

#### "ARKADE+ZINKEL+ELLIX" - The complete routing system for arches

The building techniques of the ancient Greeks and Egyptians had not contemplated the joining of wall openings by the use of arches. Roman times brought great technological progress. Thanks to archlinking they were able to create wider openings and so this technique became increasingly popular. The greatest development and the most gracious examples of arch construction came during the middle ages and continued through the years until more modern times when other building methods largely replaced the use of arches. Modern day building construction has rediscovered the charm, aesthetic taste and practical aspects of archlinking and because of this our technical department has developed and patented "ARKADE + ZINKEL". This is the only equipment on the market today capable of drawing and producing wooden, double-radius arch frames with practically no size restriction, quickly and with unmatched quality results.

"ARKADE" equipment can produce round and/or flat arches with minimum diameter 27 cm and maximum diameter 6m. If the "ARKADE" is complemented by "ZINKEL" equipment, it is also possible to make double-radius arches with a smaller radius between 13.5 and 80 cm and a larger radius of 3 m; and with particular accessories, even greater dimensions can be achieved. With "ELLIX" and some parts from "ARKADE" a perfect geometrical ellipses can be obtained.



PATENT nr. AN93A000054



#### Item

#### ARKADE

"ARKADE" complete with tracer unit and goniometer



#### ZINKEL

"ZINKEL" articulate accessory for double-radii arches



"ELLIX" the equipment for perfect geometrical ellipse for customers already using "ARKADE"







#### Item

**ELLISISTEM** 

"ELLISISTEM" is the "last born" of our special equipments for producing arch frames. With "ELLISISTEM" the customer can execute a perfect geometrical ellipse. Suitable for house restoration where the double radius arch is difficult to fit. Simple and easy to use, it keeps the same work procedure and features as "ARKADE" + "ELLIX"

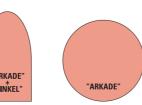
#### Examples of windows made with "Arkade+Zinkel+Ellix"













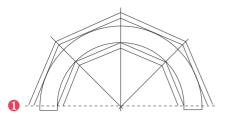


"ARKADE"

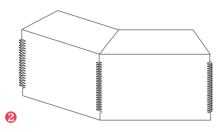
"ELLIX"



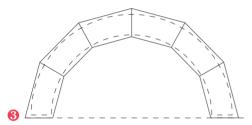
#### **WORK PROCEDURE**



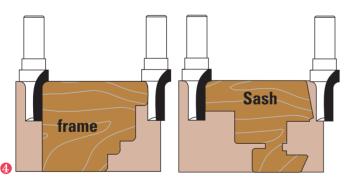
- Drawing of arch.
- Drawing and cutting of arch component parts.



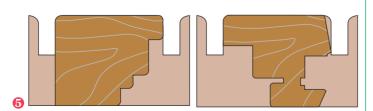
Joining the arch component parts (use eccentrinc clamp Art. SPP060029).



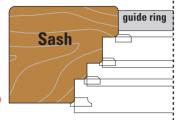
Positioning and securing the arch component parts, which are glued toghether



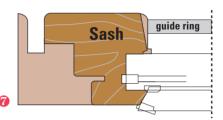
Inner-outer frame and sash outlining using a portable electric router fitted on the equipment (use tool Art. E.199.200.R).



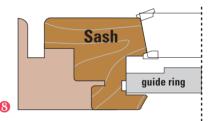
Using the band saw, remove excess wood



Profiling the frame by means of the cutter units with copy bearing on moulding machine



Profiling the sash by means of the cutter units with copy bearing on moulding machine



Profiling the glazing bead by means of the cutter units with copy bearing on moulding machine



Shaping of the glazing bead (with cutter Art. E.199.165.R use router table Art. SPP060028 ballbearing guide Art. SPP060039).



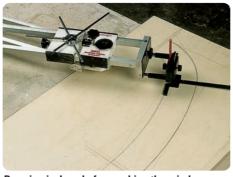
Separation of glazing bead with cutter Art. T141.061.R.

#### "ARKADE+ZINKEL+ELLIX"

The only equipment on the market capable of producing single and double radius arches or elliptical frames



The window arch is worked continuously It does not require a specific work bench The goniometer shows exactly how to cut the wood sections making up the arch



Drawing is done before making the window A carpenter's pencil i used Bars are engraved



Thanks to the revolver, the frame measurements can be repeated without risk of error





With the router table accessory and the ballbearing guide the execution of glazing bead is quick ad easy.



