BLADE PROBLEM SOLVING

Problem	Problem Cause	Solution
Premature Blade Breakage Straight Break indicates fatigue	 Incorrect blade - teeth too coarse Blade tension too high Side guides too tight Damaged or misadjusted blade guides Excessive feed Incorrect cutting fluid Wheel diameter too small for blade Blade rubbing on wheel flanges Teeth in contact with work before starting saw Incorrect blade speed 	 Use finer tooth pitch Reduce blade tension (see machine manual) Check side guide clearance (see machine manual) Check all guides for alignment/damage Reduce feed pressure Check coolant Use thinner blade Adjust wheel alignment Allow 1/2" clearance before starting cut Increase or decrease blade speed
Premature Dulling of Teeth	 Teeth pointing in wrong direction / blade mounted backwards Improper or no blade break-in Hard spots in material Material work hardened Improper coolant Improper coolant concentration Speed too high Feed too light Teeth too small 	 Install blade correctly. If teeth are facing the wrong direction, flip blade inside out Break in blade properly (Page 17) Check for hardness or hard spots like scale or flame cut areas Increase feed pressure Check coolant type Check recommended blade speed (Page 24-25) Increase feed pressure Increase footh size
Material Material Inaccurate Cut	 Tooth set damage Excessive feed pressure Improper tooth size Cutting fluid not applied evenly Guides worn or loose Insufficient blade tension 	 Check for worn set on one side of blade Reduce feed pressure Check tooth size chart (Page 23) Check coolant nozzles Tighten or replace guides, check for proper alignment Adjust to recommended tension
Band Leading in Cut	 Over-feed Insufficient blade tension Tooth set damage Guide arms loose or set too far apart Chips not being cleaned from gullets Teeth too small 	 Reduce feed force Adjust recommended tension Check material for hard inclusions Position arms as close to work as possible. Tighten arms. Check chip brush Increase tooth size
Chip Welding	 Insufficient coolant flow Wrong coolant concentration Excessive speed and/or pressure Tooth size too small Chip brush not working 	 Check coolant level and flow Check coolant ratio Reduce speed and/or pressure Use coarser tooth pitch Repair or replace chip brush
Back of tooth indicates work spinning in clamps	 Incorrect speed and/or feed Incorrect blade pitch Saw guides not adjusted properly Chip brush not working Work spinning or moving in vise 	 Check cutting chart (Page 24-25) Check tooth size chart (Page 23) Adjust or replace saw guides Repair or replace chip brush Check bundle configuration/adjust vise pressure
Irregular Break Indicates material movement	Indexing out of sequenceMaterial loose in vice	Check proper machine movementCheck vise or clamp

BLADE PROBLEM SOLVING

Problem	Problem Cause	Solution
Teeth Stripping	 Feed pressure too high Tooth stuck in cut Improper or insufficient coolant Incorrect tooth size Hard spots in material Work spinning in vise - loose nest or bundle Blade speed too slow Blade teeth running backwards Chip brush not working 	 Reduce feed pressure Do not enter old cut with a new blade Check coolant flow and concentration Check tooth size chart (Page 23) Check material for hard inclusions Check clamping pressure - be sure work is held firmly Increase blade speed - see cutting chart (Page 24-25) Reverse blade (turn inside out) Repair or replace chip brush
Wear on Back of Blades	 Excessive feed pressure Insufficient blade tension Back-up guide roll frozen, damaged, or worn Blade rubbing on wheel flange 	 Decrease feed pressure Increase blade tension and readjust guides Repair or replace back-up roll or guide Adjust wheel cant
Rough Cut Washboard surface Vibration and or chatter	 Dull or damaged blade Incorrect speed or feed Insufficient blade support Incorrect tooth pitch Insufficient coolant 	 Replace with new blade Increase speed or decrease feed Move guide arms as close as possible to the work Use finer pitch blade Check coolant flow
Wear Lines, Loss of Set	 Saw guide inserts or wheel flange are riding on teeth Insufficient blade tension Hard spots in material Back-up guide worn 	 Check machine manual for correct blade width Tension blade properly Check material for inclusions Replace guide
Twisted Blade Profile sawing	 Blade binding in cut Side guides too tight Radius too small for blade width Work not firmly held Erratic coolant flow Excessive blade tension 	 Decrease feed pressure Adjust side guide gap Use narrower blade Check clamping pressure Check coolant nozzles Decrease blade tension
Blade Wear Teeth blued	Incorrect bladeIncorrect feed or speedImproper or insufficient coolant	 Use coarser tooth pitch Increase feed or decrease speed Check coolant flow