

# INFORMATIONS TECHNIQUES

Technical information - Technische Informationen - Informaciones técnicas - Informazioni tecnici

## NUANCES

Technical compositions - Nuancen - Nuancias - Sfumature

	C	Si	Mn	P	Cr	Ni
FS15C	0,75	0,20	0,70	0,004	0,002	—
FS15N2	0,75	0,25	0,32	0,004	0,002	2,0

## CARACTERISTIQUES TECHNIQUES

Technical characteristics - Technische Charakterien - Características técnicas - Caratteristiche tecniche

Epaisseur Thickness Stärke Gruesso Spessore <b>e mm</b>	Résistance de la rupture Ultimate tensile strength Bruchfestigkeit Resistencia a la rotura Resistenza alla rottura <b>N/mm<sup>2</sup></b>	Dureté Hardness Härte Durezza Durezza <b>HRC</b>
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### - Standard

standard - Standard - estandar - standard

≤ 1,83

1480 +/- 60

42-44

> 1,83

1380 +/-60

41-43

### - Haute résistance

High tensile - Hohe Resistanz

Alta resistencia - Alta resistenza

≤ 1.83

1700 +/- 60

48-50

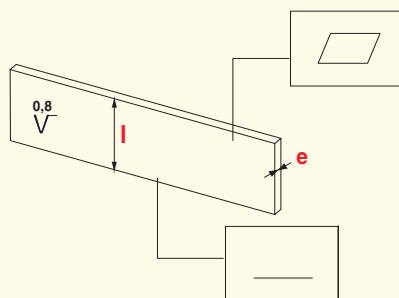
> 1.83

1600 +/- 60

45-47

## TOLERANCES GEOMETRIQUES

Geometrical tolerance - Geometrische Toleranz - Tolerancia geométrica - Tolleranza geometrica



### TOLERANCE DE PLANEITE :

Tolerance on flatness - Planheit-Toleranz

Tolerancia de planeitud - Tolleranza di planeità

	<b>0.10% DE LA LARGEUR</b>
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### TOLERANCE DE RECTITUDE :

Tolerance on straightness - Richt-Toleranz

Tolerancia de rectitud - Tolleranza di rettitudine

	<b>≤ 100 0.35mm/ M &gt;100 0.12mm/M</b>
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### TOLERANCE SUR LARGEUR ET EPAISSEUR : DOCUMENT SUR DEMANDE

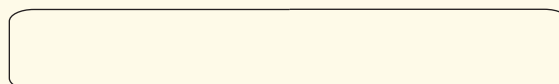
Tolerance on width and thickness on request - Toleranz bezüglich Breite und Stärke auf Anfrage

Tolerancia sobre la anchura y el grueso a petición - Tolleranza sulla larghezza e lo spessore : documento a richiesta

### BORDS USINES

Smooth square cut edges - Abgerundete Stahlkanten

Cantos trabajados - Lati lavorati

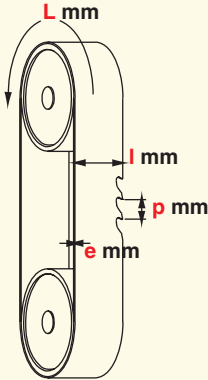


# INFORMATIONS TECHNIQUES

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## DIMENSIONS DE LA LAME

Band saw blade parameters - Sägeblatt-Dimensionen - Parametros de una sierra cinta - Parametri di una lama nastro



**L = Longueur**  
 Length  
 Gesamtlänge  
 Largo  
 Lunghezza

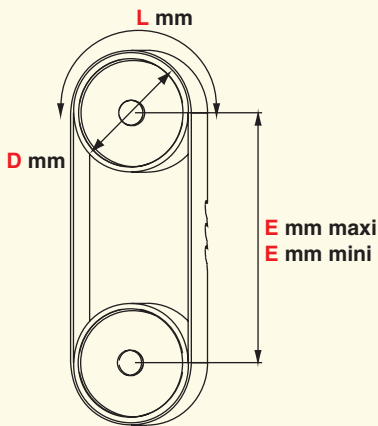
**e = Epaisseur**  
 Thickness  
 Stärke  
 Grueso  
 Spessore