With the equipment "ELLIX" a perfect geometrical ellipse can be executed





ltem	Description
SPP060037	Additional 1 500 mm hars



Item	Description
SPP060036	Additional revolver

Uses standard electric router

#### **TOOLS TO BE USED WITH THESE EQUIPMENTS**

Shank ∅8	Shank ∅12	Description	
C199.140.R	E199.140.R	T.C.T. beading bit	
C199.165.R	E199.165.R	T.C.T. beading bit	
C199.200.R	E199.200.R	T.C.T. beading bit	
T141.061.R	T141.061.R	Solid carbide bit for glass fixing lath	
U211.061.R	U211.061.R	HS upcut spiral bits for aluminium	
	Z001.006.N	Bushing ∅ 6/12	
Z001.001.N		Bushing ∅ 6/8	
TS140.96030 TS140.96035 TS140.96040		Profile cutter hole $\varnothing$ 30/35/40 Profile cutter hole $\varnothing$ 30/35/40 Profile cutter hole $\varnothing$ 30/35/40	



#### **TRIMATIC FOR HINGES**

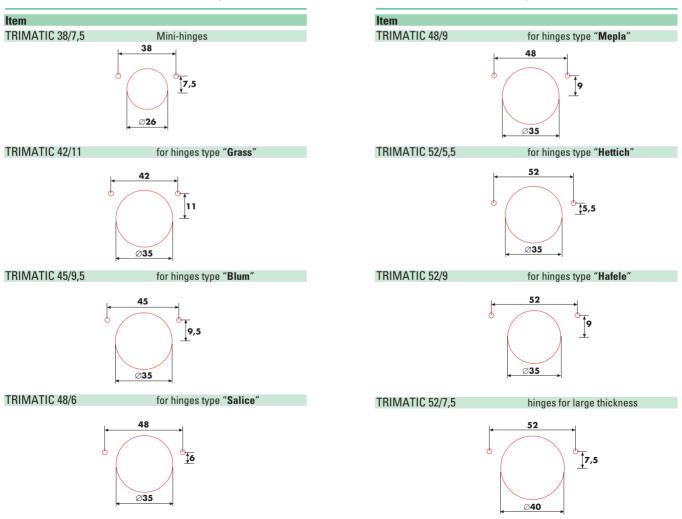
**TRIMATIC** are drilling jigs which allow making holes required in a single pass using a normal pillar drill or a portable electric drill. These articles are dedicated to craftsmen and hobbysts who have drilling problems when fitting hinges or positioning shelves with holes at a distance between centres of 32 mm.

The **TRIMATIC** unit with three tool-holders is suitable to make the three holes to fix the hinge in a single pass with distance between centres depending on the hinge to be fixed. Tools diameter depends on the hinge used. The central bit must have right hand rotation, the lateral bits have left hand rotation.

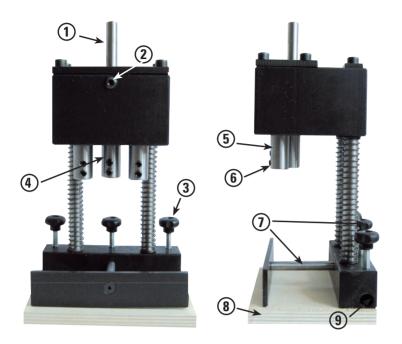


TRIMATIC 48/6 used with a pillar drilling machine

TRIMATIC 48/6 used with a portable drilling machine

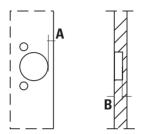


Designed in **1998** is one of the most innovative products in the woodworking field. Tested and appreciated by the most important hinges manufacturers, only our TRIMATIC boring jigs allow making more than **50.000** bores.



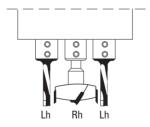
#### **DESCRIPTION**

- 1) Arbor for pillar drill spindle
- 2) Threaded hole for greasing
- 3) Locking knob for stop reference rod
- 4) Distance adjusting screw "B"
- 5) Tool holder bush
- 6) Tool locking screw
- 7) Distance adjusting screw "A"
- 8) Equipment support table
- 9) Stop rod sliding hole



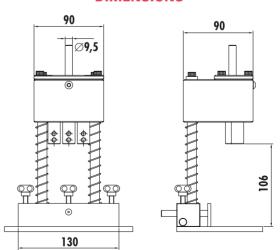
#### **HW tools suitable for TRIMATIC**

Ø	Description	Rotation
3	L120.030.L	Lh
	+ Z011.030.N	
5	L103.050.L	Lh
8	L103.080.L	Lh
10	L103.100.L	Lh
26	L140.260.R	Rh
35	L140.350.R	Rh
40	L140.400.R	Rh



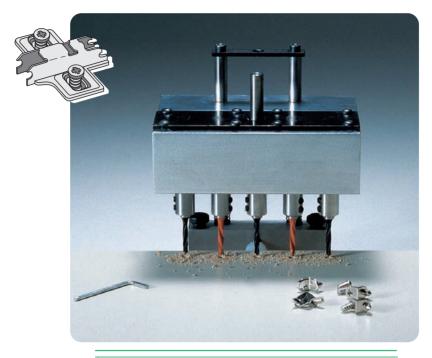


The central bit must have right hand rotation, the lateral bits have left hand rotation



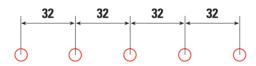
#### **TRIMATIC 32**

The **TRIMATIC** unit with five tool holders is suitable to make a five holes set with distance between centres of 32 mm in a single pass. This device is designed for drilling holes in lateral panels (sides) of furniture for both fixing the hinge and positioning the shelves at the height desired. In the **TRIMATIC 32** the tool diameters depend on the fittings used. The central bit and those mounted in the external positions have right hand rotation, the other tools have left hand rotation.



