

Aggregate Heads for CNC Routers



NAPGLADU

Delivering Productivity

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“Never Down” Guarantee



We stand behind our aggregate heads with our “Never Down” Guarantee. If your aggregate head should ever need servicing, a replacement will be shipped to you to keep you working until your original aggregate is repaired and back in service. Replacement aggregates are limited to standard configurations and are subject to availability.

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Obsession With Quality

A

We go to painstaking lengths to ensure that our aggregates out-perform the competition. Our obsession to quality craftsmanship is the foundation on which all our of aggregates heads are built.

B

C

Only the very best components are used to create our aggregate heads. This is why our aggregate heads run cool, quiet, and trouble-free. Every aggregate head we make is individually hand assembled by one, highly skilled technician who is personally responsible for the quality of that aggregate and performs a rigorous quality assurance procedure; including a 90-point inspection of the bevel gears and a 30-minute test run, before finally sealing the aggregate and signing off on the inspection report.

D

E



F

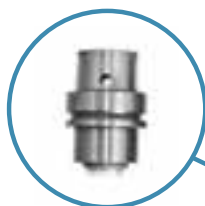
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Spindle Compatibility

Our aggregate heads are available for all types of machine spindles.

HSK, CAT, ISO, etc.

Output Versatility

Our innovative line of aggregates feature fixed or modular output systems for all types of wood-based operations.



Torque Arm Ring

We have the torque arm rings for your specific machine requirements.



Grease or Oil Lubrication

All SmartLINE & FunctionLINE aggregates are grease lubricated for standard duty operation. For extended run-time operations our UltraLINE aggregates features oil bath lubrication for optimum cooling.



ER25 or ER32



Modular Quick Change



Saw Spindles



High Quality Bevel Gears

Our bevel gears are put through a 90 point inspection for quality. Because of this, there is less gear play, less vibration, and wear is reduced. It's a difference you can hear! (Ours are quieter)

Recommended Operations by Aggregate Type

SmartLINE Aggregates



SmartLINE Aggregates feature a compact & light-weight design for operations where improved clearance or maneuverability is required. Grease lubricated for long life. SmartLINE aggregates deliver great value, with excellent price to performance ratio.

FunctionLINE Aggregates



FunctionLINE Aggregates offer the widest selection and are among our most versatile grease lubricated aggregates. Designed for high performance in almost all wood-based materials, they can be purpose-built for almost any operation specific operation

UltraLINE Aggregates



UltraLINE Aggregates are oil bath lubricated for continuous operation in extreme conditions. Recommended for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Questions About Aggregates?

Call us to talk with one of our operation engineers. Simply provide router manufacturer, spindle type, operation, and the material being processed. We will make sure you get the right aggregate for your needs.

Operation	Speds/feeds (RPM)	SmartLINE										UltraLINE				
		Duo	Vario/Viso	Mono	Mono Fix	Duo	Quattro	Vario/Viso	Extra	Soft Touch Pro	Extra II	Mono R	Mono Fix	Duo R	Vario Viso	Mega Cutter
Boring	3000 - 9000min	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Milling	8.100 min	◐	●	◐	●	◐	◐	●	◐	●	◐	●	●	●	●	○
	12.000 min	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
	15.000 min	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○
	18.000 min	○	○	◐	○	◐	◐	○	◐	●	○	○	○	○	○	○
Sawing	Ø 150mm / max. 45mm / 7000 - 10000 min	●	●	●	●	●	●	●	○	○	◐	●	●	●	●	●
	Ø 200mm / max. 70mm / 5200 - 7000 min	○	○	●	●	●	●	●	○	○	○	●	●	●	●	○
	Ø 250mm / max. 95mm / 4300 - 6000 min	○	○	○	●	○	○	○	○	○	○	●	●	●	●	○
	Ø 300mm / max.120mm / 3500 - 4500 min	○	○	○	○	○	○	○	○	○	○	●	●	●	●	○
Moulding		○	○	○	○	○	○	○	○	○	○	◐	◐	◐	◐	●
Sanding/Finishing		◐	◐	◐	◐	◐	◐	◐	◐	●	◐	●	●	●	●	●

Suitable ● Partly Suitable ◐ Not Suitable ○

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Manufacturing Examples

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Furniture



Duo
Cutout for Clamex P
joining elements



Sawing



Duo
Drilling dowel holes



Boring



Doors / Windows

Extra
Lockset recess



Boring



Extra II
Corner notching

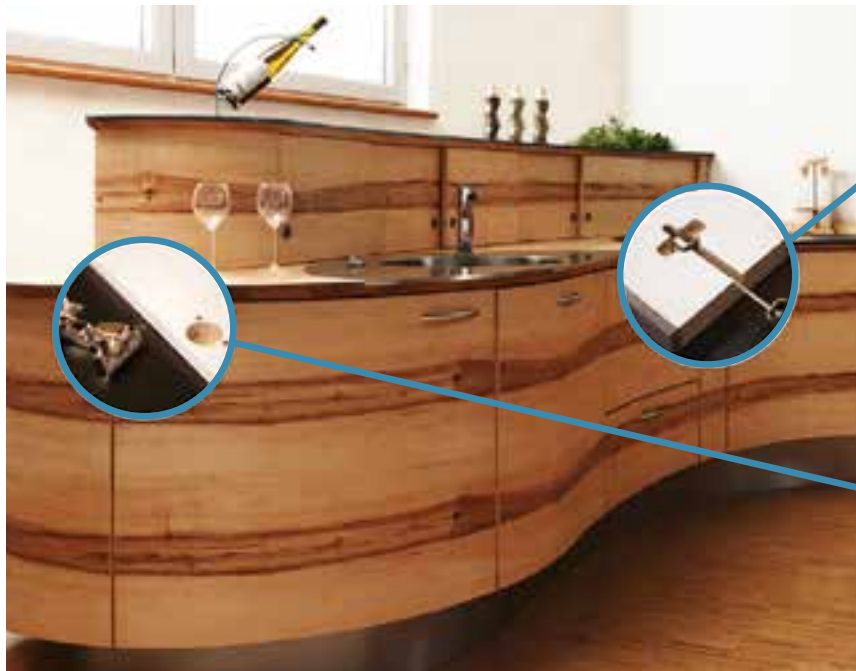


Milling

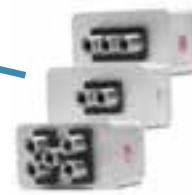


Manufacturing Examples

Cabinetry



Custom (Underneath)
Cutout for kitchen-board connectors



Custom (Vertical)
Drilling hinges in one-step operation



Custom (Vertical)
Hole patterns for acoustic panels



Mega Cutter
Sawing grooves for curved or straight wood elements



Interiors

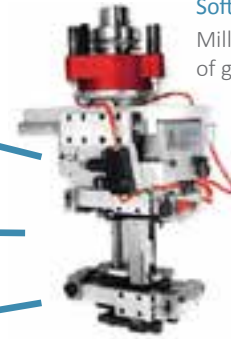


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Manufacturing Examples

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Surface and Edge Processing



Soft Touch Edge Pro
Milling and scraping
of glued edges



Sanding/
Finishing



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- K

Extra

Milling holes for bars
with long cutting
tools.



Quattro




Milling pockets for
stair clamping.




Mortising

Chisel mortising for
stairs.



Stair Manufacturing



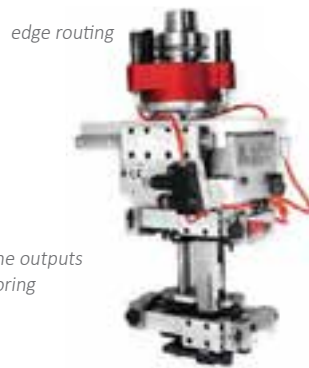
Specialized Aggregate Heads



profiling aggregate



3 inline outputs for boring



edge routing



Floating Aggregate with Chip Guide System



mortising chainsaw style



chisel corner squaring



7 tool drill bank



oscillating aggregate speeds mortising

We make aggregates for all types of operations.

We promise

- unmatched reliability
- unmatched performance
- unmatched support

How you benefit

- increase productivity
- increased reliability
- reduced machine down-time

How To Order Aggregates

Call us to talk live with one of our operation engineers. Simply provide the router manufacturer, the spindle type (HSK, ISO, BT, etc.), operation, and the material being processed. We will make sure you get the right aggregate for your needs.

Call your NAP GLADU service center to speak to a representative.



Scan the QR code or go to <http://ow.ly/AinoE> to watch the video



Automatic dowel processing



Milling & finishing of edges



Multi-spindle speed processing



Cutting pocket with chainsaw

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SmartLINE – Duo Aggregates

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SmartLINE Duo Compact Aggregate

Light weight design aggregate for standard-duty operations on smaller routers or where space is limited. They can be configured with multiple ER25 outputs, a combination of ER and saw outputs, or even with two S1 saw outputs as needed. SmartLINE aggregates are grease lubricated and offer an excellent price-to-performance ratio.