**I = Largeur**  
 Width  
 Breite  
 Anchura  
 Larghezza

**P = Pas**  
 Pitch  
 Teilung  
 Paso  
 Passo

## LONGUEUR DE LA LAME

Length of band saw blade - Sägeblatt-Länge - Largo sierra cinta - Lunghezza di una lama nastro

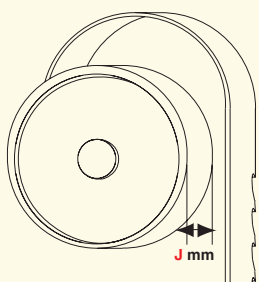


<b>L maxi</b>	=	2E maxi	+ 3,14 D
<b>L mini</b>	=	2E mini	+ 3,14 D

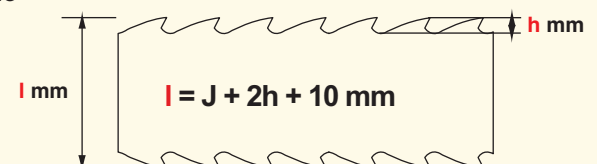
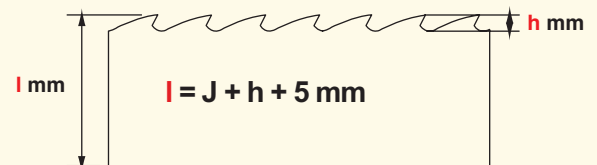
**E = Entraxe volant**  
 Pulley distance between 2 axis  
 Achsenabstand der Rollen  
 Entre-eje de los volantes  
 Entroasse dei volani

## LARGEUR DE LA LAME

Width of band saw blade - Sägeblatt-Breite - Ancho sierra cinta - Larghezza di una lama nastro


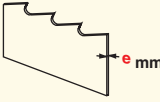
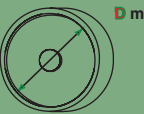



**\*I :** Prendre la largeur standard la plus proche  
 Use the standard nearest width  
 Die sich am meistannähernde Standardbreite nehmen  
 Tomar nota del ancho estandar mas adecuado  
 Prendere la larghezza standard più vicina



## EPAISSEUR DE LA LAME

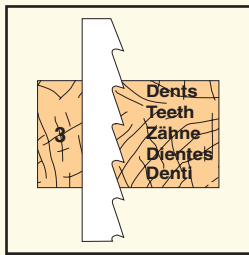
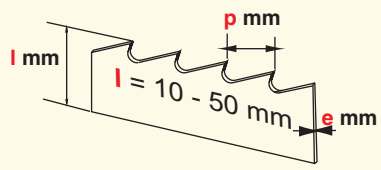
Thickness of band saw blade - Sägeblatt-Stärke - Grueso de la sierra cinta - Spessore di una lama nastro

	500	600	700	800	900	1000	1100
	0,4	0,5	0,6	0,7	0,8	0,9	1,0
	1200	1300	1400	1600	1800	2000	2200
	1,1	1,2-1,25	1,38-1,47	1,65	1,83	2,11	2,36-2,41

## PAS DE LA LAME

Pitch of band saw blade - Pas de la lame - die Zahnteilung - Paso de la sierra cinta - Passo di una lama nastro

**L = 10 - 50 MM**

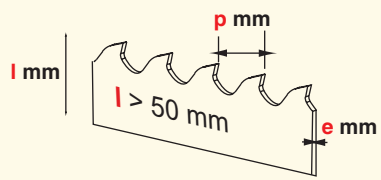


ec = **Épaisseur du copeau**  
Thickness of chips - Spanstärke  
Grueso de la viruta - Spessore del truciolo

Va = **Vitesse avance**  
Feeding speed - Vorschubgeschwindigkeit  
Velocidad de avance - Velocità avanzamento

