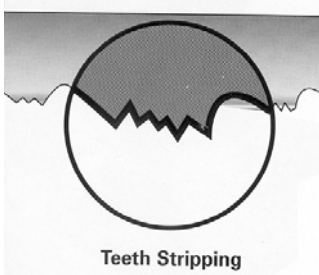
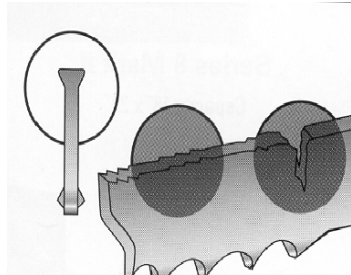
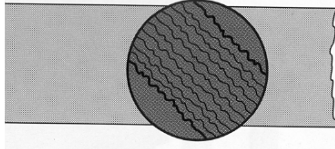
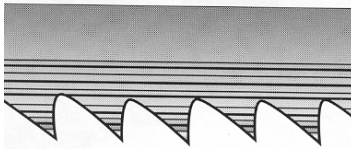


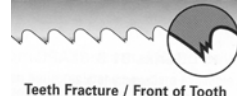


Trouble Shooting Band Saw Blades



| | <u>Probable Cause</u> | <u>Solution</u> |
|---|--|---|
| <p>Blade Breakage Straight Break Indicates Fatigue</p> | <ul style="list-style-type: none"> • Incorrect blade • Band tension too high • Excessive feed • Incorrect cutting fluid • Wheel diameter too small for blade being used • Worn or chipped back-up guide • Blade rubbing on wheel flanges • Teeth in contact with work before starting saw • Side Guides too light | <ul style="list-style-type: none"> • Teeth too coarse. Check Cutting Chart* • Reduce and tension. See Machine Operator's Manual • Reduce feed pressure • Check Coolant Table** • Use thinner blade and lower speed • Check pressure block. Replace if worn • Adjust wheel alignment • Allow 1/2" clearance before starting cut • See Operator's Manual |
| <p>Premature Dulling of Teeth</p> | <ul style="list-style-type: none"> • Blade teeth inverted (backwards) • Improper break-in periods • Hard spots in material (like scale) • Material work hardened (check for hardness and adjust feed) • Improper cutting fluid or mixture • Speed and feed too high | <ul style="list-style-type: none"> • Install blade correctly • Reduce feeds and speeds during break-in period in accordance with manufacturer's recommendations • Check material for actual hardness—hard spots like scale or flame cut surfaces • Increase feed pressure • Check Coolant Table** • Check cutting Chart* |
| <p>MATERIAL MATERIAL Inaccurate Cut</p> | <ul style="list-style-type: none"> • Teeth dull • Over or under feed • Improper pitch blade • Cutting fluid not applied evenly • Incorrect blade (too many teeth per inch) • Guides worn or loose | <ul style="list-style-type: none"> • Use new blade • Check Cutting Chart* • Check Cutting Chart* • Adjust coolant nozzles • Check Cutting Chart* • Tighten or replace guides |
| <p>Band Leading in Cut</p> | <ul style="list-style-type: none"> • Over feed • Lack of band tension • Tooth set damage • Loose guide arms or set too far from work | <ul style="list-style-type: none"> • Check Cutting Chart* • Check Operator's Manual for correct tension • Check material hardness • Adjust arm close to work at possible—tighten and align. Check Guide |
| <p>Chip Welding</p> | <ul style="list-style-type: none"> • Improper or lack of cutting fluid • Wrong coolant concentration • Excessive speed or pressure • Incorrect blade (wrong pitch) | <ul style="list-style-type: none"> • Check Coolant Table** • Check Coolant Table** • Reduce speed or pressure, Check Cutting Chart* • Check Cutting Chart* |
| <p>Teeth Fracture Back of Tooth (indicates work spinning in vise)</p> | <ul style="list-style-type: none"> • Incorrect feed and/or speed • Incorrect blade (wrong pitch) • Saw guides not adjusted properly | <ul style="list-style-type: none"> • Check Cutting Chart* • Check Cutting Chart* • Adjust or replace saw guides |
| <p>Irregular Break (indicates material movement)</p> | <ul style="list-style-type: none"> • Indexing out of sequence • Material loose in vise | <ul style="list-style-type: none"> • Check for correct indexing sequence (head rise) • Check hydraulic pressure |

| | <u>Probable Cause</u> | <u>Solution</u> |
|---|---|---|
|  <p>Teeth Stripping</p> | <ul style="list-style-type: none"> • Feed pressure too high • Tooth lodged in cut • No cutting fluid or incorrect coolant • Hard spots scale, inclusions, etc. • Incorrect blade (wrong pitch) • Work spinning in vise: loose "nest" or bundles • Blades teeth running backwards | <ul style="list-style-type: none"> • Reduce feed pressure see Cutting Chart* and or speed • Never enter same (old Blade) cut with new blade • Check Coolant Table** • Check hardness. Descale and or anneal if necessary • Check Cutting Chart* • Check Hydraulic pressure: be sure work is firmly held • Reverse blade teeth, turn inside out |
|  | <ul style="list-style-type: none"> • Insufficient blade tension • Incorrect blade (back too soft) • Incorrect feed (excessive) • Back-up guide frozen in position, damaged, or worn off • Guide arms too far apart, cocked, worn or loose • Blade rubbing on wheel flanges | <ul style="list-style-type: none"> • See Machine Operator's Manual for correct band tension • If using Hard Back Blade switch to Mix-Tooth • Reduce feed pressure see Cutting Chart* • Free pressure block and realign if worn replace (never regrind) • Move arms close to work as possible • Adjust wheel alignment |
|  <p>Rough Cut Washboard Surface Vibration and or Chatter</p> | <ul style="list-style-type: none"> • Dull or damaged blade • Incorrect feed and or speed • Lack of band support • Insufficient band tension • Incorrect pitch blade | <ul style="list-style-type: none"> • Replace with proper blade • Check Cutting Chart* Adjust until noise disappears • Set guide arm properly—close to work as possible • Check Operator's Manual for correct tensions • Check Cutting Chart* |
|  <p>Wear Lines, Loss of Set</p> | <ul style="list-style-type: none"> • Saw guide inserts or roller are riding on teeth • Insufficient blade tension • Incorrect blade (width of blade incorrect) • Hard spots • Back-up Guide worn | <ul style="list-style-type: none"> • Check table and Operator's manual for correct blade width • Check for correct blade tension • Check Cutting Chart* • Check material hardness • Replace |
|  <p>Twisted Blade Contour Sawing</p> | <ul style="list-style-type: none"> • Band binding in cut • Side guides adjusted too tight • Work not held firmly • Incorrect or lack of cutting fluid | <ul style="list-style-type: none"> • Check for over-feed, damage set, slight width blade for radii being cut • Set side guides properly • Check vise and hydraulics • Check Coolant Table** |
|  <p>Blade Wear / Teeth Blued</p> | <ul style="list-style-type: none"> • Incorrect blade • Incorrect feed or speed • Improper or lack of cutting fluid | <ul style="list-style-type: none"> • Check Cutting Chart* • Check Cutting Chart* • Check Coolant Table** |
|  <p>Teeth Fracture / Front of Tooth (indicates work spinning in vise)</p> | <ul style="list-style-type: none"> • Material loose in vise • Incorrect blade (wrong pitch) | <ul style="list-style-type: none"> • Check hydraulic pressure • Check Cutting Chart* |