

CNC floating aggregates
for constant and defined processing with
thickness variations and shape deviations



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Efficient and precise processing with floating aggregates: Guaranteed consistent quality with uneven workpieces

getastet
produzieren

Stair construction:

Probed edge processing of the stair tread



Kitchen:

Corner joints in countertops
Milling of rebates for flush mounting (sink/stove)
Milling the glued edge flush with the countertop

Why probing aggregates?

Probing processing enables the efficient and precise processing of workpieces, regardless of their material thickness, with guaranteed consistent processing depth.

How floating aggregates work:

Floating aggregates rely on integrated probe technology. The sensing element of the aggregate is pressed against the workpiece with a preset spring preload. This enables the sensing unit to detect unevenness, which is mechanically compensated for by the sensing unit technology. The clamped tool can thus work its way into the workpiece at an exactly constant depth or position in relation to the reference surface.

The advantages of using probing aggregates

Sensing directions:

Probing aggregates can be used in different axial directions: axial, radial, horizontal and 3-dimensional.

Application possibilities:

Touch processing and the use of touch units are possible in 3-, 4- and 5-axis machines, robot systems and throughfeed technology.

Materials:

Probing operations are possible in various materials such as wood, composites, plastics and many more. The optimum design of the aggregate is individually selected based on the application and system specifications.

Interiors, furniture, stand construction, shop fit-out:

Clamex grooves scanned in the edge or in the surface for panels with thickness variations
Rounding or chamfering of edges with constant precision
Decorative grooves in a constant and defined position
Traced edge processing in 3-, 4- and 5-axis machines and robot systems



Door production:

Milling decorative grooves on the surface, e.g. V-groove
Sawing continuous decorative grooves on the surface



Surfaces & edges:

Edge processing for 3-, 4- and 5-axis machines
Probed processing of inlay grooves
Edge processing of curved shapes



	SOFT TOUCH PRO (HORI) FUNCTION LINE	SOFT TOUCH ONE FUNCTION LINE	SOFT TOUCH ONE FUNCTION LINE
Max. input speed:	18.000 rpm	8.100 rpm	18.000 rpm
Max. output speed:	18.000 rpm	12.000 rpm	18.000 rpm
Gear ratio:	1 : 1	1 : 1,48	1 : 1
Max. torque:	10 Nm	10 Nm	10 Nm
Permissible operating temperature:	max. 85°C	max. 85°C	max. 85°C
Machining angle:	0°	90°	0°
Number of tool outputs:	1 / fixed	1 / fixed	1 / fixed
Lubrication:	Grease / Lifetime lubrication / Oil	Grease / Lifetime lubrication / Oil	Grease / Lifetime lubrication
Floating capacity:	10 mm	10 mm	10 mm
Adjustment range:	10 mm	7 mm	70 mm
Setting precision:	0,01 mm	0,01 mm	0,01 mm
Probing direction:	axial	axial	axial
Tool connection:	<ul style="list-style-type: none"> • modular interface ER 25, ER 32 • other connections on request 	<ul style="list-style-type: none"> • ATlock • S1 saw blade flange • modular interface • other connections on request 	<ul style="list-style-type: none"> • ER 32 • other connections on request
Special feature:	<ul style="list-style-type: none"> • great flexibility for various applications • modular interchangeable probes with bayonet lock and quick and easy tool change with tool adapter • height adjustment of the probe element: 10 mm with an adjustment accuracy of 0.01 mm • high flexibility when adapting to different applications • different floating bells for different tool lengths as standard - individual solutions can be designed • specific customer requirements are solved individually • infinitely adjustable probing force • modular extension for probed sawing work 	<ul style="list-style-type: none"> • basic solution for standard applications • permanently integrated tool spindle ER 32 and the always constant sensing element • height adjustment of the probe element: 70 mm with an adjustment accuracy of 0.01 mm • suitable for repetitive machining operations without the need to change the floating bell or the tool holder 	
Application examples:	<ul style="list-style-type: none"> • edge processing of the stair tread • decorative grooves and inlay grooves • Clamex grooves keyed into edges and surfaces • rounding or chamfering of edges • corner joints in worktops • milling rebates for flush mounting • milling glued edges flush with the worktop • SOFT TOUCH PRO HORI: continuous decorative grooves in the surface through probed sawing 	<ul style="list-style-type: none"> • edge processing of the stair tread • decorative grooves and inlay grooves • rounding or chamfering edges • corner joints in worktops • milling rebates for flush mounting 	