V = **Vitesse de rotation**  
Rotating speed - Umlaufgeschwindigkeit  
Velocidad de rotación - Velocità rotazione

**L > 50 MM**



$$P = \frac{60V \times ec}{Va}$$

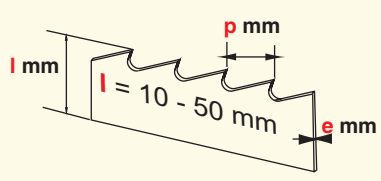
ec = 0,5 - 1,5  
Va = 10 - 80 m/min  
V = 20 - 40 m/s

ec moy = 0,8  
Va moy = 35 m/min

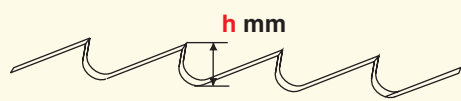
## HAUTEUR DE LA DENT

Tooth height - Zahnhöhe - Altura del diente - Altezza del dente

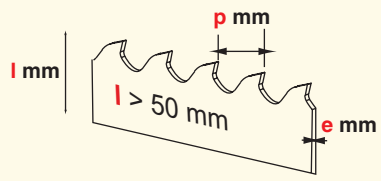
**L = 10-50 mm**



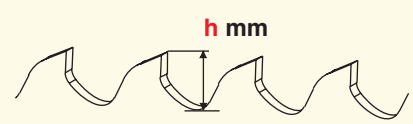
$$h \text{ maxi} = \frac{2P}{3}$$



**L > 50 mm**



$$h \text{ maxi} = 11 \times e$$



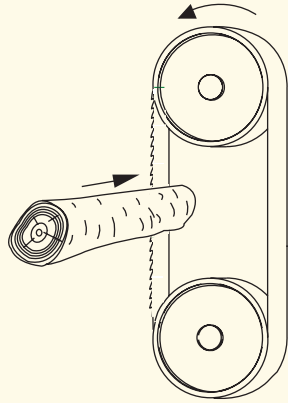
## SENS DE ROTATION DE LA LAME

Rotating way of the saw - Umlaufrichtung des Sägeblatters

Sentido de rotación de la hoja - Senso di rotazione della lama a nastro

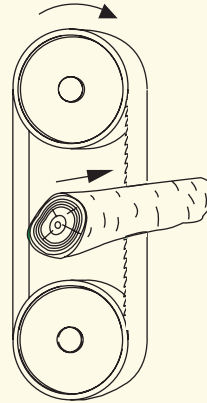
### ROTATION GAUCHE

Anti-clockwise rotation  
Linksdrehend  
Rotación izquierda  
Rotazione sinistra



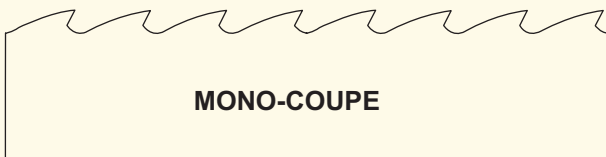
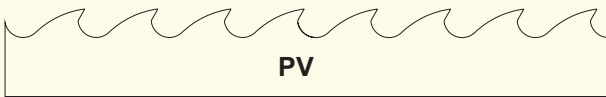
### ROTATION DROITE

Clockwise rotation  
Rechtsdrehend  
Rotación derecha  
Rotazione destra



## DENTURE STANDARD

Standard tooth shape - Standard-Zahnung - Dientes estandarés - Dentatura standard



## FINITION DE LA DENT

Tooth finishing - Zahn-Ausführung - Acabado del diente - Finitura del dente

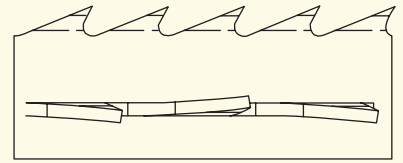
### AVOYAGE PAR TORSION : La voie est donnée par torsion des dents.