Use For:

- Combine boring and sawing operations
- Creating custom profiles and mortises
- Faster sizing and grooving (saw blade)

Features:

- Output: two-sided, right angle
- Output options: ER25, saw blade

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/AilXp> to watch the video



Boring



Milling



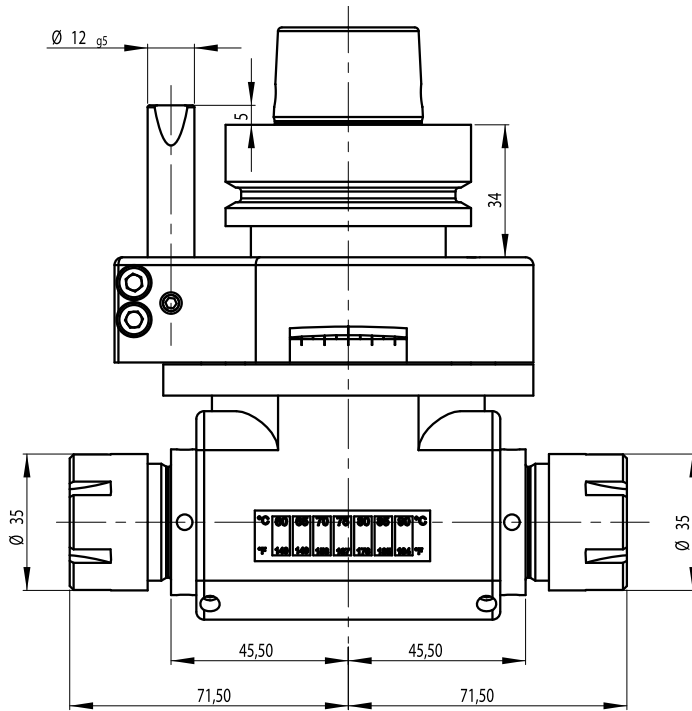
Sawing

Max Speed Input (Spindle)	8,000 R.P.M.
Max Speed Output (Tool)	12,000 R.P.M.
Max Torque	12 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	M5, S2

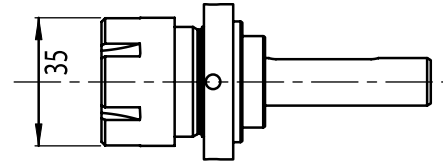


SmartLINE – Duo Aggregates

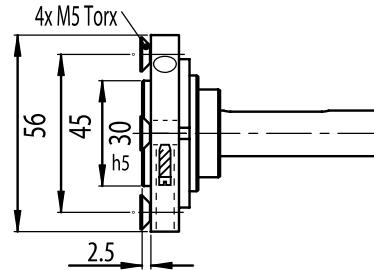
SmartLINE Duo Dimensions (mm)



SmartLINE Duo Output Options



M5 - ER25 Collet and nut
Range: 1mm – 16mm



S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

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Fixed Angle Aggregates

NAP GLADU fixed angle Mono aggregate heads can be built to any angle for any operation. Available with all the features of our FunctionLINE aggregates, a fixed angle mono aggregate head delivers high performance in continuous operation, perfect for boring, routing, and sawing applications.

Call us to order a fixed angle aggregate built to your specific machine and operation requirements.



SmartLINE – Vario/Viso Aggregates

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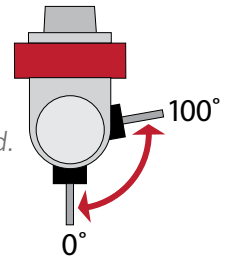
SmartLINE Vario & Viso Adjustable Angle

Use Vario or Viso Aggregates to cut at any angle from 0° to 100°. The Viso digital display aggregate takes the guesswork out of repeating angles, and makes transfer of angles from prints to aggregate easy.

Vario aggregates can be fitted with an ER25 output, or the Combi saw output that is compatible with 45mm or 52mm bolt circles. The Viso can also accept the modular system.

Features:

- Compact design for smaller routers or where space is limited.
- Variable angle single output (0° - 100°)
- Viso features digital display for easy angle setting



Scan the QR code or go to <http://ow.ly/Aim7v> to watch the video

Includes:

- Collet nut & wrenches
- ER collets sold separately



Boring



Milling



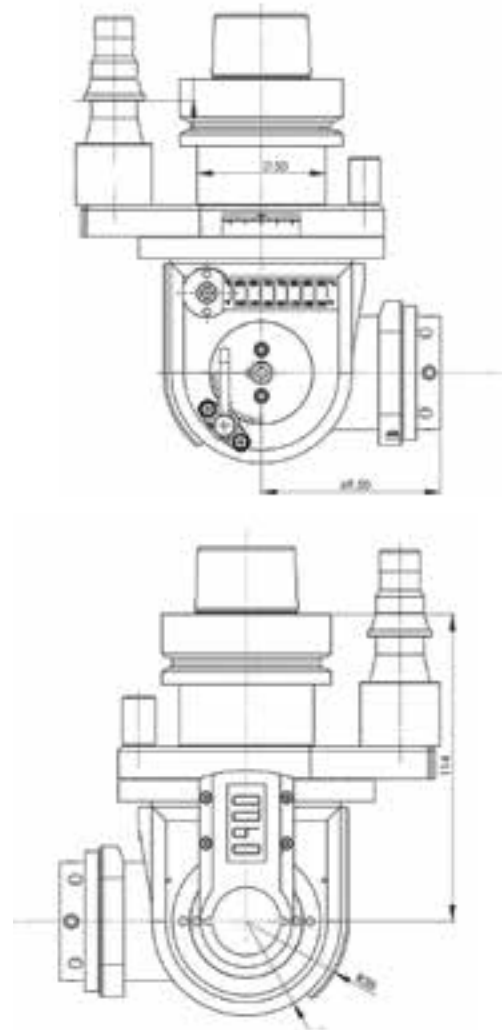
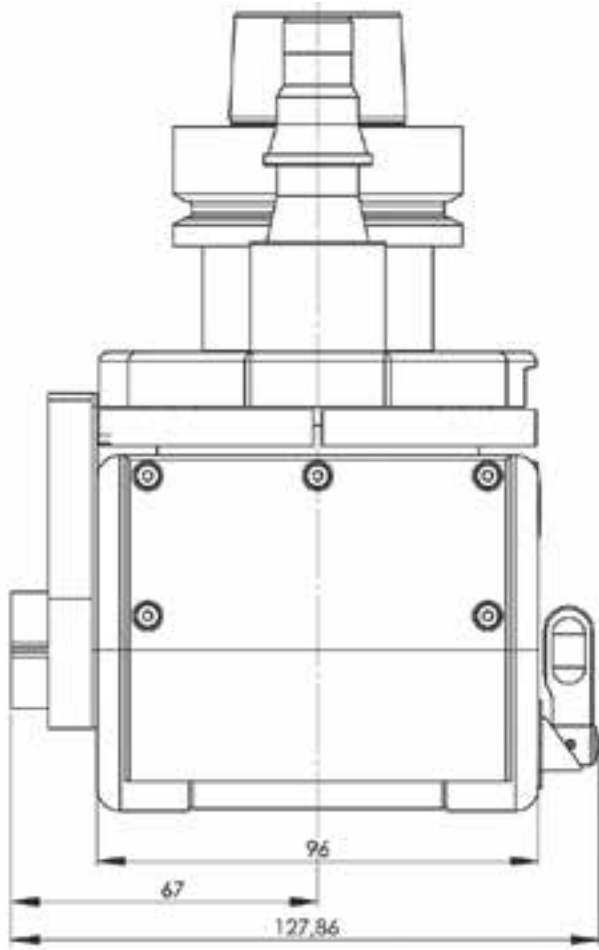
Sawing

Max Speed Input (Spindle)	15,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	K1, K2



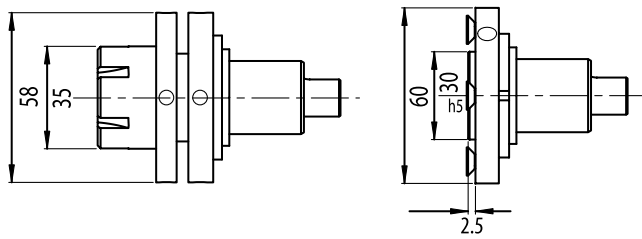
SmartLINE – Vario/Viso Aggregates

SmartLINE Vario & Viso Dimensions (mm)



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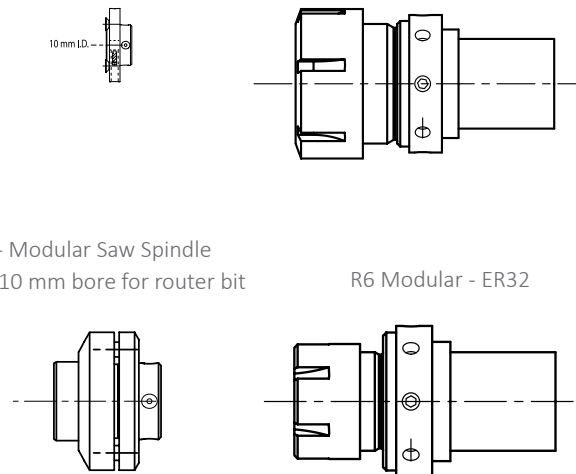
SmartLINE Vario or Viso Output Options



K1 - ER25 Collet and saw blade

K2 - Saw blade with either 45mm or 52mm bolt circle

Modular Output Options (Viso Only)



S1 - Modular Saw Spindle w/ 10 mm bore for router bit

R6 Modular - ER32

P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank

M5 - Modular ER25

SmartLINE – Extra Aggregates

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SmartLINE Extra Lockset Recess

Innovative lockset recess aggregate features compact design and lighter weight to make this the ideal aggregate for working in tight spaces. Offset design is optimized for cutting lockset recesses, but can be used for other boring operations.