	SOFT TOUCH HORI FUNCTION LINE	SOFT TOUCH 360° FUNCTION LINE	SOFT TOUCH 3D FUNCTION LINE	FLUSH TRIM ROUTING AGGREGATE
Max. input speed:	12.000 rpm	12.000 rpm	12.000 rpm	10.000 rpm
Max. output speed:	8.100 rpm	12.000 rpm	12.000 rpm	10.000 rpm
Gear ratio:	1 : 0,67	1 : 1	1 : 1	1 : 1
Max. torque:	15 Nm	10 Nm	10 Nm	6 Nm
Permissible operating temperature:	max. 85°C	max. 85°C	max. 85°C	max. 85°C
Machining angle:	90°	0°	0°	90°
Number of tool outputs:	1 / fixed	1 or 2 / fixed	1 / fixed	2 / fixed
Lubrication:	Oil / Oil bath lubrication	Grease / Lifetime lubrication	Grease / Lifetime lubrication	Grease / Lifetime lubrication
Floating capacity:	10 mm	5 mm	axial: 7,5 mm / radial 5 mm	vertical: 9-100 mm / horizontal: ± 2 mm
Adjustment range:	10 mm		5 mm	vertical: 7 mm / horizontal: 4 mm
Setting precision:	0,1 mm		0,01 m	
Probing direction:	axial	radial	axial: 7,5 mm / radial 5 mm	vertical and horizontal
Tool connection:	<ul style="list-style-type: none"> • ATlock • other connections on request 	<ul style="list-style-type: none"> • ER 25 • modular interface • other connections on request 	<ul style="list-style-type: none"> • E 16 internal • other connections on request 	<ul style="list-style-type: none"> • tool mounting 3x M4 on pitch circle Ø25, centering diameter Ø19h5 • other connections on request
Special feature:	<ul style="list-style-type: none"> • height adjustment of the probe element: 10 mm with an adjustment accuracy of 0.1 mm • specific customer requirements are solved individually • very high feed speeds possible • optimum processing quality 	<ul style="list-style-type: none"> • floating aggregate for defined edge processing on curved molded parts • radial probing • vertical or horizontal design depending on the number of axes • ideal addition for edge processing in 3-, 4-, 5-axis machines and robot systems for GRP/CFRP parts and interior fittings, etc. 	<ul style="list-style-type: none"> • extension of the SOFT TOUCH 360° probing aggregate with additional axial probing • probing aggregate for defined edge processing on curved shaped parts on 5-axis systems or robot systems • simultaneous probing: radial and axial • ideal addition for edge processing on 5-axis systems or robot systems for GRP/CFRP parts and in interior fittings, etc. 	<ul style="list-style-type: none"> • panel processing: After the edge has been glued on, the aggregate mills the edge overhang flush to the top and bottom of the panel using the integrated tracing function. • compressed air is required on the machine side for the functions of the aggregate.
Application examples:	<ul style="list-style-type: none"> • decorative grooves and inlay grooves • SOFT TOUCH PRO HORI: continuous decorative grooves in the surface thanks to probed sawing 	<ul style="list-style-type: none"> • edge processing of the stair tread • edge processing of curved shapes and deburring work • edge processing in 3-, 4- and 5-axis machines and robot systems • milling glued edges flush with the panel 	<ul style="list-style-type: none"> • edge processing of the stair tread • edge processing of curved shapes and deburring work • edge processing on 5-axis machines and robot systems • milling glued edges flush with the panel 	<ul style="list-style-type: none"> • milling the glued edge flush with the panel



FUNCTION LINE

SOFT TOUCH PRO

SOFT TOUCH PRO FUNCTION LINE

Floating aggregate for constant and defined machining depth despite clamping unevenness and thickness fluctuations

Typical applications:

- Facade installation: Routing of V-grooves in ALUCOBOND
- Stairs: Edge machining of stair treads
- Furniture making: Clamex P connectors in edges
- Kitchens: Routing of recesses in countertops / doors: decorative grooves
- Formwork installation: Drilling at a defined depth
- Automotive and aerospace: Edge machining of molded parts and countersinking

Technical Specifications

Max. input speed:	18.000 rpm
Max. output speed:	18.000 rpm
Gear ratio:	1:1
Max. torque:	10 Nm
Permissible operating temperature:	max. 85°C
Machining angle:	0°
Number of tool outputs:	1 / fixed
Lubrication:	Grease / Lifetime lubrication
Floating capacity:	10 mm
Adjustment range:	10 mm
Setting precision:	0,01 mm
Probing direction:	axial



Routing, drilling, grinding, profiling, and sawing with surface probing (vertical and horizontal) Diverse machining possibilities thanks to modular system allowing individual adaptation to different requirements.

