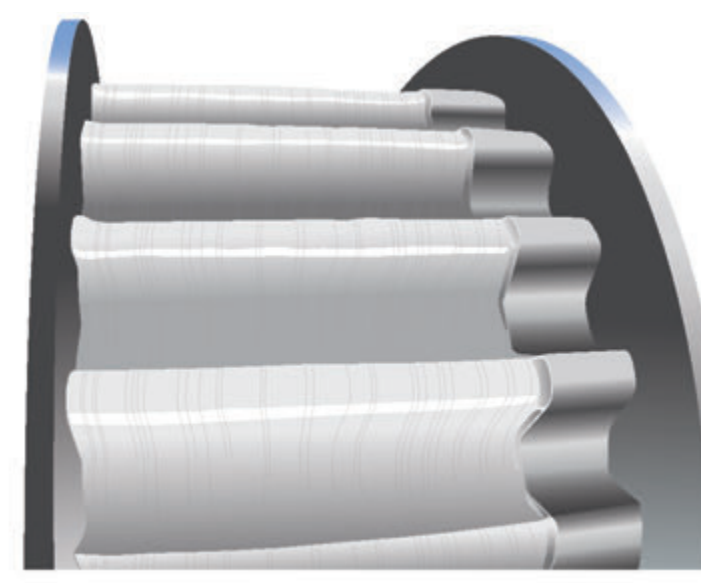


8. UNUSUALLY LOUD DRIVE



FLANGE FAILURE

Flanges can be forced off by belts due to drive misalignment or improper flange attachment. Realign the drive and replace the sprocket.



WORN SPROCKETS

Sprocket grooves wear due to length of service, misalignment, debris, drive overloading, or improper belt tensioning. If a ridge can be detected between the worn and unworn areas of the groove, the sprocket should be replaced.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1. DELAMINATION	<ol style="list-style-type: none"> Excessive shockload Less than 6 teeth in mesh Extreme sprocket run-out Worn sprockets Backside idler Incorrect sprocket groove profile Misaligned drive Belt undertensioned 	<ol style="list-style-type: none"> Redesign to manufacturer's recommendations Redesign drive to manufacturer's recommendations Replace sprocket Replace sprocket Use inside idler Use proper belt/sprocket combination Realign drive Retension to manufacturer's recommendations
2. TRACKING	<ol style="list-style-type: none"> Misaligned drive Center distance exceeds 8X small sprocket diameter 	<ol style="list-style-type: none"> Realign drive Redesign drive or realign existing drive
3. EXCESSIVE BELT EDGE WEAR	<ol style="list-style-type: none"> Misaligned belt drive Damage due to belt mishandling Flange damage Belt too wide for sprocket Rough flange surface finish Improper belt tracking Belt rubbing against guard or drive structure 	<ol style="list-style-type: none"> Realign drive. Follow proper handling instructions. Repair flange or replace sprocket. Use proper belt width for sprocket. Replace or repair flange. Realign drive. Remove obstruction or realign drive.
4. EXCESSIVE TOOTH WEAR	<ol style="list-style-type: none"> Belt tension too low or too high Belt running partly off unflanged sprocket Misaligned drive Incorrect belt/sprocket match Worn, rough, or damaged sprocket Belt rubbing against drive bracketry or other obstruction Excessive load 	<ol style="list-style-type: none"> Retension to manufacturer's recommendations Realign drive Realign drive Use proper belt/sprocket combination Replace sprocket Remove obstruction or alter belt path Redesign drive to manufacturer's recommendations

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
5. TENSILE BREAK	<ol style="list-style-type: none"> Crimp failure-improper belt handling and storage prior to installation Excessive shockload Sub-minimal diameter Debris or foreign object in drive Extreme sprocket run-out Too low or too high belt tension 	<ol style="list-style-type: none"> Follow proper handling and storage procedures Redesign drive to manufacturer's recommendations Redesign drive to use larger sprockets Protect drive Replace sprockets Retension to manufacturer's recommendations
6. TOOTH SHEAR	<ol style="list-style-type: none"> Excessive shockload Less than 6 teeth in mesh Extreme sprocket run-out Worn sprockets Backside idler Incorrect sprocket groove profile Misaligned drive Belt undertensioned 	<ol style="list-style-type: none"> Redesign drive to manufacturer's recommendations Redesign drive to manufacturer's recommendations Replace sprocket Replace sprocket Use inside idler Use proper belt/sprocket combination Realign drive Retension to manufacturer's recommendations
7. LAND AREA WORN	<ol style="list-style-type: none"> Excessive tension Excessive sprocket wear Debris in sprockets 	<ol style="list-style-type: none"> Retension to manufacturer's recommendations Replace sprocket Eliminate and guard against debris
8. UNUSUALLY LOUD DRIVE	<ol style="list-style-type: none"> Incorrect belt/sprocket match Incorrect tension Misaligned drive Worn sprockets Debris in sprockets 	<ol style="list-style-type: none"> Use proper belt/sprocket match Retension to manufacturer's recommendations Realign drive Replace sprockets Eliminate and guard against debris

PREVENTIVE MAINTENANCE TOOLS FOR EVERY APPLICATION



DOUBLE BARREL TENSION TESTER (30kg)

Product No. 74010075



SINGLE BARREL TENSION TESTER (15kg)

Product No. 74010076

550C SONIC TENSION METER

Product No. 74200550



BELT & PULLEY GAUGES

Product No. 74010015



EZ ALIGN™ GREEN LASER ALIGNMENT TOOL

Product No. 74203000