Setting: Kerf is given by teeth twisting

Das Schränken : die Schnittfuge wird von der Zahn-Torsion festgelegt

Triscado: se da la via por torsion de los dientes

Stradatura: si da la strada con la torsione dei denti



Utilisé principalement pour les lames de menuiserie ou de largeur inférieure à 50 mm.

Mainly used for band saw blades for carpentries or with width less than 50mm

Hauptsächlich für Schreinerei-Sägeblätter benutzt, oder für Blätter, deren Breite unter 50 mm liegt

Utilizado principalmente para sierras estrechas o de ancho inferior a 50 mm.

Utilizzata principalmente per le lame falegnameria oppure di larghezza inferiore a 50 mm

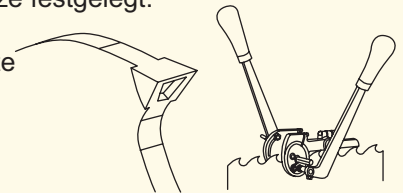
### ECRASAGE : La voie est donnée par refoulement de métal à la pointe de la dent.

Swaging: Kerf is given by crushing metal on the point of the tooth

Das Stauchen: die Schnittfuge wird vom Stauchen des Metalls an der Zahnpitze festgelegt.

Chafado: se da la via por rechazo de metal en la punta del diente

Schiacciatura: si da la strada con compressione dell'acciaio alla punta del dente



### FORESTELL : Avoyage par dépôt d'alliage à base de Cobalt sur la pointe de la dent.

Forestell: Kerf is made with a cobalt alloy tipping on top of the teeth

Forestell: Schnittfuge durch einen Kobalt-Legierungs Aufsatz, auf die Zahnpitze

Forestell: Triscado por colocación de aleación de cobalto sobre la punta del diente

Forestell: stradatura con messa di lega a base di cobalto sulla punta del dente

### Dureté : 48-50 HRC

Hardness - Härte - Durezza - Durezza

### Haute tenue à l'échauffement

Very good friction resistance - Standfest bei Erwärmung

Alta resistencia al calentamiento - Alta tenuta al riscaldamento

### Résistance au choc

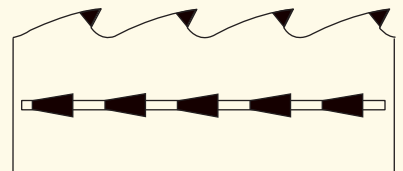
Shock resistance - Stoss-Resistant - Resistencia a los golpes - Resistenza ai colpi

### Résistant à l'abrasion

Abrasion resistance - Reibungs-Resistant - Resistencia al desafilado - Resistenza alla disaffilatura

### Facilité d'affûtage

Easy to sharpen - Leicht Schärffbar - Facilidad de afilado - Facilità di affilatura



### TYPES DE PASTILLES SUIVANT ESSENCE DE BOIS :

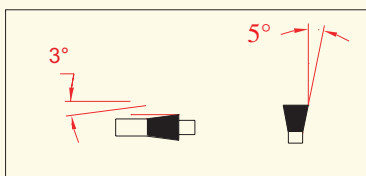
Possible tipping according to wood species - Zahn je nach Holzart

Tipo de pastilla según el especie de madera - Tipologia di pastiglia secondo specie di legno

#### Type D

##### Bois dur

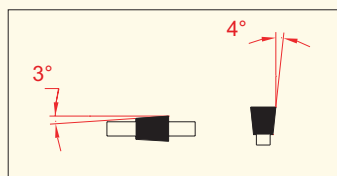
Hard wood  
Hartholz  
Madera dura  
Legno duro



#### Type T

##### Bois tendre

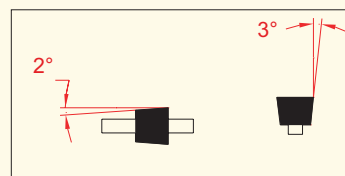
Soft wood  
Weichholz  
Madera blanda  
Legno tenero



