

EXCHANGEABLE UNITS

Tooling technology







Wood / Composites / Aluminium machining



PRODUCT COMPASS

UNITS-OVERVIEW & TECHNICAL DATA

STANDARD AGGREGATES

	MONO R Classic line  P. 12	DUO Classic line  P. 15	QUATTRO Classic line  P. 6+9	FLEX D Classic line  P. 14	FLEX D Premium line  P. 14	FORTE Classic line  P. 10
Maximum output speed	8.000 min ⁻¹	15.000 min ⁻¹	15.000 min ⁻¹	15.000 min ⁻¹	15.000 min ⁻¹	15.000 min ⁻¹
Transmission ratio	1:0,8	1:1,2	1:1,2	1:1	1:0,94	1:1,2
Maximum output torque	25 Nm	25 Nm	25 Nm	25 Nm	26,5 Nm	25 Nm
Lubrication	Grease	Grease	Grease	Grease	Oil bath	Grease

OTHER VERSIONS



Product overview
online

	MONO Classic line  online	MONO R Premium line  online	SUBIO Classic line  P. 12	MULTI H3 Classic line  online	MULTI H3+ Classic line  online	MULTI V Classic line  P. 9+15
Maximum output speed	15.000 min ⁻¹	8.000 min ⁻¹	10.000 min ⁻¹	12.000 min ⁻¹	10.000 min ⁻¹	12.000 min ⁻¹
Transmission ratio	1:1,2	1:0,8	1:1	1:4	1:1,37	1:1
Maximum output torque	25 Nm	25 Nm	8 Nm	2 Nm	5 Nm	5 Nm
Lubrication	Grease	Oil bath	Grease	Grease	Grease	Grease

ANGULO Classic line  P. 11	MOULDER Premium line  P. 14+17	FLOATING VC Classic line  P. 10	FLOATING V Classic line  P. 13	COLLEVO+ Classic line  P. 7+16	SIMOLO Classic line  P. 13+16	SECO Classic line  P. 18	TRUCOLO Classic line  P. 8
10.000 min ⁻¹	10.000 min ⁻¹	24.000 min ⁻¹	18.000 min ⁻¹	2.700 min ⁻¹	4.000 min ⁻¹	6.000 min ⁻¹	15.000 min ⁻¹
1:1,3	1:0,7	1:1	1:1	1:0,9	1:1	1:1,2	1:1
20 Nm	25 Nm	8 Nm	10 Nm	-	-	-	-
Grease	Oil bath	Grease	Grease	Grease	Grease	Grease	Grease

FLOATING HS Classic line  online	LIVELLO Classic line  P. 6	ZUCCO Classic line  P. 11+17	RENITO H Classic line  online	RENITO V Classic line  P. 7	CAVO H Classic line  P. 8	CAVO V Classic line  online	MOULDER C Premium line  online
15.000 min ⁻¹	12.000 min ⁻¹	3.000 min ⁻¹	1.000 min ⁻¹	1.000 min ⁻¹	4.000 min ⁻¹	4.000 min ⁻¹	10.000 min ⁻¹
1:1,2	1:1	1:1	1:0,73	1:1	1:1	1:0,8	1:0,9
25 Nm	5 Nm	-	22 Nm	22 Nm	-	-	25 Nm
Grease	Grease	Grease	Grease	Grease	Grease	Grease	Oil bath

BENZ GMBH

WERKZEUGSYSTEME

At BENZ Werkzeugsysteme, our maxim, "Innovation. Precision. Passion." is far more than just a marketing formula. Rather, it describes the core goals of our business while also outlining the reasons why we have been able to compete in the market successfully with tool systems for woodworking, metal machining and composite material processing for more than 30 years.

Innovations are important to us. But we also recognize that they can be successful only if they precisely meet the needs of our customers. This is why we have maintained a strict focus on our customers for many years. We ensure that our developments and innovations simplify your production processes and lower your manufacturing costs - and ultimately improve your competitiveness as a result.

INNOVATION. With an eye on what is currently within the bounds of feasibility, we strive to always make use of innovative technologies. And we keep in close contact with our customers to ensure we already know today what our customers will need tomorrow. Technical progress is ingrained into our very identity, which means you can always find smart, detailed solutions in our product range.

