

PROFLEX[®] SW M42

Special design for profiles made of residual stress material



Product level 2

Profile tooth

Profiles

Band width 34 x 1.1 - 67 x 1.6mm

Band width 1-3/8 x 0.042 - 2-5/8 x 0.063 Inch

Product Information

PROFLEX[®] SW M42 – Special designs for profiles with residual stress material

Thermal influences or plastic deformation can cause residual stresses in semi-finished products, especially in profiles. When these tensions are released during the sawing process, jamming of a conventional band saw blade in the cutting channel often occurs.

The PROFLEX[®] SW M42 is the result of innovative development work by WIKUS. The extra wide special set means that profiles and girders with residual stresses can be separated without any problems. The bimetal band saw blade has impressive performance, especially in steel construction and in cutting industrial profile blanks.

The PROFLEX[®] SW M42 is equipped with a special profile tooth form in addition to the special SW set width, which is specially adapted to materials with residual stress.

Standard set width compared to special set width SW:
The extra wide set increases the free cut of the band

saw blade so that there is more clearance to prevent jamming due to released material residual stress.

About the profile tooth form: The tooth features a positive cutting angle and a reinforced tooth back. These factors reduce susceptibility to tooth breakage and vibration when sawing profiles.

Application

- Profiles and girders with residual stress
- For steel construction and industrial profile cuts

Advantages

- No jamming in the cutting channel
- Extra wide special limitation
- Significantly extended lifetime
- Resistant to broken teeth and bandbreakage
- Low finishing due to low-burr cutting edges
- Low noise level
- Low vibration susceptibility

Features

- Extra wide special set and variable tooth pitch
- Extremely sturdy tooth contour
- M42 tooth edge with positive rake angle

Technical Data

Dimensions		Tooth pitch in tpi	
Width x thickness			
mm	Inch	3 - 4	2 - 3
34 x 1.10	1-3/8 x 0.042	P	
41 x 1.30	1-5/8 x 0.050	P	P
54 x 1.30	2-1/8 x 0.050	P	
54 x 1.60	2-1/8 x 0.063	P	P
67 x 1.60	2-5/8 x 0.063	P	P
Contact length	[mm]	80-160	150-300
	[Inch]	3.1-6.3	5.9-11.8

P = Profile tooth

Materials Overview



- Case-hardening steels, spring steels and ball-bearing steels
- Rust-proof and acid-resistant steels (ferretic)
- Nitrided steel, high-speed steel and tool steel
- Construction, deep-drawn and machining steels
- Carbon steels, and quenched and tempered steels
- Cast iron
- Aluminium / aluminium alloys
- Non-ferrous metals