

# Industrial Metalsawing

Bandsaw Blades



**Global Precision**

# Introduction

April 1999 saw the beginning of a new era for the production of Bahco bandsaw blades. A major investment programme was undertaken resulting in the opening, in April 2000, of a new state-of-the-art bandsaw blade manufacturing facility based near to Sheffield, England.

We are confident that our investment in the new production facilities and equipment will enable us to remain at the forefront of cutting technology and to continue to meet our customers' changing needs. Our new facilities enable us to continually develop new and innovative products for the metal cutting industry.

Bahco has confidence and high expectations for the future, happy that our long held ambition to provide top quality cutting solutions for our customers is already a reality.

Quality is key to our entire operation. We believe that a key factor in Production and General Purpose cutting is product

consistency. To achieve this, we operate within the Snap On QFS quality system or Quality Forward System, which uses the ISO 9001:2000 framework. It includes a continually improving quality management system, which includes a focus on customer requirements and satisfaction.

All stages of production from raw material sourcing to finished product are subject to stringent quality checks including computer based monitoring and measuring systems.

Bahco Group itself manufactures a wide range of tools used within the building and construction, industrial maintenance and horticultural industries.

The turnover amounts to approximately 350 million US\$. Sales are channeled mainly through industrial distribution and the hardware trade.



# Key Production Processes

## Tooth forming

High technology milling and grinding processes are used for precision tooth forming enabling sharper and stronger teeth to be produced.

## Setting

Computer controlled measuring devices and camera monitoring systems check every tooth. This information is collated and displayed on a visual monitor which,

- Measures against set tolerance
- Has automatic shut off
- Gives high consistency of set
- Provides a report card on every coil
- Permanently backs up the Quality record on our computer database.

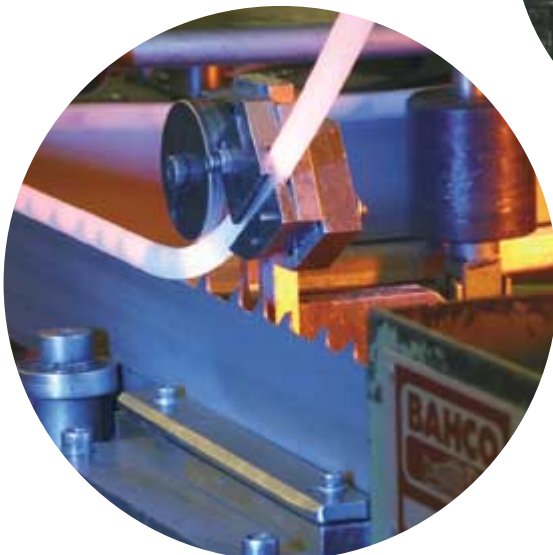


## Heat treatment

The latest technology heat treatment processes ensure:

- High consistency
- Easier welding alignment
- Reduced handling

All completed product is delivered into our highly automated distribution centres.





# Service

## Storage and Distribution

NDC - New Distribution Concept - is one of our single largest investments in customer service. It comprises two distribution centres in Europe and two in North America. Modern on-line computer processes ensure prompt and reliable deliveries and minimise stock handling for our customers.

The NDC system provides continuously updated information to our production units. This allows them to produce the right products quickly and maintain high stock security.

At the Sales Units the order is entered on-line with the distribution centre. The distribution centres are responsible for order picking, packing and despatching. The screen informs the picker which product to collect and where it is located. By scanning the bar code the order confirmation is shown on screen.

The whole system is paperless up to the final printing of despatch documents. We aim to provide 95% stock availability for all products, but 100% availability for key products.



## Weld Centres

We have strategically positioned our weld centres globally to offer customers in all Industrialised countries a reliable and fast delivery service.

Our Weld Centres feature;

- High technology welding machines and annealing control
- Automatic weld grinding equipment
- Quality Laboratory installed at each Welding Centre





# Research and Development

The Research and Development Centre for Bandsaws is a state-of-the art laboratory located in Lidköping, Sweden.

The Centre, which develops and tests metal cutting saws, is staffed by qualified engineers and metallurgists and is equipped with machines and instruments for measuring all parameters that can influence the cutting operation.

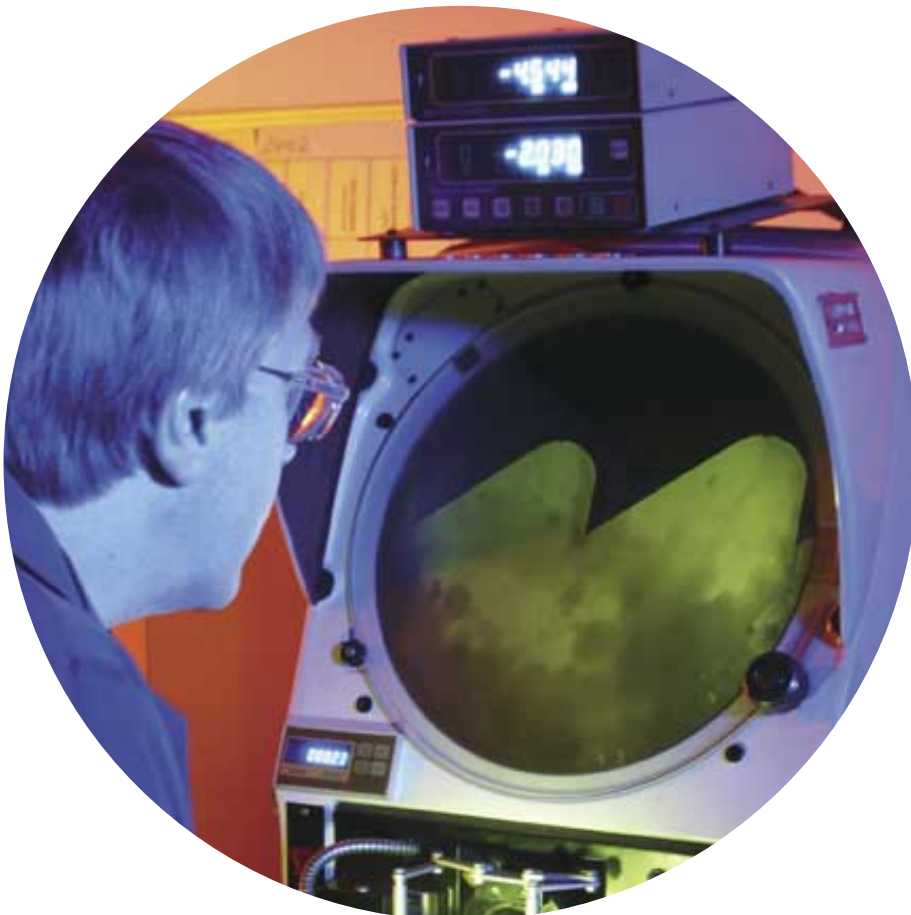
The Centre is actively involved in joint metal-cutting research projects with a major University to improve and better understand the art of metal cutting.

*Together with our colleagues around the world we aim to give you, our customer, the highest quality Bandsaw blades when you need them.*

## Customer Support Service

BandCalc™, our easy-to-use bandsaw cutting data program offers bandsaw machine operators quick access to accurate information on correct blade usage for cutting different types of materials. The program will help select blades for over 2,500 bandsaw machines giving recommendations to include Band Speed, Feed Rate and Cutting Rate. BandCalc™ will suggest a choice of TPI's (Teeth Per Inch) and modify the cutting data accordingly to ensure our customer receives the best advice for every application.

To focus attention on key Production end users, we have introduced a Bandsaw Specialist Programme in more and more markets around the world. Our Specialists' training is based around reducing the "Cost per Cut" achieved with the latest high technology Ground tooth and Carbide products, bringing greater efficiency to our customers cutting operation.



# Bandsaw Selection Guide

## Metal Cutting

Maximum performance bandsaws specially designed for the greatest variety of metal cutting applications.

## Non-Ferrous Cutting

Maximum performance bandsaws specially designed for non-ferrous cutting applications such as brass, bronze and aluminium. Also an excellent choice for cutting plastics, composites and abrasive materials.

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# General Information

## Band Length

The length of a bandsaw blade depends upon the sawing machine being used. Information for specific machines can be found in our software program, BandCalc™, see page 28, or from your sawing machine manufacturer.



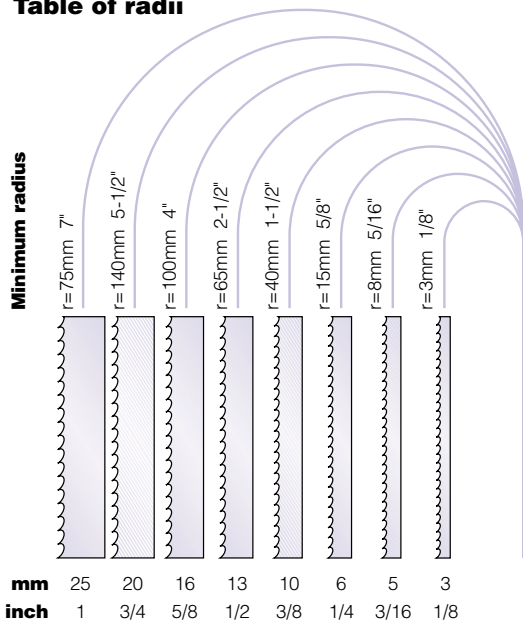
## Band Width

The band width is measured from the tip of the teeth to the back edge of the blade.

On horizontal machines, the band width is dependent upon the bandsaw machine being used. There is, however, some variation possible on vertical machines.

For contour sawing, the blade should be as wide as the machine permits, but still narrow enough so that it can be cut to the desired shape (radius). Please see diagram below.

**Table of radii**



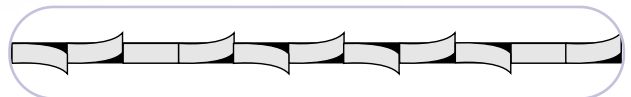
## Types of Set

The set is the tilt, or angle, given to the teeth of the saw blade to provide clearance for the blade body and the tooth edges. Below are different types of set:



### Raker set

In the raker set, one tooth is set to the left, one tooth is set to the right, and one tooth (raker) is unset. This set type is used on most evenly pitched blades such as regular and hook. It is also used for contour and friction cutting blades on vertical bandsaw machines.



### Combo set

In the combo set, used on combo toothed blades, a raker (unset) tooth is followed by teeth in a left, right, left, right sequence. This pattern is repeated with each series of teeth starting and ending with the largest tooth in the pattern.







## Teeth Per Inch (TPI)

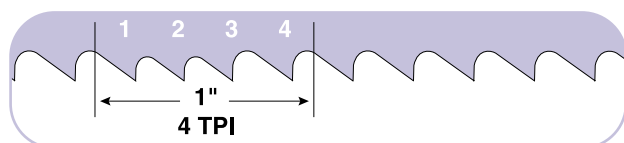
The number of teeth per inch (TPI) defines the pitch of the blade and can vary from less than 1 to 24.