PRECISION. We ensure our products have the highest level of precision and reliability. This is vital in our industry. Our customers also rely on absolute precision during production - and need to be able to put all their trust in us. But production is not the only area where we strive for precision. We also seek minimal tolerances and maximum accuracy in other areas as well - from development to sales to delivery.

PASSION. BENZ precision products are composed of a vast array of different individual parts. They are the result of great care that starts in the design phase and even includes the selection of raw materials. Primarily, however, they are the expression of our employee's experience and passion to do good work. We are tool specialists through and through, and we are willing to move mountains to reach the perfect solution and to ensure the satisfaction of our customers.



CONTENT

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MANUFACTURE OF STAIRS

AGGREGATES

QUATTRO

Four-sided angle head

1



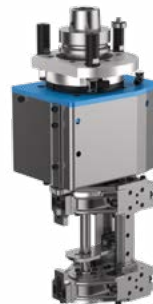
Product
information

Save expensive tool change times:
With this aggregate you can have four cutting
tools available directly on the workpiece.

LIVELLO

Edge trimming unit

2



Product
information

Three-sided tracing for a perfect result even on
the bottom side of the workpiece, no turning of
the workpiece

PROCESSING OF STAIR AND STEP STRINGERS



1 QUATTRO

Milling of slots and drilling of dowel holes



2 LIVELLO

Three-sided tracing and double-sided milling/sanding on two sides of chamfers on edges and roundings



3 COLLEVO+

Sanding of edges and outside contours of staircases also with inner roundings



4 RENITO V

Chiselling out of rectangular recesses for treads, drilling of square holes as distortion lock on palings

COLLEVO+

Belt sanding unit

3



Product information

Sanding of straight, convex or concave edges

RENITO V

Chisel mortising unit vertical

4



Product information

Reduction of the processing time: machining of square holes with standard tools in just one step



MANUFACTURE OF WINDOWS

AGGREGATES

CAVO H

Hinge mortising unit

1



Product
information

Available in vertical and horizontal version

TRUCOLO

HSK tool holder with chip baffle

2



Product
information

One tool holder for several profile cutters,
quick change of cutting tools,
simple cleaning of the cutters

PROCESSING OF WINDOW FRAMES AND SASHES



- 1 **CAVO H**
Mortising of slots for hinge hooks



- 2 **TRUCOLO**
Milling of profiles with profile cutters



- 3 **MULTI V3**
Drilling of holes for fittings in just one stroke



- 4 **QUATTRO**
Machining of dowel drills

MULTI V3

Multi spindle head

3



Product
information

Time-savings by drilling
several holes in one stroke

QUATTRO

Four-sided angle head

4



Product
information

Save expensive tool change times:
With this aggregate you can have four cutting
tools available directly on the workpiece.



MANUFACTURE OF DOORS

AGGREGATES

FORTE

Look recess trimming unit

1



Product
information

Two tools for milling lock recesses and face plates with one aggregate

FLOATING VC

Floating trimming unit

2



Product
information

Small & Fast:
Traced milling with up to 24,000 rpm

PROCESSING OF INTERIOR DOORS



- 1 **FORTE**
Milling of the recesses for lock case and face label.



- 2 **FLOATING VC**
Milling of decorative grooves and engravings



- 3 **ANGULO**
Notching of inner corners on light cutouts



- 4 **ZUCCO**
Sanding of inner door plates up to the corners e.g. on country house doors

ANGULO

Corner notching unit

3



Product
information

Undersurface trimming on
5-axis machines

ZUCCO

Vibrating sanding unit

4



Product
information

Finishing of flat surfaces
especially in the corners



MANUFACTURE OF KITCHENS

AGGREGATES

SUBIO

Undersurface unit

1



Product
information

Processing from below
without turning the workpiece

MONO R

Single-sided angle head

2



Product
information

With reduced ratio for perfect quality of the cut

COUNTERTOP MACHINING



- 1 **SUBIO**
Milling of recesses for the connection of parts of countertops



- 2 **MONO R**
Cutting of panels



- 3 **FLOATING V**
Traced milling for a perfect connection of the panels



- 4 **SIMOLO**
Sanding of chamfers

FLOATING V

Floating trimming unit

3



Product
information

Perfect surface:
integrated chip removal for more cleanliness
on the workpiece surface, user-friendly due to
easy adjustment and quick tool change

SIMOLO

Orbital sanding unit

4



Product
information

Sanding of flat, convex or concave surfaces



MANUFACTURE OF FURNITURE

AGGREGATES

FLEX D

Adjustable angle head

1



Classic
line



Product
information

Premium
line



Product
information

Less waste:
Digital display of the a-axis angle for
quick and exact adjustment

MOULDER

Moulder head

2



Product
information

Use of various types of tools:
brushes, sanding wheels, profile cutters or
saw blade packages

PROCESSING OF WARDROBE ELEMENTS



- 1 **FLEX D**
Cutting panels with angles from -5° to $+100^{\circ}$ of the a-axis.



- 2 **MOULDER**
Milling of finger joints



- 3 **MULTI V5**
Drilling of row holes for shelves



- 4 **DUO**
Milling of slots for drawer bottoms

MULTI V5

Multi spindle head

3



Product information

Time-savings by drilling several holes in one stroke

DUO

Double-sided angle head

4



Product information

Maximum flexibility with the BENZ Solidfix® modular quick change system



TREATMENT OF SURFACES

AGGREGATES

SIMOLO

Orbital sanding unit

1



Product
information

Finishing surfaces on CNC machine

COLLEVO+

Belt sanding unit

2



Product
information

Sanding of flat, convex or concave edges

PROCESSING OF SURFACES ON A MACHINE



- 1 **SIMOLO**
Sanding of flat, convex or concave surfaces



- 2 **COLLEVO+**
Sanding of edges



- 3 **ZUCCO**
Sanding of inlays
all the way to the corners



- 4 **MOULDER**
Brushing of surfaces

ZUCCO

Vibrating sanding unit

3



Product
information

Finishing of flat surfaces
especially in the corners

MOULDER

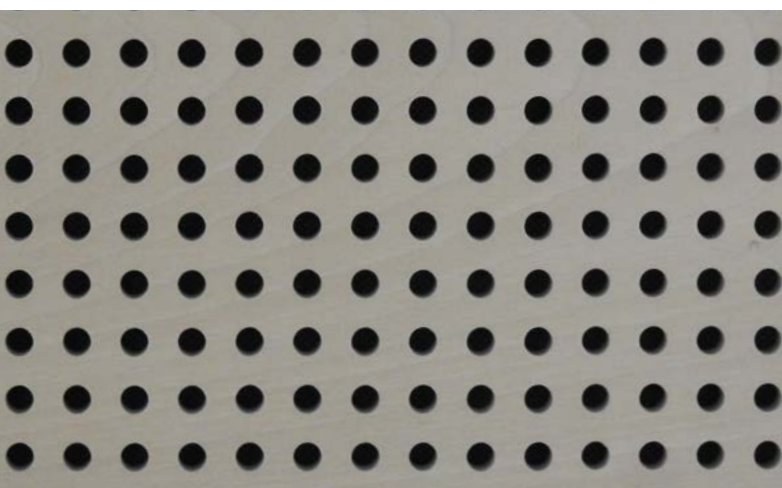
Moulder head

4



Product
information

Use of various types of tools:
brushes, sanding wheels, profile cutters or
saw blade packages



SPECIAL APPLICATIONS

AGGREGATES

SECO

Cutting unit

1



Product
information

Cutting of various materials such as foam, cardboard, fabric, leather, rubber etc.

MULTI V21

Multi spindle head

2



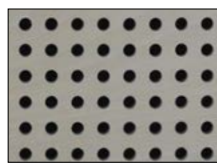
Product
information

Time saving due to the simultaneous production of several holes in one stroke

VARIOUS APPLICATIONS



- 1 **SECO**
Cutting of various materials with
an oscillating knife



- 2 **MULTI V21**
Drilling of holes in acoustic panels



- 3 **CATENO**
Sawing of door and window
cut-outs in prefabricated houses



- 4 **MULTI V3 CABINEO**
Drilling of recesses for cabineo
connectors

CATENO

Vertical cut-off aggregate

3



Product
information

Sawing of very deep cuts

MULTI V3 CABINEO

Multi spindle head vertical

4



Product
information

Time-savings by drilling recesses for cabineo
connectors in just one stroke

SYSTEM DESIGN

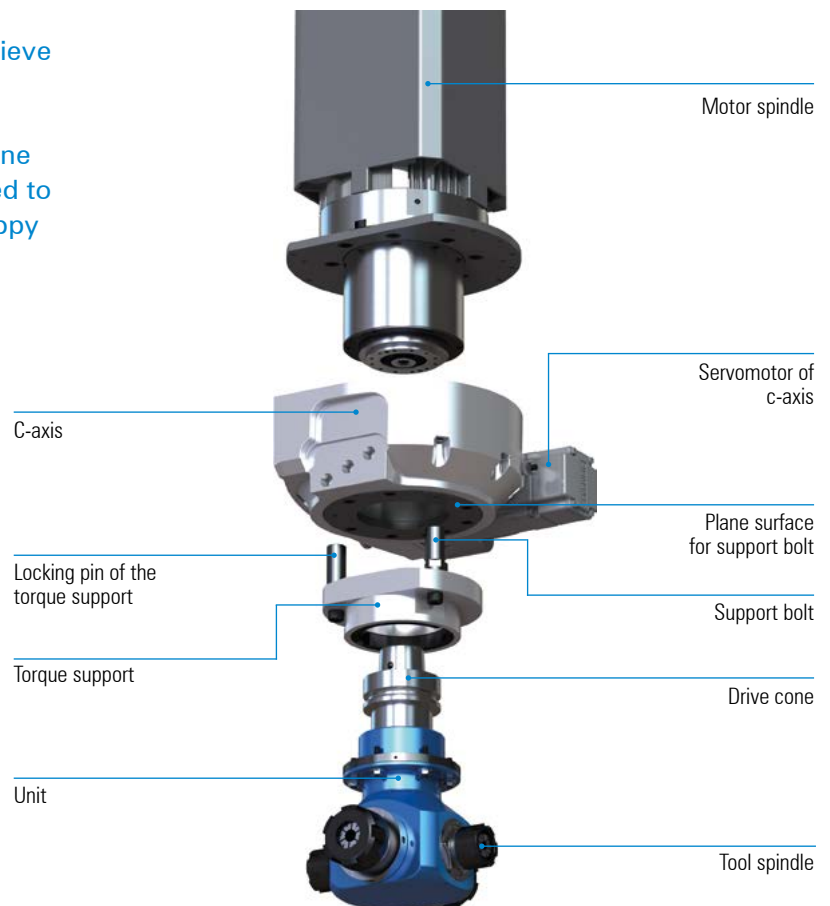
MODULAR DESIGN

MODULAR DESIGN - FOR MAXIMUM FLEXIBILITY

A "complete unified work of art"

With individual machine elements it is like a puzzle. They must fit together exactly to achieve the desired overall picture.

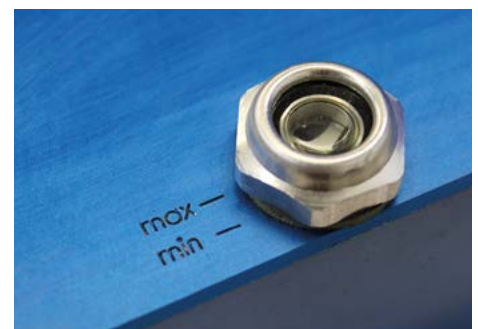
For the use of exchangeable units on your machining center, this means that the machine connection of a unit must be exactly matched to the c-axis and the motor spindle. We are happy to help so that everything fits.



PRODUCT LINES - OPTIMAL LUBRICATION FOR EVERY APPLICATION

Product lines: Classic line and Premium line

Aggregates with permanent grease lubrication are part of the Classic Line they are built for most of the standard applications. The Premium Line with oil-bath lubrication was developed especially for heavy-duty machining, e.g. deep cuts in solid wood.



Oil gauge glass

MACHINE CONNECTION - THE INTERFACE TO YOUR MACHINE

Precise fit

There are many machine manufacturers with numerous types of machines for machining wood and composite materials. Each manufacturer generally builds on its own machine concept – and thus on different components.