Use For:

- routing out lockset recesses
- other boring operations

Features:

- Offset design optimized for longer tooling operations such as mortising
- Output options: ER25

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

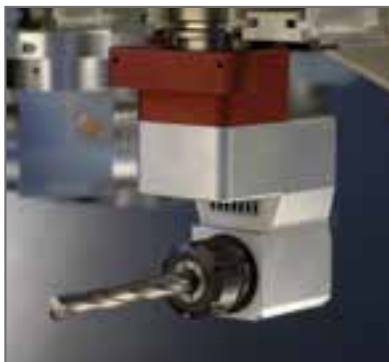


Boring



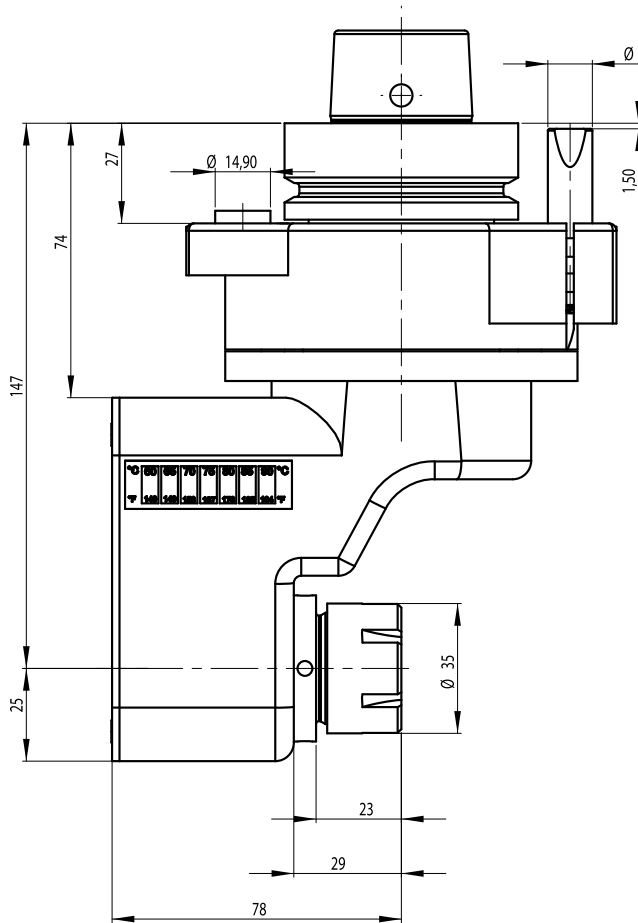
Milling

Max Speed Input (Spindle)	8,000 R.P.M.
Max Speed Output (Tool)	12,000 R.P.M.
Max Torque	3 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	M5

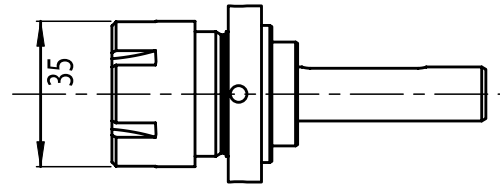


SmartLINE – Extra Aggregates

SmartLINE Extra Lockset Recess



SmartLINE Extra Lockset Recess Output



M5 - ER25 Collet and nut
Range: 1mm – 16mm

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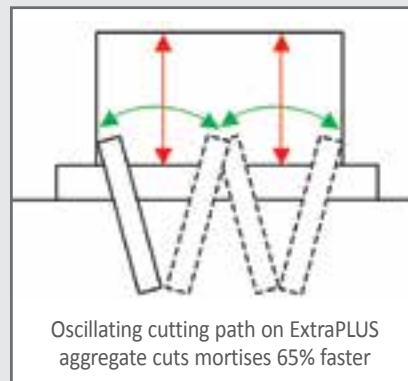
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EXTRA PLUS Oscillating Lock-Recess Aggregate



Winner of the IWF 2012 Challengers Award, the Extra Plus aggregate head is one of our innovative additions to our FunctionLINE. Featuring an oscillating cutting motion, the Extra Plus reduces lock recess cutting time by 65%.



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

FunctionLINE – Mono Aggregates

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FunctionLINE Mono Aggregate

An affordable way to add 4th axis capability to your CNC router. Able to perform routing, boring, mortising, and sawing operations.

FunctionLINE Mono aggregates can be configured with either ER25 or ER32 outputs, or a saw arbor, or for maximum flexibility a modular output that allows switching between saw spindles or ER outputs.

Features:

- Single, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/AilXp> to watch the video



Boring



Milling



Sawing

Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	M5, R6, S1, S2, Modular

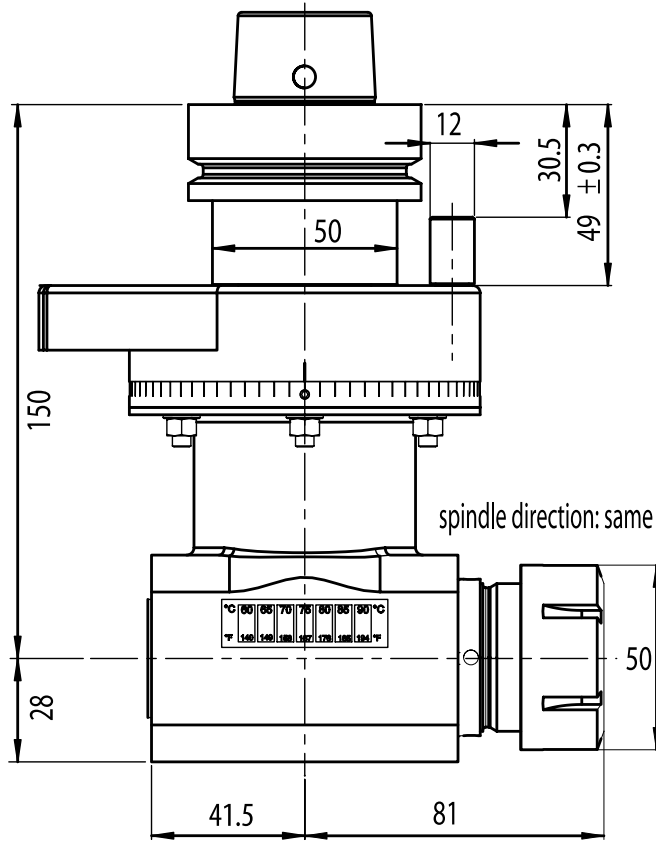


Modular output options



FunctionLINE – Mono Aggregates

FunctionLINE Mono Dimensions (mm)



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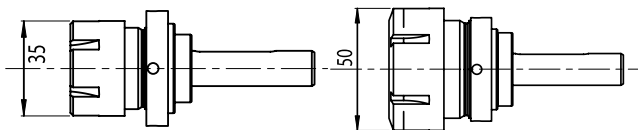
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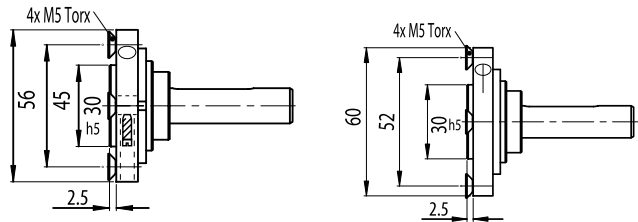
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FunctionLINE Mono Output Options



M5 - ER25 Collet, and nut
Range: 1mm – 16mm

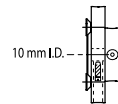
R6 - ER32 Collet
Range: 3mm – 20mm



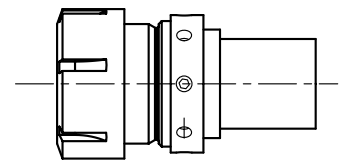
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

S2 - Saw Spindle,
52mm bolt circle

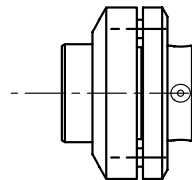
FunctionLINE Mono Modular Options



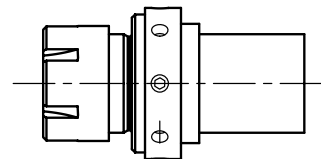
S1 - Modular Saw Spindle
w/ 10 mm bore for router bit



R6 Modular - ER32



P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank



M5 - Modular ER25

FunctionLINE – Duo Aggregates

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FunctionLINE Duo Aggregate

An affordable way to add 4th axis capability to your CNC router. Able to perform routing, boring, mortising, and sawing operations.

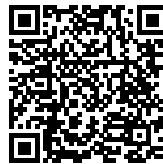
FunctionLINE Duo aggregates can be configured with either ER25 or ER32 outputs, or a saw arbor, or for maximum flexibility a modular output that allows switching between saw spindles or ER outputs.