Thin-walled workpieces like tubes, pipes, sheet etc., require fine teeth, otherwise there is a risk of tooth damage or breakage.

Large cross sections should be cut with a coarse-pitched saw, i.e. fewer teeth per inch. The fewer teeth engaged in the workpiece the higher the cutting capacity. This is because the penetration capacity of each individual tooth is greater if the saw's feed pressure is distributed over a fewer number of teeth. A coarse pitch (few TPI) therefore increases productivity and provides a desirable, large chip space.

Soft materials, such as aluminium and bronze, require a large chip space. A coarse pitch prevents the chips from building up and packing together in the gullets, which can impair sawing and damage the blade.

Use the TPI selection guides to find the right pitch for your application.



## Bandsawing facts

### Machine

Check frequently:

- The operation of the chip brush.
- The wear and alignment of the guides.
- The band tension with a tensionmeter (see page 29).
- The band speed with a tachometer (see page 29).
- The coolant concentration with a refractometer (see page 29).

### Coolant / Cutting fluid

The coolant lubricates, cools and carries the chips from the cut. It is important to:

- Use good cutting fluid.
- Use recommended concentration of cutting fluid.
- Make sure that the cutting fluid reaches the cut with low pressure and large flow.

### Workpiece

- Make sure that the workpiece is firmly clamped so that it cannot vibrate or rotate.
- Do not use bent or damaged workpieces.

### Running in

To obtain the maximum blade life always use the recommended band speed but lower the feed rate to 1/3-1/2 during the first 10 minutes of cutting.

During the next 10 minutes increase the feed rate in stages, until you have reached the recommended feed rate.

# General Information

## Feed Rate/Chips

It is important that each tooth of the bandsaw blade cuts a chip with the right thickness. This is determined by the selection of tooth pitch, band speed and feed rate. Start by selecting the right tooth pitch from the diagrams on page 9 and 10 then set your band speed according to the diagram below. You can now set the correct feed rate by studying the chips which the bandsaw blade produces when cutting. Use the pictures (right) and adjust your feed rate or band speed accordingly.

For more information on cutting data contact your local Bahco representative who can help you find the correct cutting data for your specific application.

1. Thin or pulverized chips - increase feed rate or lower band speed
2. Loosely rolled chips - correct cutting data
3. Thick, heavy or blue chips - too high feed, lower feed rate or increase band speed



1.



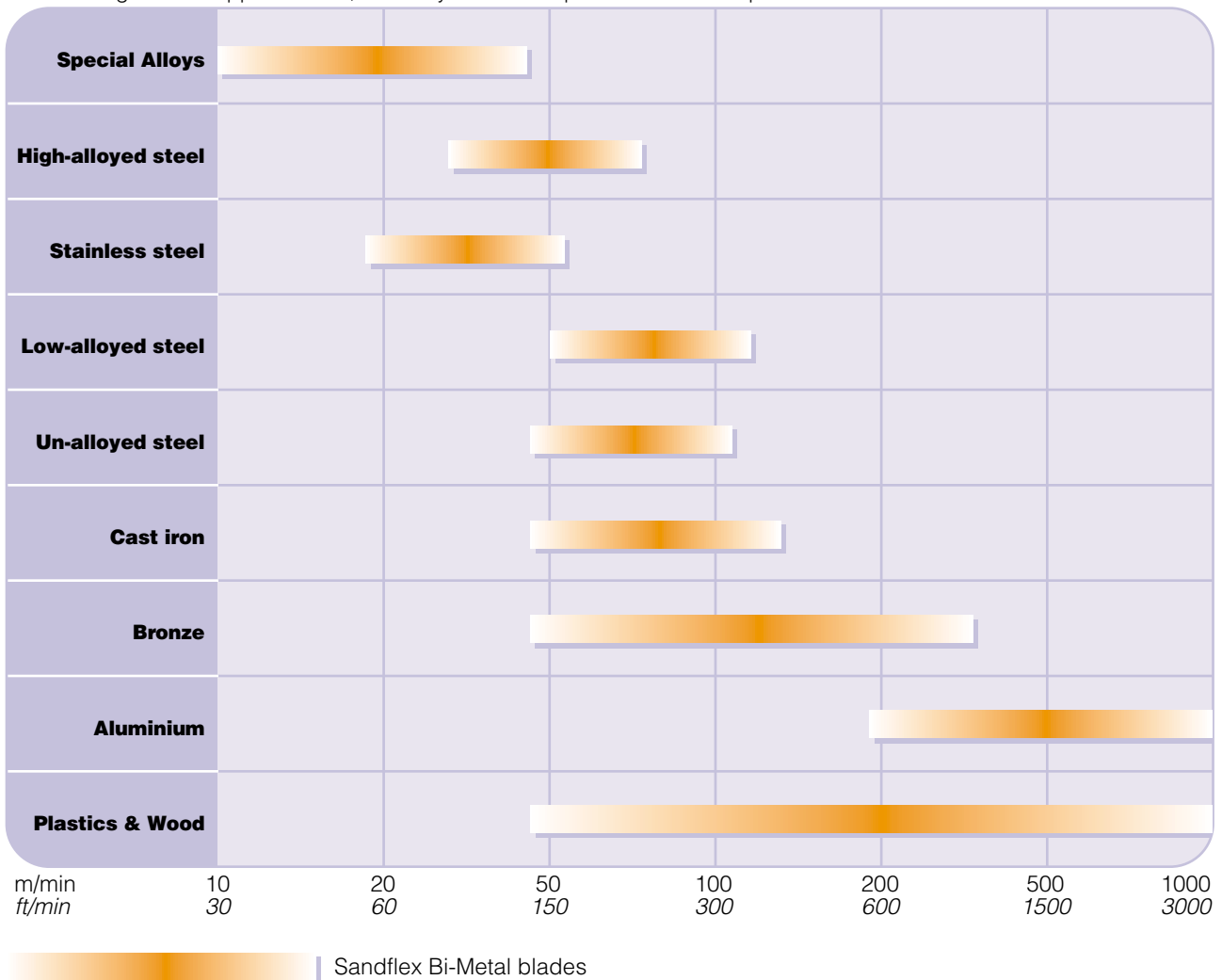
2.



3.

## Band Speed

When using carbide-tipped blades, consult your Bahco specialist for band speed recommendations.



## Tooth pitch for solid workpieces

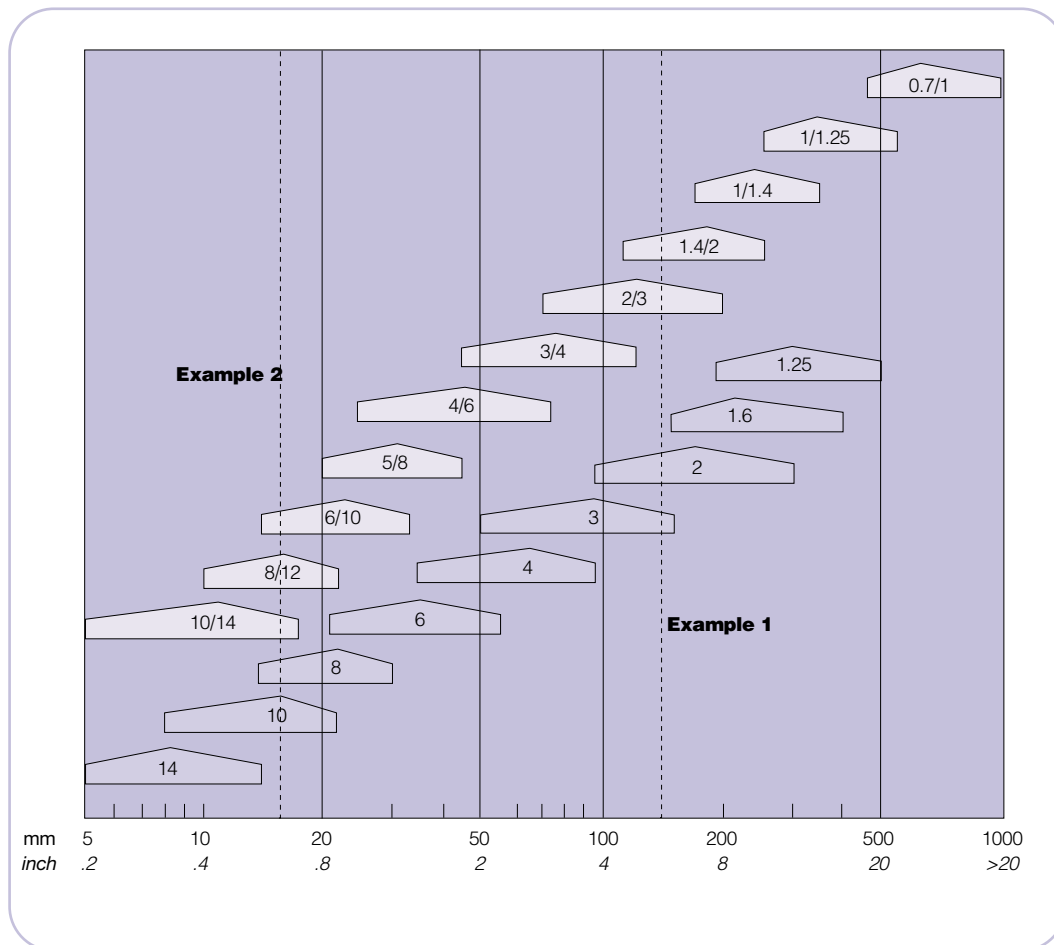
The diagram below will help you select the right pitch for cutting solids.

The ideal choice is at the widest point of each field.

Example 1: When cutting a  $\varnothing$  6 inch (150 mm) bar, use 2 TPI, if an evenly pitched blade is your choice. Use a 2/3 TPI or a 1/2 TPI if you choose a variably pitched blade.

Example 2: If you are sawing in soft materials like plastics, aluminium or wood, choose a pitch two steps coarser than recommended.

When cutting 1/2-3/4 inch (13-20 mm) thick pieces of aluminium, use a 6 TPI or a 5/8 TPI blade.