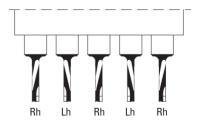






#### **HW tools suitable for TRIMATIC 32**

Ø	Description	Rotation
4	L103.040.R	Rh
4	L103.040.L	Lh
5	L103.050.R	Rh
5	L103.050.L	Lh

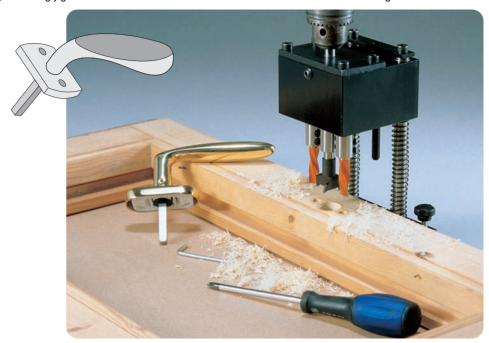


The central bit and those mounted in the external positions have right hand rotation, the other tools have left hand rotation.

#### **DRILLING JIG FOR CREMONE BOLTS**

**TRIMATIC 43/0** was designed for window frame makers who have problems with drilling holes to fit the handle on wood, wood/aluminium and PVC windows. **TRIMATIC 43/0** allows drilling the three holes necessary to fit the cremone bolt in one single pass with a normal pillar drill or a portable electric drill.

TRIMATIC 43/0, a drilling jig for handles with a distance between centres of the retaining screws of 43 mm.



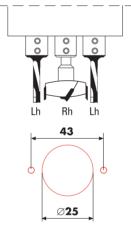


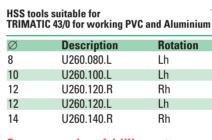
Drilling of wood and PVC window frames to fit cremone bolts

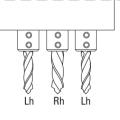
#### Item TRIMATIC 43/0

#### HW tools suitable for TRIMATIC 43/0

Ø	Description	Rotation
4	L103.040.R	Rh
4	L103.040.L	Lh
5	L103.050.R	Rh
5	L103.050.L	Lh
8	L103.080.L	Lh
10	L103.100.R	Rh
10	L103.100.L	Lh
12	L103.120.R	Rh
12	L103.120.L	Lh
25	L140.250.R	Rh
26	L140.260.R	Rh







Some examples of drilling patterns				
SIEGENIA-T	RIAL	WEIDTMANN-KURLER		
U260.120.L	2	U260.100.L	2	
U260.120.R	1	U260.140.R	1	

G-U JET77		OLIVEN		
U260.100.L	2	U260.080.L	2	
U260.120.R	1	U260.140.R	1	

130



The central bit must have right hand rotation, the lateral bits have left hand rotation.

# 90 90 90

#### SPECIAL DEVICES FOR ANGULAR HINGES INSERTING

With constant attention paid to our customers' requirements and ongoing research for developing new technical solutions for helping craftsmen and small firms, our special equipments **TRIMATIC 22, 25 e 28** help the window makers to make holes for angular hinges to be mounted on windows and door-windows, in wood and wood-aluminium material. The **TRIMATIC 22, 25 e 28** can be used either with pillar drills or portable electric drills, and have distance between holes suitable for angular hinges of the following types: Siegenia (Trimatic 22), GU (Trimatic 25), Maico and AGB (Trimatic 28).

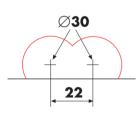


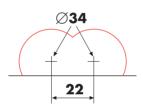




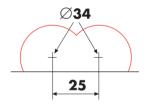
Item

TRIMATIC 22 for angular hinges "SIEGENIA" (Ø30 and Ø34) with a distance between holes of 22 mm





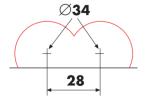
TRIMATIC 25 for angular hinges "GU" with a distance between holes of 25 mm



TRIMATIC 28 for angular hinges MAICO (type "Trend") and AGB with a distance between holes of 28 mm

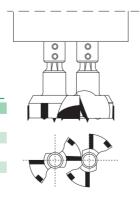


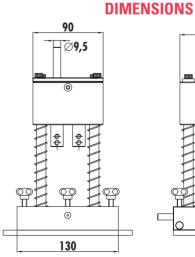
Mount the right-hand rotation bit on the bush related to the drill spindle and the left-hand rotation bit on the other bush.

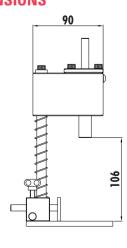


#### HW tools suitable for TRIMATIC 22 - 25 - 28

Ø	Description	Rotation
30	L160.300.R	Rh
30	L160.300.L	Lh
34	L160.340.R	Rh
34	L160.340.L	Lh







#### TRIMATIC 22,4 FOR "LAMELLO® CABINEO®"

SISTEMI has always paid special attention to the demands of woodworkers and their issues in the woodworking. For this reason, we have developed Trimatic 22,4: the new and only drilling jig on the market that can drill the required three blind holes for mounting Lamello® Cabineo® furniture connection, in a single pass simply using a power portable drill or stationary pillar drill. It is especially thought for hobbyists, artisans and craftsmen who do not own CNC router machines.