Features:

- Dual, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/AiiXp> to watch the video



Boring



Milling



Sawing

Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	#1 clockwise, #2 opposite
Tool Interfaces	M5, R6, S1, S2, Modular

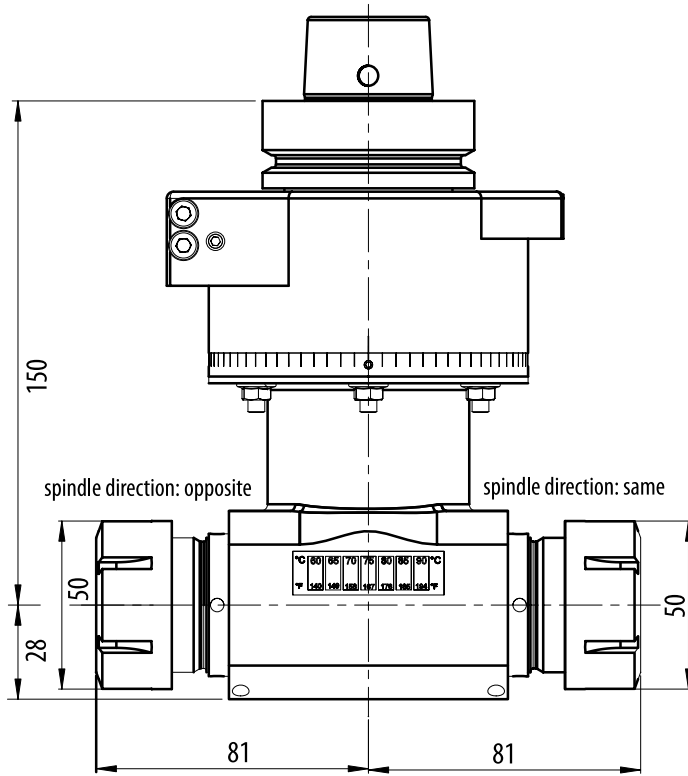


Modular output options

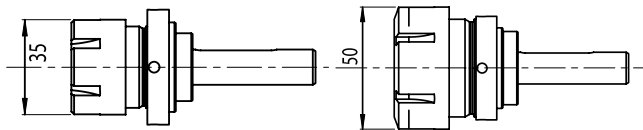


FunctionLINE – Duo Aggregates

FunctionLINE Duo Dimensions (mm)

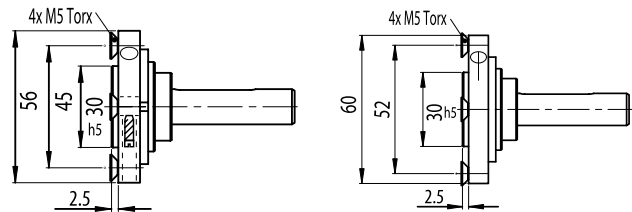


FunctionLINE Duo Output Options



M5 - ER25 Collet, and nut
Range: 1mm – 16mm

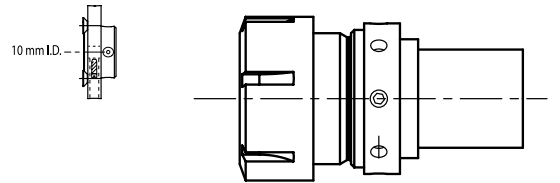
R6 - ER32 Collet,
Range: 3mm – 20mm



S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

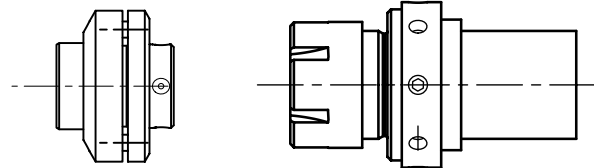
S2 - Saw, Spindle,
52mm bolt circle

FunctionLINE Duo Modular Options



S1 - Modular Saw Spindle
w/ 10 mm bore for router bit

R6 Modular - ER32



P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank

M5 - Modular ER25

FunctionLINE – Quattro Aggregates

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FunctionLINE Quattro Aggregate

FunctionLINE Quattro aggregates can be configured with 4 ER25 outputs, or two ER25 and two ER32 outputs, or two modular outputs and two ER25 outputs. Modular outputs are required for saw spindles.

They provide the greatest number of configurations and operation specific tool output options for routing, boring, milling, and sawing operations.

Features

- Quad, right angle outputs
- Reduces time consuming tool changes
- Output options: ER25, ER32, saw blade, modular

Includes:

- Collet nuts & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/Aimxn> to watch the video



Boring



Milling



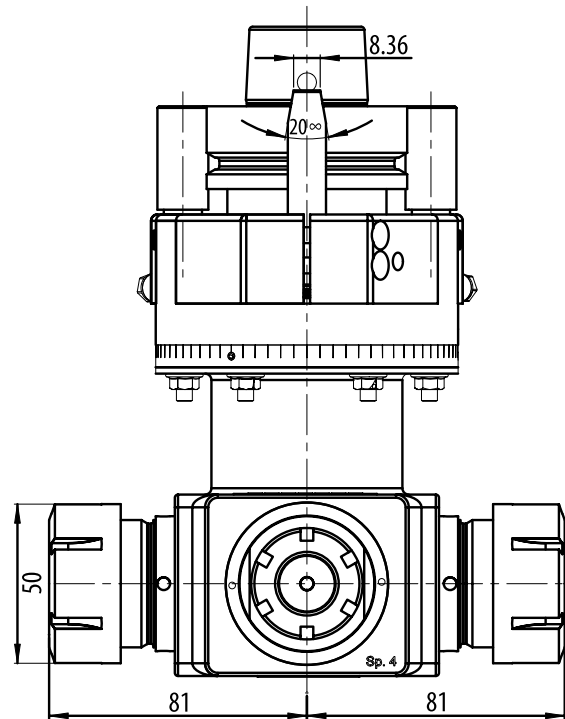
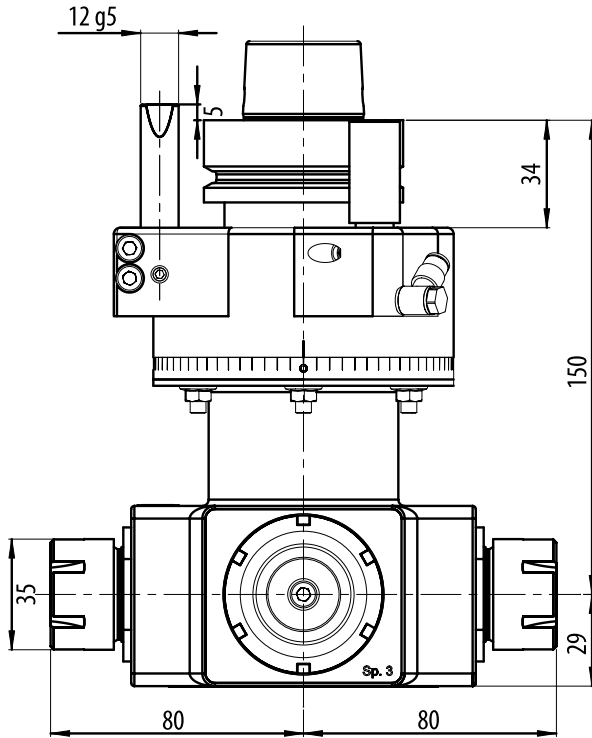
Sawing

Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	#1 & #2 clockwise, #3 & #4 opposite
Tool Interfaces	M5, R6, S1, Modular

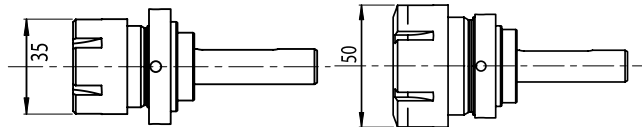


FunctionLINE – Quattro Aggregates

FunctionLINE Quattro Dimensions (mm)

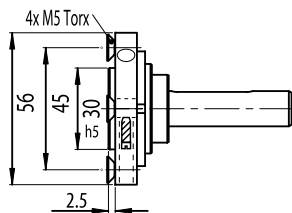


FunctionLINE Quattro Output Options



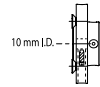
M5 - ER25 Collet, and nut
Range: 1mm – 16mm

R6 - ER32 Collet
Range: 3mm – 20mm



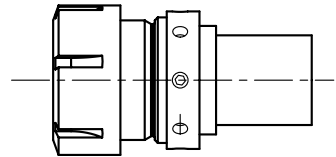
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

FunctionLINE Quattro Modular Options

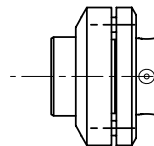


10 mm I.D.

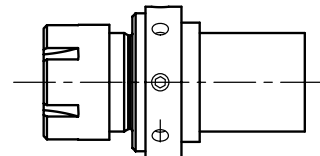
S1 - Modular Saw Spindle
w/ 10 mm bore for router bit



R6 Modular - ER32



P1 - Modular Saw Arbor
Range: 1.5mm-4mm tool shank



M5 - Modular ER25



FunctionLINE – Vario/Viso Aggregates

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FunctionLINE Vario/Viso Aggregate

Use Vario/Viso Aggregates to cut at any angle from 0° to 100°. They can be fitted with an ER25 output, or the Combi saw output that is compatible with 45mm or 52mm bolt circles. The Viso can also accept the modular system.

The Viso digital display aggregate takes the guesswork out of repeating angles, and makes transfer of angles from prints to aggregate easy.