# General Information

## Cutting pipes and profiles

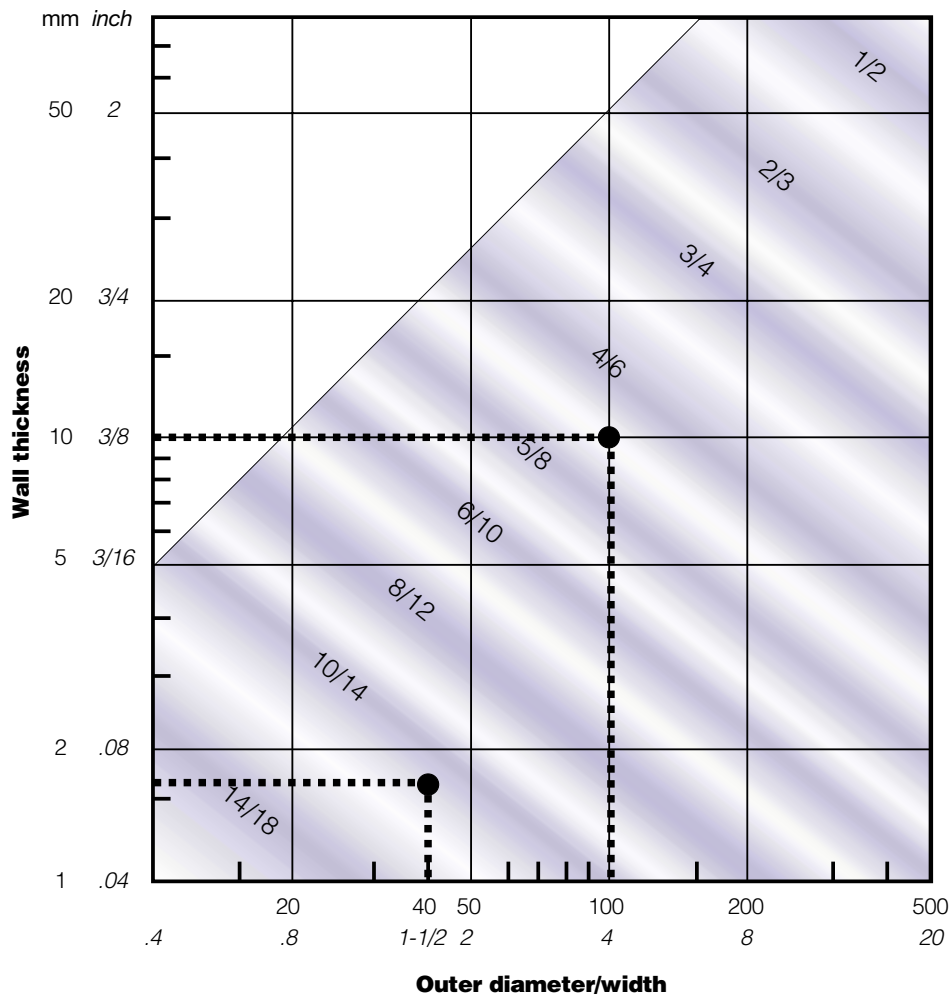
The diagram below will help you find the right tooth pitch for cutting pipes and profiles.

The recommended tooth pitch for cutting profiles is found in the field where the width meets the wall thickness of the profile.

Example 3: When cutting a 4" x .4" (100 x 10 mm) U-beam, select a 5/8 TPI or a 4/6 TPI blade.

The recommended tooth pitch is found in the field where the outer diameter meets the wall thickness of the pipe to be cut.

Example 4: When cutting a 1.5" x .06" (40 x 1.6 mm) pipe, select a 10/14 TPI blade.





# Tooth Shape guide

## Metal Cutting (Evenly pitched)

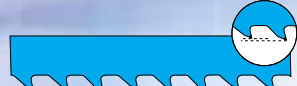
The tooth shapes have different rake angles, clearance angles and gullet depths. This makes each tooth shape suitable for a specific application.



**Regular** is a standard tooth shape with  $0^\circ$  rake angle. Regular is the traditional tooth shape for general cutting of small, solid workpieces.



**Positive PS** has a  $10^\circ$ - $15^\circ$  rake angle, a curved back and a gullet with large chip capacity. It is excellent for cutting large workpieces of all types of steel.



**Triple Set Xtra**, with high/low, 3 tooth pattern designed to give maximum chip clearance and even chip load. This blade with  $10^\circ$  rake is ideal for cutting large difficult, abrasive materials.

## Metal Cutting (Variably pitched)

These tooth shapes should be used when there is a risk of vibration when cutting tubes, profiles and bundles. Generally, multi-purpose blades are variably pitched.



**Combo** tooth shape is similar to Regular. It is suitable for multi-purpose cutting of thin-walled tubes and profiles in most materials.



With its advanced design and Positive PS teeth, **Combo PS** has optimum gullet capacity and is the ideal tooth shape for production cutting, especially of alloyed steels.



**Carbide Triple Set Xtra, Combo** same as the standard triple set xtra, but with advantage of combo pitches to give smoother, cutting action, low vibrations.



**Combo PR**, with a  $5$ - $10^\circ$  rake angle, and is mainly used on medium sized to large workpieces when vibration may occur.



**Combo LK** is a low kerf, combo design to provide low vibration, long life and good surface finish in multi-purpose cutting applications. Available in 3856-SANDFLEX® Multi-cut range.



**Combo LZ** is a low kerf, zero rake combo design available in 4/6 TPI. It provides a zero rake option within the 3856-SANDFLEX® Multi-cut range. Specifically designed for difficult to cut shapes, sections, tubes and bundles.

## Metal Cutting (Ground profile info)

Advanced tooth design of ground bandsaw blades will give, in combination with precise setting, superior surface finish and extended tool life.



**Combo PHG** is a patented ground tooth shape with positive rake angle designed for good penetration of large sections of tough-to-cut alloys and workhardening materials.



**Combo PSG** is a new ground tooth shape with positive rake angle. It is the ideal tooth shape for production cutting medium to large sections of a wide range of materials and especially on alloyed and stainless steels.

## Non-ferrous Cutting (Evenly pitched)

The tooth shapes have different rake angles, clearance angles and gullet depths. This makes each tooth shape suitable for a specific application.



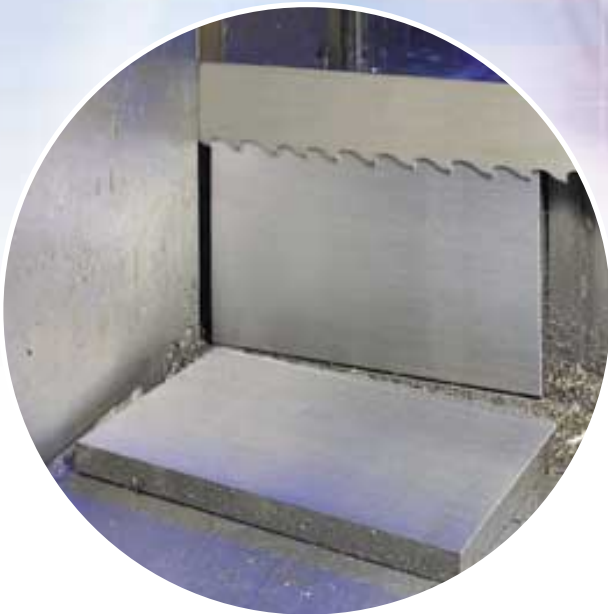
**Hook** has sharp teeth with  $10^\circ$  rake angle and shallow gullets. It is used for cutting non-ferrous metals, wood and plastics.



**Carbide Triple Set** with high/low, 3 tooth pattern maximum clearance, and even chip loads. This tooth shape is ideal for use on non ferrous alloys found in the foundry industry.



# Production Cutting



## 3851 — SANDFLEX® Cobra™

### For high productivity cutting of large workpieces

- Specially designed tooth shapes for maximum cutting performance.
- M42 tooth tips offer heat and wear resistance for long blade life.
- Excellent choice for stainless steels.
- For cutting small sections, see page 16.

DIMENSIONS		TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
MM	INCHES			
27 x 0.9	1 x .035	3	Positive PS	<b>3851-27-0.9-P-3</b>
		4	Positive PS	<b>3851-27-0.9-P-4</b>
		4	Regular	<b>3851-27-0.9-R-4</b>
		6	Regular	<b>3851-27-0.9-R-6</b>
		8	Regular	<b>3851-27-0.9-R-8</b>
		10	Regular	<b>3851-27-0.9-R-10</b>
		2/3	Combo PS	<b>3851-27-0.9-2/3</b>
		3/4	Combo PS	<b>3851-27-0.9-3/4</b>
		4/6	Combo PS	<b>3851-27-0.9-4/6</b>
		5/8	Combo PR	<b>3851-27-0.9-5/8</b>
		6/10	Combo	<b>3851-27-0.9-6/10</b>
		8/12	Combo	<b>3851-27-0.9-8/12</b>
		10/14	Combo	<b>3851-27-0.9-10/14</b>
34 x 1.1	1-1/4 x .042	2	Positive PS	<b>3851-34-1.1-P-2</b>
		3	Positive PS	<b>3851-34-1.1-P-3</b>
		6	Regular	<b>3851-34-1.1-R-6</b>
		2/3	Combo PS	<b>3851-34-1.1-2/3</b>
		3/4	Combo PS	<b>3851-34-1.1-3/4</b>
		4/6	Combo PS	<b>3851-34-1.1-4/6</b>
		5/8	Combo PR	<b>3851-34-1.1-5/8</b>
41x 1.3	1-1/2 x .050	1.25	Positive PS	<b>3851-41-1.3-P-1.25</b>
		2	Positive PS	<b>3851-41-1.3-P-2</b>
		3	Positive PS	<b>3851-41-1.3-P-3</b>
		2/3	Combo PS	<b>3851-41-1.3-2/3</b>
		3/4	Combo PS	<b>3851-41-1.3-3/4</b>
		4/6	Combo PS	<b>3851-41-1.3-4/6</b>
54 x 1.3	2 x .050	2/3	Combo PS	<b>3851-54-1.3-2/3</b>
		3/4	Combo PS	<b>3851-54-1.3-3/4</b>
		4/6	Combo PS	<b>3851-54-1.3-4/6</b>
54 x 1.6	2 x .062	1.25	Positive PS	<b>3851-54-1.6-P-1.25</b>
		2/3	Combo PS	<b>3851-54-1.6-2/3</b>
		3/4	Combo PS	<b>3851-54-1.6-3/4</b>
80 x 1.6	3-1/8 x .062	.7/1	Combo PR	<b>3851-80-1.6-.7/1</b>
		1/1.4	Combo PR	<b>3851-80-1.6-1/1.4</b>
		1.4/2	Combo PR	<b>3851-80-1.6-1.4/2</b>

### Coarse pitches

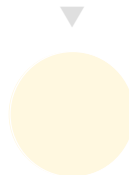
- Coarse toothing for very large workpieces.
- Tooth design penetrates large and difficult materials.



