

HAR Series
Rotary Helical Cutterheads

Vs **HAS Series**
Square Helical Cutterheads

HAR Series
True helical cutting (Slice motion)
More overlap of rows
2.5mm thickness of insert
Radius shaped insert
Extra quiet cutting
Dramatically reduced tearout
Replace only damaged or dull knives

HAS Series
Straight cutting
Less effective cutting
2 / 2.5mm thickness of insert
Straight insert
Quiet cutting
Moderate reduced tearout
Replace only damaged or dull knives



<http://www.yuanan.com.tw>



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YUAN AN
CUTTER HEADS

PowerEdge



- Helical Cutterheads
- Multi-profiling Cutterheads
- Terminus System Cutterheads
- Tera System Cutterheads
- Cutting Journal

YUAN AN CUTTER HEADS

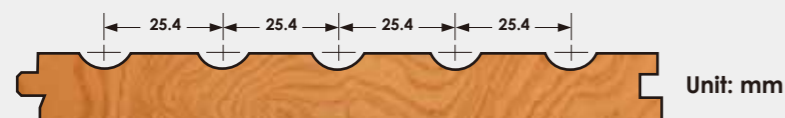
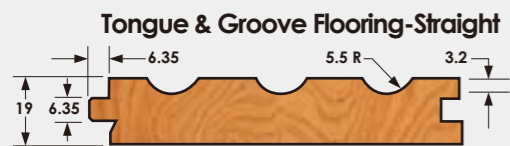
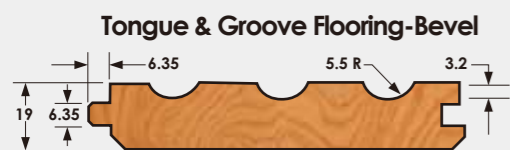
High Material Removal Rate!
Better Surface Finish!
Lower Power Consumption!
Low Noise !

Based on the extensive experience in the design and manufacturing of woodworking machinery, YUAN AN has accumulated knowledge in wood cutting technology. This technological background enables us to produce the cutterheads that will deliver maximum performance through the perfect combination of material, geometry and accuracy. Each cutterhead features high hardness with toughness to give excellent wear resistance and strength required for heavy cutting operation. YUAN AN'S outstanding R&D capabilities allow us to custom design cutterheads that will fully meet customers' requirements.



Hydro-Bore (Optional)

The cutterhead can be connected to a high pressure hydraulic power, that forces the bore of the cutterhead to fix with the spindle securely. This results in higher concentricity and better balance.



INDEX →

	1 Helical Cutterhead HAR Series.....P.03 HAS Series.....P.03 VAR Series.....P.04 HAB Series.....P.04 CAR Series.....P.04
	2 Multi-Profiling Cutterhead MP Series.....P.05 P.06
	3 Terminus System Cutterhead PAA Series.....P.07 PAB Series.....P.07 PAC Series.....P.08 PAD Series.....P.08
	4 Tersa System Cutterhead TAA Series.....P.09 TAC Series.....P.10
	5 Knives PKS Series.....P.11 PKD Series.....P.12
	6 Cutting Journal TMA Series.....P.13 HMR Series.....P.14 HMS Series.....P.14 HMD Series.....P.14

PowerEdge

Helical Series

HAR Series

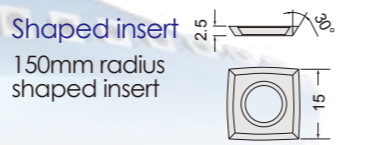
Rotary Helical Cutterheads (insert 15 x 15 x 2.5 with 150mm radius)

FEATURES:

- 150mm radius shaped insert ensure tear-free cutting and create finer surface effect.
- The inserts are rotated according to helix angle, assuring superior cutting performance.
- The cutterhead body is manufactured from aluminum alloy, anodized, dyed and dynamically balanced for extra smooth running, light weight and operational safety.
- Available to equip with HAB side cutter. (optional)
- Hydro-bore is available.



PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	SLOTS
HAR125100**6R15	125	100	**	6
HAR125150**6R15	125	150	**	6
HAR125230**6R15	125	230	**	6
HAR125240**6R15	125	240	**	6
HAR140100**6R15	140	100	**	6
HAR140150**6R15	140	150	**	6
HAR140230**6R15	140	230	**	6
HAR160100**6R15	160	100	**	6
HAR160150**6R15	160	150	**	6
HAR160230**6R15	160	230	**	6



HAS Series

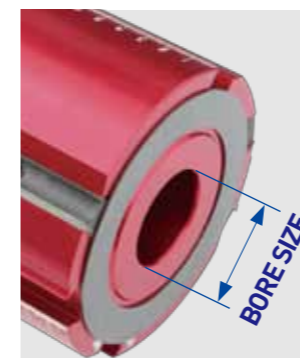
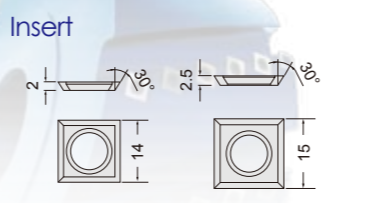
Square Helical Cutterheads

FEATURES:

- Accurate helix angle assures superior cutting performance.
- Tungsten carbide inserts are staggered for finer surface finish.
- Suitable for economic 14 x 14 x 2.0mm inserts or 15 x 15 x 2.5mm high strength inserts.
- Greatly reduces noise level. Higher chip removal rate.
- Reduced torque and horsepower requirements.
- Available to equip with HAB side cutter. (optional)
- Hydro-bore is available.



PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	TCT SLOTS
HAS100100**6R14	100	100	**	6
HAS100150**6R14	100	150	**	6
HAS125100**6R14	125	100	**	6
HAS125125**6R14	125	125	**	6
HAS125150**6R14	125	150	**	6
HAS125200**6R14	125	200	**	6
HAS125230**6R14	125	230	**	6
HAS125240**6R14	125	240	**	6
HAS140100**6R14	140	100	**	6
HAS140150**6R14	140	150	**	6
HAS140230**6R14	140	230	**	6
HAS160100**6R14	160	100	**	6
HAS160150**6R14	160	150	**	6
HAS160230**6R14	160	230	**	6



BORE SIZE	**
1-1/4"	32
35mm	35
1-1/2"	38
40mm	40
1-13/16"	46
50mm	50
2-1/8"	54
60mm	60
65mm	65

Note:

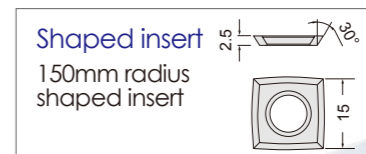
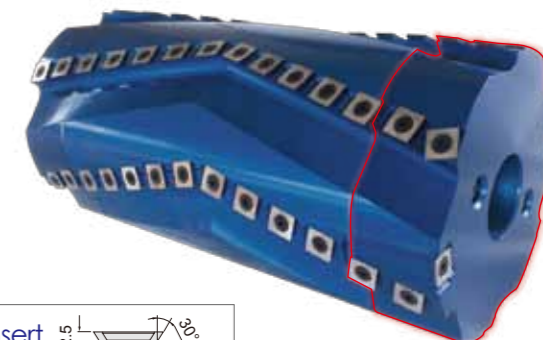
When ordering cutterheads, replace the ** in the part number with the number in the ** column in the chart at left which matches the bore size of your machine. Other sizes and configurations are available upon request, including Hydro-Bore.

VAR Series

V Shape Helical Cutterheads

FEATURES:

- Equipped with HAB side cutter (optional)
- "V" shaped insert arrangement allows wood chips to concentrate with outstanding chip exhaust performance.
- Also ideal for laminated board.
- Hydro-bore is available.



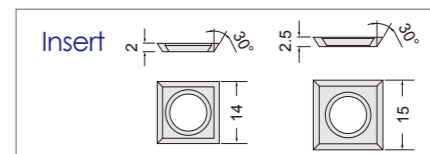
▲ HAB side cutter is optional

HAB Series

Rabbeting

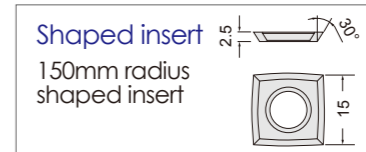
FEATURES:

- Inserts provided on cutter surface and both sides permit cutting and rabbeting.
- Two inserts on each end of the cutter.
- Accommodates 14 x 14 x 2.0 inserts.



CAR Series

Profiled Section Is Available



Multi-Profiling Cutterhead

APPLICATIONS:

Suitable for flooring, paneling, door frames and cabinet door frames.



Multi-Profiling Insert Head & Flooring Knives

MP Series

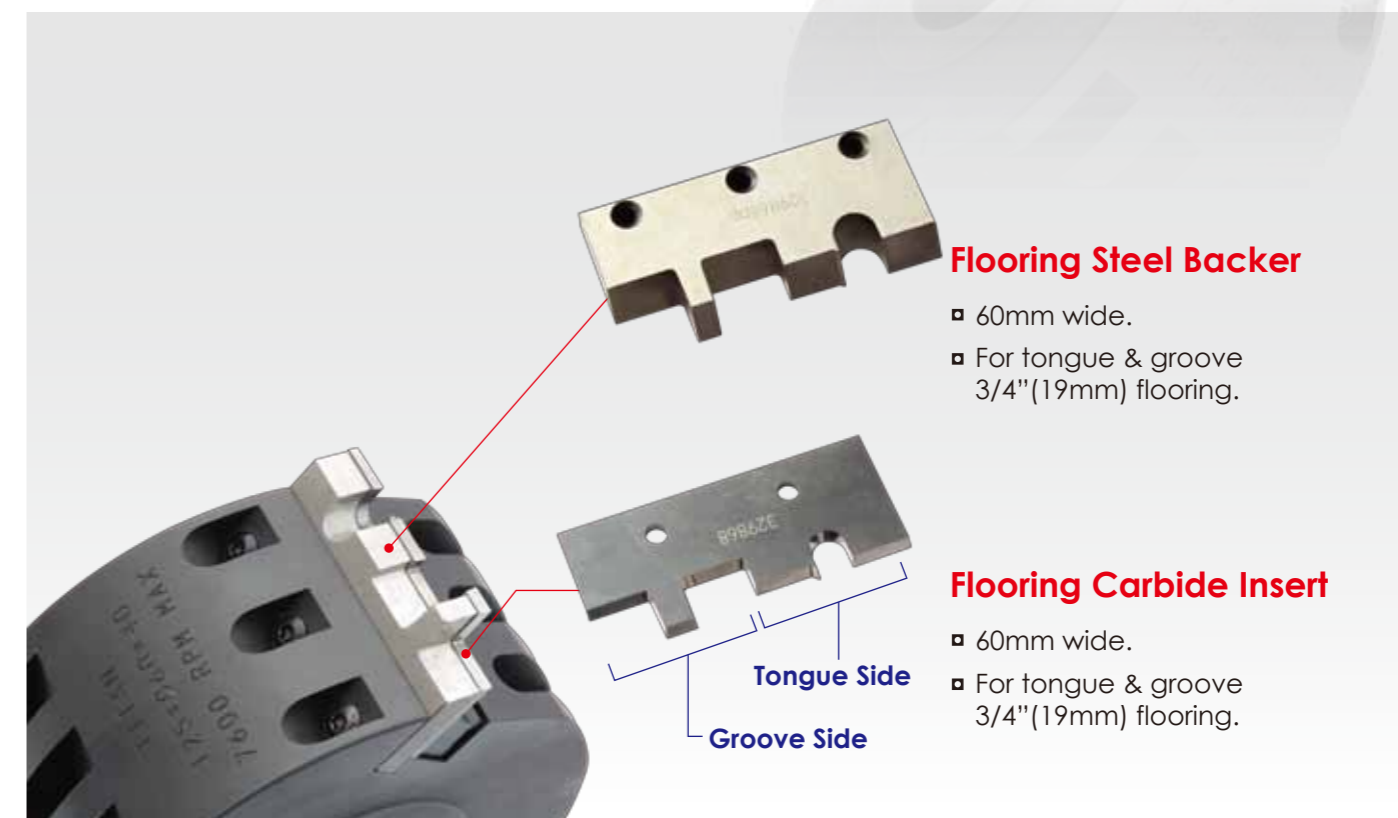
Multi-Profiling Cutterheads

FEATURES:

- 3-wing design exhibits higher chip removal rate and maximum durability.
- Solid carbide knives can be changed quickly without need of assistance of a knife setting gauge.
- A wide variety of profiles to choose from.
- Deep profiles are also available.
- Custom profiled knives are available.
- 60mm wide minor dia.



PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	PROFILING KNIFE SLOTS
MP12560383	125	60	1-1/2"	3
MP12560403	125	60	40	3
MP12560463	125	60	1-13/16"	3
MP12560503	125	60	50	3



Flooring Steel Backer

- 60mm wide.
- For tongue & groove 3/4"(19mm) flooring.

Flooring Carbide Insert

- 60mm wide.
- For tongue & groove 3/4"(19mm) flooring.

Terminus System

PAA Series

Planing / Finishing Cutterheads

FEATURES:

- Quick-lock centrifugal force clamping system.
- Reversible knives.
- Accurate and consistent cutting cycle accuracy within $\pm 0.03\text{mm}$.
- Solid aluminum alloy structure.
- Advanced head design.
- Knives protrude 1.5mm.
- Available with H.S.S. knives with 18% tungsten or carbide.
- Knives are changed radially.
- Choice of various configurations from 2 knives to specified depending on cutterhead diameter knives.
- Suitable for hogging or finishing applications.
- Hydro-bore is available.

BENEFITS:

- Quick and accurate knife change for increased convenience and time saving.
- Lower tooling cost per board.
- No need to adjust knife.
- Reduces stress on the spindle and bearings.
- Maximum safety and outstanding performance.
- Increase material removal rate.
- Extended service life of knife.
- Easy to access for knife change.
- Dramatically boost your productivity.
- Dual functions feature great versatility.

PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	KNIVES
PAA125100**400	125	100	**	4
PAA125150**400	125	150	**	4
PAA125200**400	125	200	**	4
PAA125230**400	125	230	**	4
PAA125240**400	125	240	**	4
PAA140100**400	140	100	**	4
PAA140150**400	140	150	**	4
PAA140230**400	140	230	**	4

PAB Series

Planing / Solid Profiling Cutterheads

FEATURES:

- Combine cutterheads with Terminus planing knives and profiling possible up to 12.7mm depth of profiling knives.

PROFILING KNIVES:

- Double radius concave knives. (PKR3 / R6 R10)
- Double back-out knives. (PKDB)
- Double bevel knives 45°. (PKBV)

PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	PLANING KNIVES	PROFILING KNIFE SLOTS
PAB125100**420	125	100	**	4	2
PAB125150**420	125	150	**	4	2
PAB125200**420	125	200	**	4	2
PAB125230**420	125	230	**	4	2
PAB125240**420	125	240	**	4	2
PAB140100**420	140	100	**	4	2
PAB140150**420	140	150	**	4	2
PAB140230**420	140	230	**	4	2

Operation Instructions

STEP 1



Loosen set screws by using a 3mm hexagonal wrench.

STEP 2



Use the hexagonal wrench to gently tap down the gib, then you can take out the knives radially.

STEP 3



To mount new knives or use the other edge of the knife, make sure the knife is properly engage with the cavity on the cutterhead body.

STEP 4



Tap down on the gib again, then the gib will automatically precisely secure the knife in place. Finally, tighten all set screws.



PAC Series

Planing / Dovetailed Profiling Cutterheads

FEATURES:

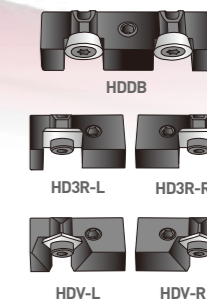
- Combine cutterheads with Terminus planing knives and profiling knives holder in dovetail slots.

PROFILING KNIVES:

- V-groove. (Bevel knives)
- Double back-out.
- Concave knives R3.

PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	PLANING KNIVES	DOVETAIL SLOTS
PAC125100**402	125	100	**	4	2
PAC125150**402	125	150	**	4	2
PAC125200**402	125	200	**	4	2
PAC125230**402	125	230	**	4	2
PAC125240**402	125	240	**	4	2
PAC140100**402	140	100	**	4	2
PAC140150**402	140	150	**	4	2
PAC140230**402	140	230	**	4	2

Profiling Knives (Optional):



PAD Series

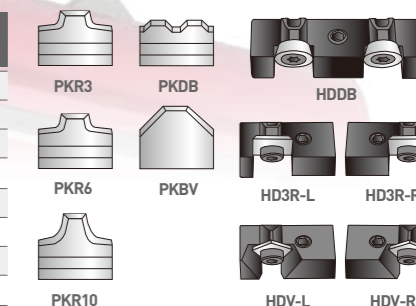
Planing / Multi-Profiling Cutterheads

FEATURES:

- A universal cutterhead that combines Terminus planing knives, dovetailed profiling knives and solid profiling knives in one cutterhead.
- Integrates functions of PAB and PAC series.
- Stocked cutterheads for prompt delivery.

PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	PLANING KNIVES	PROFILING KNIFE SLOTS	DOVETAIL SLOTS
PAD125100**222	125	100	**	2	2	2
PAD125150**222	125	150	**	2	2	2
PAD125200**222	125	200	**	2	2	2
PAD125230**222	125	230	**	2	2	2
PAD125240**222	125	240	**	2	2	2
PAD140100**222	140	100	**	2	2	2
PAD140150**222	140	150	**	2	2	2
PAD140230**222	140	230	**	2	2	2

Profiling Knives (Optional):



Tersa System

Fast ... Safe ... Precise ...

A Perfect Combination of Durability, Simplicity And Quietness

The decisive advantage of the Tersa system is the user friendliness.

Knives can be mounted in the planning head using no screws or keys, and they are fixed in the right position by means of a specially made gib which is pressed outward towards the knife by utilizing the centrifugal force. To replace the knife, the gib is pushed back, and the knives can be replaced without using any other tools.

Operation Instructions

STEP 1

Turn the slide stop cover to the position in which the knives are shown.



STEP 2

Use the provided press punch to gently tap down the segmented gibs. This will release the knife.



STEP 3

Align the knife, carefully slide it and install a new knife (or the same knife reversed for a new edge). Repeat this procedure for the other three knives.



STEP 4

Make sure the knife is properly seated upon the bead and the ends are not protruding past the ends of the cutterhead, then close the slide stop cover. When the machine is started later, the gibs will automatically secure the knife in place.



- Knife change in seconds-requires no technical skills-just set it and forget it !
- Knives clamped by centrifugal force and gib wedges-no screws.

- No knife adjustment is needed. Maintains consistent cutting circle.
- Reversible knives in chrome steel and HSS.
- Easy maintenance.
- Less power consumption.

- Low noise.
- Knives can be easily changed on machine.

TAA Series

Planning / Finishing Cutterheads

FEATURES:

- Tersa system cutterhead.
- Centrifugal knives clamping during running for dependable clamping at all times.
- Knives change from radial direction for added convenience without restriction by limited space at both ends of cutterhead.
- Reversible HSS-knives.
- Choice of 2 to 6 knives cutterhead configuration.
- Accurate and consistent cutting cycle accuracy within $\pm 0.03\text{mm}$.
- Hydro-bore is available.



PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	KNIVES
TAA125100**40	125	100	**	4
TAA125150**40	125	150	**	4
TAA125200**40	125	200	**	4
TAA125230**40	125	230	**	4
TAA125240**40	125	240	**	4
TAA140100**40	140	100	**	4
TAA140150**40	140	150	**	4
TAA140230**40	140	230	**	4

TAC Series

Planning / Dovetailed Profiling Cutterheads

FEATURES:

- Combine cutterheads with Tersa planing knives and profiling knives holder in dovetail slots.

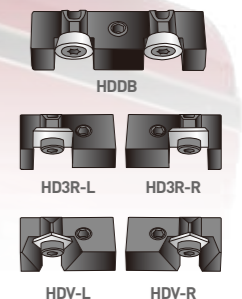
PROFILING KNIVES:

- V-groove. (Bevel knives)
- Double back-out.
- Concave knives R3.



PART NO.	CUTTING CIRCLE	CUTTING LENGTH	BORE DIAMETER	KNIVES	DOVETAIL SLOTS
TAC125100**42	125	100	**	4	2
TAC125150**42	125	150	**	4	2
TAC125200**42	125	200	**	4	2
TAC125230**42	125	230	**	4	2
TAC125240**42	125	240	**	4	2
TAC140100**42	140	100	**	4	2
TAC140150**42	140	150	**	4	2
TAC140230**42	140	230	**	4	2

Profiling Knives (Optional):













Knives for Terminus / Tersa System

PKS Series

Solid Profiling Knife

FEATURES:

- Knives for profile depth up to 12mm. Suitable for PAB and PAD cutterheads in TCT.















PART NO.	PROFILE	DESCRIPTION
PKR3		Double Radius Concave Knives R3 
PKR6		Double Radius Concave Knives R6 
PKR10		Double Radius Concave Knives R10 
PKDB		Double Back-out in Knives 
PKBV		Double Bevel Knives 45° 

PKD Series

Knife Holders and Profiling Inserts

FEATURES:

- Profiling knife for mounting into dovetail slots for cutterheads PAC, PAD and TAC.

PART NO.	PROFILE	DESCRIPTION
Hddb		Knife Holder for Double Back-out 
HD3R-R		Knife Holder for Radius Cocove R3 (Right Hand) 
HD3R-L		Knife Holder for Radius Cocove R3 (Left Hand) 
HDV-R		Knife Holder for V-Groove (Right Hand) 
HDV-L		Knife Holder for V-Groove (Left Hand) 
IND11		Carbide Insert D11 mm
INT12		Carbide Insert 12 x 12 x 1.5 mm
INR3		Carbide Insert Double Radius Concave Knives R3
INT09		Carbide Insert 9 x 9 x 1.5 mm for V-Groove Holder

Cutting Journal

- Max. Cutterhead Length **2.5 Meters**
- **One-piece** Structure

FEATURES:

- The cutting journal is precision machined from a solid mild carbon steel piece, featuring outstanding rigidity and stability.
- The cutting journal is manufactured according to customers' drawing or machine specifications.
- Cutterhead body is phosphoric acid treated to resist corrosion.
- 4 types of cutterhead journal are available for surface planing and planing-sand machine.

Tersa System

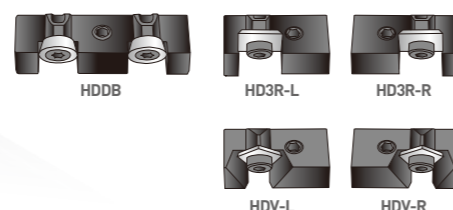
TMA Series



FEATURES:

- TERSA system knives.
- 4 slots are standard design.
- Other number of slots are available upon request.
- 2 dovetail slots are available to fit with dovetail knives.

Profiling Knives (Optional):



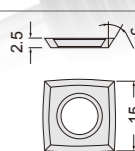
HMR Series



FEATURES:

- 150mm radius shaped insert.
- 6 slots are standard design.
- Other number of slots are available upon request.

Shaped insert
150mm radius
shaped insert



HMS Series



FEATURES:

- 14x14x2.0 / 15x15x2.5 inserts.
- 6 slots are standard design.
- Other number of slots are available upon request.



HMD Series



FEATURES:

- Wedge type with 30x12x1.5 inserts.
- Wedge type with 30x12x2.5 inserts.
- 6 slots are standard design.
- Other number of slots are available upon request.

With
wedge type

