

Industrial Knives



Material: HSS 6 % W – 1.3343 – M2, HSS 18 % W – 1.3355 – T1, HLS 13 % Cr – 1.2379 – D2, DS – 1.2067 – TOOL STEEL

Use: machining of wood boards and balks.

Machine: planer and thicknesser

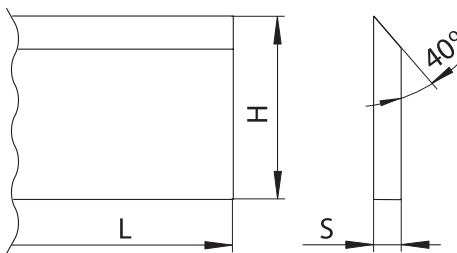


Characteristics:

- » material: 1.3355 for hardwood, 1.3343 for hard- and softwood, 1.2379 for softwood, 1.2067 for softwood
- » planing knives are manufactured in metric system and in inches
- » custom-made coated planing knives with extended life-span
- » hardness of planing knives 59 to 64 HRC
- » heat treatment made in a special computer-controlled furnace
- » customized manufacture of planing knives of any dimensions

Most common planing knives – table of dimensions

[L x H x S]					
100 x 35 x 3.0	100 x 30 x 3.0	100 x 25 x 3.0	100 x 20 x 3.0	100 x 25 x 2.5	100 x 20 x 2.5
120 x 35 x 3.0	120 x 30 x 3.0	120 x 25 x 3.0	120 x 20 x 3.0	120 x 25 x 2.5	120 x 20 x 2.5
130 x 35 x 3.0	130 x 30 x 3.0	130 x 25 x 3.0	130 x 20 x 3.0	130 x 25 x 2.5	130 x 20 x 2.5
150 x 35 x 3.0	150 x 30 x 3.0	150 x 25 x 3.0	150 x 20 x 3.0	150 x 25 x 2.5	150 x 20 x 2.5
180 x 35 x 3.0	180 x 30 x 3.0	180 x 25 x 3.0	180 x 20 x 3.0	180 x 25 x 2.5	180 x 20 x 2.5
210 x 35 x 3.0	210 x 30 x 3.0	210 x 25 x 3.0	210 x 20 x 3.0	210 x 25 x 2.5	210 x 20 x 2.5
240 x 35 x 3.0	240 x 30 x 3.0	240 x 25 x 3.0	240 x 20 x 3.0	240 x 25 x 2.5	240 x 20 x 2.5
260 x 35 x 3.0	260 x 30 x 3.0	260 x 25 x 3.0	260 x 20 x 3.0	260 x 25 x 2.5	260 x 20 x 2.5
310 x 35 x 3.0	310 x 30 x 3.0	310 x 25 x 3.0	310 x 20 x 3.0	310 x 25 x 2.5	310 x 20 x 2.5
400 x 35 x 3.0	400 x 30 x 3.0	400 x 25 x 3.0	400 x 20 x 3.0	400 x 25 x 2.5	400 x 20 x 2.5
410 x 35 x 3.0	410 x 30 x 3.0	410 x 25 x 3.0	410 x 20 x 3.0	410 x 25 x 2.5	410 x 20 x 2.5
450 x 35 x 3.0	450 x 30 x 3.0	450 x 25 x 3.0	450 x 20 x 3.0	450 x 25 x 2.5	450 x 20 x 2.5
500 x 35 x 3.0	500 x 30 x 3.0	500 x 25 x 3.0	500 x 20 x 3.0	500 x 25 x 2.5	500 x 20 x 2.5
510 x 35 x 3.0	510 x 30 x 3.0	510 x 25 x 3.0	510 x 20 x 3.0	510 x 25 x 2.5	510 x 20 x 2.5
530 x 35 x 3.0	530 x 30 x 3.0	530 x 25 x 3.0	530 x 20 x 3.0	530 x 25 x 2.5	530 x 20 x 2.5
610 x 35 x 3.0	610 x 30 x 3.0	610 x 25 x 3.0	610 x 20 x 3.0	610 x 25 x 2.5	610 x 20 x 2.5
640 x 35 x 3.0	640 x 30 x 3.0	640 x 25 x 3.0	640 x 20 x 3.0	640 x 25 x 2.5	640 x 20 x 2.5
710 x 35 x 3.0	710 x 30 x 3.0	710 x 25 x 3.0	710 x 20 x 3.0	710 x 25 x 2.5	710 x 20 x 2.5
810 x 35 x 3.0	810 x 30 x 3.0	810 x 25 x 3.0	810 x 20 x 3.0	810 x 25 x 2.5	810 x 20 x 2.5
910 x 35 x 3.0	910 x 30 x 3.0	910 x 25 x 3.0	910 x 20 x 3.0	910 x 25 x 2.5	910 x 20 x 2.5
1000 x 35 x 3.0	1000 x 30 x 3.0	1000 x 25 x 3.0	1000 x 20 x 3.0	1000 x 25 x 2.5	1000 x 20 x 2.5
1010 x 35 x 3.0	1010 x 30 x 3.0	1010 x 25 x 3.0	1010 x 20 x 3.0	1010 x 25 x 2.5	1010 x 20 x 2.5
1050 x 35 x 3.0	1050 x 30 x 3.0	1050 x 25 x 3.0	1050 x 20 x 3.0	1050 x 25 x 2.5	1050 x 20 x 2.5
1220 x 35 x 3.0	1220 x 30 x 3.0	1220 x 25 x 3.0	1220 x 20 x 3.0	1220 x 25 x 2.5	1220 x 20 x 2.5



Material: HSS 6 % W – 1.3343 – M2, HSS 18 % W – 1.3355 – T1, HLS 13 % Cr – 1.2379 – D2

Use: profile cutting, machining of wood boards and balks

Machine: shapers, multisided profile cutting millers, planers and thicknessers



Characteristics:

- » material: 1.3355 for hardwood, 1.3343 for hard- and softwood, 1.2379 for softwood
- » serrated back knives in metric and inch sizes
- » customized manufacture of serrated back knives of any dimensions
- » hardness: 58 to 63 HRC, at customer's request other hardness
- » heat treatment made in a special computer controlled furnace
- » 60° and 90° serration
- » angle of cutting edge: standard 45° + peripheral land 0.5 mm, other angle at customer's request
- » bevel angle 45°, other angle at customer's request