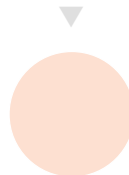
**LARGE & MEDIUM SOLIDS**



**SMALL SOLIDS & BUNDLES**



**PIPES, PROFILES, CASTINGS**



**CONTOURS**



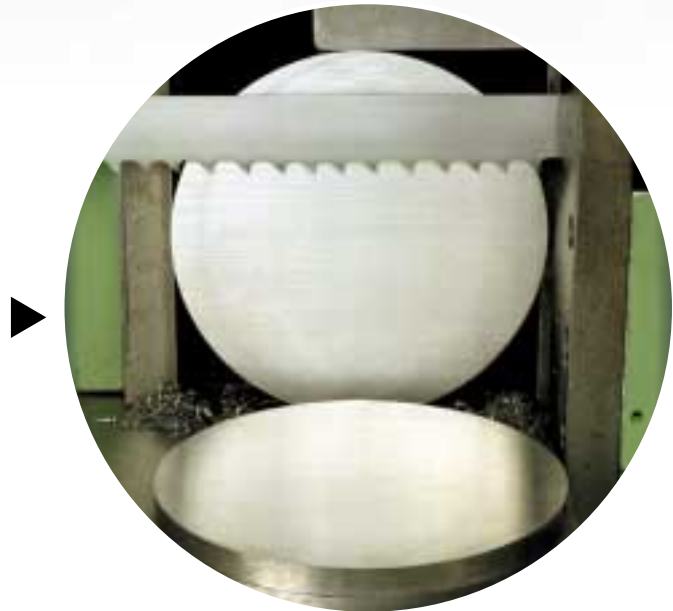


### 3851 — SANDFLEX® Cobra™ PSG™

**For production cutting of medium to large sections on various materials, especially alloyed and stainless steels**

- Specially designed in combination with sharp cutting edges for easy penetration.
- HSS tooth edge withstands high heat.
- Precise set for smooth finish.
- Ground tooth for precise and consistent tooth height.
- Fatigue resisting backing material and M42 tooth tips offer good performance and long life.

DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
27 x 0.9	1 x .035	2/3	Combo PSG	<b>3851-27-0.9-PSG-2/3</b>
		3/4	Combo PSG	<b>3851-27-0.9-PSG-3/4</b>
		4/6	Combo PSG	<b>3851-27-0.9-PSG-4/6</b>
34 x 1.1	1-1/4 x .042	2/3	Combo PSG	<b>3851-34-1.1-PSG-2/3</b>
		3/4	Combo PSG	<b>3851-34-1.1-PSG-3/4</b>
		4/6	Combo PSG	<b>3851-34-1.1-PSG-4/6</b>
41 x 1.3	1-1/2 x .050	1.4/2	Combo PSG	<b>3851-41-1.3-PSG-1.4/2</b>
		2/3	Combo PSG	<b>3851-41-1.3-PSG-2/3</b>
		3/4	Combo PSG	<b>3851-41-1.3-PSG-3/4</b>
		4/6	Combo PSG	<b>3851-41-1.3-PSG-4/6</b>
54 x 1.3	2 x .050	1.4/2	Combo PSG	<b>3851-54-1.3-PSG-1.4/2</b>
54 x 1.6	2 x .062	1.4/2	Combo PSG	<b>3851-54-1.6-PSG-1.4/2</b>
		2/3	Combo PSG	<b>3851-54-1.6-PSG-2/3</b>
		3/4	Combo PSG	<b>3851-54-1.6-PSG-3/4</b>
		4/6	Combo PSG	<b>3851-54-1.6-PSG-4/6</b>
67 x 1.6	2-5/8 x .062	2/3	Combo PSG	<b>3851-67-1.6-PSG-2/3</b>
		3/4	Combo PSG	<b>3851-67-1.6-PSG-3/4</b>
		4/6	Combo PSG	<b>3851-67-1.6-PSG-4/6</b>



### Product code: How it works

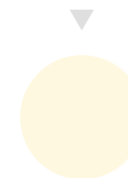
SAMPLE CODE	SAMPLE EXPLANATION
<b>3851 27-0.9-PSG-2/3-4570</b>	<b>GRADE:</b> 3851 Sandflex Cobra PSG
<b>3851 27-0.9-PSG-3/4-4570</b>	<b>WIDTH:</b> 27 mm, 1 inch
<b>3851-27 0.9-PSG-4/6-4570</b>	<b>THICKNESS:</b> 0.9 mm, .035 inch
<b>3851-34-1.1 PSG 2/3-4570</b>	<b>TOOTH SHAPE:</b> Positive (no letter for Combo)
<b>3851-34-1.1-PSG-3/4 4570</b>	<b>TEETH PER INCH:</b> 3/4
<b>3851-34-1.1-PSG-4/6-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"



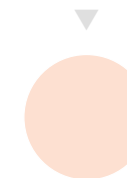
**LARGE & MEDIUM SOLIDS**



**SMALL SOLIDS & BUNDLES**



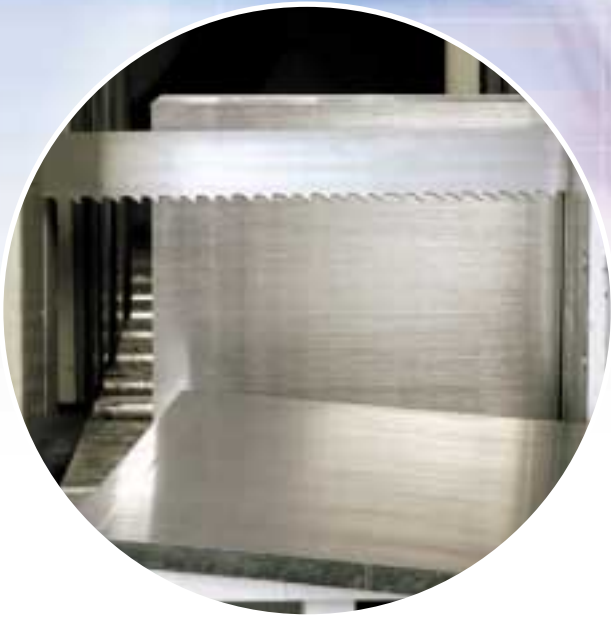
**PIPES, PROFILES, CASTINGS**



**CONTOURS**



# Production Cutting



## 3854 – SANDFLEX® King Cobra® PHG™

### For high productivity cutting of difficult-to-cut materials

- Special design in combination with sharp cutting edges for easy penetration in difficult to cut materials.
- Harder teeth for longer wear.
- Precise set for smooth surface finish.
- Ground tooth gives precise and consistent tooth height for consistent chipload.
- Fatigue resisting backing material and M42 tooth tips offer the best performance and long life in difficult to cut materials.

DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
27 x 0.9	1 x .035	2/3	Combo PHG	<b>3854-27-0.9-PHG-2/3</b>
		3/4	Combo PHG	<b>3854-27-0.9-PHG-3/4</b>
		4/6	Combo PHG	<b>3854-27-0.9-PHG-4/6</b>
34 x 1.1	1-1/4 x .042	2/3	Combo PHG	<b>3854-34-1.1-PHG-2/3</b>
		3/4	Combo PHG	<b>3854-34-1.1-PHG-3/4</b>
		4/6	Combo PHG	<b>3854-34-1.1-PHG-4/6</b>
41 x 1.3	1-1/2 x .050	1.4/2	Combo PHG	<b>3854-41-1.3-PHG-1.4/2</b>
		2/3	Combo PHG	<b>3854-41-1.3-PHG-2/3</b>
		3/4	Combo PHG	<b>3854-41-1.3-PHG-3/4</b>
		4/6	Combo PHG	<b>3854-41-1.3-PHG-4/6</b>
54 x 1.6	2 x .062	.7/1	Combo PHG	<b>3854-54-1.6-PHG-.7/1</b>
		1/1.4	Combo PHG	<b>3854-54-1.6-PHG-1/1.4</b>
		1.4/2	Combo PHG	<b>3854-54-1.6-PHG-1.4/2</b>
		2/3	Combo PHG	<b>3854-54-1.6-PHG-2/3</b>
		3/4	Combo PHG	<b>3854-54-1.6-PHG-3/4</b>
67 x 1.6	2-5/8 x .062	.7/1	Combo PHG	<b>3854-67-1.6-PHG-.7/1</b>
		1/1.4	Combo PHG	<b>3854-67-1.6-PHG-1/1.4</b>
		1.4/2	Combo PHG	<b>3854-67-1.6-PHG-1.4/2</b>
		2/3	Combo PHG	<b>3854-67-1.6-PHG-2/3</b>

### Product code: How it works

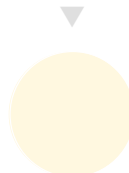
SAMPLE CODE	SAMPLE EXPLANATION
<b>3854 27-0.9-PHG-2/3-4570</b>	<b>GRADE:</b> 3854 Sandflex King Cobra PSG
<b>3854 27-0.9-PHG-3/4-4570</b>	<b>WIDTH:</b> 27 mm, 1 inch
<b>3854-27-0.9-PHG-4/6-4570</b>	<b>THICKNESS:</b> 0.9 mm, .035 inch
<b>3854-34-1.1-PHG 2/3-4570</b>	<b>TOOTH SHAPE:</b> Positive (no letter for Combo)
<b>3854-34-1.1-PHG-3/4 4570</b>	<b>TEETH PER INCH:</b> 3/4
<b>3854-34-1.1-PHG-4/6-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"



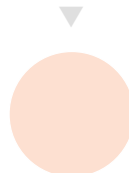
**LARGE & MEDIUM SOLIDS**



**SMALL SOLIDS & BUNDLES**



**PIPES, PROFILES, CASTINGS**



**CONTOURS**



### 3868 — Carbide Triple Set® "Xtra"<sup>SM</sup>

**For production cutting of small to large and difficult abrasive materials**

- Triple set tooth design with good kerf clearance which will eliminate tooth loss.
- Selected carbide tip for wear, resistance and durability.
- Strong set pattern for good swarf clearance and longer tool life.
- Standard widths and thickness which fit all types of bandsaw machines without modification.

