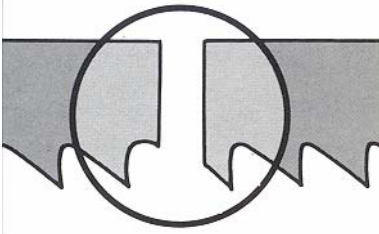
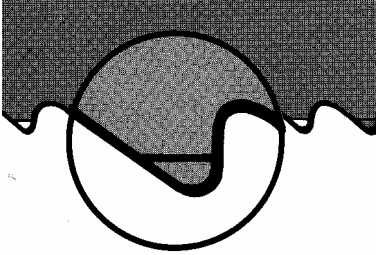
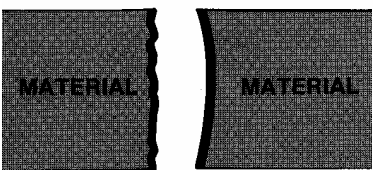
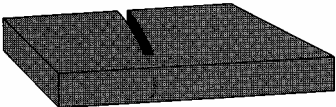

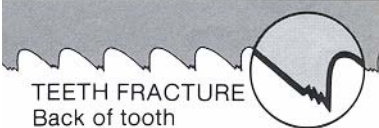
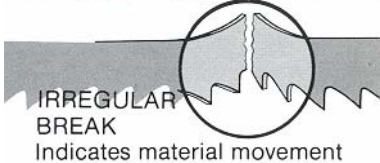
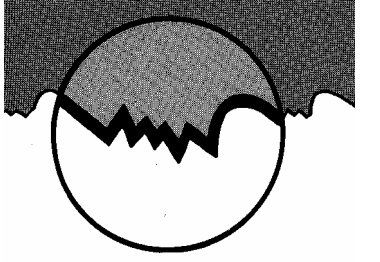
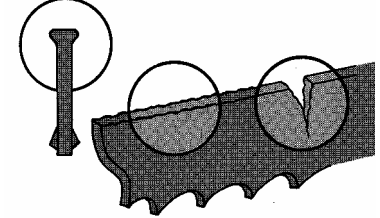
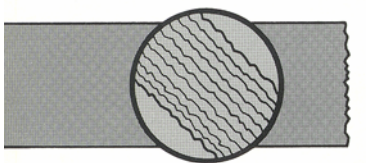
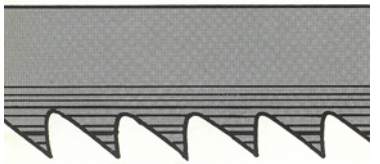


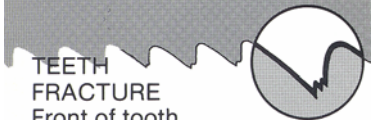


Band Saw Trouble Shooting Chart

The members of the North American Sawing Association (NASA) recognize that a band saw machine and band saw blade need to be properly matched to achieve peak performance. The majority of band sawing difficulty is caused by misapplication due to incorrect feed, speed, cutting fluid ratio, tooth selection and machine repair. It is important for saw blade users to continually train their operators and seek the latest in sawing technical data and utilize preventive maintenance to ensure a cost effective cutting application.

Blade Effect	Probable Cause	Solution
 <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 width • Worn or chipped pressure block • Blade rubbing on wheel flange • Teeth in contact with work before starting saw • Side guides too tight 	<ul style="list-style-type: none"> • Check tooth selection • Reduce band tension, refer to operators manual • 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
 <p>PREMATURE DULLING OF TEETH</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Install blade correctly • Refer to recommended procedures • Check material hardness and surface condition • Increase feed pressure • Follow coolant mixing procedures • Check cutting recommendations
 <p>INACCURATE CUT</p>	<ul style="list-style-type: none"> • Guide arms too far apart • Blade worn out • Over or under feeding • Improper tooth pitch • Cutting fluid not applied properly • Too many teeth for material cross section • Guides worn or loose 	<ul style="list-style-type: none"> • 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
 <p>BAND LEADING IN CUT</p>	<ul style="list-style-type: none"> • Over feeding • Low band tension • Tooth set damaged • Guide arms loose or space too wide 	<ul style="list-style-type: none"> • Check cutting recommendations • Refer to operators manual • Check material hardness • Adjust guides and guide arms
 <p>CHIP WELDING</p>	<ul style="list-style-type: none"> • Worn or missing chip brush • Improper or lack of cutting fluid • Wrong coolant ratio • Excessive feed or speed • Incorrect blade pitch 	<ul style="list-style-type: none"> • Replace or adjust chip brush • Check coolant flow and fluid type • Check coolant type and ratio • Reduce feed or speed • Use proper tooth selection
 <p>TEETH FRACTURE Back of tooth indicates work spinning in vise</p>	<ul style="list-style-type: none"> • Saw guides not properly adjusted • Incorrect feed or speed • Incorrect blade • Material moved in vise 	<ul style="list-style-type: none"> • Align or adjust saw guides • Refer to cutting recommendations • Use proper blade type and pitch • Inspect and adjust vises

Blade Effect	Probable Cause	Solution
 <p>IRREGULAR BREAK Indicates material movement</p>	<ul style="list-style-type: none"> • Indexing while blade in work • Blade not high enough before index • Saw head drifts into work while neutral 	<ul style="list-style-type: none"> • Adjust index sequence • Adjust height selector • Check hydraulic cylinder
 <p>TEETH STRIPPING</p>	<ul style="list-style-type: none"> • Improper blade break-in procedure • Speed too slow • Feed pressure too 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 	<ul style="list-style-type: none"> • 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
 <p>WEAR ON BACK OF BLADES</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
 <p>ROUGH CUT washboard surface Vibration and or chatter</p>	<ul style="list-style-type: none"> • Dull or damaged blade • Incorrect feed or speed • Blade not supported properly • Low blade tension • Incorrect tooth pitch • Guide arms too far apart 	<ul style="list-style-type: none"> • 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
 <p>WEAR LINES, LOSS OF SET</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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
 <p>TWISTED BLADE Contour sawing</p>	<ul style="list-style-type: none"> • Blade binding in cut • Side guides are too tight • Work loose in vise • Feed too heavy • Guide arms too far apart 	<ul style="list-style-type: none"> • Adjust feed or use heavy set blades • Adjust guides • Adjust vises • Reduce feed pressure • Adjust guide arms closer to material
 <p>BLADE WEAR Teeth blued</p>	<ul style="list-style-type: none"> • Incorrect blade • Heavy feed or too fast speed • Lack of cutting fluid • Blade installed backwards 	<ul style="list-style-type: none"> • Use proper tooth selection • Refer to cutting recommendations • Adjust coolant flow or ratio • Install blade correctly
 <p>TEETH FRACTURE Front of tooth indicates work spinning in vise</p>	<ul style="list-style-type: none"> • Material loose in vise • Incorrect tooth pitch • Feed too fast • Speed too fast 	<ul style="list-style-type: none"> • Adjust vises • Use proper tooth selection • Reduce feed rate • Refer to cutting recommendations