Features:

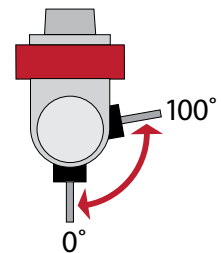
- Route, drill, saw, or mortise any angle from 0° to 100°
- Viso features digital display for easy angle setting
- Output options: combination ER25 and saw blade or modular system (Viso only)

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/Aim7v> to watch the video



Boring



Milling



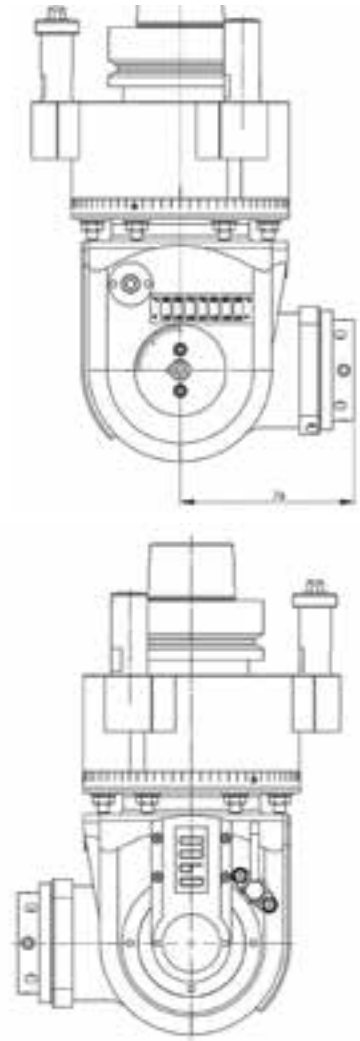
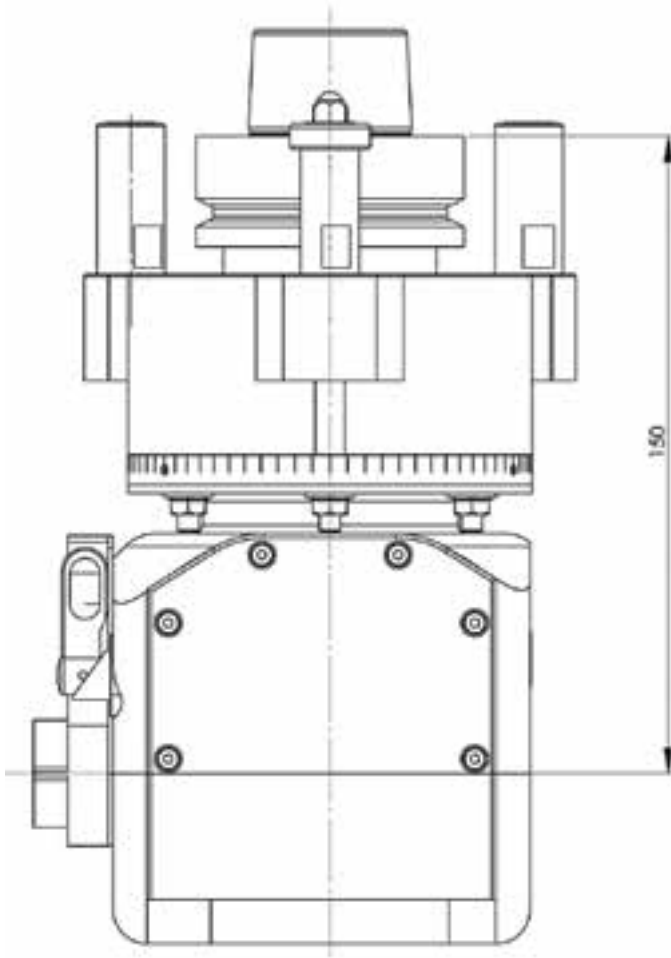
Sawing

Max Speed Input (Spindle)	15,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Opposite of machine spindle
Tool Interfaces	K1, K2 (Vario) K1, K2, Modular (Viso)



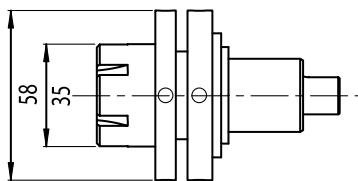
FunctionLINE – Vario/Viso Aggregates

FunctionLINE Vario/Viso Dimensions (mm)

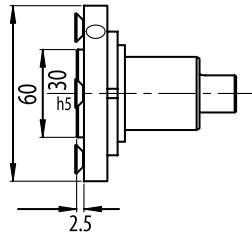


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FunctionLINE Vario/Viso Output Options

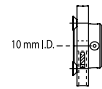


K1 - ER25 Collet and saw blade

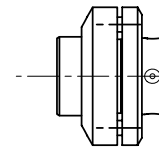


K2 - Combi spindle 45mm and 52mm bolt circle

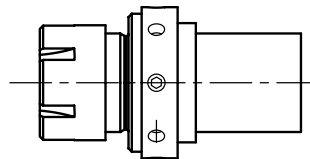
FunctionLINE Vario/Viso Modular Options



S1 - Modular Saw Spindle w/ 10 mm bore for router bit



P1 - Modular Saw Arbor Range: 1.5mm-4mm tool shank



M5 - Modular ER25

FunctionLINE – Extra Aggregates

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FunctionLINE Extra Aggregate

Innovative lockset recess aggregate features an offset design optimized for cutting lockset recesses. Can also be used for other boring operations.

Use For:

- routing out lockset recesses
- use ER16 output on back for cutting lock plates
- other boring or routing operations

Features:

- Offset design optimized for longer tooling operations such as mortising
- ER32 output on front, ER16 on back
- 15,000 RPM tool speed for faster cutting

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

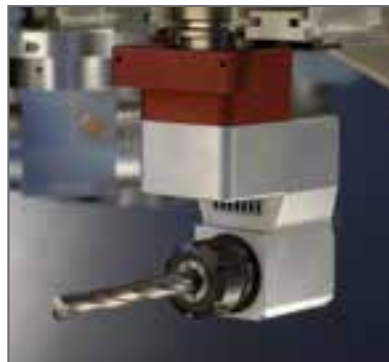


Boring



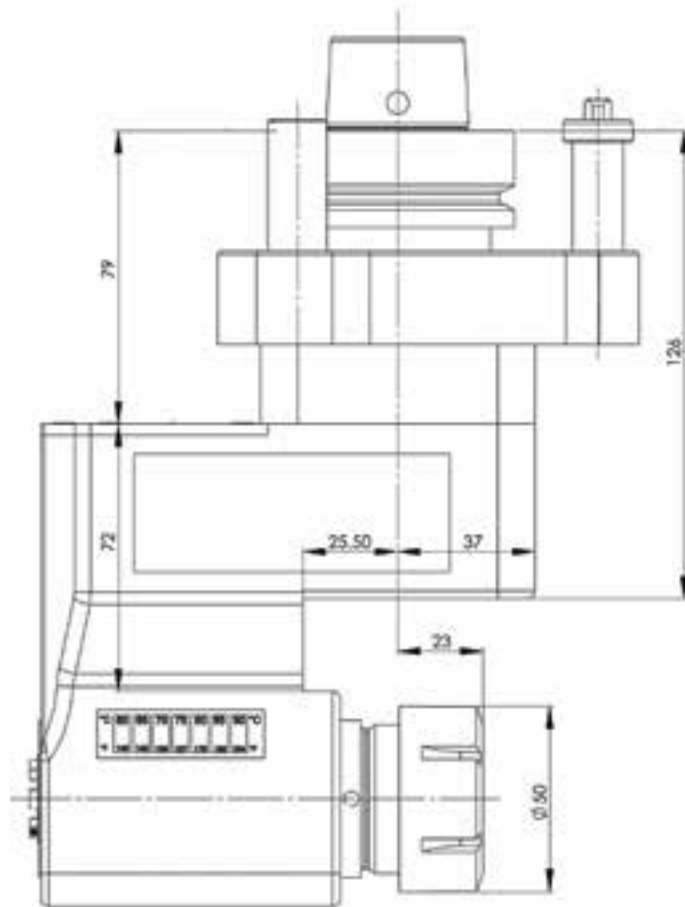
Milling

Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	14.75 ft/lbs
Gear Ratio	1:1.5
Lubrication	Grease
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	Front: ER32 Back: ER16 integral



FunctionLINE – Extra Aggregates

FunctionLINE Extra Aggregate



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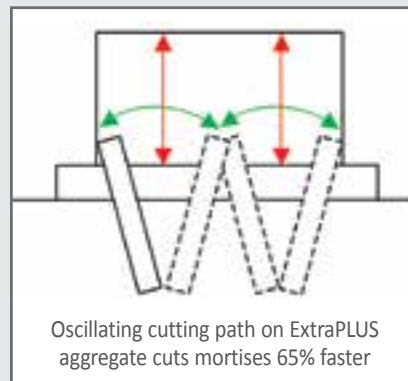
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EXTRA PLUS Oscillating Lock-Recess Aggregate



Winner of the IWF 2012 Challengers Award, the Extra Plus aggregate head is one of our innovative additions to our FunctionLINE. Featuring an oscillating cutting motion, the Extra Plus reduces lock recess cutting time by 65%.