That has a significant effect on exchangeable units. They have to be adapted to the relevant machine type, both in terms of the drive taper (HSK, SK, BT, etc.) and the torque support.

Benz Standard – Machine connections



HSK - F63 BIESSE



HSK - F63 Busellato



HSK - F63 Felder



HSK - F63 HOMAG / WEEKE
/ WEINMANN



HSK - F63 IMA



HSK - F63 Masterwood



HSK - F63 SCM



HSK - F63 SCM



HSK - F63 Weinig



other machine connections on request

LENGTHS / DESIGNS - THE OPTIMUM FOR EACH APPLICATION

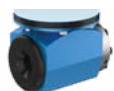
Aggregates- overall lengths

The length makes the difference: Many BENZ units are available in 3 different lengths.



SHORT

- For cramped working areas in the machine (little distance between the machining table and machine spindle)
- If the changing weight of the tool changer is limited



MEDIUM

- The universal length: covers the majority of machining tasks and tools



LONG

- For machining tasks with large tool diameters (saw blades, etc.)
- For machining tasks on high workpieces



OUTPUT SPINDLE - VARIOUS OPTIONS

The output spindle

BENZ offers the right output spindle for every tool.



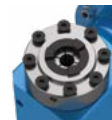
Options output spindles



Collet chuck holder ER25 Mini
per DIN6499 with externally
located clamping nut



Collet chuck holder ER32
per DIN6499 with externally
located clamping nut



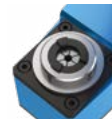
Centring Ø40 (TK Ø52 - 8x M5)/
collet chuck holder ER25A
per DIN6499 with internally
located clamping nut



Centring Ø30 (TK Ø42 - 2x Ø6)/
collet chuck holder ER25 Mini
per DIN6499 with externally
located clamping nut



Collet chuck holder ER16A
per DIN6499 with internally
located clamping nut



Collet chuck holder ER25A
per DIN6499 with internally
located clamping nut



Collet chuck C25 per
DIN 6388 with externally
located clamping nut



Centring Ø30 (TK Ø45/
Ø52 - 4x M5) /
Weldon holder Ø10
per DIN1835B



Centring Ø30 (TK Ø52 - 4x M5 /
TK Ø48 - 2x Ø6 / Ø8)/
Whistle-Notch holder Ø16 / Ø20
per DIN1835E



Centring Ø40 (TK Ø45/
Ø52 - 8xM5)



Centring Ø40 (TK Ø52 -
8x M5)
Weldon holder Ø10 / Ø16
per DIN1835B



Centring Ø16 (TK Ø28 - 4x M6)



Arbor Ø30 (TK Ø42 - 2x Ø6),
tool length 1.5 - 6 mm



Arbor Ø30 (TK Ø42 - 2x Ø6),
tool length 1.5 - 16 mm



Arbor Ø30 (TK Ø42 - 2x Ø6),
tool length 1.5 - 33 mm



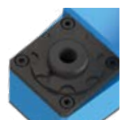
Arbor Ø30 (TK Ø42 - 2x Ø6),
tool length 1.5 - 52 mm



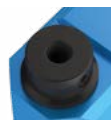
Arbor Ø30 (TK Ø42 - 2x Ø6),
tool length 1.5 - 63 mm



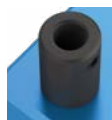
Modular quick-change system
BENZ Solidfix® S3



Weldon holder Ø12
per DIN1835B



Weldon holder Ø6
per DIN1835B



Weldon holder Ø10
per DIN1835B




HSK - F63 per DIN 69063



Weldon holder Ø10 /
Ø16 per DIN1835B



Whistle-Notch holder Ø6
per DIN1835E

 other output spindles on request

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We hereby declare that our products meet the basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine to the extent that this is possible as part of delivery.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with versions of the incomplete machine's special documents via our documentation department should they have reason to request them. The incomplete machine also satisfies the stipulations of EC Directive 2014/30/EC on electromagnetic compatibility. The protective goals of EC Directive 2014/35/EC regarding electronic equipment have been met.

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BENZ GmbH Werkzeugsysteme

Im Mühlegrün 12

D-77716 Haslach

T +49 7832 704-0

F +49 7832 704-8001

info@benztooling.com

www.benztooling.com