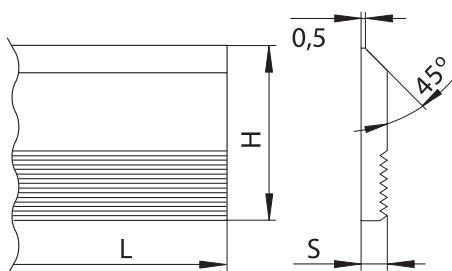
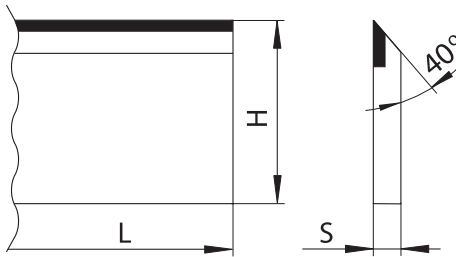


Table of dimensions

[L x H x S]								
30x50x8	30x60x8	30x40x8	30x80x8	30x40x6	30x50x6	30x60x6	30x30x4	30x40x4
40x50x8	40x60x8	40x40x8	40x80x8	40x40x6	40x50x6	40x60x6	40x30x4	40x40x4
50x50x8	50x60x8	50x40x8	50x80x8	50x40x6	50x50x6	50x60x6	50x30x4	50x40x4
60x50x8	60x60x8	60x40x8	60x80x8	60x40x6	60x50x6	60x60x6	60x30x4	60x40x4
70x50x8	70x60x8	70x70x8	70x80x8	70x40x6	70x50x6	70x60x6	70x30x4	70x40x4
80x50x8	80x60x8	80x70x8	80x80x8	80x40x6	80x50x6	80x60x6	80x30x4	80x40x4
100x50x8	100x60x8	100x70x8	100x80x8	100x40x6	100x50x6	100x60x6	100x30x4	100x40x4
130x50x8	130x60x8	130x70x8	130x80x8	130x40x6	130x50x6	130x60x6	130x30x4	130x40x4
150x50x8	150x60x8	150x70x8	150x80x8	150x40x6	150x50x6	150x60x6	150x30x4	150x40x4
180x50x8	180x60x8	180x70x8	180x80x8	180x40x6	180x50x6	180x60x6	180x30x4	180x40x4
210x50x8	210x60x8	210x70x8	210x80x8	210x40x6	210x50x6	210x60x6	210x30x4	210x40x4
230x50x8	230x60x8	230x70x8	230x80x8	230x40x6	230x50x6	230x60x6	230x30x4	230x40x4
260x50x8	260x60x8	260x70x8	260x80x8	260x40x6	260x50x6	260x60x6	260x30x4	260x40x4
500x50x8	500x60x8	500x70x8	500x80x8	500x40x6	500x50x6	500x60x6	500x30x4	500x40x4
600x50x8	600x60x8	600x70x8	600x80x8	600x40x6	600x50x6	600x60x6	600x30x4	600x40x4
635x50x8	635x60x8	635x70x8	635x80x8	635x40x6	635x50x6	635x60x6	635x30x4	635x40x4
650x50x8	650x60x8	650x70x8	650x80x8	650x40x6	650x50x6	650x60x6	650x30x4	650x40x4

Carbide Tipped Planing Knives



Material: high-performance tungsten carbide with sufficient hardness specially made for machining of wood

Use: broaching and thickening of hardwood boards, board with adhesives and for high-performance cutting

Machine: planer and thicknesser

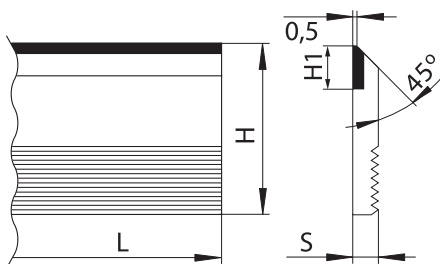
Characteristics:

- » planing knives with cutting edged of tungsten carbide have shank made of structural steel in which the tungsten carbide cutting tip is brazed with silver and copper
- » tungsten carbide planing knives in metric and inch sizes
- » customized manufacture of carbide tipped planing knives of any dimensions

Table of dimensions

[L x H x S]					
100 x 35 x 3.0	310 x 35 x 3.0	810 x 35 x 3.0	210 x 30 x 3.0	500 x 30 x 3.0	1050 x 30 x 3.0
120 x 35 x 3.0	400 x 35 x 3.0	1050 x 35 x 3.0	240 x 30 x 3.0	510 x 30 x 3.0	180 x 25 x 3.0
130 x 35 x 3.0	410 x 35 x 3.0	100 x 30 x 3.0	260 x 30 x 3.0	530 x 30 x 3.0	210 x 25 x 3.0
150 x 35 x 3.0	510 x 35 x 3.0	120 x 30 x 3.0	310 x 30 x 3.0	610 x 30 x 3.0	260 x 25 x 3.0
180 x 35 x 3.0	530 x 35 x 3.0	130 x 30 x 3.0	400 x 30 x 3.0	640 x 30 x 3.0	310 x 25 x 3.0
210 x 35 x 3.0	610 x 35 x 3.0	150 x 30 x 3.0	410 x 30 x 3.0	710 x 30 x 3.0	810 x 25 x 3.0
240 x 35 x 3.0	640 x 35 x 3.0	180 x 30 x 3.0	450 x 30 x 3.0	810 x 30 x 3.0	1050 x 25 x 3.0

Carbide Tipped Serrated Back Knives



Material: High-performance tungsten carbide with sufficient hardness specially made for machining of wood materials

Use: profile cutting, machining of wood boards and balks

Machine: shapers, multisided profile cutting millers, planers and thicknessers

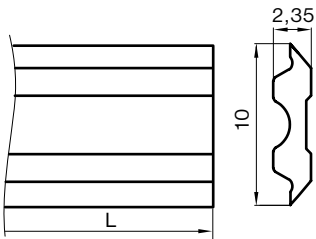
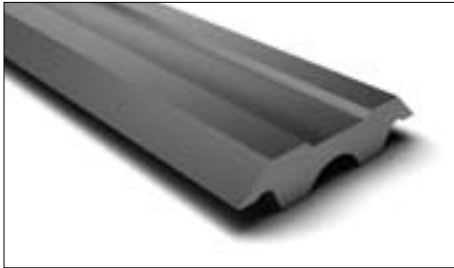
Characteristics:

- » serrated back knives with tungsten carbide cutting tips have shank made of tool steel in which the tungsten carbide tip is brazed with silver and copper
 - » carbide tipped serrated back knives in metric and inch sizes
 - » thickness of tungsten carbide tips H1: 15, 20, 25, 30 mm
 - » customized manufacture of carbide tipped serrated back knives of any dimensions
- The most common tungsten carbide tipped serrated back knives – table of dimensions

The most carbide tipped blankets with fixation grooving – table of dimensions

[L x H x S]			
50 x 40 x 8	50 x 50 x 8	50 x 60 x 8	50 x 70 x 8
80 x 40 x 8	80 x 50 x 8	80 x 60 x 8	80 x 70 x 8
100 x 40 x 8	100 x 50 x 8	100 x 60 x 8	100 x 70 x 8
130 x 40 x 8	130 x 50 x 8	130 x 60 x 8	130 x 70 x 8
180 x 40 x 8	180 x 50 x 8	180 x 60 x 8	180 x 70 x 8
230 x 40 x 8	230 x 50 x 8	230 x 60 x 8	230 x 70 x 8
650 x 40 x 8	650 x 50 x 8	650 x 60 x 8	650 x 70 x 8

Usage: wood board and balk machining
Machine: planer and thicknesser

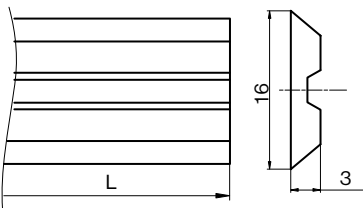


System Tersa

Material: HLS 13%Cr – 1.2379 – D2, HSS 18% W – 1.3355 – T1, 1.3247 – M42, tungsten carbide (TC)

Characteristics:

- » Application: material 1.2379 – for soft wood, 1.3355 for hard and soft wood, TC for hard wood and high cutting performance
- » planing knives are supplied in 60 – 650 mm lengths
- » the knives can be supplied PVD coated which increases their lifespan

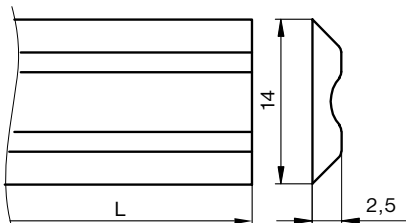


System Centrolock

Material: HSS 18% W – 1.3355 – T1, tungsten carbide (TC)

Characteristics:

- » Application: material 1.3355 for hard and soft wood, TC for hard wood and high cutting performance
- » planing knives are supplied in 20 – 650 mm lengths
- » the knives can be supplied PVD coated which increases their lifespan



System Terminus

Material: HSS 18% W – 1.3355 – T1, tungsten carbide (TC)

Characteristics:

- » Application: material 1.3355 for hard and soft wood, TC for hard wood and high cutting performance
- » planing knives are supplied in 60 – 660 mm lengths
- » the knives can be supplied PVD coated which increases their lifespan

Application: shaping, broaching and thickening

Machine: shapers, multilateral profile millers, surfacers and thicknessers

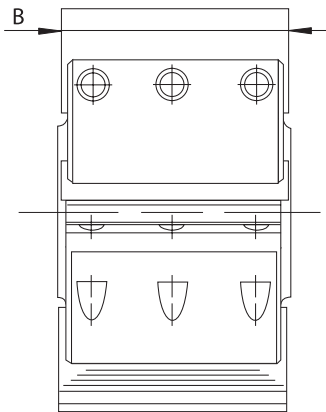
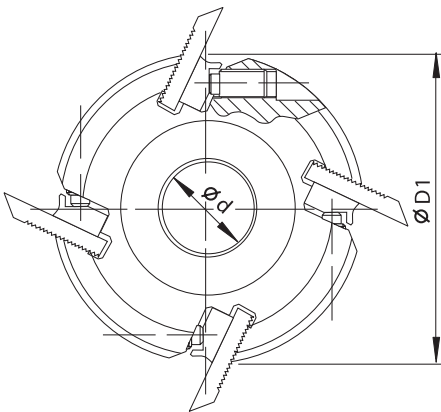


Characteristics:

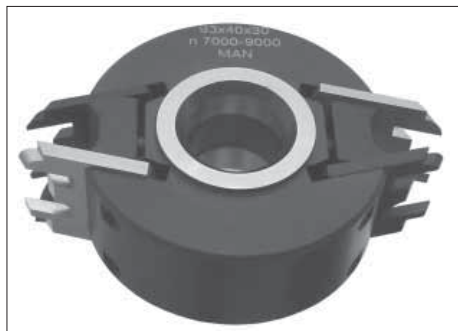
- » only for machine feed
- » maximum revolutions $n = 9000 \text{ rev/min}$

Safety profile cutter head – dimensional table

D	B	d	z	m
122	40	40	4 or 2	3,4
		60	4 or 2	5,1
		80	4 or 2	6,9
		100	4 or 2	8,6
		130	4 or 2	11,2
		150	4 or 2	12,9
		180	4 or 2	15,5
		230	4 or 2	19,8



Application: shaping
Machine: shapers, multilateral profile millers



Characteristics:

- » with limiters for hand feed and without limiters for machine feed
- » clamping with automatic centring of cutters

Universal Profile Cutter Head

D	d	B	n	Manual feed MAN	Machine feed MEC	Steel version
93	30	40	7000 – 9000	•	•	•
93	30	52	7000 – 9000	•	•	•
120	30	40	7000 – 9000	•	•	•
120	30	52	7000 – 9000	•	•	•

We supply spare parts for this product

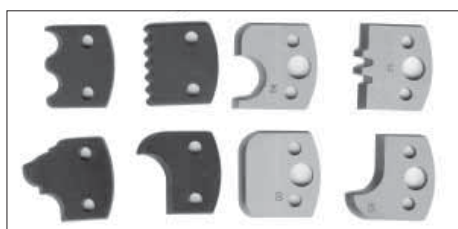
Wooden Cabinet for Cutter Head, Profile Cutters, and Limiters

- » Suspended cabinet with dimensions 600 x 900 x 150 mm (including a promo area above the glassed part)
- » Glassed face with lockable doors
- » 48 pivots for profile cutters and limiters
- » 1 pivot for profile cutter head



