



**CUTTING & GRINDING
SOLUTIONS**

The following is a guide for solving the problems which most commonly occur when using cutting and grinding wheels.

This guide helps you to identify problems, define the causes and find solutions.

Before operation, carefully read the instructions for safe work, which are enclosed in the packaging, and information printed on the product label.



Read the instructions



Wear eye protection



Wear hearing protection



Wear gloves



Wear a respirator



SHORT LIFE

CUTTING



Cutting without movement

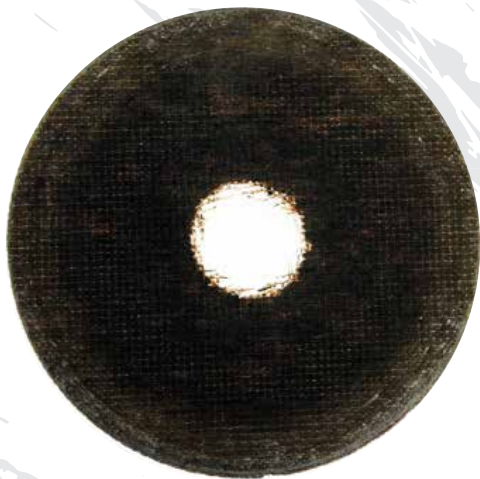


Vibrations

Cause	Solution
Excessive force	Cut with lower force
Cutting too deep	Use only as much wheel as necessary
Expiry date has passed	Replace the wheel
Inappropriate storage	Ensure proper storage
RPM too low; drop in RPM too big	Cut under higher revolutions (max. 80m/s), use a stronger machine, do not use force
Product too soft	Use a harder product



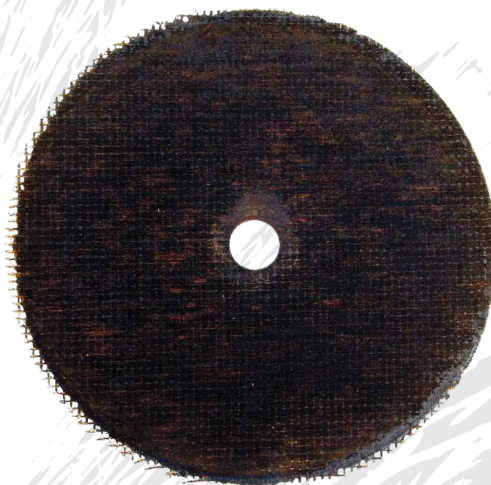
RIPPED OUT FLANGE



CUTTING

DAMAGED EDGES

CUTTING



Cause	Solution
Excessive force	Use a thicker wheel
Side load capacity	Use additional reinforced product 2x2, cut at an angle of 90°
Workpiece not properly clamped	Properly clamp workpiece
Product stuck in the workpiece	Use movement while cutting
Clamping flanges (top, bottom) with different diameter	Use flanges with the same diameter

Cause	Solution
Vibrations – workpiece not properly clamped	Properly clamp product or workpiece
Vibrations – cutting far from clamping area	Cut close to clamping area
Grinding with cutting wheel	Use grinding wheel for grinding
Excessive lateral load	Cut at an angle of 90°