Scan the QR code or go to <http://ow.ly/Aimc0> to watch the video

Oscillating cutting path on ExtraPLUS aggregate cuts mortises 65% faster

FunctionLINE – Soft Touch Aggregates

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Boring



Milling

Sanding/
Finishing

FunctionLINE Soft Touch Aggregate

The Soft-Touch aggregate head accurately follows the contours of your stock, automatically compensating for up to 10mm of variance to maintain constant depth-of-cut. Floating pressure is adjustable from 1/4 lb. to 20 lbs. Compressed air provides saw dust evacuation.

Features:

- Up to 10mm of compensation for surface variation
- Eliminate re-work processing
- Optional chip guide directs dust into the machine's dust hood for a cleaner work environment

Includes:

- Collet nut and wrench, standard floating bell, ER25 or ER32 output (your choice)



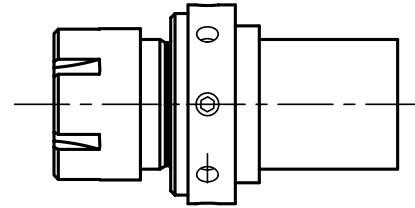
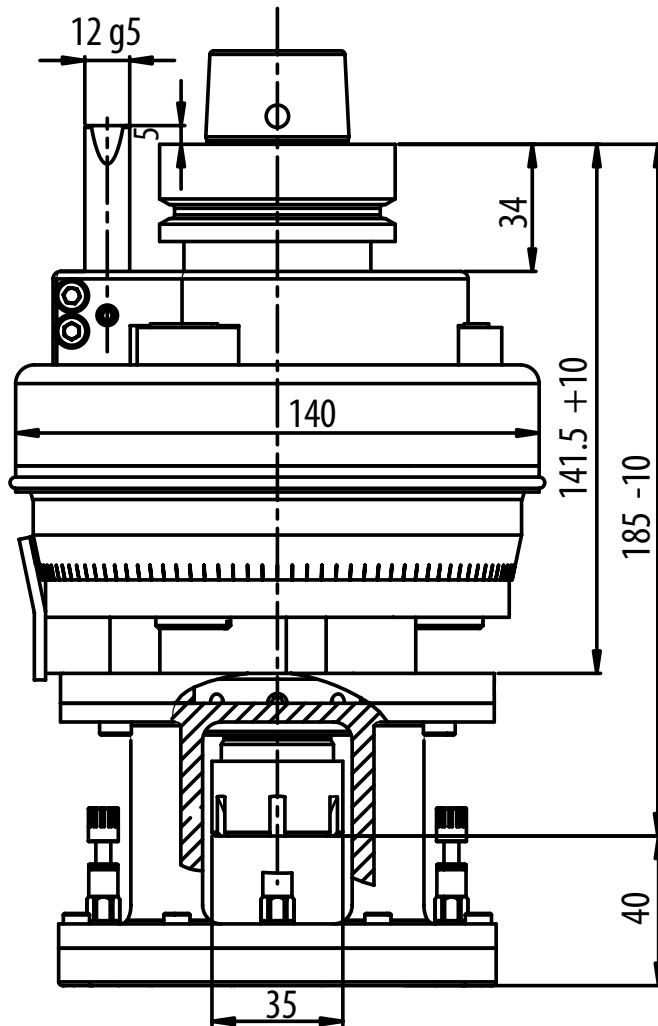
Scan the QR code or go to <http://ow.ly/AimRv> to watch the video

Max Speed Input (Spindle)	18,000 R.P.M. (24,000 R.P.M option)
Floating Pressure	Adjustable from 1/4 lb. to 20 lbs.
Floating Range	10 mm (with 10mm adjustment)
Floating Bell	70mm deep x 105 mm I.D.
Max Torque	10 ft/lbs
Gear Ratio	1:1
Lubrication	Grease
Max Temp.	85° C / 185° F
Output Direction	Same as machine spindle
Tool Interfaces	Modular

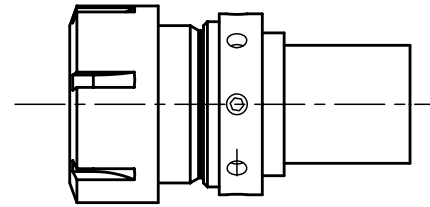


FunctionLINE – Soft Touch Aggregates

FunctionLINE Soft Touch Dimensions (mm) FunctionLINE Soft Touch Modular Options



M5 - Modular ER25



R6 - Modular ER32

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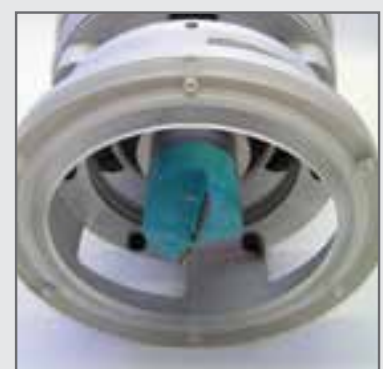
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Soft-Touch Aggregate Heads

Soft-Touch aggregates are one of the most versatile members of our aggregate line-up. Its modular capabilities provide a wide variety of spindle outputs to perform a variety of processing tasks quickly and efficiently.

Includes: Chip Guide, Various floating bells, shoes, sanding discs, and sleighs.



UltraLINE – Mono Aggregates

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UltraLINE Mono Aggregate

UltraLINE aggregates are an affordable way to add 4th axis capability to your CNC router. Perform routing, boring, mortising, and sawing operations faster and easier. We recommend UltraLINE aggregates for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features

- Oil bath gear lubrication for superior wear resistance during heavy-duty operations
- Single, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, arbor

Includes:

- Collet nut & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/AimmP> to watch the video



Boring



Milling



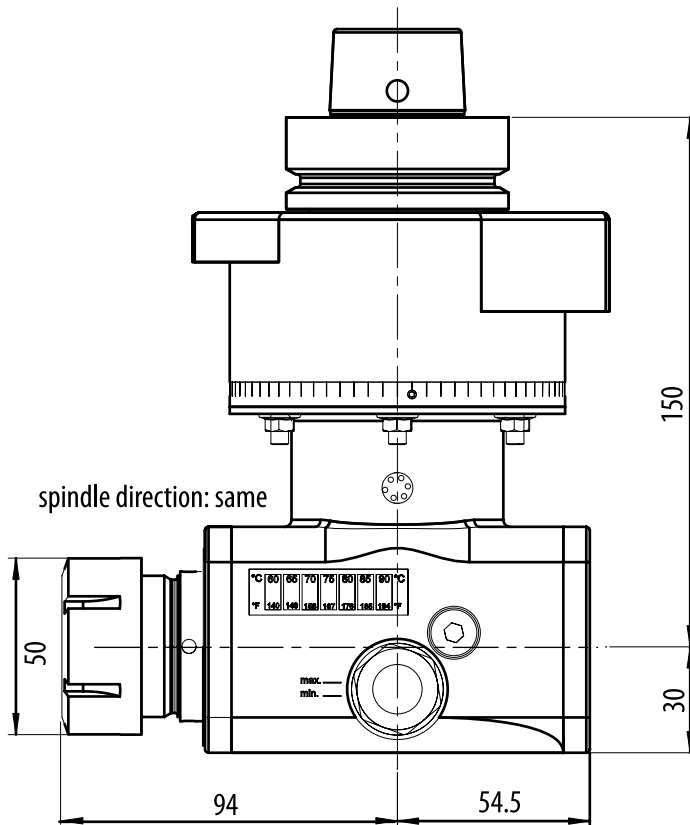
Sawing

Sanding/
Finishing

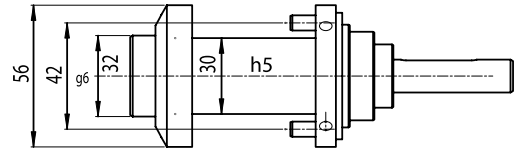
Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	16.25 ft/lbs
Gear Ratio	1:1.5
Lubrication	Oil Bath
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	M5, R6, S1, S2, A1, A2, A3, A4, O5, R7

UltraLINE – Mono Aggregates

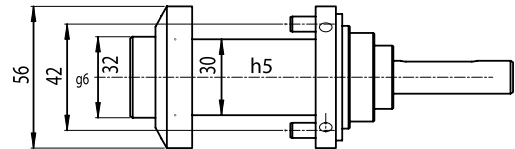
UltraLINE Mono Dimensions (mm)



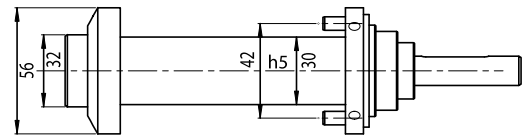
UltraLINE Mono Modular Options



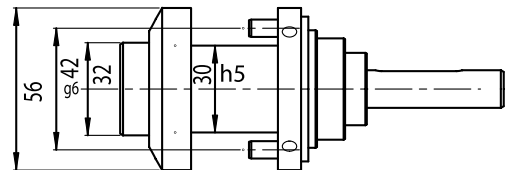
A1 - Prolock Spindle | Range: 1.5mm-6mm tool shank



A2 - Prolock Spindle | Range: 48mm – 52mm

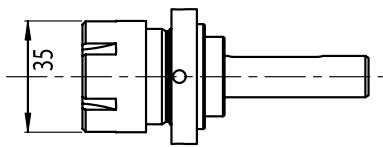


A3 - Prolock Spindle | Range: 98mm – 102mm

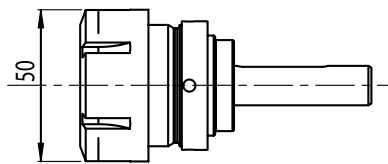


A4 - Prolock Spindle | Range: 28mm – 32mm

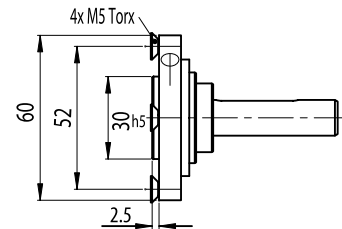
More Modular Options



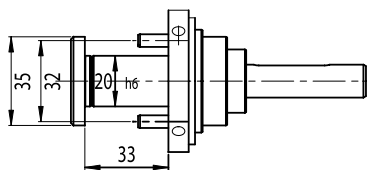
M5 - ER25 Collet and nut
Range: 1mm – 16mm



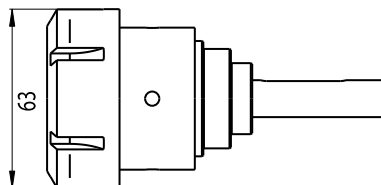
R6 - ER32 Collet and nut
Range: 3mm – 20mm



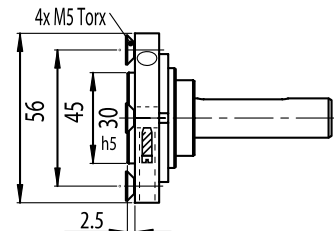
S2 - Saw Spindle,
52mm bolt circle



O5 - Special, $\varnothing 20h6$ 2x $\varnothing 5H7$, 2x
M5 - bolt circle 32mm, M10 central



R7 - ER40 - for use with Ultra
Line only. Range: 4mm – 26mm



S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit

UltraLINE – Duo Aggregates

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UltraLINE Duo Aggregate

UltraLINE aggregates add 4th axis capability to your CNC router. Perform routing, boring, mortising, and sawing operations faster and easier. We recommend UltraLINE aggregates for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features

- Oil bath gear lubrication for superior wear resistance during heavy-duty operations
- Dual, right angle output (other angles available)
- Output options: ER25, ER32, saw blade, Prolock

Includes:

- Collet nuts & wrenches
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/AimmP> to watch the video



Boring

Milling

Sawing

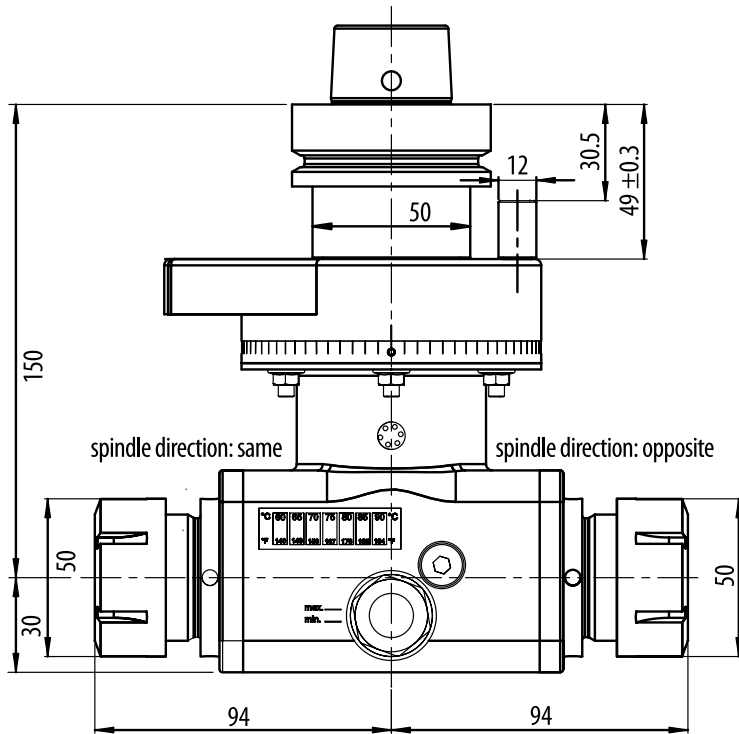
Sanding/
Finishing

Max Speed Input (Spindle)	10,000 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	16.25 ft/lbs
Gear Ratio	1:1.5
Lubrication	Oil Bath
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	M5, R6, S1, S2, A1, A2, A3, A4, 05

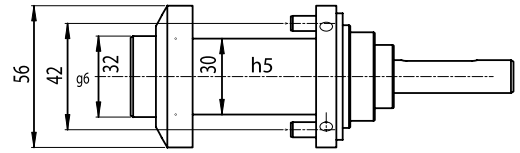


UltraLINE – Duo Aggregates

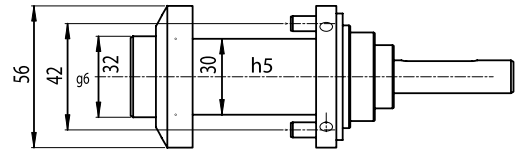
UltraLINE Duo Dimensions (mm)



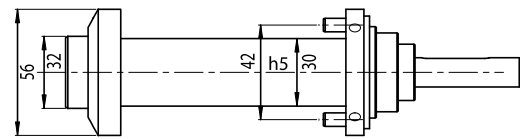
UltraLINE Duo Modular Options



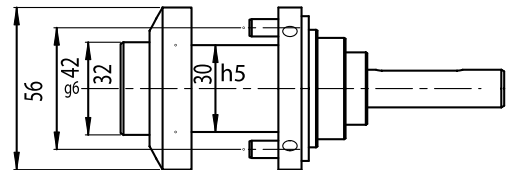
A1 - Prolock Spindle | Range: 1.5mm-6mm tool shank



A2 - Prolock Spindle | Range: 48mm – 52mm

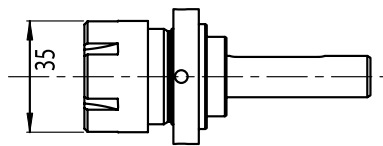


A3 - Prolock Spindle | Range: 98mm – 102mm

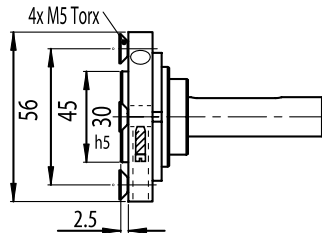


A4 - Prolock Spindle | Range: 28mm – 32mm

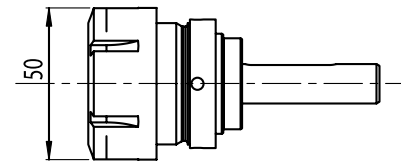
More Modular Options



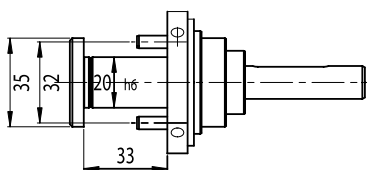
M5 - ER25 Collet and nut
Range: 1mm – 16mm



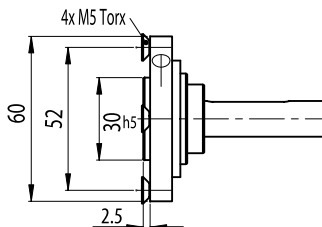
S1 - Saw Spindle, 45mm bolt circle
w/ 10 mm bore for router bit



R6 - ER32 Collet and nut
Range: 3mm – 20mm



O5 - Special, $\varnothing 20h6$ 2x $\varnothing 5H7$, 2x
M5 - bolt circle 32mm, M10 central



S2 - Saw Spindle,
52mm bolt circle

UltraLINE – Vario/Viso Aggregates

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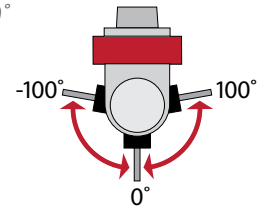


UltraLINE Vario/Viso Aggregate

UltraLINE aggregates feature oil bath lubricated gearing for superior wear resistance, and are sealed from all contaminants for extended life under heavy-duty conditions. UltraLINE aggregates are perfect for sawing using blades larger than 7", V-grooving, heavy routing operations, cutting MDF, composite materials, or cutting aluminum.