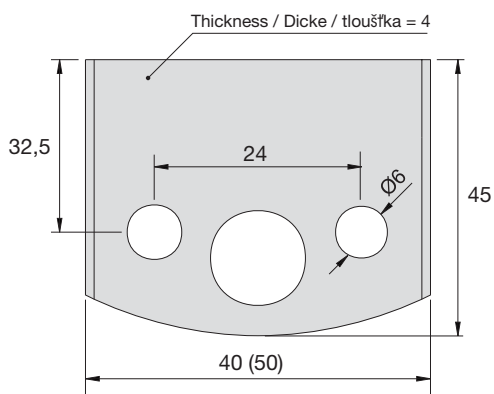
Wooden Cassette for Cutter Head, Profile Cutters and Limiters

- » in versions for 6, 12, 24 and 36 sets
- » knife profile option by the customer's request



Characteristics:

- » width 40 mm, thickness 4 mm
- » knives can operate with limiters (manual shift) or without (machine shift)
- » knife material – HSS (tool steel), SP
- » limiter material – structural steel, SP
- » the limiter prevents tool "kicking" at manual feed
- » the limiter has a profile cut 0,8 mm deeper



Semiproducts for Profile Cutter Cut

- » Semiproducts of both limiters and profile knives are in the same dimensions
- » For maximum profile depth up to 16 mm

You'll find more information in the PILANA catalog – Milling and planing heads, blankets and cutting knives

Material of knives: special chipper steel developed for manufacture of chipper and flaker knives, DS tool steel

Use: final operation for two-stage or single-stage manufacture of chips to be use for chipboards

Machine: ring and drum flaker of brands Pallmann, Maier, Klöckner, Pessa and in the first disintegration stage of wood on Hombak machines



Characteristics:

- » flaker knives of hardness 55 to 57 HRC, at customer's request also other hardness
- » heat treatment made in a special computer-controlled furnace
- » angle of cutting edge 35° – 44° as per type of machine

The most often used flaker knives for chipboard – table of dimensions

[L x H x S]				
Hombak	Klöckner	Maier	Pallmann	Pessa
306,9 x 57 x 4	403 x 90 x 4	334 x 100 x 5	299 x 100 x 5	599 x 100 x 5
363,1 x 57 x 4	489 x 90 x 4	464 x 100 x 5	449 x 100 x 5	
365,6 x 75 x 4	501 x 90 x 4	464 x 90 x 5	524 x 100 x 5	
370,2 x 57 x 4			449 x 90 x 5	
525,5 x 62 x 4			449 x 85 x 3	
533,4 x 75 x 4			299 x 75 x 5	
539,3 x 57 x 4			449 x 90 x 3	
547,3 x 74 x 4				

OSB boards flaker knives

Material of knives: special chipper steel developed for manufacture of chipper and flaker knives

Use: in the first and second stage of wood disintegration in the manufacture of OSB

Machine: flaker of Pallmann, Maier, Klöckner and CAE brand



Characteristics:

- » OSB knives hardness 55 – 58 HRC, other hardness at customer's request
- » heat treatment made in a special computer-controlled furnace

The most often used flaker knives for OSB – table of dimensions

[L x H x S]	
CAE	Pallmann
469,9 x 69,85 x 5	603 x 83 x 5
726,85 x 82,5 x 6,35	680 x 83 x 5
	728 x 83 x 5
	803 x 83 x 5

You'll find more information in the PILANA catalog – Industrial knives

L – length [mm], H – width [mm], S – thickness [mm]

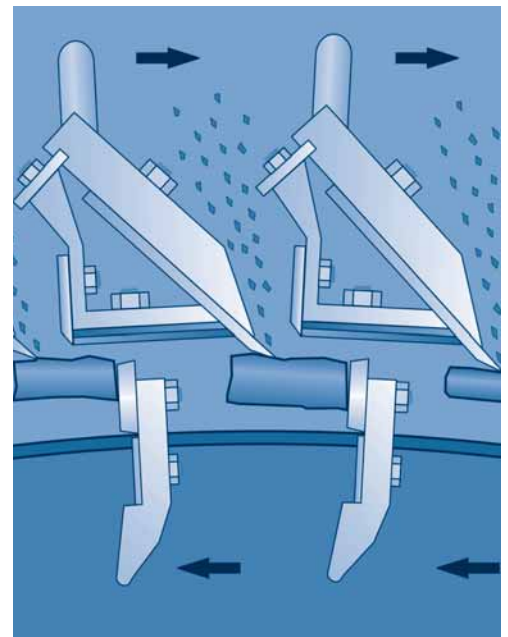
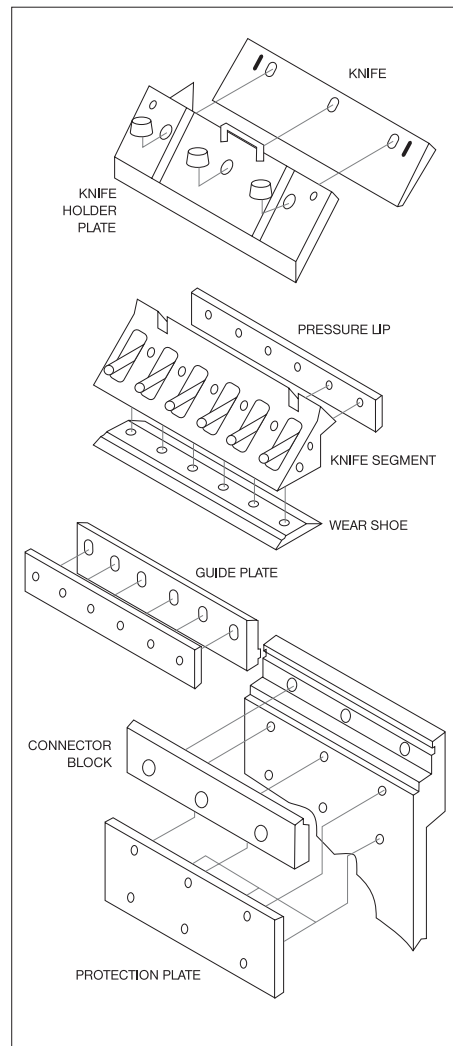
Material of knives: special chipper steel developed for manufacture of chipper and flaker knives, DS tool steel, holders of structural steel