Watch the Video on



TRIMATIC 22,4 NEW











11.2 11.2 Ø **15** 

0

HW tools suitable for TRIMATIC 22,4, for "Lamello ® Cabineo ®"

Ø	Description	Rotation	
L174.150.R <b>NEW</b>	Ø 15x35	Rh	
L174.150.L NEW	Ø 15x35	Lh	



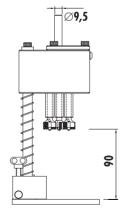
L174.150.L (x2)

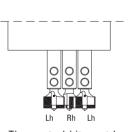
#### **DESCRIPTION**



- 2) Threaded hole for greasing
- 3) Locking knob for stop reference rod
- 4) Threaded screw for depth adjustment
- 5) Tool holder bush
- 6) Tool locking screw
- 7) Basement with millimetric scale
- 8) Equipment support table
- 9) Stop rod sliding hole

#### **DIMENSIONS**





The central bit must have right hand rotation, the lateral bits have left hand rotation



The special millimetric scale on the basement will help you to make the 5 mm hole in the corresponding workpiece to tighten the screw of Cabineo ® with accuracy

Cabineo ® is a product of

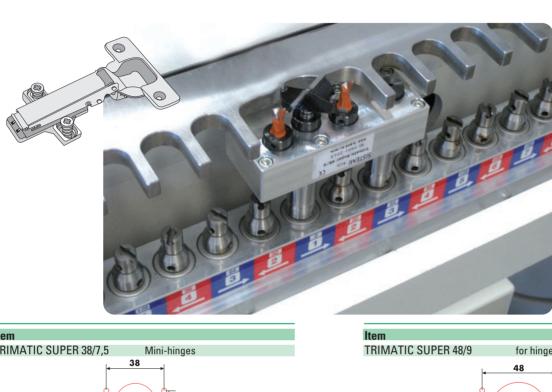




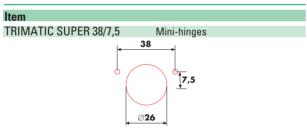
#### DRILLING JIG FOR MAKING HOLES FOR HINGE INSERTING

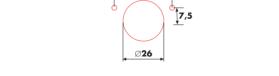
The TRIMATIC SUPER is a very innovative drilling jig, suitable to solve many problems to craftsmen and small industries when fitting the hinges and handles on doors, windows and cabinet doors. The TRIMATIC SUPER can be easily and guickly mounted on the multispindles head of any automatic boring machine with 32 mm distance between centres chucks. The TRIMATIC SUPER is very precise and fast, making in one single pass the three holes required for fitting the hinges on the cabinet doors.

At the moment, 8 types TRIMATIC SUPER in different patterns are available, suitable for the most common hinges: Salice, Blum, Hettich, Grass, Mepla, Ferrari, ecc. The new model 43/0, is now available for the execution of the holes necessary to fit the cremone bolt on the handles of doors and windows. The TRIMATIC SUPER are small-sized, 12,5x5x3 cm, but they are very solid and long-lasting devices. The diameter of the drills has to be chosen with reference to the model of hinges being used. Now, just choose the type of TRIMATIC SUPER you need.

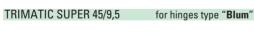


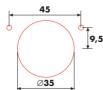




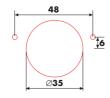


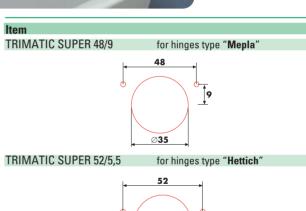


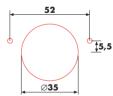




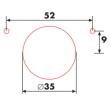
TRIMATIC SUPER 48/6 for hinges type "Salice"

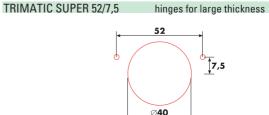






TRIMATIC SUPER 52/9 for hinges type "Hafele"





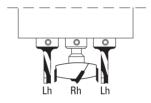


#### **DRILLING JIG FOR MAKING HOLES FOR HINGE INSERTING**



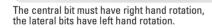
#### HW tools suitable for TRIMATIC SUPER

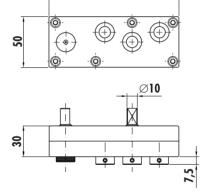
Ø	Description	Rotation	
3	L120.030.L	Lh	
	+ Z011.030.N		
5	L171.050.L	Lh	
8	L171.080.L	Lh	
10	L171.100.L	Lh	
26	L170.260.R	Rh	
35	L170.350.R	Rh	
40	L170.400.R	Rh	



# DIMENSIONS 125







#### DRILLING OF WOOD AND PVC WINDOW FRAME TO FIT CREMONE BOLT



#### HW tools suitable for TRIMATIC SUPER 43/0

Ø	Description	Rotation	
10	L103.100.L	Lh	
12	L103.120.L	Lh	
25	L140.250.R	Rh	

#### TRIMATIC SUPER 22,4 FOR "LAMELLO " CABINEO ""

The new TRIMATIC SUPER 22,4 allows to drill at the same time the three holes perpendicular to the machine boring axis suitable for mounting Cabineo® connections.

ltem

TRIMATIC SUPER 22,4 NEW

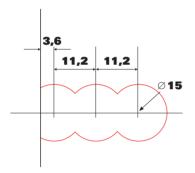




TRIMATIC SUPER 22,4 drilling jig for multi spindles machines

#### **HW tools suitable for TRIMATIC SUPER 22,4**

S Ø 6	Description	Rotation
L174.150.R <b>NEW</b>	Ø 15x35	Rh
L174.150.L <b>NEW</b>	Ø 15x35	Lh







32 57

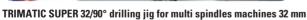
**DIMENSIONS** 



#### DRILLING JIG FOR MAKING HOLES FOR HINGE INSERTING

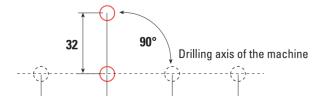
TRIMATIC SUPER 32/90° allows to drill at the same time 2 holes perpendicular to the machine boring axis.





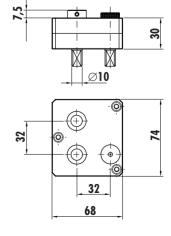
#### HW tools suitable for TRIMATIC SUPER 32/90°

Ø	Description	Rotation	
20	L170.200.L	Lh	
10	I 171.100.R	Rh	





TRIMATIC SUPER 32/90°







#### **ECCENTRIC CLAMP**

The eccentric clamp is suitable for keeping the glued wood sections with comb joints under pressure. It is tightened and slackened by turning the grip; the eccentric pressors are covered in rubber to prevent damage to the wood.





Item	Thickness range	
SPP060029	Min. 25 mm - Max 75 mm	
SPP060053	Min. 65 mm - Max 110 mm	

#### **ROUTER TABLE**



Item	Description
SPP060028	Router table to separate the glass fixing lath
SPP060039	Ball bearing guide for router table

#### **DRIVER FOR CURVES**

The driver for curves was conceived for greater safety during router machining on curves. It is equipped with a motor sufficient to guarantee a regular feed of about 2 m/min. so that a good quality of finish is obtained. The rubber wheel, apart from not damaging the wood, guarantees the perfect position of the piece with respect to the tools. The driver can already be applied with an arc of 25 cm radius.

2 feed rates=1,39 mt/min. + 2,78 mt/min.



Item	Description
SPP060065	Drivers for curves 2 feed rate

#### **LIFTING CLAMP**

The lifting clamp facilitates the handling and trasport of large panels. It features an anatomic wooden grip and rubber covered eccentric jaws.

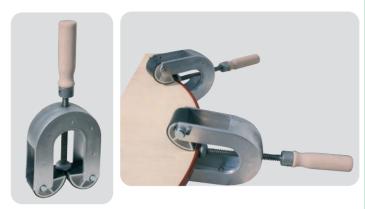


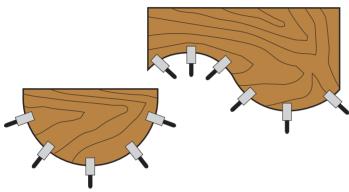


Item	Thickness range
SPP060047	Min. 10 mm - Max 65 mm

#### FDGF CLAMP

The edge clamp is used to press the wooden lippings against the edge of the panel. The eccentric pressors are covered in rubber. This article is practically indispensable when gluing edge on curved or shaped panels.





Item	Thickness range
ILGIII	i ili ukiless raliye
SPP060052	Min. 10 mm - Max 65 mm

#### **T-JOINTS CLAMP**

Suitable for T-joints in little pieces of furniture





Item	Thickness range
SPP060075	Min. 10 mm - Max 65 mm

#### **CARPENTER'S CLAMP**

The carpenter's clamp is suitable for craftsmen who manufacture modern furniture. The clamp is tightened and loosened by turning the wooden handgrip.

The ends which hold the panel are covered with ribbed rubber to protect and improve the grip. With a suitable number of extensions furniture of any dimension can be assembled.



Item	Thickness range
SPP020021	Min. 250 mm - Max 800 mm

#### **EXTENSIONS**

Item	Thickness range
SPP020022	800 mm

#### **DOOR LIFTER**

Lifts, swivels and lowers. Easy foot operation for weights up to 100 kg for the installation of doors including fire doors, windows, furniture, dry walls, partitions.



#### Item

LIFTER100



#### **QUICK CLAMPING DEVICES**

Devices for quick clamping workpieces and for numerous applications. By simply applying pressure on the grip, once dead centre has been passed, they close securely. Horizontal models with horizontal or vertical clamping, push rod and pneumatic. Maximum quality and a virtually unlimited lifespan.



#### **HORIZONTAL TYPE WITH HORIZONTAL CLAMPING**

ART. B.ORI



Item	Clamping strength	
B.ORI.0240	Kg. 120	
B.ORI.0400	Kg. 200	
B.ORI.0600	Kg. 300	
B.ORI.0700	Kg. 350	

## HORIZONTAL TYPE WITH VERTICAL CLAMPING ART. B.VER



Item	Clamping strength	
B.VER.0241	Kg. 120	
B.VER.0401	Kg. 200	
B.VER.0601	Kg. 300	
B.VER.0701	Kg. 350	

#### **PNEUMATIC TYPE**

ART. B.PNE



Operated by a cylinder 6,5 Atm.

Item	Clamping strength
B.PNE.0400	Kg. 200

#### **PUSHER TYPE**

ART. B.SPI



Item	Clamping strength
B.SPI.0400	Kg. 220

#### **SPARE ENDPINS**

ART. B.PUNTALE



SPARE ENDPINS made in rubber

Item	Description
B.PUNTALE.0240	M6 for B.ORI.0240
B.PUNTALE.0400	M8 for B.ORI.0400
B.PUNTALE.0600	M10 for B.ORI.0600
B.PUNTALE.0700	M12 for B.ORI.0700



# KleinWASHER Automatic Tool Washer



- Suitable for washing any metal parts and tools from the industry to the smaller workshop
- For tools of various dimensions, also for tool groups for windows thanks to its rotating tank with an height of 350 mm
- · Heated biological operating mode
- To be used only with water-based detergent (see our item Klein(LEANUP)

#### Includes:

- Stainless steel housing Rotating tank D=600 mm Tank's capacity: 75 L
   Maximum payload: 100 kg Maximum height of the tools: 350mm

- Stainless steel upper, under and lateral washing arms Timer
   Thermal resistance Single-phase 1 hp pump Dimensions: 940x790 h930 mm
   Dimensions packing: 1210x1050 h1200 mm Weight: 65 kg

ltem Description **KLEINWASHER** Automatic tool washer

#### **SHRINK FIT UNIT**

ART. K.START.2



- Heating time from 2 to 7 seconds
- Provided with inductor stop rings (6 to 12) + (14 to 20) and chuck holder for HSK63F Heating located on the tool holder, no deterioration of the tool and tool holder
- Self-regulated power thanks to a microprocessor depending on parameters detected

  - Inductor rotates 180° without disassembling

  - Power supply 3x380/480V – 16A 50/60 Hz -14 kW

  - Dimensions: L= 255 mm - D= 490 mm - H= 755 mm

- Weight (options excluded) 20 kgs

This items cannot be sold in Germany/France/USA due to commercial agreements between the producer (Elco) and their autorised dealers in these markets.

K.START.2 NEW

### KleinCLEANER Manual Tool Washer



- Can wash any type of tools or metal parts
- Easy to be used with water and spray gun
- Heated biological operating mode

#### Includes:

- Spray gun
- Tool holding grid
- Stainless steel tank with thermal resistance
- Air-operated double diaphragm pump 5 L/min
- Tank dimensions: 600x500 h 250 mm
- Tank capacity: 70L
  Dimensions: 700x560 h1000 mm
- Dimensions packing: 970x670 h1020
  Weight: 30 Kg

Item	Description
KLEINCLEANER	Manual tool washer

#### **COOLING UNIT WITH AIR FLOW**

ART. K.FG500



- Air cooling unit for shrink fit chucks
   Cooling time from 1,30 minute to 3 minutes
   Provided with cooling stop rings (6 to 12) + (14 to 20) and chuck holder for HSK63F
- Compressed air supply: 4-6 bars Dimensions: L= 220 mm D= 190 mm H= 615 mm
- Weight: 5 kgs

This items cannot be sold in Germany/France/USA due to commercial agreements between the producer (Elco) and their autorised dealers in these markets.

K.FG500 NEW



#### ANGLE HEADS FOR CNC ROUTING MACHINES

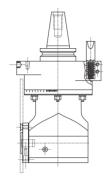
For a quotation on a model not present in this catalogue, please specify:

Type of Machine and model - Type of tool holder (HSK, ISO etc.) - N° of tool exits - Tool used - Application and material to be processed

# CNC Aggregate With One Exit Type MONO 90° Function line

ART. GR2.WS.FL





#### FUNCTION LINE. CNC Aggregate With One Exit

**GREASE LUBRICATION** 

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the FUNCTION LINE. For Boring, Routing, and Sawing.

#### **Technical Data:**

- Machine connection per request Speed max.: 10,000 R.P.M. (drive) Speed max.: 15,000 R.P.M. (tool spindle)

- Speed max.: 15,000 A.F.M. (tool spiritile)
   Gear ratio i= 1:1,5 Torque max.: 20 Nm
   Temperature max.: 85° C / 185° F
   Tool interfaces: Collet ER 25, collet ER 32, saw blade connection with flange 30 mm and pitch circle 45 mm, alternatively 52 mm
- In conventional design or alternatively available with modular tool clamping system
- Rotating direction left or right
   Spindle rotating direction same as drive rotating direction
   Position of tool spindle 90°
- Aggregate can be rotated 360° around drive.

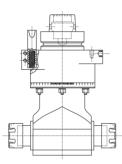
#### Accessories included:

- Collet nut for ER25 Hook spanner 4 torx screws to fix the saw blade to the connection

#### **CNC Aggregate With Two Exits** Type DUO

ART. GR2.WZ.FL





#### **FUNCTION LINE. CNC Aggregate With Two Exits**

GREASE LUBRICATION

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the FUNCTION LINE. For Boring, Routing, and Sawing.

#### **Technical Data:**

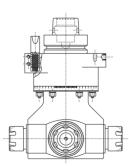
- Machine connection per request Speed max.: 10,000 R.P.M. (drive)
  Speed max.: 15,000 R.P.M. (tool spindle) Gear ratio i: 1:1,5
  Torque max.: 20 Nm Temperature max.: 85° C
  Tool interfaces: Collet ER 25, collet ER 32, saw blade connection with flange
  30 mm and pitch circle 45 mm, alternatively 52 mm

- In conventional design or alternatively available with modular tool clamping system
   Rotating direction left or right
   Spindle rotating direction same as drive rotating direction one tool running same direction, one tool opposite
- Position of tool spindle 90°
- Aggregate can be rotated 360° around drive

#### **CNC Aggregate With Four Exits** Type QUATTRO

ART. GR2.WV.FL





#### **FUNCTION LINE. CNC Aggregate With Four Exits**

**GREASE LUBRICATION** 

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the FUNCTION LINE. For Boring, Routing

#### Technical Data:

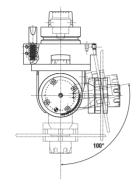
- Machine connection per request
  Speed max.: 10,000 R.P.M. (drive)
  Speed max.: 15,000 R.P.M. (tool spindle)
  Gear ratio i: 1:1,5 Torque max.: 20 Nm
  Temperature max.: 85° C

- Tool interfaces: collet ER 25 / ER 32, 2 x boring and 2 x routing
- Rotating direction left or right
  Spindle rotating direction same as drive rotating direction three tools running same direction, one tool opposite direction
- Position of tool spindle 90°
- Aggregate can be rotated 360° around drive

#### **CNC Aggregate With Adjustable Angle And** Digital Display - Type VÁRIO VISO

ART. GR2.WD.FL





#### FUNCTION LINE. CNC Aggregate With Adjustable Angle And Digital Display GREASE LUBRICATION

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the FUNCTION LINE. For Boring, Routing, and Sawing.

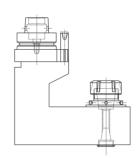
- Machine connection per request Speed max. 15,000 R.P.M. (drive) Speed max. 15,000 R.P.M. (tool spindle) Gear ratio i 1:1 Torque max. 20 Nm Temperature max. 85° C / 185° F

- Angle adjustment 0 100°
- Tool interfaces: Combination connection ER 25, saw blade or saw blade
- connection flange 30 mm and pitch circle 45/52 mm with integrated Weldon connection diameter 10 mm Rotating direction left or right
- Spindle rotating direction opposite drive rotating direction
- Version with one single clamping screw and digital display of adjusted angle
- with conical pin for 0° reference adjustment Aggregate can be rotated 360° around drive

#### **CNC Aggregate For The Machining Of Panels From Underneath - Type SOTTO**

ART. GR2.W1.FL





#### **FUNCTION LINE. CNC Aggregate With One Exit From Underneath**

**GREASE LUBRICATION** 

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the  ${\sf FUNCTION\ LINE}$ .

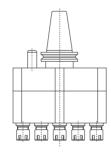
#### **Technical Data:**

- Machine connection per request Speed max. 15,000 R.P.M. (drive)
- Speed max. 15,000 R.P.M. (tool spindle) Gear ratio i 1:1
- Torque max. 15 Nm
- Temperature max. 85° C / 185° F
- Tool interface cylindrical 10 mm Rotating direction left or right
- Aggregate can be rotated 4 x 90° around drive
- Cycle operation required!

#### **CNC Aggregate Vertical Version With** Multiple Spindles In Line - Type VERTI-LINE

ART. GR2.W2.FL





#### FUNCTION LINE. CNC Aggregate Vertical Version With Multiple Spindles In Line

High performance in continuous operation with highest operator ease: these are the fatures of the aggregates of the FUNCTION LINE. For Boring and Light Duty Routing Operations.

#### **Technical Data:**

- · Machine connection per request · Speed max. 10,000 R.P.M. (drive)
- Speed max. 10,000 R.P.M. (tool spindle)

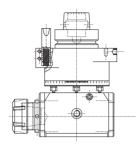
- Speed max. 10,000 K.P.IVI. (tool spindle)
   Gear ratio i 1:1
   Torque max. 15 Nm (drive)
   Temperature max. 85° C / 185° F
   Tool interfaces ER 16 Mini, Weldon 10 mm
   Rotating direction left or right Rotating direction spindles alternating left/right
   Aggregate can be rotated 360° around drive
   Amount of spindles variable, depending on motor spindle and collision dimensions
- Available with different patterns for hinges etc.



#### **CNC Aggregate With One Exit** Type MONO With Oil Lubrication

ART GR3 WS UL





#### ULTRA LINE. CNC Aggregate With One Exit [90°]

OIL BATH LUBRICATED

No compromises! The aggregates of the ULTRA LINE have been designed for extreme applications in continuous operation, for the use with critical material and for highest loads. Ideal for the use with a large Diameter Saw Blade or aRough Milling Tool. Using the Optimum Motorspindle Torque and the Optimum Saw Blade/Tool Speed. For Boring, Routing and Sawing.

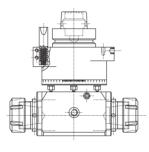
#### **Technical Data:**

- Machine connection per request Speed max.: 10,000 R.P.M. (drive) Speed max.: 15,000 R.P.M. (tool spindle)
- Gear ratio i: 1:1,5
- Torque max.: 20 Nm
- Temperature max.: 85° C / 185° F Tool interfaces: Collet ER 25, collet ER 32, saw blade connection with flange 30 mm and pitch circle 45 mm, alternatively 52 mm
- In conventional design or alternatively available with modular tool clamping system
- Rotating direction left or right
   Spindle rotating direction same as drive rotating direction
- Position of tool spindle 90°
- Aggregate can be rotated 360° around drive

#### **CNC Aggregate With Two Exits** Type DUO With Oil Lubrication

ART. GR3.WZ.UL





#### **ULTRA LINE. CNC Aggregate With Two Exits**

OIL BATH LUBRICATED

No compromises! The aggregates of the ULTRA LINE have been designed for extreme applications in continuous operation, for the use with critical material and for highest loads. For Boring, Routing and Sawing.

#### **Technical Data:**

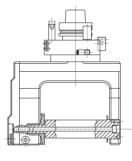
- Machine connection per request Speed max.: 10,000 R.P.M. (drive) Speed max.: 15,000 R.P.M. (tool spindle)

- Gear ratio i: 1:1,5 Torque max.: 20 Nm
- Temperature max.: 85° C
- Tool interfaces: Collet ER 25, collet ER 32, saw blade connection with flange 30 mm and pitch circle 45 mm, alternatively 52 mm in conventional design or alternatively available with modular tool clamping system
- Rotating direction left or right
- Spindle rotating direction same as drive rotating direction one tool running same direction, one tool opposite
- Position of tool spindle 90°
- Aggregate can be rotated 360° around drive

#### **CNC Aggregate With Moulder Spindle And Gear Reduction Now With Integrated Dust Exhaust Type MEGACUTTER**

ART. GR3.WX.UL





#### ULTRA LINE. CNC Aggregate For Moulder Knife tool

**OIL BATH LUBRICATED** 

No compromises! The aggregates of the ULTRA LINE have been designed for extreme applications in continuous operation, for the use with critical material and for highest loads. Ideal For The Use With a Moulder Spindle or a Saw Blade Package. Using The Optimum Motorspindle Torque And The Optimum Saw Blade/Tool Speed.

#### **Technical Data:**

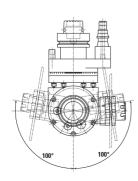
- Machine connection
- Speed max. 11.380 R.P.M. (drive)
   Speed max. 7,690 R.P.M. (tool spindle)
   Gear ratio i = 1:0,641
- Torque max. 20 Nm
- Temperature max. 85° C / 185° F
- Tool interfaces: arbour with 30 mm diameter, 120 clamping length Rotating direction left or right Spindle rotating direction same as drive rotating direction

- Position of tool spindle 90°
- Aggregate can be rotated 360° around drive

#### **CNC Aggregate With Adjustable Angle** Type VARIO VISO With Oil Lubrication

ART. GR3.WD.UL





#### ULTRA LINE. CNC Aggregate With Adjustable Angle

OIL BATH LUBRICATED

No compromises! The aggregates of the ULTRA LINE have been designed for extreme applications in continuous operation, for the use with critical material and for highest loads. For Boring, Routing and Sawing.

#### **Technical Data:**

- Machine connection per request Speed max. 13.760 R.P.M (input) Speed max. 15.000 R.P.M (output)

- Gear ratio i 1:1,09
- Torque max. 22 Nm
- Temperature max. 85° C / 185° F Angle adjustment 2 x 0 100°
- Tool interfaces Combination connection ER 25/saw, collet connection ER 25 as well as saw blade connection with flange 30 mm, pitch circle 45 mm, alternatively 52 mm
- Rotating direction left or righ
- Spindle rotating direction opposite drive rotating direction
- Adjustment regulation with nonius
- Aggregate can be rotated 360° around drive