FUNCTION LINE

SOFT TOUCH ONE

SOFT TOUCH ONE FUNCTION LINE

Floating aggregate for constant and defined machining depth despite clamping unevenness and thickness fluctuations

Typical applications:

- Facade installation: Routing of V-grooves in ALUCOBOND
- Stairs: Edge machining of stair treads
- Doors: Decorative grooves
- Kitchens: Routing of recesses in countertops
- Formwork installation: Drilling at a defined depth
- Automotive and aerospace: Edge machining of molded parts and countersinking

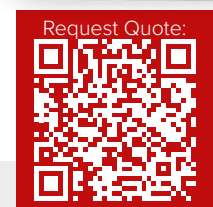
Technical Specifications

Max. input speed:	18.000 rpm
Max. output speed:	18.000 rpm
Gear ratio:	1:1
Max. torque:	10 Nm
Permissible operating temperature:	max. 85°C
Machining angle:	0°
Number of tool outputs:	1 / fixed
Lubrication:	Grease / Lifetime lubrication
Floating capacity:	10 mm
Adjustment range:	70 mm
Setting precision:	0,01 mm
Probing direction:	axial



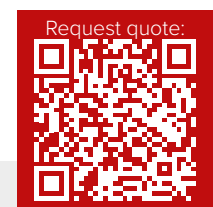
Routing – Drilling – Sawing (horiz.) – Grinding- for standard applications

Various sensing devices for different tool lengths as standard. Individual solutions can be designed.



SOFT TOUCH PRO FUNCTION LINE vs. SOFT TOUCH ONE FUNCTION LINE

- great flexibility for various applications
- modular interchangeable floating bells with bayonet lock and quick and easy tool change with tool adapter
- height adjustment of the probing element: 10 mm
- high flexibility when adapting to different applications
- different floating bells for different tool lengths as standard - individual solutions can be designed
- specific customer requirements are solved individually
- infinitely adjustable probing force
- modular extension for probed sawing work
- basic solutions for standard applications
- permanently integrated tool spindle ER 32 and the always constant floating bell
- height adjustment of the floating bell: 70 mm
- suitable for repetitive machining operations without the need to change the floating element or the tool holder



Exact grooving depths despite unevenness with circular grooving saw blades

FUNCTION LINE

SOFT TOUCH PRO HORI

SOFT TOUCH PRO HORI FUNCTION LINE

90° gearbox w. surface probing for groove sawing with copying unit from SOFT TOUCH PRO for precise and accurate groove depths