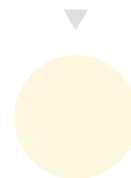
DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
34 x 1.1	1-1/4 x .042	2	TSX	<b>3868-34-1.1-TSX-2</b>
		2/3	TSX	<b>3868-34-1.1-TSX-2/3</b>
		3/4	TSX	<b>3868-34-1.1-TSX-3/4</b>
41 x 1.3	1-1/2 x .050	1.4/2	TSX	<b>3868-41-1.3-TSX-1.4/2</b>
		1.6	TSX	<b>3868-41-1.3-TSX-1.6</b>
		2	TSX	<b>3868-41-1.3-TSX-2</b>
		2/3	TSX	<b>3868-41-1.3-TSX-2/3</b>
		3/4	TSX	<b>3868-41-1.3-TSX-3/4</b>
54 x 1.3	2 x .050	1.4/2	TSX	<b>3868-54-1.3-TSX-1.4/2</b>
54 x 1.6	2 x .062	.7/1	TSX	<b>3868-54-1.6-TSX-.7/1</b>
		1/1.25	TSX	<b>3868-54-1.6-TSX-1/1.25</b>
		1.4/2	TSX	<b>3868-54-1.6-TSX-1.4/2</b>
		1.6	TSX	<b>3868-54-1.6-TSX-1.6</b>
		2	TSX	<b>3868-54-1.6-TSX-2</b>
		2/3	TSX	<b>3868-54-1.6-TSX-2/3</b>
67 x 1.6	2-5/8 x .062	.7/1	TSX	<b>3868-67-1.6-TSX-.7/1</b>
		1/1.25	TSX	<b>3868-67-1.6-TSX-1/1.25</b>
80 x 1.6	3-1/8 x .062	.7/1	TSX	<b>3868-80-1.6-TSX-.7/1</b>



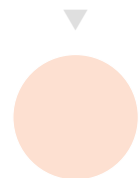
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**PIPES, PROFILES, CASTINGS**

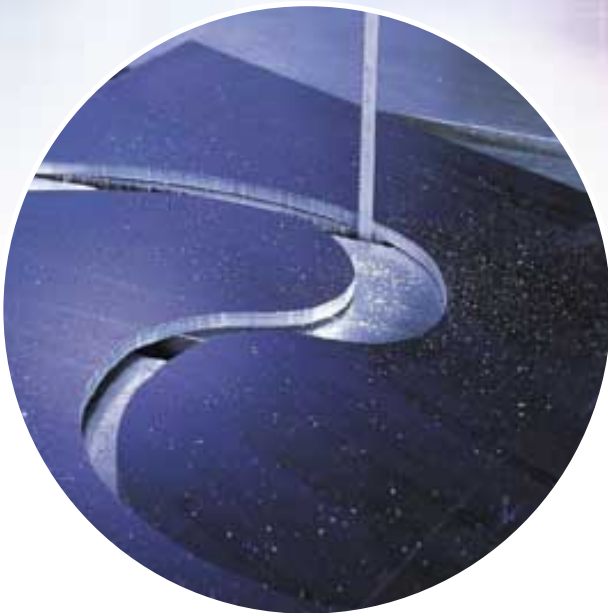


**CONTOURS**





# Other Production/Special Purpose Cutting

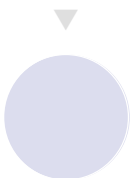


## 3851 — SANDFLEX® Cobra™

**For contour and high productivity cutting of small workpieces**

- Specially designed tooth shapes for maximum cutting performance.
- M42 tooth tips provide heat and wear resistance for long blade life.
- Excellent choice for stainless steels.
- For cutting large sections, see page 12.

DIMENSIONS MM	INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
6 x 0.6	1/4 x .025	10	Regular	<b>3851-6-0.6-R-10</b>
		14	Regular	<b>3851-6-0.6-R-14</b>
		10/14	Combo	<b>3851-6-0.6-10/14</b>
6 x 0.9	1/4 x .035	10	Regular	<b>3851-6-0.9-R-10</b>
		14	Regular	<b>3851-6-0.9-R-14</b>
		10/14	Combo	<b>3851-6-0.9-10/14</b>
10 x 0.6	3/8 x .025	10	Regular	<b>3851-10-0.6-R10</b>
		14	Regular	<b>3851-10-0.6-R14</b>
		10/14	Combo	<b>3851-10-0.6-10/14</b>
10 x 0.9	3/8 x .035	8	Regular	<b>3851-10-0.9-R-8</b>
		10	Regular	<b>3851-10-0.9-R-10</b>
		14	Regular	<b>3851-10-0.9-R-14</b>
		10/14	Combo	<b>3851-10-0.9-10/14</b>
13 x 0.6	1/2 x .025	10	Regular	<b>3851-13-0.6-R-10</b>
		14	Regular	<b>3851-13-0.6-R-14</b>
		18	Regular	<b>3851-13-0.6-R-18</b>
		5/8	Combo PR	<b>3851-13-0.6-5/8</b>
		6/10	Combo	<b>3851-13-0.6-6/10</b>
		8/12	Combo	<b>3851-13-0.6-8/12</b>
13 x 0.9	1/2 x .035	10/14	Combo	<b>3851-13-0.6-10/14</b>
		6	Regular	<b>3851-13-0.9-R-6</b>
		10	Regular	<b>3851-13-0.9-R-10</b>
		14	Regular	<b>3851-13-0.9-R-14</b>
		6/10	Combo	<b>3851-13-0.9-6/10</b>
20 x 0.9	3/4 x .035	10/14	Combo	<b>3851-13-0.9-10/14</b>
		4/6	Combo PS	<b>3851-20-0.9-4/6</b>
		5/8	Combo PR	<b>3851-20-0.9-5/8</b>
		6/10	Combo	<b>3851-20-0.9-6/10</b>
27 x 0.9	1 x .035	3	Regular	<b>3851-27-0.9-P-3</b>
		4	Regular	<b>3851-27-0.9-P-4</b>
		4	Regular	<b>3851-27-0.9-R-4</b>
		6	Regular	<b>3851-27-0.9-R-6</b>
		8	Regular	<b>3851-27-0.9-R-8</b>
		10	Regular	<b>3851-27-0.9-R-10</b>
		2/3	Regular	<b>3851-27-0.9-2/3</b>
		3/4	Regular	<b>3851-27-0.9-3/4</b>
		4/6	Combo PS	<b>3851-27-0.9-4/6</b>
		5/8	Combo PR	<b>3851-27-0.9-5/8</b>
		6/10	Combo	<b>3851-27-0.9-6/10</b>
		8/12	Combo	<b>3851-27-0.9-8/12</b>
		10/14	Combo	<b>3851-27-0.9-10/14</b>



LARGE & MEDIUM SOLIDS



SMALL SOLIDS & BUNDLES



PIPES, PROFILES, CASTINGS



CONTOURS

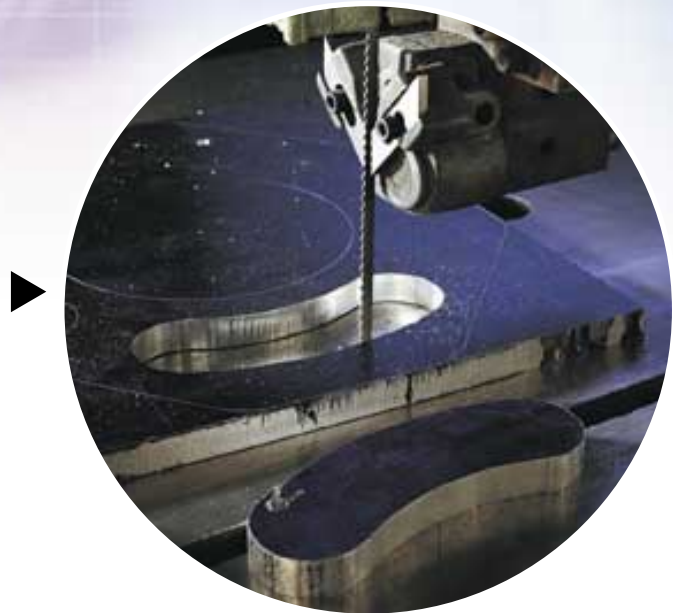


### 3852 — SANDFLEX® Die-Band™

#### For contour sawing of tool and mould steels

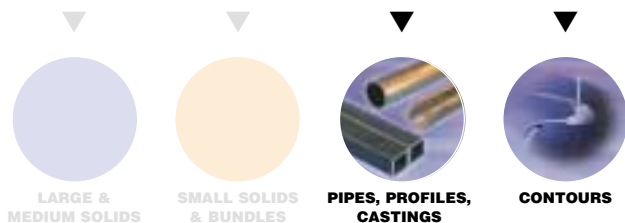
- Precisely set for accurate cutting.
- Positive rake teeth for easy feed.
- M42 tooth tips provide exceptional heat resistance and give long life even without coolant.
- Easily welded on machine-mounted welders.

DIMENSIONS		TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
MM	INCHES			
6 x 0.6	1/4 x .025	6	Hook	<b>3852-6-0.6-H-6</b>
6 x 0.9	1/4 x .035	6	Hook	<b>3852-6-0.9-H-6</b>
10 x 0.6	3/8 x .025	6	Hook	<b>3852-10-0.6-H-6</b>
10 x 0.9	3/8 x .035	4	Hook	<b>3852-10-0.9-H-4</b>
		6	Hook	<b>3852-10-0.9-H-6</b>
13 x 0.6	1/2 x .025	4	Hook	<b>3852-13-0.6-H-4</b>
		6	Hook	<b>3852-13-0.6-H-6</b>
13 x 0.9	1/2 x .035	3	Hook	<b>3852-13-0.9-H-3</b>
		4	Hook	<b>3852-13-0.9-H-4</b>
		6	Hook	<b>3852-13-0.9-H-6</b>



#### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3852-6-0.6-H-6-4570</b>	<b>GRADE:</b> 3852 Sandflex Die-Band
<b>3852-6-0.9-H-6-4570</b>	<b>WIDTH:</b> 6 mm, 1/4 inch
<b>3852-10-0.6-H-6-4570</b>	<b>THICKNESS:</b> 0.6 mm, .025 inch
<b>3852-10-0.9-H-4-4570</b>	<b>TOOTH SHAPE:</b> Hook
<b>3852-10-0.9-H-6-4570</b>	<b>TEETH PER INCH:</b> 6
<b>3852-13-0.6-H-4-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"





# Other Production/Special Purpose Cutting



## 3853 — SANDFLEX® Fabricator™

### For bundle cutting of tubes and structural steel

- Special set prevents blade from binding in the cut.
- Special tooth shape for extra toughness.
- Tough Matrix tooth material provides superior shock resistance.
- Gives fast, straight cuts with low feed forces.
- Particularly well suited for mitre (angle) cutting.

DIMENSIONS		TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
MM	INCHES			
20 x 0.9	3/4 x .035	5/8	Combo PS	<b>3853-20-0.9-5/8</b>
27 x 0.9	1 x .035	4/6	Combo PS	<b>3853-27-0.9-4/6</b>
		5/8	Combo PS	<b>3853-27-0.9-5/8</b>
34 x 1.1	1-1/4 x .042	3/4	Combo PS	<b>3853-34-1.1-3/4</b>
		4/6	Combo PS	<b>3853-34-1.1-4/6</b>
		5/8	Combo PS	<b>3853-34-1.1-5/8</b>
41 x 1.3	1-1/2 x .050	3/4	Combo PS	<b>3853-41-1.3-3/4</b>
		4/6	Combo PS	<b>3853-41-1.3-4/6</b>
		5/8	Combo PS	<b>3853-41-1.3-5/8</b>
54 x 1.3	2 x .050	3/4	Combo PS	<b>3853-54-1.3-3/4</b>
		4/6	Combo PS	<b>3853-54-1.3-4/6</b>
		5/8	Combo PS	<b>3853-54-1.3-5/8</b>
54 x 1.6	2 x .062	3/4	Combo PS	<b>3853-54-1.6-3/4</b>
		4/6	Combo PS	<b>3853-54-1.6-4/6</b>

### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3853-20-0.9-5/8-4570</b>	<b>GRADE:</b> 3853 Sandflex Fabricator
<b>3853-27-0.9-4/6-4570</b>	<b>WIDTH:</b> 27 mm, 1 inch
<b>3853-27-0.9-5/8-4570</b>	<b>THICKNESS:</b> 0.9 mm, .035 inch
<b>3853-34-1.1-3/4-4570</b>	<b>TEETH PER INCH:</b> 3/4
<b>3853-34-1.1-4/6-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"







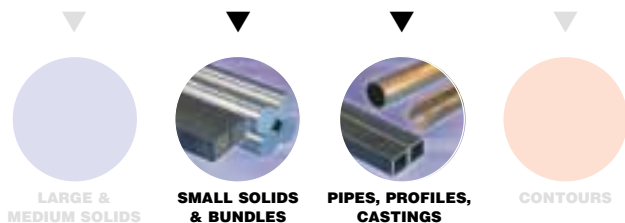
# Multi-purpose

## 3850 — SANDFLEX® Dragon™

### For easy-to-cut steels

- Multi-purpose tooth shapes for a variety of applications.
- Matrix HSS edge provides tough, impact-resistant teeth which are well suited for cutting thin-walled tubes.

DIMENSIONS MM	INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
13 x 0.5	1/2 x .020	10	Regular	<b>3850-13-0.5-R-10</b>
		14	Regular	<b>3850-13-0.5-R-14</b>
		18	Regular	<b>3850-13-0.5-R-18</b>
		24	Regular	<b>3850-13-0.5-R-24</b>
		10/14	Combo	<b>3850-13-0.5-10/14</b>
		14/18	Combo	<b>3850-13-0.5-14/18</b>
16 x 0.9	5/8 x .035	10/14	Combo	<b>3850-16-0.9-10/14</b>
20 x 0.9	3/4 x .035	6	Regular	<b>3850-20-0.9-R-6</b>
		8	Regular	<b>3850-20-0.9-R-8</b>
		10	Regular	<b>3850-20-0.9-R-10</b>
		14	Regular	<b>3850-20-0.9-R-14</b>
		4/6	Combo PR	<b>3850-20-0.9-4/6</b>
		5/8	Combo PR	<b>3850-20-0.9-5/8</b>
		6/10	Combo	<b>3850-20-0.9-6/10</b>
		8/12	Combo	<b>3850-20-0.9-8/12</b>
		10/14	Combo	<b>3850-20-0.9-10/14</b>
27 x 0.9	1 x .035	4	Regular	<b>3850-27-0.9-R-4</b>
		6	Regular	<b>3850-27-0.9-R-6</b>
		8	Regular	<b>3850-27-0.9-R-8</b>
		10	Regular	<b>3850-27-0.9-R-10</b>
		14	Regular	<b>3850-27-0.9-R-14</b>
		3/4	Combo PR	<b>3850-27-0.9-3/4</b>
		4/6	Combo PR	<b>3850-27-0.9-4/6</b>
		5/8	Combo PR	<b>3850-27-0.9-5/8</b>
		6/10	Combo	<b>3850-27-0.9-6/10</b>
		8/12	Combo	<b>3850-27-0.9-8/12</b>
10/14	Combo	<b>3850-27-0.9-10/14</b>		
34 x 1.1	1-1/4 x .042	4	Regular	<b>3850-34-1.1-R-4</b>
		3/4	Combo PR	<b>3850-34-1.1-3/4</b>
		4/6	Combo PR	<b>3850-34-1.1-4/6</b>
		5/8	Combo PR	<b>3850-34-1.1-5/8</b>
		6/10	Combo	<b>3850-34-1.1-6/10</b>
8/12	Combo	<b>3850-34-1.1-8/12</b>		
41 x 1.3	1-1/2 x .050	3/4	Combo PR	<b>3850-41-1.3-3/4</b>
		4/6	Combo PR	<b>3850-41-1.3-4/6</b>
		5/8	Combo PR	<b>3850-41-1.3-5/8</b>





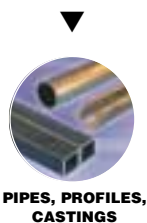
# Multi-purpose

## 3850 – SANDFLEX® Portable Bandsaw Blades

### For portable hand held machines

- Multi-purpose tooth shapes for a variety of applications.
- Tough impact - resistant teeth offer long life and good surface finish in a wide range of applications including thin wall tubes.

DIMENSIONS		TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
MM	INCHES			
13 x 0.5	1/2 x .020	10	Regular	<b>3850-13-0.5-R-10</b>
		14	Regular	<b>3850-13-0.5-R-14</b>
		18	Regular	<b>3850-13-0.5-R-18</b>
		24	Regular	<b>3850-13-0.5-R-24</b>
		10/14	Combo	<b>3850-13-0.5-10/14</b>
		14/18	Combo	<b>3850-13-0.5-14/18</b>





### 3862 — SANDFLEX® Compensator™

#### For light machines with limited feed force

- Positive rake Combo PR teeth give excellent surface finish and long blade life.
- M42 edge provides hard teeth for difficult-to-cut steels.

DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
27 x 0.9	1 x .035	3/4	Combo PR	<b>3862-27-0.9-3/4</b>
		4/6	Combo PR	<b>3862-27-0.9-4/6</b>
34 x 1.1	1-1/4 x .042	2/3	Combo PR	<b>3862-34-1.1-2/3</b>
		3/4	Combo PR	<b>3862-34-1.1-3/4</b>
		4/6	Combo PR	<b>3862-34-1.1-4/6</b>
41 x 1.3	1-1/2 x .050	2/3	Combo PR	<b>3862-41-1.3-2/3</b>
		3/4	Combo PR	<b>3862-41-1.3-3/4</b>
		4/6	Combo PR	<b>3862-41-1.3-4/6</b>



### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3862 27-0.9-3/4-4570</b>	<b>GRADE:</b> 3862 Sandflex Compensator
<b>3862 27-0.9-4/6-4570</b>	<b>WIDTH:</b> 27 mm, 1 inch
<b>3862-34 1.1-2/3-4570</b>	<b>THICKNESS:</b> 1.1 mm, .042 inch
<b>3862-34-1.1 3/4 4570</b>	<b>TEETH PER INCH:</b> 3/4
<b>3862-34-1.1-4/6 4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"



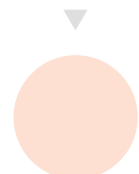
LARGE & MEDIUM SOLIDS



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PIPES, PROFILES, CASTINGS



CONTOURS



# Multi-purpose



## 3856 — SANDFLEX® Multi-cut™

**For multi-purpose applications on lighter machine types of manual or semi-automatic design**

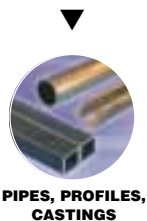
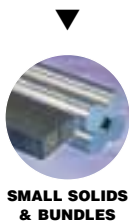
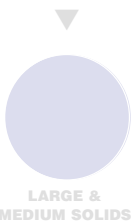
- Large range of tooth pitches and standard loop lengths to meet the needs of most multi-purpose applications.
- M42 tooth tips offer good heat and wear resistance for long blade life.
- Variable pitch tooth shapes (Combo LK and LZ) reduce vibration across a wide range of materials.
- Low kerf (Combo LK) design gives good surface finish.
- Zero rake (LZ) option is ideal for structural steel, bundles and difficult to cut shapes.
- Supplied in pre-welded 5 loop packs.

DIMENSIONS MM	TEETH INCHES	TOOTH PER INCH	TOOTH TYPE	PRODUCT CODE
27 x 0.9	1 x .035	2/3	Combo LK	<b>3856-27-0.9-LK-2/3-XXXX</b>
		3/4	Combo LK	<b>3856-27-0.9-LK-3/4-XXXX</b>
		4/6	Combo LK	<b>3856-27-0.9-LK-4/6-XXXX</b>
		4/6	Combo LZ	<b>3856-27-0.9-LZ-4/6-XXXX</b>
		5/8	Combo LK	<b>3856-27-0.9-LK-5/8-XXXX</b>
		6/10	Combo LK	<b>3856-27-0.9-LK-6/10-XXXX</b>
		8/12	Combo LK	<b>3856-27-0.9-LK-8/12-XXXX</b>

\*Available loop lengths in mm to be added to product code when ordering, 2450, 2500, 2700, 2720, 2750, 2825, 2845, 2910, 2925, 2945, 3010, 3100, 3150, 3180

### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3856</b> 27-0.9-LK-2/3-2450	<b>GRADE:</b> 3856 Sandflex Multi-cut
<b>3856</b> 27-0.9-LK-3/4-2450	<b>WIDTH:</b> 27 mm, 1 inch
<b>3856-27-0.9-LK-4/6-2450</b>	<b>THICKNESS:</b> 0.9 mm, .035 inch
<b>3856-27-0.9-LZ-4/6-2450</b>	<b>TOOTH SHAPE:</b> Zero Rake
<b>3856-27-0.9-LK-5/8-2450</b>	<b>TEETH PER INCH:</b> 2/3
<b>3856-27-0.9-LK-6/10-2450</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"







# Non-ferrous Cutting

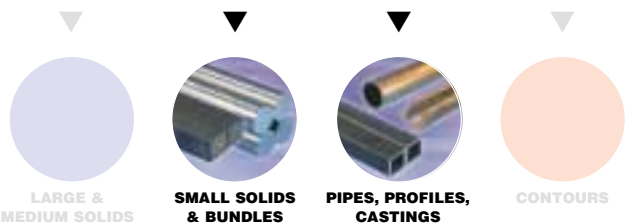
## 3850 — SANDFLEX® Dragon™

### For horizontal machines

- Positive hook toothing for good penetration and chip formation.
- Tough Matrix HSS tooth tips.
- Large gullets for good chip carrying capacity.

DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
20 x 0.9	3/4 x .035	3	Hook	<b>3850-20-0.9-H-3</b>
27 x 0.9	1 x .035	3	Hook	<b>3850-27-0.9-H-3</b>
Bandmill				
34 x 1.1	1-1/4 x .042	1.33	PM	<b>3850-34-1.1-P-1.33</b>

- The PM tooth has a 10° positive rake angle and a gullet with a large chip capacity.
- This 1.33 TPI is designed for large sections of wood in Bandmill type machines.