Use: final operation for two-stage or single-stage manufacture of chips to be used for chipboards

Machine: ring flaker of Pallmann, Maier, Klöckner, Pesa and Hombak brand

We manufacture:

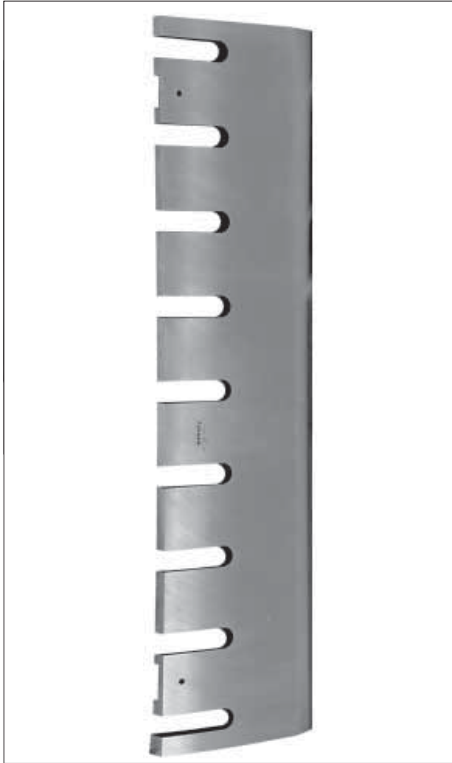
- » knife
- » knife holder plate
- » pressure lip
- » knife segment
- » wear shoe
- » guide plate
- » connector block
- » protection plate



Material of knives: special chipper steel developed for manufacture of chipper and flaker knives

Use: crushing of waste timber, cutting timber to chips intended for flaking

Machine: chippers

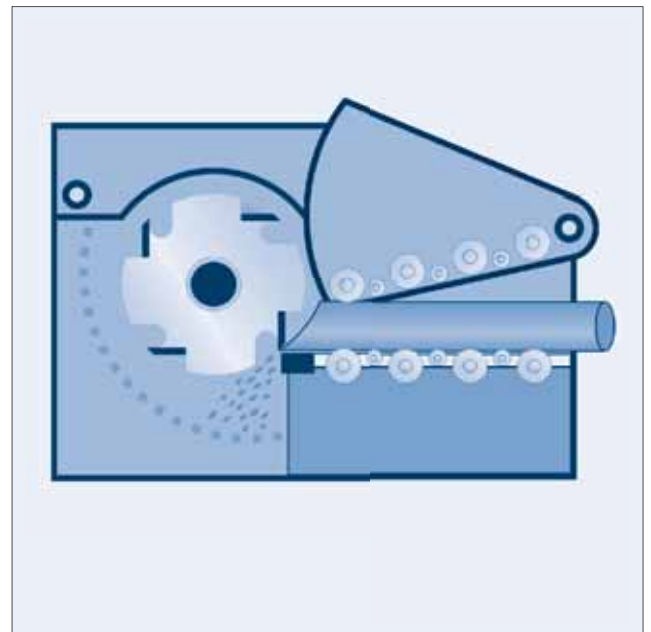
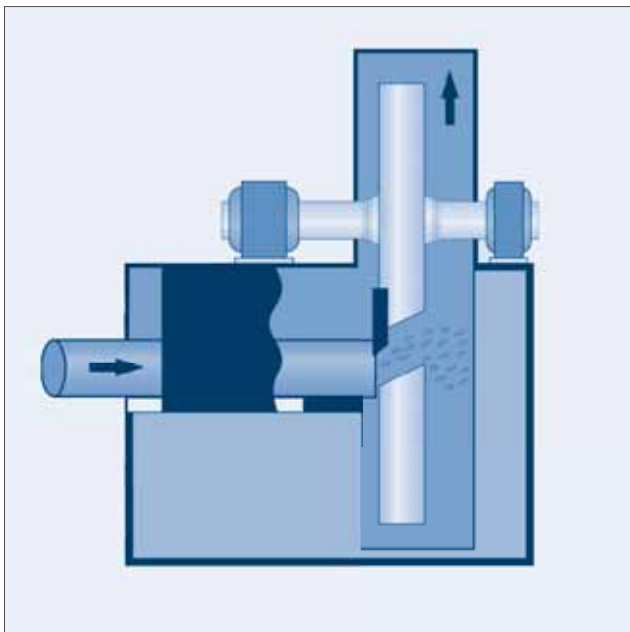


Characteristics:

- » chipper knives of hardness 52 to 58 HRC
- » heat treatment made in a special computer-controlled furnace
- » angle of cutting edge: 26° to 40° as per type of machine and sort and condition of wood
- » manufacture of any knife as per drawing documentation or according to a sample
- » beside knives, we deliver also counter-knives, pressure bars and other components, depending on type of machine

We produce knives mainly for the following machines

Ahlstrom	Bush	Esterer	Jenz	Murray	Segem
Altec	CAE	EWD	Klöckner	Murray	Schlising
Ari	Camura	Ferrari	KMW	NHS	Schmidt
Asplundh	Canadac	Fujikogio	Kockum	Nicolson	Siba
Bandit	Candac	Fulghum	Kone Wood	Olathe	Sjolins
Berkli	Carthage	Gustin Som	LGU	Pallmann	Soderhamn
Bezner	Comact	Hedlund	Linck	Pessa	Tunissen
Blaf Clawson	Demuth	Heinola	Linder	Pezzolato	Vecoplan
Bongioann	Dosco	Hewsaw	Maier	Precision	Vermeer
Bruks	Ducker	Husky	Mitts	Rauma	Wayne
Brush	Erjo	Jensen	Morbark	Rudnick	Zeno



You'll find more information in the PILANA catalog – Industrial knives

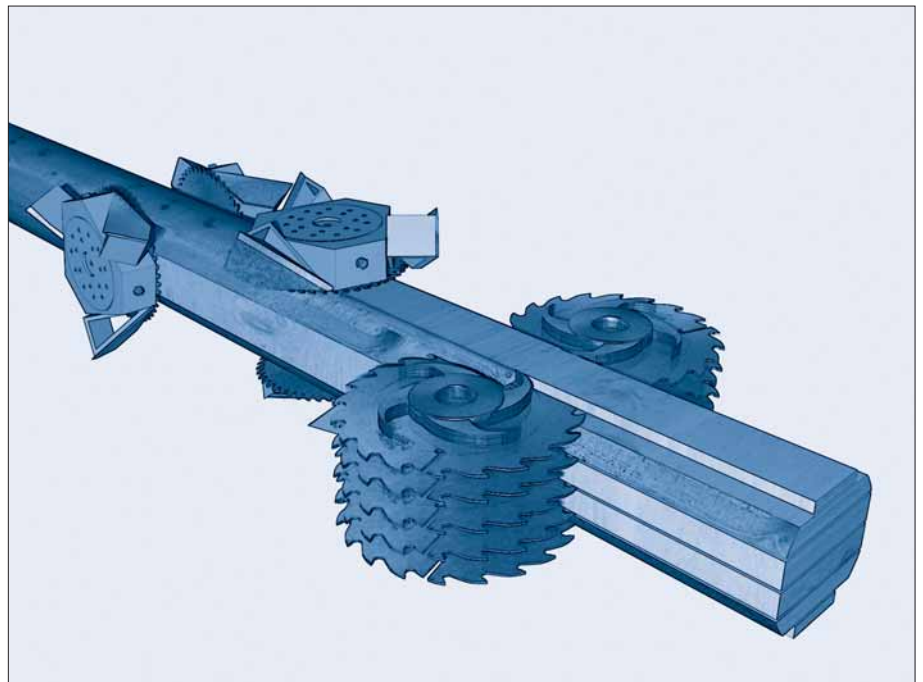
Material of knives: special chipper steel developed for manufacture of chipper canter and slabber knives

Use: the knives are used in canter and slabber units which are part of sawmilling lines



Characteristics:

- » heat treatment made in a special computer-controlled furnace
- » manufacture of any knife as per drawing documentation or according to a sample
- » beside knives, we deliver also counter-knives, pressure bars and other components, depending on type of machine



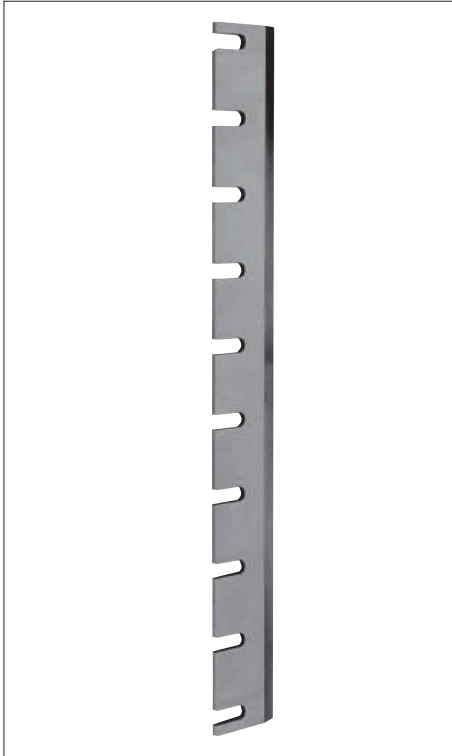
We produce knives mainly for the following machines

Ahlström	EWD	Linck	Segem
Bongioanni	Forano	Linder	Söderhamn
CAE	Heinola	Mem	Wurster
Comact	Hew saw	Sawqiup	
Esterer	LBL	Schenck	

Material of knives: special chipper steel developed for manufacture of chipper, veneer slicing and flaker knives, CHIPPER – 1.2362, 1.2631 – A8 in Solid design

Use: slicing, peeling and cutting of veneer

Machine: peeling and slicing machines, veneer slicers

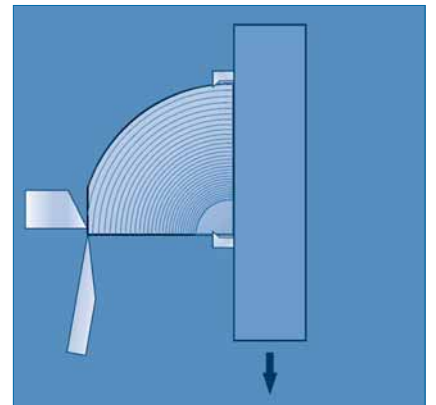
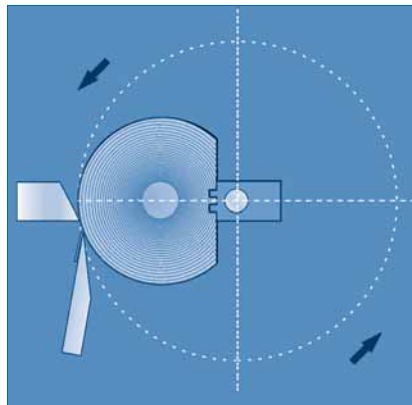
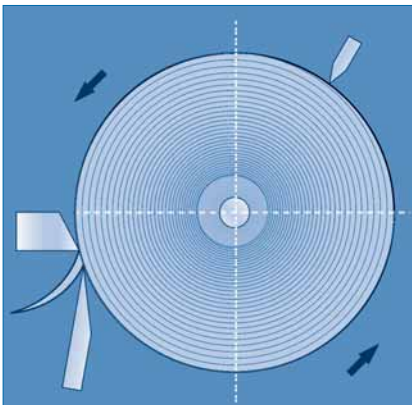


Characteristics:

- » veneer slicing knives of hardness 57 to 60 HRC heat treatment made in a special computer-controlled oven
- » angle of cutting edge: approx. 20°
- » besides knives, we also supply other components: pressure bars and other components depending on the type of machine

We produce knives mainly for the following machines

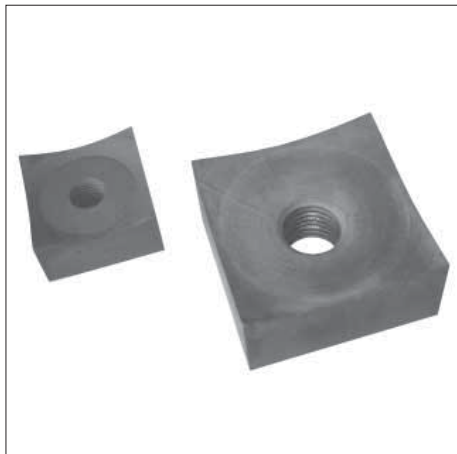
AEW	Derouleuse	Chambon	Minami	Shonai	Uroko
Arizun	Derulor	John	Monguzi	Sodeme	Valette
Brugg	Fezer	Josting	Muller	Tai-Hei	Victor
Capital	Fisher	Jusan	Nishigami	Tai-Yuan	Watarai
COE	FRF	Kaiser	Peller	Takekana	Weitina
Colombo	Fudder	Kelner	PM I	Tanouchi	Zuen Kwan
Coralì	Fukushima	KPS	Rapidex	Temil	
Cremona	Hasimoto	Marunaka	Raute	Thoms/ Benato	
Dahol	Hattori	Meinan Aristo	RFR	Tromag	



Material of knives: HSL – 1.2379 – D2, carburized DS tool steel,
chipper – 1.2362 – A8

Use: crushing of waste materials in plastics processing industry

Machine: crushing machines

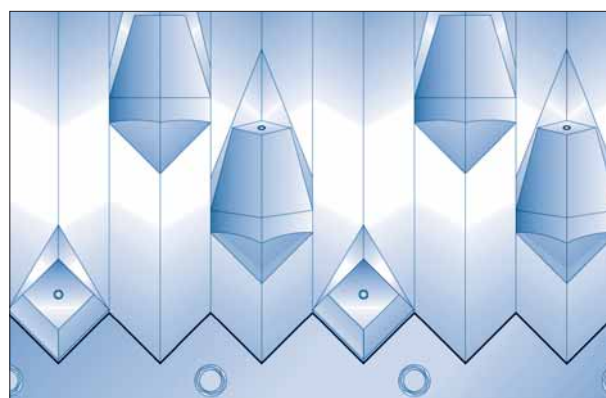
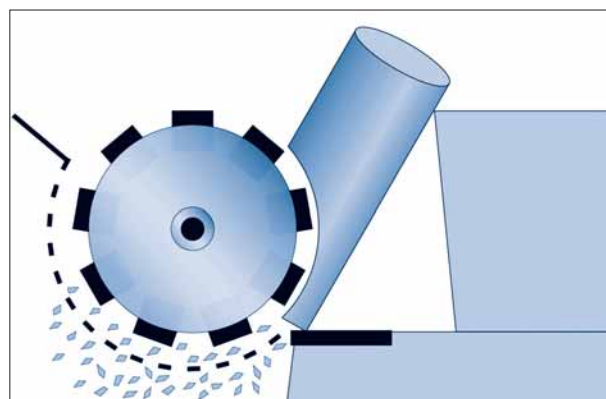


Characteristics:

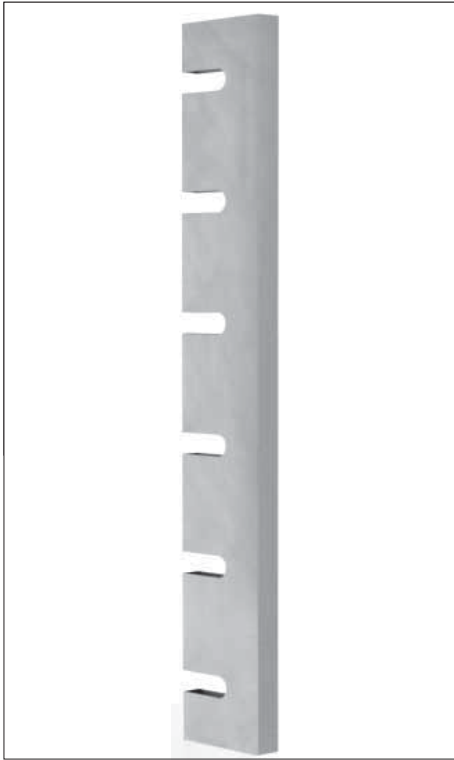
- » shredder knives most often of square or circular shape
- » shredder knives of hardness 52 to 59 HRC, lower hardness recommended for materials with admixture of metals
- » heat treatment made in a special computer-controlled furnace
- » other components for crushing machines: stator knives and holders

We produced knives mainly for the following machines

Bano	Haas	Reinbold	Untha	Weima	Zeno
BMH	Miller	TPA	Vecoplan	Weis	



Material of knives: HLS – 1.2379 – D2, CHIPPER – 1.2362 – A8
Use: crushing of waste materials in plastics processing industry
Machine: crushing machine

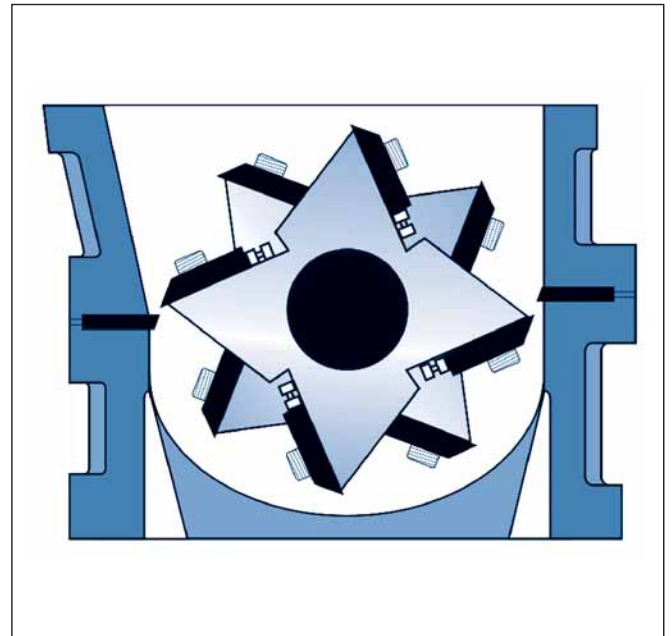
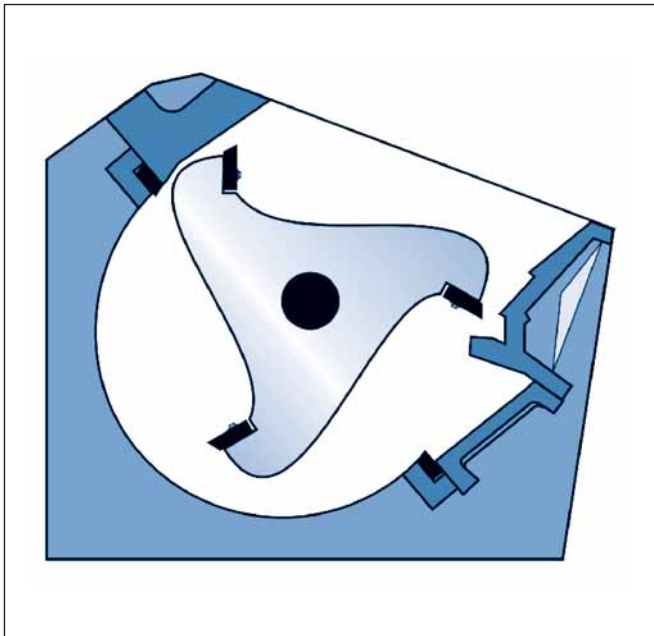


Characteristics:

- » granulator knives of hardness 56 – 59 HRC
- » heat treatment made in a special computer-controlled oven
- » angle of cutting edge: around 50° as per type of machine and depending on the sort of waste material
- » manufacture of any plastics processing knife as per drawing documentation or a sample

We produce knives mainly for the following machines

Alpine	Corcoran	Gloucester	Lodi	Rainville	Tria
Alstele/Entoleter	Cumberland	Granotec	Mitts/Merrill	Ramco R&S	Triple S
Berlyn	Dreher	Gruendler	Nelmor	Rapid	Wortex
Black Friar	Dryflo	Herbold	Pallmann	Rotogran	
CMB	Falzoni	Hydraclaim	Polymer	Sorema	
Conair	Flinchbaugh (FPI)	IMS	Previero	Sprout Waldren	
Condux	Foremost	Intrapala	Process Control	Taylor Styles	



You'll find more information in the PILANA catalog – Industrial knives

Material of knives: special chipper steel developed for knives manufacturing

Machine: different machines

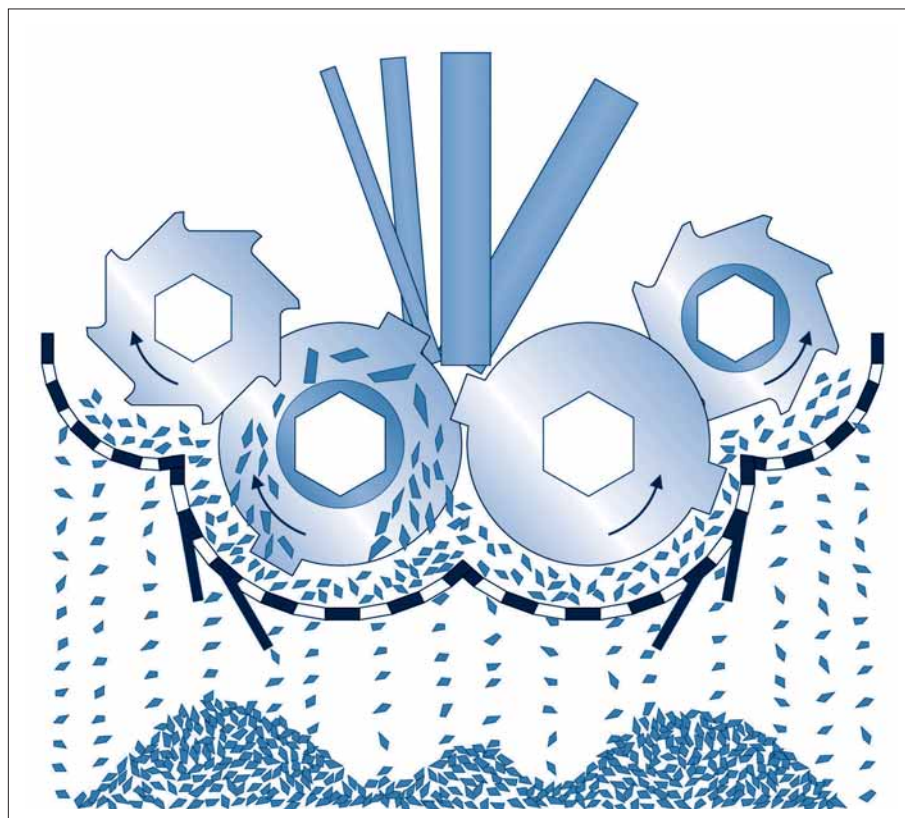
Knives for

- » tyre recycling
- » leather
- » metalworking
- » grass
- » agriculture
- » pulp and paper
- » cigarettes
- » tobacco
- » rugs
- » textile
- » meat
- » polygrafy
- » recycling
- » food processing
- » packaging
- » rubber

Characteristics:

- » heat treatment made in a special computer-controlled furnace
- » manufacture of any knife as per drawing documentation or according to a sample
- » beside knives, we deliver also counter-knives, pressure bars and other components, depending on type of machine

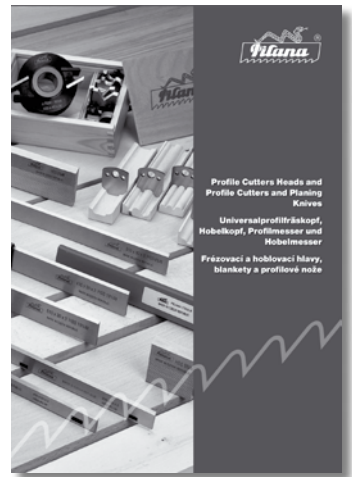
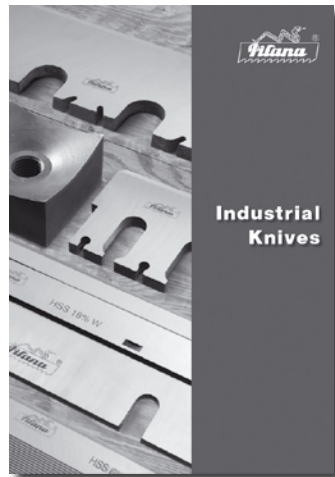
Recycling schema



Address

Nadrazni 804, Hulin
768 24, Czech Republic
Phone: +420 573 328 250, Fax:+420 573 328 141
E-mail: sales@pilana.cz www.pilana.com

You'll find more information in the PILANA catalog – Industrial knives



Contact:
 PILANA TOOLS a.s.
 Nadrazni 804
 768 24 Hulín
 CZECH REPUBLIC
 Phone: +420 573 328 250
 Fax: +420 573 328 141
 E-mail: sales@pilana.cz
 www.pilana.com