Fast feed rate due to high cutting speed

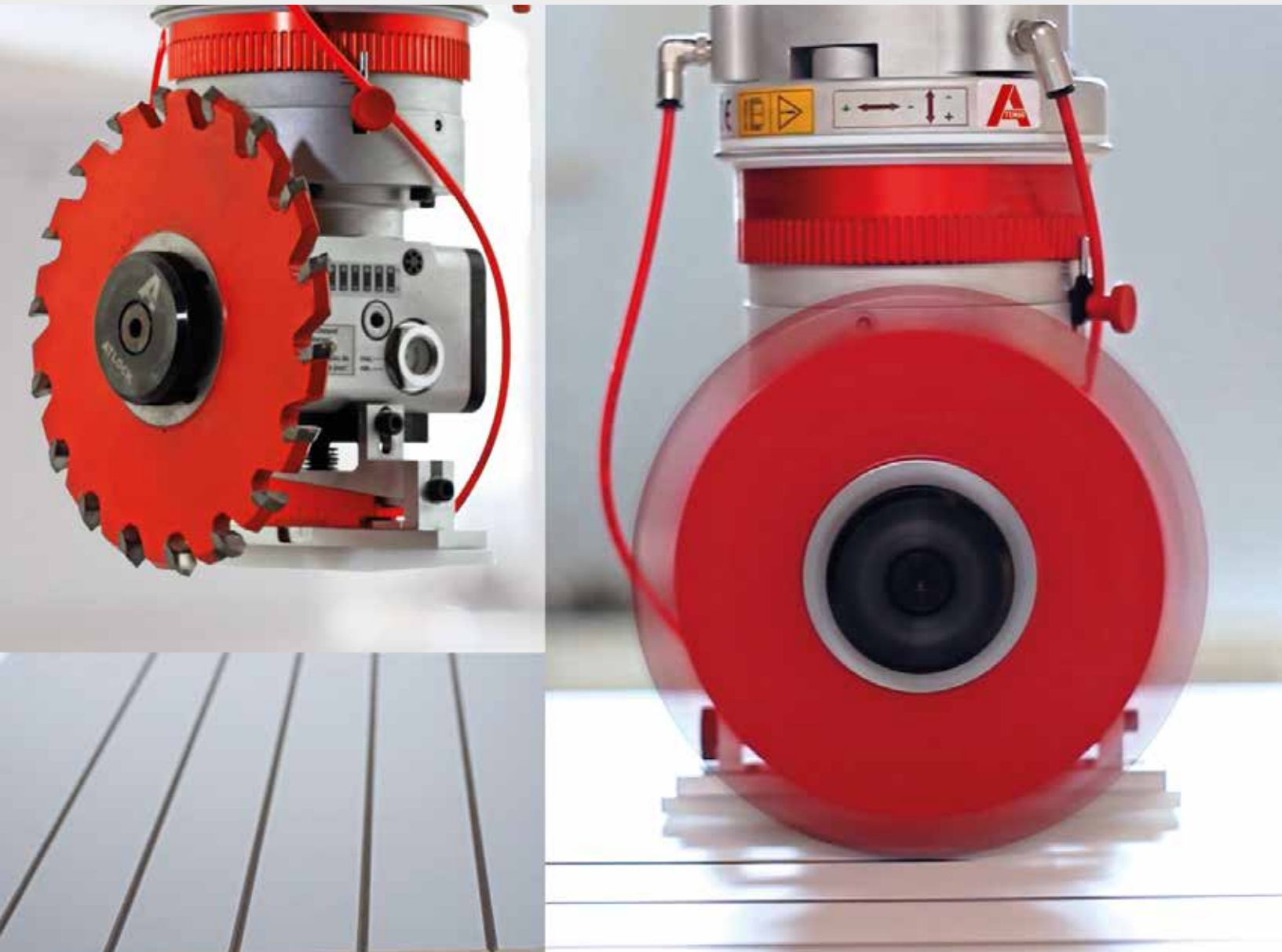
Machining capabilities: Sawing

Typical applications:

- Doors: All types of decorative grooves
- Facades: V-grooves

Technical Specifications

Max. input speed:	8.100 rpm
Max. output speed:	12.000 rpm
Gear ratio:	1 : 1,48
Max. torque:	10 Nm
Permissible operating temperature:	max. 85°C
Floating capacity:	10 mm
Adjustment range:	7 mm
Setting precision:	0,01 mm
Machining angle:	90°
Number of tool outputs:	1 / fixed
Lubrication:	Grease / Lifetime lubrication



SOFT TOUCH HORI:

The floating aggregate is specially designed for grooving applications.



SOFT TOUCH PRO HORI:

The floating aggregate consists of the basic SOFT TOUCH PRO FUNCTION LINE aggregate, which can be used for various applications. The attachment for clamping the saw blade extends the functionality of the basic aggregate.

If a SOFT TOUCH PRO FUNCTION LINE is already available, only the additional attachment is required. This horizontal attachment can be individually adapted for probed sawing applications.



With the ATEMAG probing aggregates, which are clamped in the spindle of the CNC, continuous grooves can be cut into workpieces by clamping a grooving saw blade. If the material to be machined has unevenness, this can be compensated for by the grooving tool of the aggregate, thus ensuring a consistent grooving depth.

Request quote:





FUNCTION LINE

SOFT TOUCH 360°

FUNCTION LINE

SOFT TOUCH 3D

SOFT TOUCH 360° MONO / DUO FUNCTION LINE

Floating aggregate for defined edge machining of contoured parts on 5-axis machines or robot systems

Typical applications:

- Musical instruments: Edge machining of guitar bodies
- Furniture making: Edge machining of contoured shapes
- Routing of glued-on edge banding flush with board on 5-axis machines
- Industrial robot cells: End-of-arm solution for edge machining of GFRP/CFRP parts after pressing
- ...