#### Type K

##### Cas spéciaux

Special applications  
Speziale Fälle  
Casos especiales  
Caso speciali

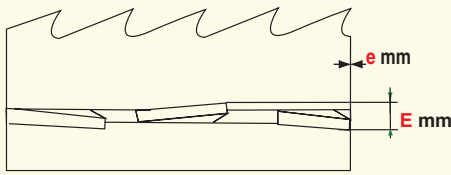


## VALEUR DE LA VOIE

Kerf resolution - Die Schnittfuge - Valor de la vía - Valore della strada

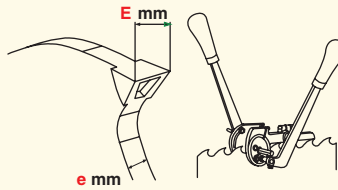
### Avoyage

Setting-Schränken  
Triscado-Stradatura



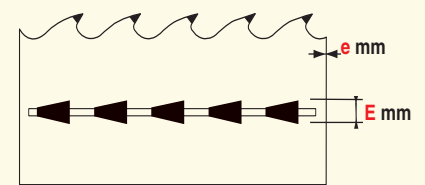
### Ecrasage

Swaging-Stauchen  
Chafado- Schiacciatura



### Denture Forestell

Forestell tipping teeth-Forestell Zahnung  
Dientes Forestell-Dentatura Forestell



### Bois dur

Hard wood - Hartholz - Madera dura-Legno duro

$$1,5 \times e = E$$

$$2 \times e = E$$

$$2 \times e = E$$

### Bois tendre

Soft wood - Weichholz - Madera blanda - Legno tenero

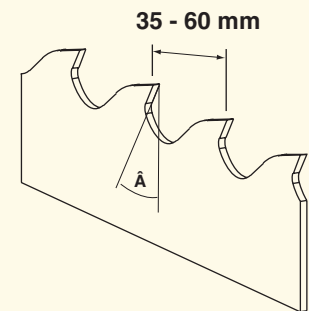
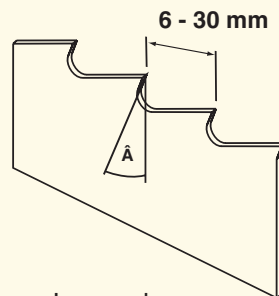
$$2 \times e = E$$