CUTTING TOOL EDGE BURNT



CUTTING

PRODUCT BREAKAGE

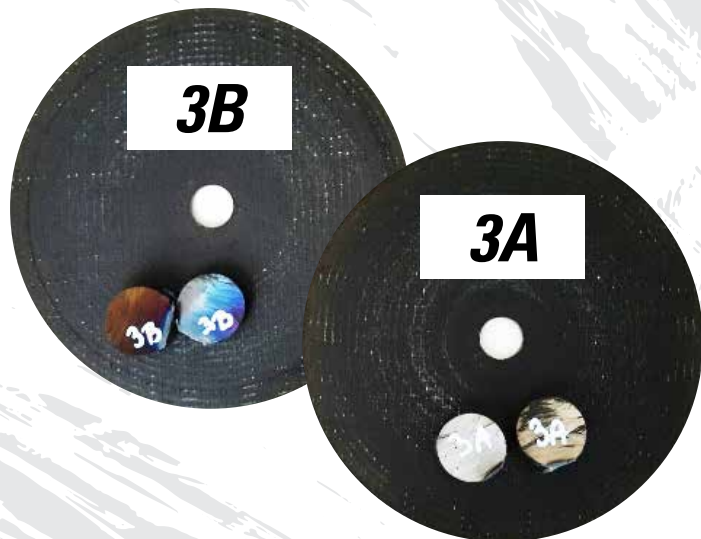
CUTTING



Cause	Solution
Product too hard	Use a softer product
Too little movement or too much pressure during cutting	Ensure more movement, decrease pressure

Cause	Solution
Excessive lateral pressure	Cut at an angle of 90°
Cutting wheel used for grinding	Use a product for cutting and grinding 2x2
Workpiece not properly clamped	Properly clamp workpiece
Product stuck in the workpiece	Use more movement during cutting

BURNING



Cause	Solution
Product too hard or too thick	Use a softer or thinner product
Too much pressure and cutting without movement	Cut with movement
Inadequate revolutions/min	Use a suitable machine

CUTTING

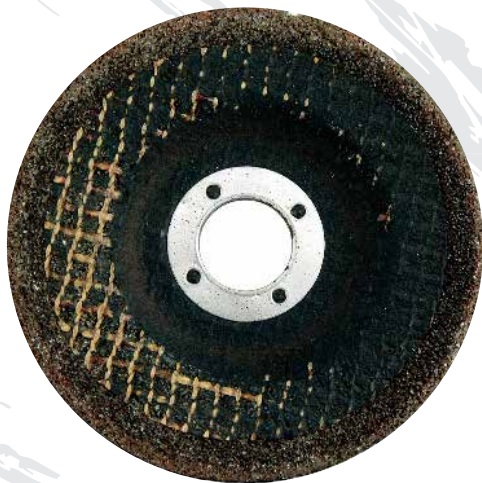
UNEVEN CUT

Cause	Solution
Product too thin for application	Use a thicker product
Pressure too high	Use lower pressure
Improperly clamped workpiece	Cut closer to clamping area

PRODUCT DOES NOT CUT

Cause	Solution
Blue chip, product too hard or too thick	Use a softer or thinner product

UNEVEN WEAR



GRINDING

UNEVEN EDGE WEAR



GRINDING

Cause	Solution
Incorrect clamping	Check flanges
Out of balance	Replace the wheel
Clamping flanges (top, bottom) with different diameter	Use flanges with the same diameter

Cause	Solution
Excessive force	Grind with lower force
Inadequate angle – too low	Ensure adequate tilt angle, i.e. 25–35°

CRACKS



GRINDING

SHORT LIFE

GRINDING



Cause	Solution
Product too hard	Use a softer product

Cause	Solution
Wheel too soft	Use a harder product
Pressure too high	Reduce pressure
Drop in RPM too big	Use a stronger machine

ADHESION OF WORKPIECE

GRINDING

WHEEL DOES NOT GRIND

GRINDING



Cause	Solution
Inappropriate wheel design	Use a different type of product – special quality (aluminium)

Cause	Solution
Product too hard	Use a softer product
Pressure too low	Increase the pressure
Machine too weak	Use a stronger machine

PRODUCT BOUNCES

Cause	Solution
Clamping flange dirty or worn	Clean or replace flange
Worn-out bearings	Replace bearings or machine
Eccentrically clamped product	Properly clamp product

EDGE BREAKAGE



FLAP DISC

EXCESS EDGE WEAR



Result

Ejection of abrasive cloth at the edge, inefficient grinding

Solution

Reduce pressure or use a disc of higher durability

Result

Uneven wear of the disc, inefficient grinding

Solution

Reduce grinding angle or use convex disc

BURNING

FLAP DISC

CORRECT USAGE

FLAP DISC



Result

Inefficient grinding

Solution

Reduce pressure or use a more coarse grain

Result

Even disc wear, without burning, optimal grinding, maximum life span of disc



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