## TROUBLESHOOTING CHART - BAND SAW BLADES

For metal and/or wood cutting bandsaws

<table>
<thead>
<tr>
<th>Blade Effect</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
</table>
| **PREMATURE BLADE BREAKAGE** | Incorrect Blade  
Band tension too high  
Excessive feed  
Incorrect cutting fluid  
Wheel diameter too small for blade width  
Worn or chipped pressure block  
Blade rubbing on wheel flange  
Teeth in contact with work before starting saw  
Side guides too tight | Check tooth selection  
Reduce band tension,  
Reduce feed pressure  
Check coolant recommendations  
Use narrower blade  
Replace worn pressure blocks  
Adjust wheel alignment  
Allow blade clearance above work  
Refer to operators manual |
| **PREMATURE DULLING OF TEETH** | Blade on machine backwards  
Improper blade break-in procedure  
Hard material or heavy surface scale  
Material is work hardening  
Improper cutting fluid or mix ratio  
Speed or feed too high | Install blade correctly  
Refer to recommended procedures  
Check material hardness/surface cond.  
Increase feed pressure  
Follow coolant mixing procedures  
Check cutting recommendations |
| **INACCURATE UNMATCHING CUT** | Guide arms too far apart  
Blade worn out  
Over or under feeding  
Improper tooth pitch  
Curing fluid not applied properly  
Too many teeth for material cross section  
Guides worn or loose | Adjust guide arms closer to material  
Replace blade  
Check cutting recommendations  
Use proper tooth selection  
Adjust coolant nozzles  
Use proper tooth selection  
Tighten or replace guides |
| **BAND IS LEADING IN THE CUT** | Over feeding  
Low band tension  
Tooth set damaged  
Guide arms loose or space too wide | Check cutting recommendations  
Refer to operators manual  
Check material hardness  
Adjust guides and guide arms |
| **METAL CHIP WELDING TO BLADE** | Worn or missing chip brush  
Improper or lack of cutting fluid  
Wrong coolant ratio  
Excessive feed or speed  
Incorrect blade pitch | Replace or adjust chip brush  
Check coolant flow and fluid type  
Check coolant type and ratio  
Reduce feed or speed  
Use proper tooth selection |
<table>
<thead>
<tr>
<th>Blade Effect</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
</table>
| **IRREGULAR BREAK** | Indexing while blade in work  
Blade not high enough before index  
Saw head drifts into work while neutral | Adjust index sequence  
Adjust height selector  
Check hydraulic cylinder |
| **TEETH ARE STRIPPING OFF BAND** | Improper blade break-in procedure  
Speed too slow  
Feed pressure to high  
Tooth jammed in cut  
Poor cutting fluid application or ratio  
Hard material or heavy scale  
Wrong blade pitch  
Work spinning or loose nested bundles  
Blade on backwards | Follow proper break-in procedure  
Refer to cutting recommendations  
Reduce feed pressure  
Do not enter new blade in that cut  
Adjust coolant flow and ration  
Check material or surface hardness  
Use proper tooth selection  
Tighten vises or use nesting clamps  
Install blade correctly |
| **TEETH FRACTURE** | Saw guides not properly adjusted  
Incorrect feed or speed  
Incorrect blade  
Material moved in vise | Align or adjust saw guides  
Refer to cutting recommendations  
Use proper blade type and pitch  
Inspect and adjust vises |
| **WEAR ON THE BACK EDGE OF BLADE** | Excessive back-up guide preload  
Low blade tension  
Incorrect blade (carbon steel type)  
Excessive feed rate or pressure  
Damaged or worn pressure block  
Guide arms spaced too far apart  
Blade rubbing band wheel flanges | Adjust pressure blocks  
Refer to operators manual  
Switch to a Bimetal blade  
Reduce feed rate or pressure  
Replace pressure block  
Adjust guide arms closer to work  
Adjust wheel alignment |
| **ROUGH CUT** | Dull or damaged blade  
Incorrect feed or speed  
Blade not supported properly  
Low blade tension  
Incorrect tooth pitch  
Guide arms too far apart | Install new blade  
Refer to cutting recommendations  
Adjust or tighten guide arms  
Refer to operators manual  
Use proper tooth selection  
Adjust guide arms closer to material |
| **WEAR LINES, LOSS OF SET** | Saw side guides too tight  
Blade riding too high in guide  
Blade teeth riding on band wheel surface  
Wrong blade width for machine  
Chips be carried back into cut  
Worn or damaged pressure block  
Insufficient coolant flow | Adjust guides properly  
Adjust rollers or pressure blocks  
Adjust tracking or replace wheel  
Refer to operators manual  
Replace or adjust chip brush  
Replace pressure block  
Adjust coolant flow |
<table>
<thead>
<tr>
<th>Blade Effect</th>
<th>Probable Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TWISTED BLADE</strong></td>
<td>Blade binding in cut</td>
<td>Adjust feed or use heavy set blades</td>
</tr>
<tr>
<td></td>
<td>Side guides are too tight</td>
<td>Adjust guides</td>
</tr>
<tr>
<td></td>
<td>Work loose in vise</td>
<td>Adjust vises</td>
</tr>
<tr>
<td></td>
<td>Feed to heavy</td>
<td>Reduce feed pressure</td>
</tr>
<tr>
<td></td>
<td>Guide arms too far apart</td>
<td>Adjust guide arms closer to material</td>
</tr>
<tr>
<td><strong>Profile Sawing.</strong></td>
<td><strong>BLADE WEAR</strong></td>
<td><strong>Teeth are Blued.</strong></td>
</tr>
<tr>
<td></td>
<td>Incorrect blade</td>
<td>Use proper tooth selection</td>
</tr>
<tr>
<td></td>
<td>Heavy feed or too fast speed</td>
<td>Adjust coolant flow or ratio</td>
</tr>
<tr>
<td></td>
<td>Lack of cutting fluid</td>
<td>Install blade correctly</td>
</tr>
<tr>
<td></td>
<td>Blade installed backwards</td>
<td></td>
</tr>
</tbody>
</table>