$$2,5 \times e = E$$

$$2,5 \times e = E$$

## ANGLE D'ATTAQUE

Rake angle - Spanwinkel - Angulo de ataque - Angolo di attacco



### Bois dur

Hard wood - Hartholz - Madera dura - Legno duro

$$\hat{A} = 5^\circ - 8^\circ$$

$$\hat{A} = 18^\circ - 25^\circ$$

### Bois tendre

Soft wood - Weichholz - Madera blanda - Legno tenero

$$\hat{A} = 10^\circ - 12^\circ$$

$$\hat{A} = 25^\circ - 35^\circ$$

## VITESSE LINEAIRE DE LA LAME

Linear speed of band saw blade - Lineargeschwindigkeit des Sägeblattes

Velocidad linear de la hoja - Velocità lineare della lama

**Bois dur** - Hard wood - Hartholz - Madera dura - Legno duro

**Bois mi-dur** - Medium hard wood - Nadelholz - Madera semi-dura - Legno semi duro

**Bois tendre** - Soft wood - Weichholz - Madera blanda - Legno tenero

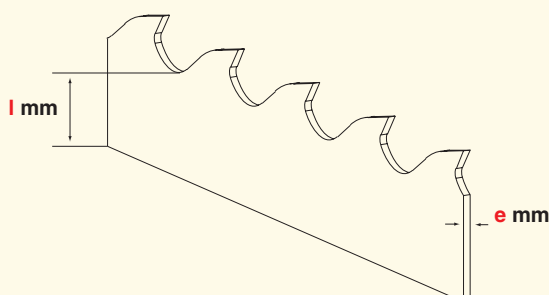
$$V = 20 - 32 \text{ M/S}$$

$$V = 32 - 36 \text{ M/S}$$

$$V = 36 - 42 \text{ M/S}$$

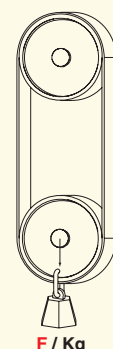
## FORCE DE TENSION

Tension strength - Spannkraft - Fuerza de tensión - Forza della tensione



$$F_{kg} = (l' \times e \times 15) \times 2$$

$$F_{kg} = (l' \times e \times 21) \times 2$$



## NIVEAUX DE FINITION

Finishing level - Ausführung - Nivel de acabado - Livelli di finitura

### - Feuillard

Strip steel - Stahlband

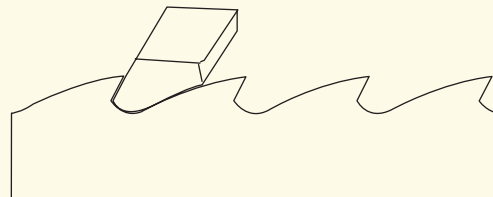
Fleje - Acciaio



### - Denté

- Toothed only - Gezahnt

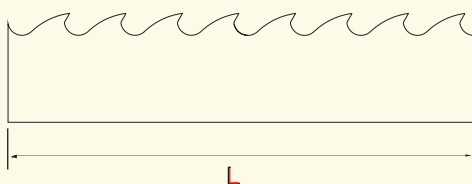
- Dentado - Dentato



### - Longueur dentée

Length toothed only - Gezahnte Länge

Longitud dentada - Lunghezza dentata



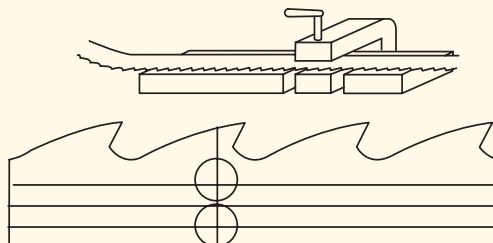
### - Plané, dressé, tensionné

Planished, leveled, tensionned

Geplant, gespannt, gerichtet

Planeado, enderezado, tensionado

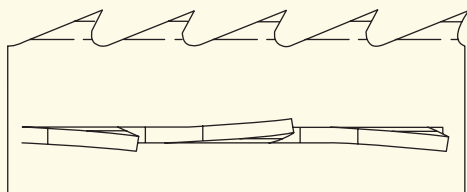
Spianato, ridrazzato, tensionato



### - Denté, avoyé

Toothed, setted - Gezahnt, geschränkt

Dentado, triscado - Dentato, stradato



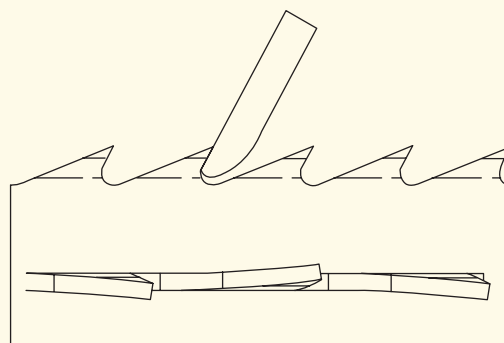
### - Affûté, avoyé, Plané, dressé, tensionné