Features:

- Ultra Vario Aggregate features a full 200° of angle adjustment from -100° to 100°
- Most flexible of any aggregate head
- Create "impossible" custom profile and mortises
- Faster sizing and grooving (saw blade) than with router bits



200° of adjustment from -100° to +100°

Includes:

- Collet nut & wrenches
- Torx screws and saw blade connection
- ER collets sold separately



Scan the QR code or go to <http://ow.ly/Aim7v> to watch the video



Boring



Milling



Sawing



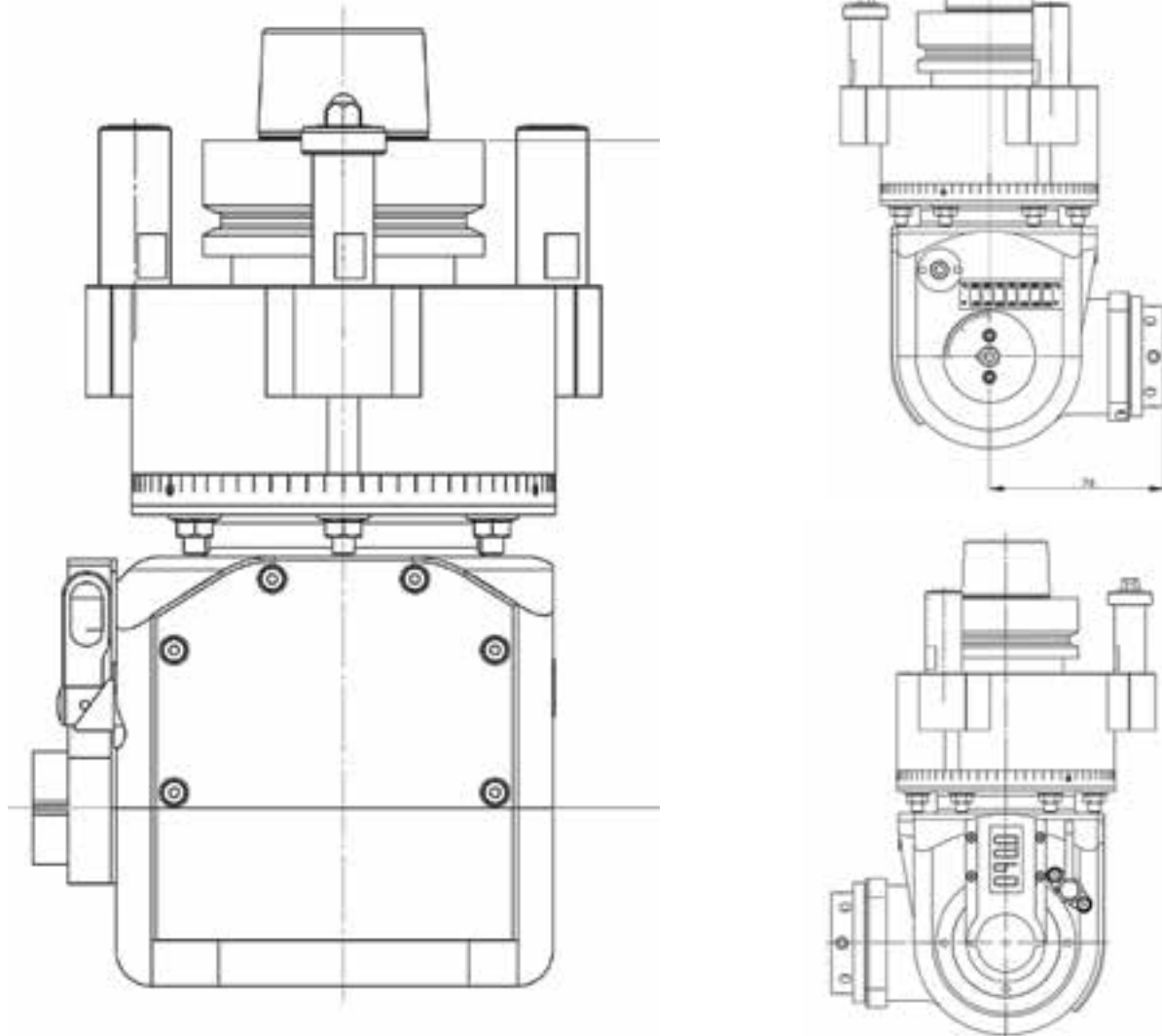
Sanding/
Finishing

Max Speed Input (Spindle)	13,760 R.P.M.
Max Speed Output (Tool)	15,000 R.P.M.
Max Torque	16.25 Ft/lbs
Gear Ratio	1:1.09
Lubrication	Oil Bath
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Opposite machine spindle
Tool Interfaces	K1, K2



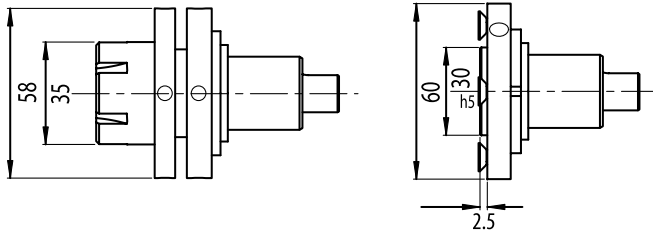
UltraLINE – Vario/Viso Aggregates

UltraLINE Vario/Viso Dimensions (mm)



- A
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- C
- D
- E
- F
- G
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- I
- J
- K

UltraLINE Vario/Viso Output Options



K1 - ER25 Collet and saw blade

K2 - Combi spindle 45mm and 52mm bolt circle

UltraLINE – Moulder Aggregate

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UltraLINE Moulder Aggregate

UltraLINE Moulder aggregates are used with a variety of cutting tools to shape and form as required. They are also used for gang saw operations. They feature oil bath lubricated gearing for superior wear resistance under heavy-duty use.

Features:

- Gear reduction for high torque
- 30mm x 120mm arbor size
- Optional Chip Guide for dust control

Includes:

- Slide hammer and saw pins



Scan the QR code or go to <http://ow.ly/Ainju> to watch the video



Moulding



Sawing



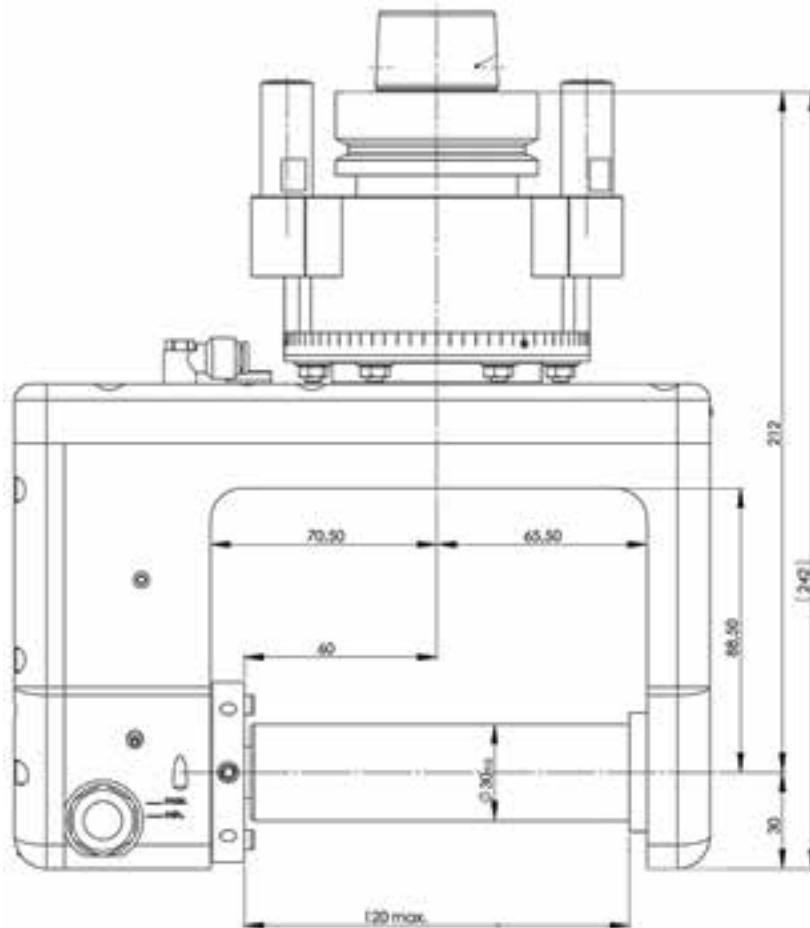
Sanding/
Finishing



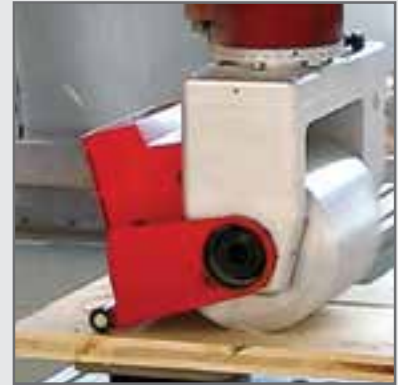
Max Speed Input (Spindle)	11,380 R.P.M.
Max Speed Output (Tool)	7,690 R.P.M.
Max Torque	17 ft/lbs
Gear Ratio	1:0.641
Lubrication	Oil Bath
Max Temp.	85° C / 185° F
Rotation	360°
Output Direction	Same as machine spindle
Tool Interfaces	Arbor Size: 30mm x 120mm

UltraLINE – Moulder Aggregate

UltraLINE Moulder Dimensions (mm)



Moulder Head Chip Guide



During operation dust is directed horizontally by the natural exhaust of the moulder.

The Chip Guide System directs dust and chips into the machine's dust exhaust system, so chips don't contaminate your material or your workplace.

AirPRO – CNC Router Dust Evacuation Nut



- Stop losing time & money on clean-up
- AirPRO removes 85% to 100% of dust
- Easy-to-use, just replace your collet nut

Problem: dust settles in cut



Solution: AirPRO



A great choice for nested cuts and slatwall too!

AirPRO's turbine action creates a powerful updraft that evacuates dust into your machine's collection hood before it has a chance to settle on your working surface.