

FARRIS BELT & SAW

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"ALL PRODUCTS AND WORKMANSHIP GUARANTEED"

Band Saw Troubleshooting

Problem	Cause
PREMATURE AND EXCESSIVE TOOTH WEAR	<ul style="list-style-type: none">● Feed pressure too light, increase it● Lower band velocity● Insufficient coolant (apply at point of cut, saturate teeth and kerf evenly)● Improper coolant● Improper tooth selection,● Improper break-in with new band. Velocity and feeding should be reduced the first few cuts.● Teeth are running the wrong direction. Be sure teeth are pointing in proper direction.● Incorrect insert size for the band, allowing them to strike teeth
BLADE VIBRATION	<ul style="list-style-type: none">● Increase or decrease band velocity● Increase tension of band● Teeth too coarse for workpiece● Increase feed pressure● Material not securely vised● Use a Broach Tooth or Posi-Tooth blade
TOOTH STRIPPAGE	<ul style="list-style-type: none">● Teeth too coarse for workpiece● Material not securely vised● Improper coolant● Insufficient coolant● Too much feed pressure— reduce for good chip curl● Band velocity too low — increase speed● Gullets may be loading up — use higher viscosity lubricant or coolant
FINISHED CUT SURFACE TOO ROUGH	<ul style="list-style-type: none">● Improper tooth selection — choose a finer pitch● Increase band velocity● Decrease feed rate● Apply sufficient coolant
PREMATURE BLADE BREAKAGE	<ul style="list-style-type: none">● Thickness of blade too heavy for diameter of wheels and speed of machine● Increase or decrease velocity● Check wheels for defects● Teeth too coarse for workpiece — use a finer pitch● Decrease blade tension● Decrease feeding force● Brittle weld — increase annealing period, decreasing heat gradually● Check for proper adjustment of band guides, saw guide arms, saw guide inserts and back-up bearings● Apply sufficient coolant

BLADE MAKING BELLY-SHAPED CUTS	<ul style="list-style-type: none"> ● Increase tension ● Adjust guides closer to workpiece ● Teeth too fine — use a coarser pitch ● Decrease feed force
GULLETS LOADING	<ul style="list-style-type: none"> ● Teeth too fine for workpiece — use a coarser pitch ● Apply proper coolant or lubricant ● Decrease band velocity
BAND DEVELOPS A NEGATIVE CAMBER	<ul style="list-style-type: none"> ● Band is riding on saw guide backup bearing too heavily. Adjust band for alignment on top and bottom wheels. ● Check band wheel alignment
BLADE NOT RUNNING TRUE AGAINST SAW GUIDE BACKUP BEARING	<ul style="list-style-type: none"> ● If clicking noise against saw guide backup bearing, remove burr on band ● Check band wheel alignment ● Check saw guide backup bearing for wear, replace if necessary ● Weld not in proper alignment. Reweld blade straight and true.
CUTTING RATE TOO SLOW	<ul style="list-style-type: none"> ● Increase band velocity ● Increase feed pressure ● Use coarser pitch ● Apply proper coolant
BLADE LEADING IN CUT	<ul style="list-style-type: none"> ● Reduce feed pressure or rate ● Possible hard inclusion — use of cutting oil will help reduce leading ● Check adjustments and wear of saw guides or rollers, or chip brush. Brush may be worn or not properly adjusted.
PREMATURE LOSS OF SET	<ul style="list-style-type: none"> ● Improper width selection — check chart on page B-17 for correct width for radius cutting ● Reduce band velocity ● Introduce coolant
BAND DEVELOPS POSITIVE CAMBER	<ul style="list-style-type: none"> ● Decrease feeding force ● Use a coarser pitch to increase tooth penetration ● Adjust saw guides closer to work
BAND DEVELOPS TWIST	<ul style="list-style-type: none"> ● Wrong width for radius being cut — choose a narrower blade. ● Binding in cut — decrease feed pressure ● Decrease band tension ● Adjust saw guides further from workpiece
BAND STALLS IN WORK	<ul style="list-style-type: none"> ● Feed pressure too great — decrease feed ● Teeth too coarse, use finer tooth blade
BAND SQUEALS	<ul style="list-style-type: none"> ● Feed rate too low — increase ● Check coolant flow

CHIP WELDING	<ul style="list-style-type: none">● Decrease feed pressure● Use proper coolant● Adjust chip brush to remove chips from gullets● Use properly mixed coolant in sufficient amounts
BAND SCORING (Side Wear or Grooving)	<ul style="list-style-type: none">● Check for wear on saw guide inserts● Too much pressure on saw guide inserts● Check alignment of saw guides — be sure they are square to front vise. Replace or clean guides.
BURRING OR MUSHROOMING OF BLADE BACK EDGE	<ul style="list-style-type: none">● Increase tension and adjust guides● Check contact between blade and back edge rollers● Reduce feed pressure● Use coarser pitch blade