Toothed, setted, sharpened, planished, leveled, tensionned

Geschärft, geschränkt, geplant, gespannt, gerichtet

Afilado, triscado, planeado, enderezado, tensionado

Affilato, stradato, spianato, ridrazzato, tensionato



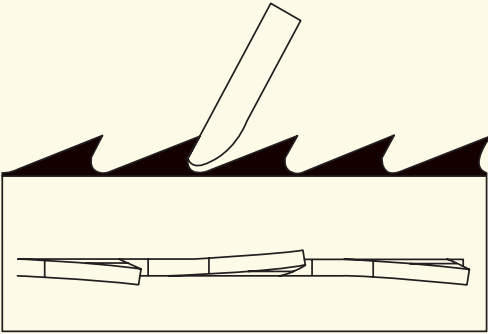
**- Affûté, avoyé, trempé**

Sharpened, set tempered

Geschränkte, geschärfte und gehärtete Zahnspitzen

Afilado, triscado, templado

Affilato, stradato, temprato



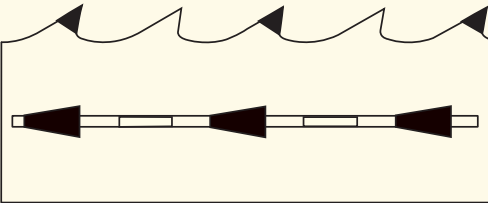
**- Denture Alliage cobalt Forestell, affûtée 1 dts/2**

Forestell tipped 1/2 teeth

Jeder zweite Zahn Forestell, geschärft

Forestell, afilado, 1 diente sobre 2 (1 diente si, uno no)

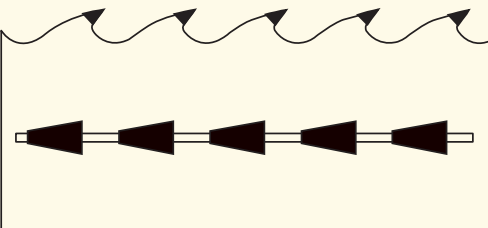
Dentatura Forestell affilata 1 dente/2



**- Denture Alliage cobalt Forestell**

Forestell tipped - Forestell Zähne

Dientes Forestell - Dentatura Forestell



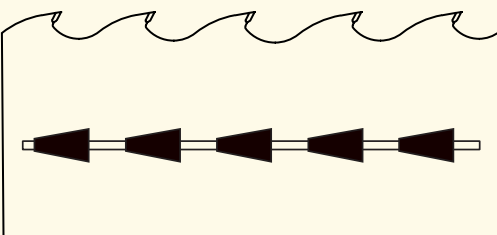
**- Denture carbure**

HM tipped

HM Zähne

Dientes acero duro

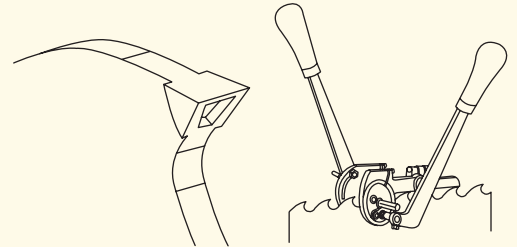
Dentatura al widia



**- Denture écrasée**

Swaging - Gestaut

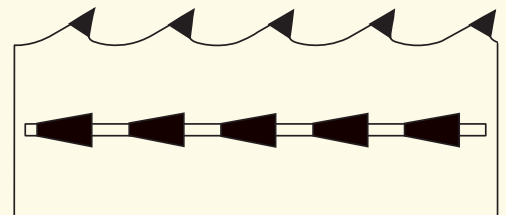
Chafado - Dentatura schiacciata



**- Denture Alliage cobalt Forestell**

Forestell tipped - Forestell Zähne

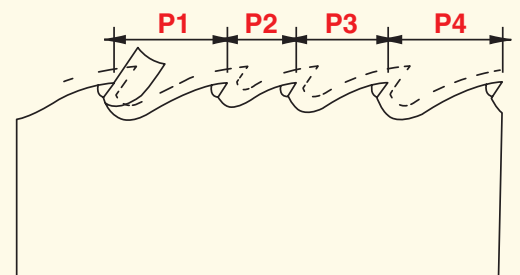
Dientes Forestell - Dentatura Forestell



**- Denture à pas variable**

Variable pitch - Zahnteilungen unterschiedlich

Paso variable - Dentatura a passo variabile



**Autres finitions sur demande**

Other finishing on request

Andere Ausführung auf Anfrage

Otros acabados a petición

Altre finiture a richiesta