

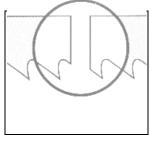
MZ SERIES BANDSAW BLADE - SOLVING PROBLEMS

There are many variables that can influence the successful operation of your MZ Series Bandsaw. Cutting operations can be short-circuited by: broken teeth, stripped teeth, broken blades, dulled blades, chips welding in the gullets, blade hang-ups or the MZ Series Bandsaw stopping altogether. Generally it's considered to be the fault of the machine; after all it's the machine that stops production, RIGHT! Not necessarily! It's the whole process that **STOPS.**

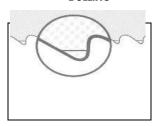
Your MZ Series Bandsaw, the blade and the operator work together as a production system to make sure you achieve clean, efficient, profitable cuts. When something happens - it's often not the machine. That's why we offer this guide - so that you can better identify a problem and determine what might have caused it. In many cases, the problem can be solved by making minor adjustments to blade speed or blade feed pressure. Sometimes the wrong type of coolant or coolant with the wrong concentration is the culprit. More often than not the blade pitch is incorrect for the material size or shape.

PROBLEM

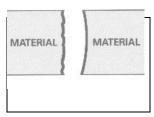
BLADE **BREAKAGE**



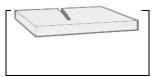
PREMATURE DULLING



INACCURATE CUT



BAND LEADING IN CUT



PROBABLE CAUSE

Incorrect blade - Teeth too coarse. Band Tension too high. Excessive feed. Incorrect cutting fluid.

Wheel diameter too small for blade width. Blade rubbing on wheel flanges. Teeth in contact with work before starting SQW.

Guides too tight.

Use finer tooth pitch. Reduce band tension, (See Manual). Reduce feed pressure.

Check coolant.

Use thinner blade and lower blade speed. Adjust wheel alignment (See Manual). Allow 1/2" clearance before starting cut. See machine manual.

SOLUTION

Blade teeth backwards.

Improper break-in.

Hard spots in material.

Material work hardened - adjust feed.

Improper cutting fluid or mixture.

Speed and feed too high.

Install blade correctly.

Reduce feed during break-in.

Check material hardness or scale.

Increase feed pressure.

Check coolant.

Check blade supplier speed chart.

Teeth dull.

Over or under feed.

Improper tooth pitch.

Cutting fluid not applied evenly.

Incorrect tooth selection.

Guides worn or loose.

Use new blade.

Adjust feed pressure accordingly.

Check blade supplier recommendations.

Adjust coolant nozzles.

Lower the number of teeth.

Tighten or replace guides.

Over feed.

Not enough band tension.

Tooth set damage.

Guide arms loose or set too far apart.

Lower feed pressure.

Check manual and increase band tension.

Check material hardness.

Adjust guide arms as close as possible.

CHIP WELDING



Improper or not enough coolant. Wrong coolant concentration.

Excessive blade speed or feed pressure. Wrong tooth pitch.

Defective or worn chip brush.

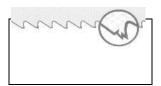
Check coolant.

Check coolant.

Reduce speed or feed pressure.

Check with blade supplier. Replace chip brush.

TEETHFRACTURE

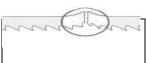


Incorrect speed and/or pressure. Incorrect tooth pitch.

Blade guides not adjusted properly. Chip brush defective.

Lower band speed or feed. Check with blade supplier. Adjust or replace saw guides. Replace chip brush.

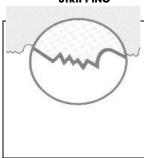
IRREGULAR BREAK



Indexing out of sequence. Material loose in vise.

Check for correct indexing sequence. Check vise holding pressure.

TEETH **STRIPPING**



Feed pressure too high.

Tooth stuck in cut.

Not enough or incorrect coolant.

Hard spots, scale, inclusions etc.

Wrong tooth pitch.

Work spinning in vise. Loose bundles.

Incorrect break-in.

Blade teeth running backwards.

Defective or worn chip brush.

Reduce feed pressure.

Never enter unfinished cut with new blade.

Check coolant.

Check hardness of material. Remove scale.

Check with blade supplier.

Check vise pressure. Tack weld ends of

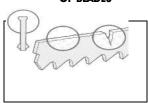
bundles.

Use proper break-in procedures.

Reverse blade, turn blade inside-out.

Replace chip brush.

WEAR ON BACK OF BLADES



Not enough blade tension. Incorrect feed pressure. Back-up guide seized.

Guide arms too far apart.

Blade rubbing on wheel flanges.

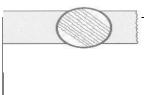
See manual for correct band tension. Reduce feed pressure.

Replace back-up guide.

Move guide arms closer to work.

Adjust wheel alignment.

ROUGH CUT



Dull or damaged blade.

Incorrect feed or speed.

Guide arms too far apart.

Not enough band tension.

Incorrect tooth pitch.

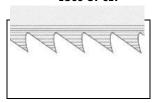
Replace with new blade.

Adjust to reduce vibration and noise.

Set guide arms as close to work as possible.

See manual for correct tension procedures. Check with blade supplier.

WEAR LINES LOSS OF SET



Saw guide bearings or carbides are riding on teeth.

Not enough band tension. Hard spots in material.

Back-up guide worn.

Check manual for correct width of blade.

See manual for correct tension procedures. Check material hardness.

Replace back-up bearings.

TWISTED BLADE



Side guides adjusted too tight. Work not held properly in vise. Incorrect or not enough coolant.

Band sticking in cut.

Check for over feed or damaged blade set. Adjust side guides as per manual. Check vise pressure. Check coolant.

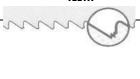
BLADE WEAR (TEETH BLUED)



Incorrect blade. Incorrect feed or speed. Improper or not enough coolant.

Check with blade supplier. Decrease blade speed and feed. Check coolant.

BROKEN TEETH



Material loose in vise. Incorrect blade (wrong pitch). Check vise pressure.

Check with blade supplier.