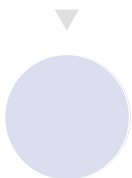
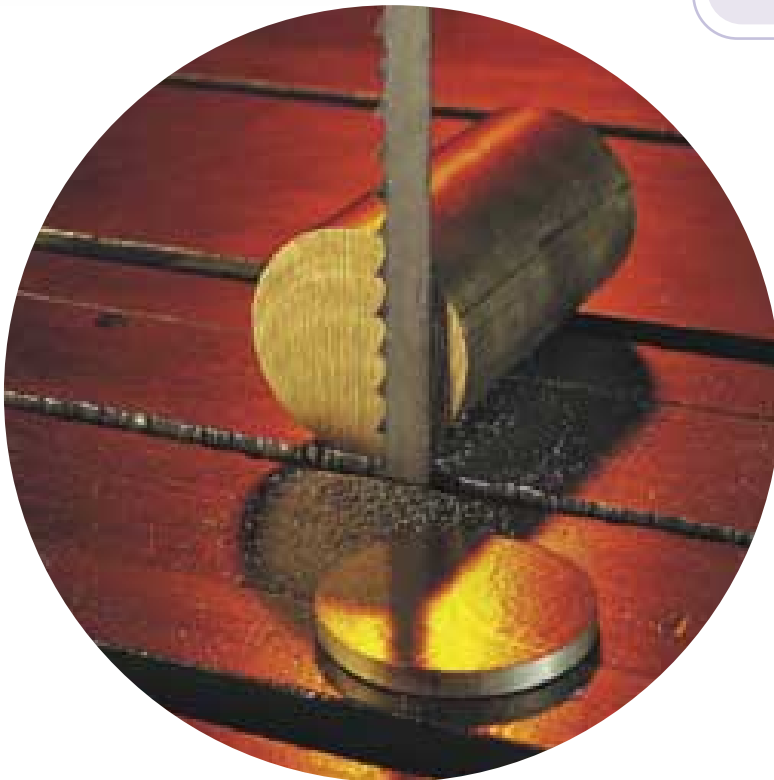
# Non-ferrous Cutting

## 3852 — SANDFLEX® Die-Band™

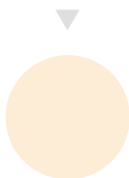
### For vertical machines and contour cutting

- Positive rake teeth make hand-fed cutting easy.
- M42 tooth tips provide wear resistance for long life.

DIMENSIONS MM	INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
6 x 0.6	1/4 x .025	6	Hook	<b>3852-6-0.6-H-6</b>
6 x 0.9	1/4 x .035	6	Hook	<b>3852-6-0.9-H-6</b>
10 x 0.6	3/8 x .025	6	Hook	<b>3852-10-0.6-H-6</b>
10 x 0.9	3/8 x .035	4	Hook	<b>3852-10-0.9-H-4</b>
		6	Hook	<b>3852-10-0.9-H-6</b>
13 x 0.6	1/2 x .025	4	Hook	<b>3852-13-0.6-H-4</b>
		6	Hook	<b>3852-13-0.6-H-6</b>
13 x 0.9	1/2 x .035	3	Hook	<b>3852-13-0.9-H-3</b>
		4	Hook	<b>3852-13-0.9-H-4</b>
		6	Hook	<b>3852-13-0.9-H-6</b>



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CONTOURS

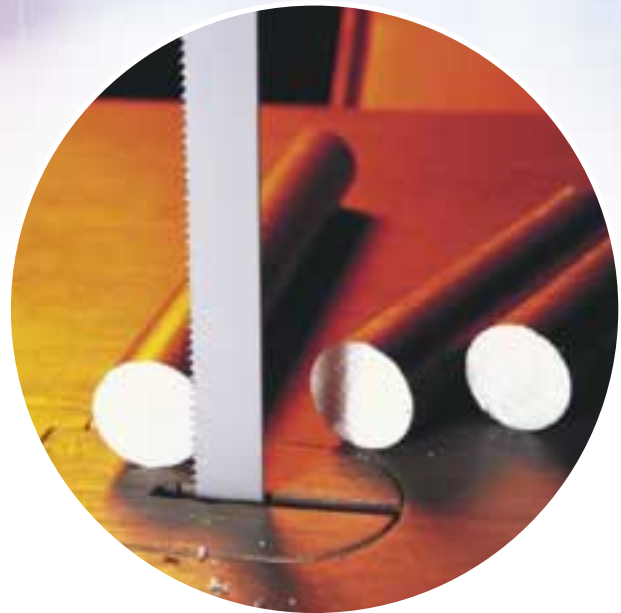


### 3861— SANDFLEX® NF™

#### Economical Bi-Metal blade for non-ferrous cutting

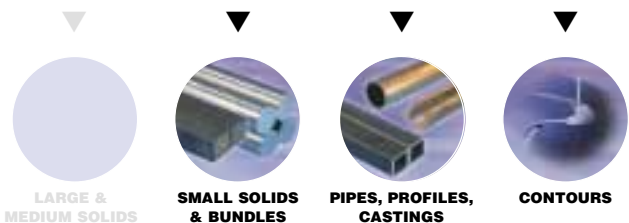
- Hook toothing for easy feeding.
- New regular pitches.
- Durable spring steel backing.
- Extended tool life

DIMENSIONS		TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
MM	INCHES			
6 x 0.6	1/4 x .025	3	Hook	<b>3861-6-0.6-H-6</b>
		10	Regular	<b>3861-6-0.6-R-10</b>
		14	Regular	<b>3861-6-0.6-R-14</b>
		18	Regular	<b>3861-6-0.6-R-18</b>
10 x 0.6	3/8 x .025	3	Hook	<b>3861-10-0.6-H-3</b>
		4	Hook	<b>3861-10-0.6-H-4</b>
		6	Hook	<b>3861-10-0.6-H-6</b>
		10	Regular	<b>3861-10-0.6-R-10</b>
		14	Regular	<b>3861-10-0.6-R-14</b>
		18	Regular	<b>3861-10-0.6-R-18</b>
13 x 0.6	1/2 x .025	3	Hook	<b>3861-13-0.6-H-3</b>
		4	Hook	<b>3861-13-0.6-H-4</b>
		6	Hook	<b>3861-13-0.6-H-6</b>
		10	Regular	<b>3861-13-0.6-R-10</b>
		14	Regular	<b>3861-13-0.6-R-14</b>
		18	Regular	<b>3861-13-0.6-R-18</b>
16 x 0.9	5/8 x .035	3	Hook	<b>3861-16-0.9-H-3</b>
20 x 0.9	3/4 x .035	2	Hook	<b>3861-20-0.9-H-2</b>
		3	Hook	<b>3861-20-0.9-H-3</b>
		6	Regular	<b>3861-20-0.9-R-6</b>
		8	Regular	<b>3861-20-0.9-R-8</b>
		10	Regular	<b>3861-20-0.9-R-10</b>
		14	Regular	<b>3861-20-0.9-R-14</b>
27 x 0.9	1 x .035	2	Hook	<b>3861-27-0.9-H-2</b>
		3	Hook	<b>3861-27-0.9-H-3</b>
		4	Regular	<b>3861-27-0.9-R-4</b>
		6	Regular	<b>3861-27-0.9-R-6</b>
		8	Regular	<b>3861-27-0.9-R-8</b>
		10	Regular	<b>3861-27-0.9-R-10</b>
		14	Regular	<b>3861-27-0.9-R-14</b>



#### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3861-6-0.6-H-6-4570</b>	<b>GRADE:</b> 3861 Sandflex NF
<b>3861-6-0.6-R-10-4570</b>	<b>WIDTH:</b> 6 mm, 1/4 inch
<b>3861-6-0.6-R-14-4570</b>	<b>THICKNESS:</b> 0.6 mm, .025 inch
<b>3861-6-0.6-R-18-4570</b>	<b>TOOTH SHAPE:</b> Regular
<b>3861-10-0.6-H-3-4570</b>	<b>TEETH PER INCH:</b> 3
<b>3861-10-0.6-H-4-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"





# Non-ferrous Cutting

## 3869 — Carbide Triple Set®

**Foundry bandsaw blade for non-ferrous and abrasive materials**

- Carbide tipped teeth with triple set configuration.
- Fast cutting.
- Easy feeding.
- Straight and radius cutting.
- Special design for foundry use.
- For use on smaller machines for difficult to cut materials.

DIMENSIONS MM	INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
13 x 0.8	1/2 x .032	4	TS	<b>3869-13-0.8-TS-4</b>
13 x 0.9	1/2 x .035	3	TS	<b>3869-13-0.9-TS-3</b>
20 x 0.9	3/4 x .035	3	TS	<b>3869-20-0.9-TS-3</b>
		4	TS	<b>3869-20-0.9-TS-4</b>
27 x 0.9	1 x .035	3	TS	<b>3869-27-0.9-TS-3</b>
		4	TS	<b>3869-27-0.9-TS-4</b>
29 x 1.1	1-1/8 x .042	2	TS	<b>3869-29-1.1-TS-2</b>
34 x 1.1	1-1/4 x .042	3	TS	<b>3869-34-1.1-TS-3</b>



### Product code: How it works

SAMPLE CODE	SAMPLE EXPLANATION
<b>3869 13-0.8-TS-4-4570</b>	<b>GRADE:</b> 3869 Carbide Triple Set
<b>3869 13-0.9-TS-3-4570</b>	<b>WIDTH:</b> 13 mm, 1/2 inch
<b>3869-20-0.9-TS-3-4570</b>	<b>THICKNESS:</b> 0.9 mm, .035 inch
<b>3869-20-0.9-TS-4-4570</b>	<b>TOOTH SHAPE:</b> Triple Set
<b>3869-27-0.9-TS-3-4570</b>	<b>TEETH PER INCH:</b> 3
<b>3869-27-0.9-TS-4-4570</b>	<b>LOOP LENGTH:</b> 4570 mm, 15'-0"



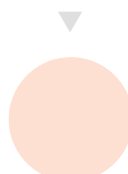
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**PIPES, PROFILES, CASTINGS**



**CONTOURS**





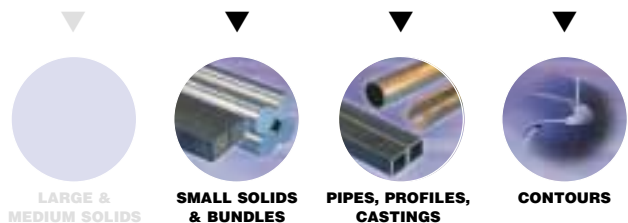
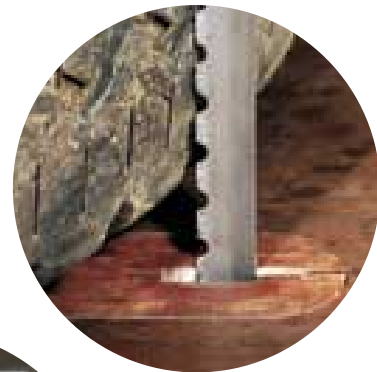
# Carbide Grit

## 3866 — Multi-Grit

**Carbide grit-edge blade for cutting ceramics, tyres, graphite, fibreglass, cables, composite materials, glass, hardened steel, super alloys and cast iron**

- Four different Carbide Grit sizes.
- Available as a Gulleted or a Continuous Cutting Edge.
- Standard width and thickness which fits all types of bandsaw machines without modifications.
- Reversibility extends tool life up to 25%.
- No teeth to snag or strip.

DIMENSIONS MM	DIMENSIONS INCHES	TEETH PER INCH	TOOTH TYPE	PRODUCT CODE
6 x 0.5	1/4 x .020	G	F	<b>3866-6-0.5-G-F</b>
10 x 0.6	3/8 x .025	G	M	<b>3866-10-0.6-G-M</b>
		G	MC	<b>3866-10-0.6-G-MC</b>
13 x 0.6	1/2 x .025	G	M	<b>3866-13-0.6-G-M</b>
		G	MC	<b>3866-13-0.6-G-MC</b>
		C	M	<b>3866-13-0.6-C-M</b>
20 x 0.8	3/4 x .032	G	M	<b>3866-20-0.8-G-M</b>
		G	MC	<b>3866-20-0.8-G-MC</b>
27 x 0.9	1 x .035	C	M	<b>3866-27-0.9-C-M</b>
		C	MC	<b>3866-27-0.9-C-MC</b>
		G	MC	<b>3866-27-0.9-G-MC</b>
		G	C	<b>3866-27-0.9-G-C</b>
34 x 1.1	1 1/4 x .042	G	C	<b>3866-34-1.1-G-C</b>
41 x 1.3	1 1/2 x .050	G	C	<b>3866-41-1.3-G-C</b>
54 x 1.6	2 x .062	G	C	<b>3866-54-1.6-G-C</b>





# Sawing Aids



## 3870 — BandCalc™

A Software program, based upon input from users with regards to material, machine, workpiece, economy and customer preferences, will recommend the best bandsaw blade for the application. It will also give necessary information on blade speed, feed rate and will calculate a cutting time and cost per cut for the application.

BandCalc™ is a computer software programme that quickly and simply determines the best bandsaw blade for a specific application. And, having selected the blade, BandCalc™ will then provide the correct cutting data. It is an excellent tool for users who wish to improve production efficiency.

BandCalc™, which is Windows based and available on CD Rom, contains up-to-date information on the entire Bahco bandsaw assortment, details of over two and a half thousand bandsaw machines and a database of some 2,700 different materials of international and country standards.

By using these databases and information input by the user, BandCalc™ will select the best blade and give alternatives for the specific application. It will also supply a cost per cut calculation and accurate cutting data.

BandCalc™ is available in ten languages: English, Swedish, French, Spanish, German, Dutch, Italian, Finnish, Japanese and Russian.

• **Please refer to BandCalc™ for a full, up to date, Machine List.**

**PRODUCT CODE**

**EAN CODE**  
731151+



3870-BANDCALC

8238926

1

45







Even the best blades need to run properly tensioned and at the right speed. That is why we offer a number of very important accessories that will help to get the best performance out of our quality blades.

### 3870 Tensionmeter

Proper tension is necessary to provide straight cuts and long blade life, thereby reducing the cost per cut.



Bahco's tensionmeter is designed for easy, accurate measurement of the correct blade tension of all bandsaws.

PRODUCT CODE	EAN CODE		
3870-TENSION METER	8145637	1	678



### 3870 Refractometer



Proper coolant concentration is as important as band speed or feed. It is easily checked with the refractometer.

PRODUCT CODE	EAN CODE		
3870-REFRACTOMETER	8192129	1	258



### 3870 Tachometer

This computerised bandsaw-blade tachometer instantly presents the actual band speed in ft/min, m/min on a LED display.

PRODUCT CODE	EAN CODE		
3870-TACHO METER	8145620	1	400



# Troubleshooting Guide

Important Facts		Band Breakage	Crooked Sawing
Machine	<b>Guides and guide arms</b> Check and adjust the guides regularly. Check if worn out and replace if necessary. Position guide arms as close to the workpiece as possible.	Guides worn out Guide setting too wide	Guides too far apart Guides worn out Guide arm loose Guides poorly adjusted
	<b>Band wheels</b> The wheels have to be kept in good condition and should be properly aligned.	Worn band wheel Too small band wheels – try thinner bands	
	<b>Chip brush</b> Check that the chip brush is properly adjusted and change it regularly.		
	<b>Band tension</b> The correct band tension is needed to get a straight cut. Measure with the Bahco tensionmeter.	Band tension too high	Band tension too low
	<b>Coolant/Cutting fluid</b> The coolant is needed to lubricate and to cool. Check the concentration with a refractometer. Use a good coolant. It should reach the cut with low pressure and with a generous flow.		
Cutting Data	<b>Band speed</b> The band speed has to be correctly chosen, see chart on page 8. Check the band speed using the Bahco tachometer.		Band speed too low
	<b>Feed rate</b> The feed rate has to be chosen so that the teeth of the bandsaw blade can work properly, see page 8.	Feed rate too high	Feed rate too high
Bandsaw Blade	<b>Tooth pitch</b> The selection of the right pitch of the blade is just as important as choosing the correct feed and speed. See page 9 and 10.	Tooth pitch too fine	Tooth pitch too fine
	<b>Tooth shape</b> Every tooth has its ideal application. To select the right one, consult page 11.		
	<b>Running in</b> A new bandsaw blade should be run in to obtain maximum bandsaw tool life. (see page 7) Never saw in old kerf.		
	<b>Blade life</b> All blades wear out eventually. Look for signs of wear.		Band worn out
Workpiece	<b>Surface</b> The surface quality of the workpiece will strongly influence the life of the blade. If the surface is bad, lower the band speed.		
	<b>Clamping</b> Make sure the workpieces are securely clamped. This is especially important when cutting bundles. Do not use bent or damaged workpieces.		





Tooth Breakage	Rough Surface	Rapid Tooth Wear	Vibration	Band Slips on Wheel
			Guides too far apart Guides poorly adjusted	
				Driving wheel worn out
Chip brush not working – gullets filled		Chip brush not working		
			Band tension too low	Band tension too low
		Too little coolant Incorrect coolant concentration		
	Band speed too low	Band speed too high	Natural vibration – speed slightly high speed slightly low	
Feed rate too high	Feed rate too high	Feed rate too high or too low	Feed rate too high or too low	Feed rate too high
Tooth pitch too fine, gullets filled	Tooth pitch too coarse	Tooth pitch too fine		
Tooth shape too weak		Wrong tooth shape selection	Use Bahco Combo	
	Band not properly run in	Band not properly run in	Band not properly run in	
	Band worn out			Band worn out
		Surface defects, i.e. scale, rust, sand		
Workpiece moves			Workpiece not properly clamped	

# Packaging Information



## Loop packaging/Bimetal and Carbide 3866, 3868, 3869

WIDTH MM	INCHES	LENGTH, MM/FT				
		<3000 <9' - 10"	3001 - 3660 9'10" - 12'0"	3661 - 4120 12'1" - 13'6"	4121 - 5334 13'7" - 17'5"	>5335 >17'5"
<13	<1/2	5	5	5	5	5
16-27	5/8-1	5	5	2 or 5	2 or 5	2 or 5
34	1-1/4	2 or 5	2 or 5	2 or 5	2	2
41-80	1-1/2 - 3-1/8	2	2	2	2	2

## Coil packaging

WIDTH MM	INCHES	LENGTH, METER/FT			
		76 250'	50 164'	30 100'	15 50'
≤ 20	≤ 3/4	X	-	X	X
27 - 34	1 - 1-1/4	X	-	-	-
≥ 41	≥ 1-1/2	-	X	-	-

Coil packaging / Carbide 3866, 3868 and 3869 – all sizes random coil, approximately 55m (180ft) in length.



# Order Form/Enquiry Form ▼

## Now contact us...

Company Name:  Contact Name:

Street:

City:

Region:  Postcode:

Country:  Telephone:

## Technical Support

Material:

Size (mm):

Surface Condition:

Clamping:  Single  Bundle (how many pieces)

Bandsaw Blade Size:   mm length  mm width mm thickness

Type of Machine:

**Inquiry**  **Order**

QTY	PRODUCT	LENGTH (MM)
10	3851-27-0.9-2/3	5740
5	3869-34-1.1-TS-3	6198

Date:  Signature:

Argentina  
BAHCO ARGENTINA S.A.  
Buenos Aires  
Phone: 11 44 84 05 57  
Fax: 11 44 84 44 63

Australia  
BAHCO TOOLS PTY. LTD.  
Wetherill Park, N.S.W. 2164  
Phone: 02-98 28 06 60  
Fax: 02-98 28 06 65

Austria  
BAHCO BELZER GmbH  
Wien  
Phone: (0)1 272 45 77  
Fax: (0)1 272 45 77-29

Belgium/Luxemburg  
BAHCO TOOLS BV  
Brussels  
Phone: (0)2 726 03 03  
Fax: (0)2 726 04 36

Brasil  
BAHCO FERRAMENTAS  
Santa Barbara do Oeste  
Phone: 19 455 1800  
Fax: 19 455 1040

Canada  
BAHCO TOOLS INC.  
Mississauga  
Phone: 800 296 47 87  
Fax: 800 877 56 87

Chile  
BAHCO CHILE LTDA  
Santiago  
Phone: 2-676 02 00  
Fax: 2-676 03 39

Czech Republic  
BAHCO TOOLS, s.r.o.  
Praha  
Phone: (0)2-24 25 20 98  
Fax: (0)2-24 24 76 12

Denmark  
BAHCO VAERKTØJ A/S  
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Phone: 43 63 03 30  
Fax: 43 96 24 56

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BAHCO TYÖKALUT OY  
Vantaa  
Phone: 09 8706 640  
Fax: 09 8706 6362

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Orléans  
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Fax: (0)2 38 41 41 43

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BAHCO BELZER GmbH  
Wuppertal  
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Fax: (0)202 474 502

Hungary  
BAHCO HUNGARY Ltd  
Budapest  
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Fax: (1)431 27 40

Italy  
BAHCO UTENSILI S.p.A.  
Milano  
Phone: 02 30 70 51  
Fax: 02 38 00 36 98

Mexico  
BAHCO HERRAMIENTAS  
Tlalnepantla  
Phone: 5390 3122  
Fax: 5390 3259 / 5390 4827

Netherlands  
BAHCO TOOLS BV  
Helmond  
Phone: (0)492 582 333  
Fax: (0)492 582 320

Netherlands  
BAHCO TOOLS BV  
Dept. International  
Helmond  
Phone: (0)492 582 371  
Fax: (0)492 582 370

New Zealand  
BAHCO TOOLS N.Z.  
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Fax: 9-2746207

Norway  
BAHCO VERKTØY AS  
Rud/Bærum  
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Fax: 67 17 56 51

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BAHCO TOOLS Sp. z oo  
Warszawa  
Phone: 22-647 38 80  
Fax: 22-647 38 78

Portugal  
BAHCO FERRAMENTAS LDA.  
Alfragide  
Phone: (2)1 424 19 70  
Fax: (2)1 424 19 79

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INTERNATIONAL  
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Fax: 095-2898384 / 2897124

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Fax: (34) 91 660 52 54

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BAHCO VERKTYG AB  
Enköping  
Phone: (0) 171 47 82 20  
Fax: (0) 171 47 82 38

Switzerland  
BAHCO BELZER GmbH  
Spreitenbach  
Phone: (0)56 417 90 00  
Fax: (0)56 417 90 10

United Kingdom  
BAHCO TOOLS LTD.  
Halesowen  
Phone: (0)121 504 52 00  
Fax: (0)121 504 52 52

USA  
BAHCO TOOLS INC.  
Scranton  
Phone: 800 446 74 04  
Fax: 800 877 56 87

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