Technical Specifications

Max. input speed:	12.000 rpm
Max. output speed:	12.000 rpm
Gear ratio:	1:1
Max. torque:	10 Nm
Permissible operating temperature:	max. 85°C
Machining angle:	0°
Number of tool outputs:	1 oder 2 / fix
Lubrication:	Grease / Lifetime lubrication
Probing direction:	radial
Floating capacity:	5 mm



Copying function for compensating for shape and position tolerances in radial axis direction of molded parts, e.g., chamfers and radii, or for deburring.



Furniture making and interior construction work: Routing of glued-on edge banding flush with board on 4-axis machines



Tool connection:

- modular interface
- other connections on request



Machine connection:

ATEMAG aggregates are used on all CNC machines and robot systems. The machine connection is precisely matched to the technical requirements of the CNC machine or robot.

SOFT TOUCH 3D FUNCTION LINE

Floating aggregate for defined edge machining of contoured parts on 5-axis machines or robot systems

Typical applications:

- Musical instruments: Edge processing on a guitar body
- Furniture: Edge processing of curved shapes
- Milling glued edges flush with the panel on 5-axis machines
- Industrial robot cells: End-of-arm solution for edge processing of GFRP/CFRP parts using the press method
- ...

Technical Specifications

Max. input speed:	12.000 rpm
Max. output speed:	12.000 rpm
Gear ratio:	1:1
Max. torque:	10 Nm
Permissible operating temperature:	max. 85°C
Machining angle:	0°
Number of tool outputs:	1 / fixed
Lubrication:	Grease / Lifetime lubrication
Floating capacity:	axial: 7,5 mm / radial 5 mm
Adjustment range:	5 mm
Setting precision:	0,01 mm
Probing direction:	axial and radial



Copying function for compensating form and position tolerances in radial and axial alignment on molded parts, e.g. chamfers, radii or for deburring



Tool connection:

- E 16 internal
- other connections on request



Machine connection:

ATEMAG aggregates are used on all CNC machines and robot systems. The machine connection is precisely matched to the technical requirements of the CNC machine or robot.

Request Quote:



Request quote:





FLUSH TRIM ROUTING AGGREGATE FUNCTION LINE

Aggregate for routing of glued-on edge banding flush with board with 3-way probing function

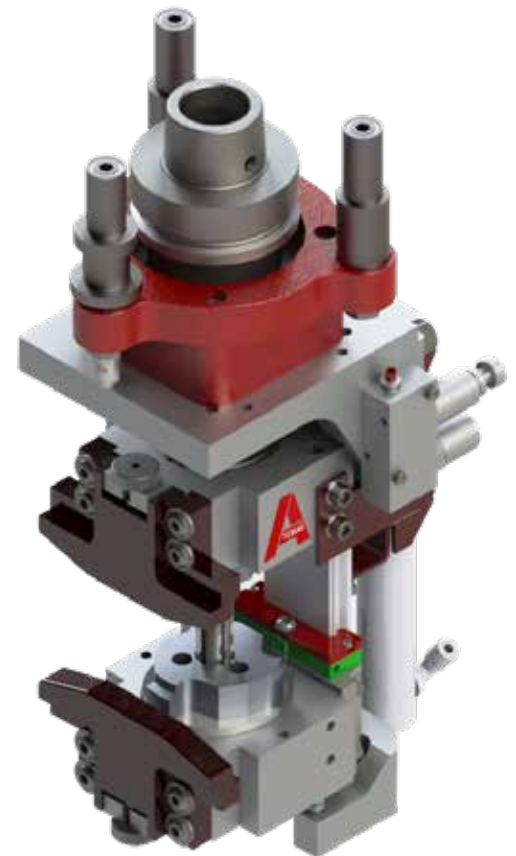
Panel processing: After gluing on the edge, the unit mills the edge protrusion flush with the top and bottom of the panel using the integrated touch function.

Compressed air is required on the machine side for the functions of the unit.



Technical Specifications

Max. input speed:	10.000 rpm
Max. output speed:	10.000 rpm
Gear ratio:	1 : 1
Max. torque:	6 Nm
Permissible operating temperature:	max. 85°C
Positioning of torque arm with respect to tool:	4 x 90°
Machining angle:	90°
Lubrication:	Grease / Lifetime lubrication



Tool connection:

- Tool mounting 3x M4 on pitch circle Ø25, Centering diameter Ø19h5
- other connections on request



Machine connection:

ATEMAG aggregates are used on all CNC machines and robot systems. The machine connection is precisely matched to the technical requirements of the CNC machine or robot.

Request Quote:

