

Lamello



## Drilling System



Unique drilling systems for high  
productive and aesthetic demands

# Content

## Drilling System



Unique drilling systems for high productive and aesthetic demands

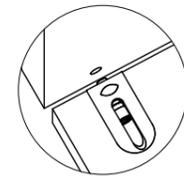
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Subject to modifications and amendments. Plastic parts may vary in colour due to the production process. Colour specifications are for guidance only.

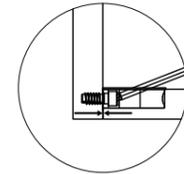
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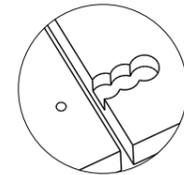
## Features Cabineo



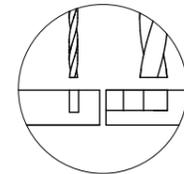
Fast assembly



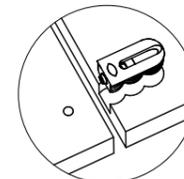
High clamping force



No edge drilling

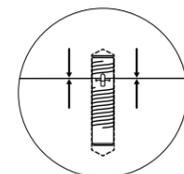


No dowel holes

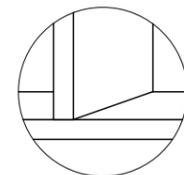


One-piece and pre-installed

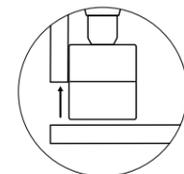
## Features Invis Mx2



High clamping force



Invisible



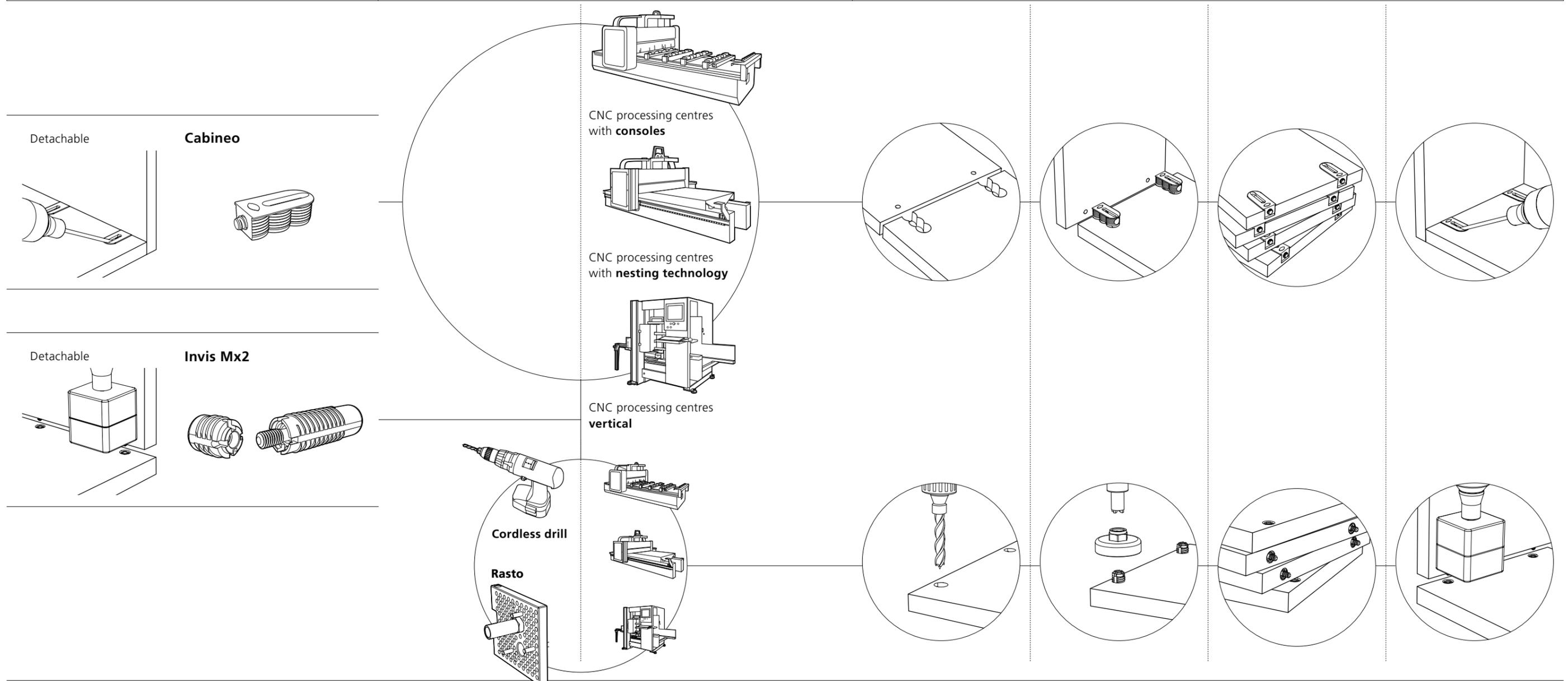
Detachable

# Drilling System

– Cabineo  
– Invis Mx2

Overview

Features	Connector	Machines		Sequence			
		Power tool	CNC machines	1 Processing	2 Connector insertion	3 Deliver flat pack	4 Assembly



*« We make a lot of furniture with wood and metal. The freedom that Cabineo offers us in joining these two materials is fantastic. »*

Chris Wilkens, co-owner of Schreinerei Werkkollektiv, Germany

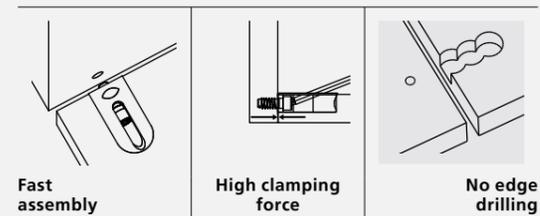


# Cabineo 12

Time-saving cabinet connector for corner joints from 13 mm



## Features



- Carcase connectors for time savings throughout the entire production chain
- For every CNC machine thanks to simple machining on the surface
- Perfectly tensioned joints due to the high clamping force
- Elimination of dowel drilling and installation leads to time savings
- Ideal for time-saving, stable carcasses and cabinets

Cabineo 12 is a one-piece cabinet connector which can be used with all CNC machines because only surface machining is required. The Cabineo is installed in the board either in the workshop or on site. The pre-assembled screw in the connector is screwed into the 5 mm hole of the second workpiece using a cordless drill. Cabineo impresses with its time-saving processing and assembly as well as the high clamping force which leads to stable connections without the need for additional dowels. Cabineo is available in white or black.

## Articles

	Art. No.
Cabineo 12, 500 pieces	<b>186320</b>
Cabineo 12, 2000 pieces	<b>186321</b>
Cabineo 12 black, 500 pieces	<b>186330</b>
Cabineo 12 black, 2000 pieces	<b>186331</b>

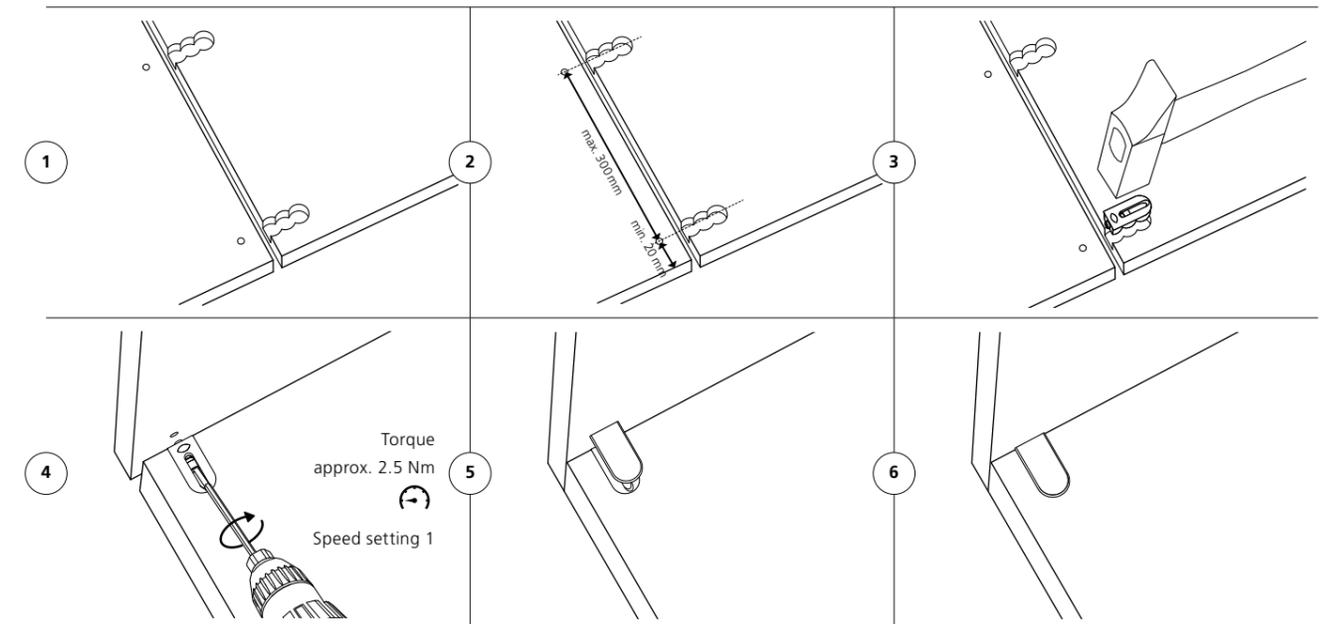


Cabineo 8/12 Starter set	<b>186305</b>
Scope of delivery: 40 x Cabineo 8, 40 x Cabineo 12, 40 x Cabineo cover caps, RAL 9003 signal white, Cabineo hexagon bit	

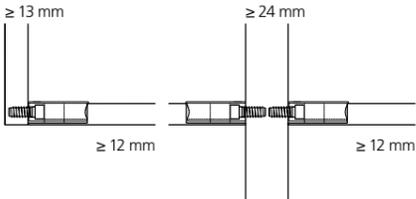
Matching accessories starting on PAGE 30



## Installation



## Technical data

<b>Joining methods</b>	Size	33.8 x 16.5 x 10.8 mm	
	Screw length	12 mm	
	Cutter	Ø 12 mm or smaller	
	Drill	Ø 5 mm and Ø 15 mm	
	Material housing	Fiberglass reinforced plastic	
	Installation tolerance	Long. ± 0.1 mm	
	Strength per connector without dowel (N)		
	Particle board 19 mm Up to	Tensile strength (N)	Shear strength (N)
		820 <sup>1</sup>	880 <sup>1</sup>
		10 N ~ 1 kg	
	Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

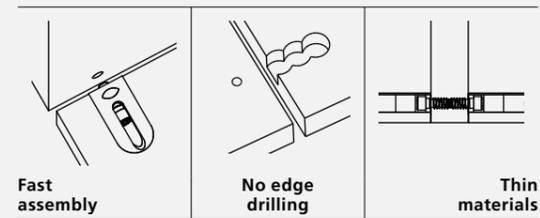
See PAGE 32-33 for technical specifications | <sup>1</sup> See comment on load limits on PAGE 51

# Cabineo 8

Time-saving cabinet connector for centre panels from 16 mm



## Features



- Carcase connectors for time savings throughout the entire production chain
- For material thicknesses from 12 mm and center panels from 16 mm
- For every CNC machine thanks to simple machining on the surface
- Elimination of dowel drilling and installation leads to time savings
- Ideal for time-saving, stable carcasses and cabinets

Cabineo 8 is a one-piece cabinet connector which can be used with all CNC machines because only surface machining is required. The Cabineo is installed in the board either in the workshop or on site. The pre-assembled screw in the connector is screwed into the 5 mm hole of the second workpiece using a cordless drill. Cabineo impresses with its time-saving processing and assembly as well as the high clamping force which leads to stable connections without the need for additional dowels. Cabineo is available in white or black.

## Articles

		Art. No.
Cabineo 8, 500 pieces		<b>186310</b>
Cabineo 8, 2000 pieces		<b>186311</b>
Cabineo 8 black, 500 pieces		<b>186340</b>
Cabineo 8 black, 2000 pieces		<b>186341</b>

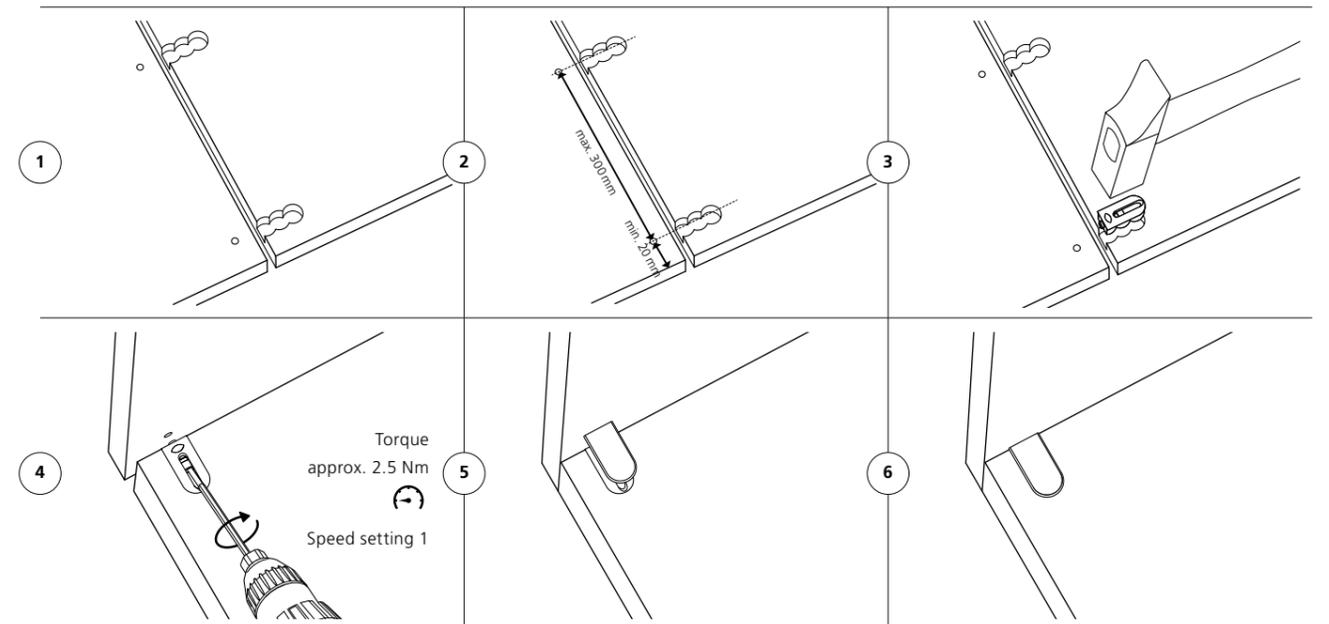


Cabineo 8/12 Starter set	<b>186305</b>
Scope of delivery: 40 x Cabineo 8, 40 x Cabineo 12, 40 x Cabineo cover caps, RAL 9003 signal white, Cabineo hexagon bit	

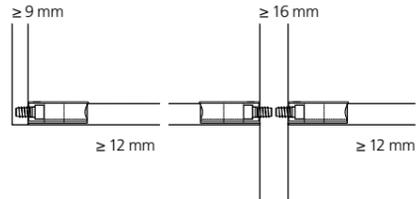
Matching accessories starting on PAGE 30



## Installation



## Technical data

<b>Joining methods</b>	Size	33.8 x 16.5 x 10.8 mm	
	Screw length	8 mm	
	Cutter	Ø 12 mm or smaller	
	Drill	Ø 5 mm and Ø 15 mm	
	Material housing	Fiberglass reinforced plastic	
	Installation tolerance	Long. ± 0.1 mm	
	Strength per connector without dowel (N)		
	Particle board 19 mm Up to	Tensile strength (N)	Shear strength (N)
		520 <sup>1</sup>	530 <sup>1</sup>
		10 N ~ 1 kg	
	Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

# Cabineo 8 M6

Wear-resistant cabinet connector for various materials and increased strength



## Features



- Time-saving carcass connector with metric screw
- For joining different materials and increased strength
- For every CNC machine thanks to simple machining on the surface
- Elimination of dowel drilling and installation leads to time savings
- Ideal for multiple furniture assemblies without wear and tear

Cabineo 8 M6 is a one-piece cabinet connector which can be used with all CNC machines because only surface machining is required. The connector is ideal when joining wood composites with materials such as aluminium, steel or compact laminate. After installing the connector in the board, the pre-assembled metric screw is screwed into a threaded hole or a socket, using a cordless drill. Cabineo impresses with its time-saving processing and assembly as well as the high clamping force which leads to stable connections without the need for additional dowels. Cabineo is available in white or black.

## Articles

	Art. No.
Cabineo 8 M6, 500 pieces	<b>186315</b>
Cabineo 8 M6, 500 pieces	<b>186316</b>
Cabineo 8 M6 black, 500 pieces	<b>186345</b>
Cabineo 8 M6 black, 2000 pieces	<b>186346</b>

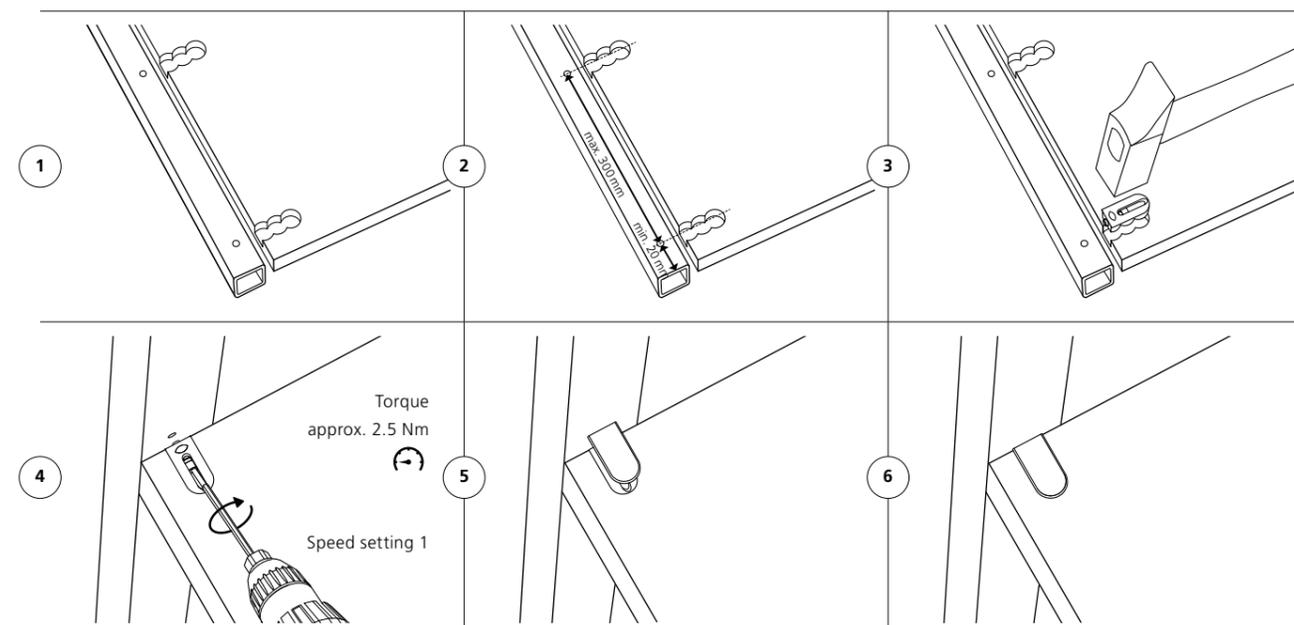


Cabineo 8 M6 Starter set **186306**  
 Scope of delivery: 80 x Cabineo 8 M6, 40 x Cabineo insert 12.3 mm, 40 x Cabineo insert 15.3 mm, 40 x cover caps, RAL 9003 signal white, Cabineo hexagonal bit, Cabineo insertion tool

Matching accessories starting on PAGE 30



## Installation



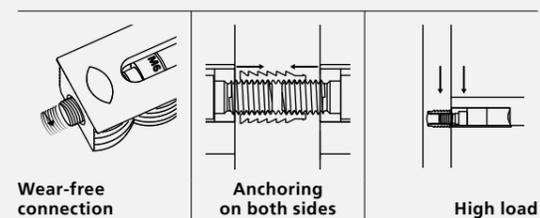
## Technical data

<b>Joining methods</b>	Size	33.8 x 16.5 x 10.8 mm	
	Screw length	8 mm	
	Cutter	Ø 12 mm or smaller	
	Drill	Ø 15 mm	
	Screw thread	M6	
	Material housing	Fiberglass reinforced plastic	
	Installation tolerance	Long. ± 0.1 mm	
	Strength per connector without dowel (N)		
	In HPL 12 mm Up to	Tensile strength (N) 2370 <sup>1</sup>	Shear strength (N) 1350 <sup>1</sup>
	Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

# Cabineo insert M6

For repeated assembly and disassembly without loss of strength

## Features



- Threaded socket in two sizes for Cabineo M6 screws
- Screwing in from both sides for center wall connections increases strength
- Efficient installation by hammering in
- High tensile strength in the wood due to the clawed retaining grooves
- Ideal for exhibition stand construction or the multiple assembly of furniture without wear and tear

The Cabineo insert M6 is a threaded insert to drive in, which can be used in combination with the Cabineo 8 M6. It is ideal for applications where the thread cannot be cut directly into the workpiece or to increase the strength in corner and dividing panel joints. The Cabineo insert M6 is hammered into the through-hole of the middle panel so that the Cabineo can reach into the insert from both sides. The same connector and insert can be used everywhere for corner and dividing panels.



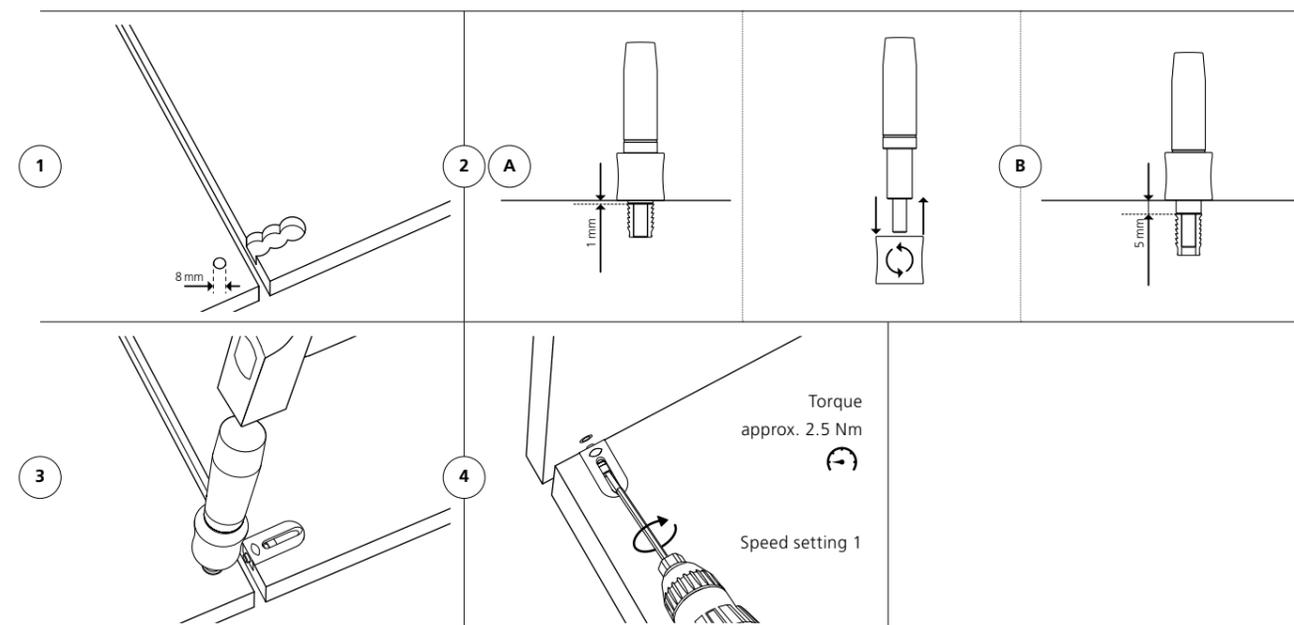
## Articles

	Art. No.
 Cabineo insert M6 x 12.3 mm, 100 pieces, incl. Cabineo insertion tool	<b>186370</b>
 Cabineo insert M6 x 12.3 mm, 500 pieces, incl. Cabineo insertion tool	<b>186371</b>
 Cabineo insert M6 x 15.3 mm, 100 pieces, incl. Cabineo insertion tool	<b>186375</b>
 Cabineo insert M6 x 15.3 mm, 500 pieces, incl. Cabineo insertion tool	<b>186376</b>
 Cabineo installation tool for insert M6	<b>276310</b>

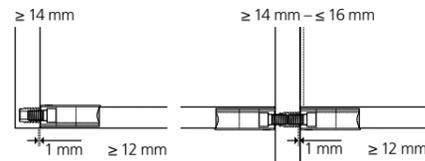
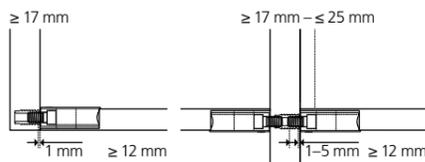
Matching accessories starting on PAGE 30



## Installation



## Technical data

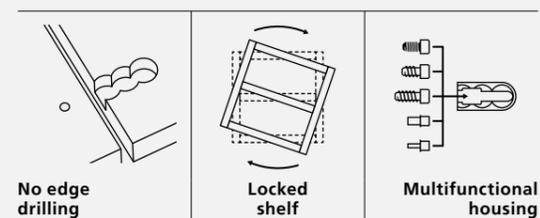
Joining methods		Size	Ø 9.3 x 12.3/15.3 mm	
		Thread	M6	
		Drill hole	Ø 8 mm	
		Material	Brass	
		Installation tolerance	Long. ± 0.1 mm	
		Strength per connector without dowel (N)		
		Particle board 19 mm Up to	Tensile strength (N)	Shear strength (N)
		Insert M6 x 12.3	810 <sup>1</sup>	1210 <sup>1</sup>
		Insert M6 x 15.3	940 <sup>1</sup>	1240 <sup>1</sup>
			10 N ~ 1 kg	
		Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

# Cabineo X

Cabinet connector and shelf support without edge drilling



## Features



- Time-saving carcass connector with open housing
- Can be used with Cabineo X screws or shelf supports
- Flexible and simple positioning of the cabinet cover and shelves
- For every CNC machine thanks to simple machining on the surface
- Ideal for shelves, built-in cupboards, access panels and adjustable shelves

Cabineo X is a connector for cabinets and shelves, that can be used with all CNC machines and is pressed into place in the workshop or on site. Due to the open housing, it is possible to insert a Cabineo screw from the top and screw it into the counterpart with a hexagon bit. Using it with screws, Cabineo X is ideal when installing shelves into already joined cabinets or when assembling corner joints. Combined with shelf supports, Cabineo X prevents shelves from being pulled out.

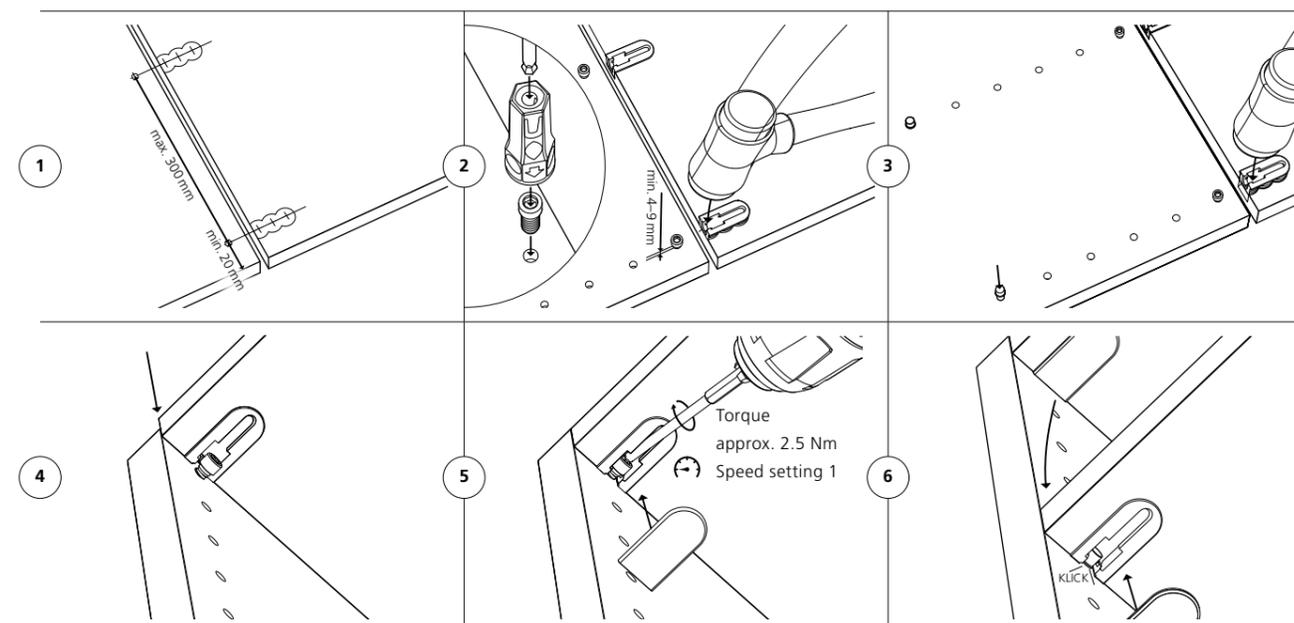
## Articles

	Art. No.
Cabineo X, 500 pieces	<b>186360</b>
Cabineo X, 2000 pieces	<b>186361</b>
Cabineo X black, 500 pieces	<b>186365</b>
Cabineo X black, 2000 pieces	<b>186366</b>
	
Cabineo 12 screw, 500 pieces	<b>186380</b>
Cabineo 12 screw, 2000 pieces	<b>186381</b>
Cabineo 8 screw, 500 pieces	<b>186382</b>
Cabineo 8 M6 screw, 500 pieces	<b>186384</b>
	
Cabineo X shelf support Ø 5, 500 pieces	<b>186386</b>
Cabineo X shelf support Ø 3, 500 pieces	<b>186388</b>

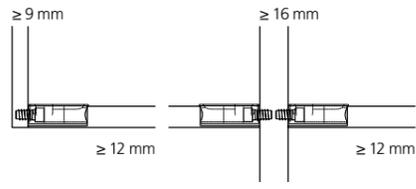
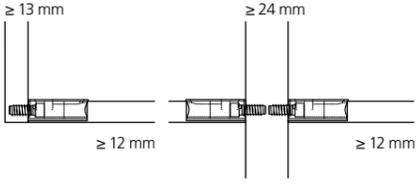
	<b>186307</b>
Cabineo X Starter Set	
Scope of delivery: 80 pieces Cabineo X, 40 pieces Cabineo 12 screw, 20 pieces Cabineo 8 screw, 20 pieces Cabineo 8 M6 screw, 20 pieces Cabineo X shelf support Ø 5, 20 pieces Cabineo X shelf support Ø 3, 40 pieces Cabineo cover caps signal white, 1 piece Cabineo X screw-in aid, 1 piece Cabineo hexagonal bit 1/4" GL 80 mm	

Matching accessories starting on PAGE 30

## Installation



## Technical data

<b>Joining methods</b>	Size	33.8 × 16.5 × 10.8 mm	
	Screw length	8 mm or 12 mm	
Cabineo 8 screw	Shelf support	Ø 3 mm or Ø 5 mm	
	Cutter	Ø 12 mm or smaller	
Cabineo 12 screw	Drill	Ø 5 mm and Ø 15 mm	
	Material housing	Fiberglass reinforced plastic	
	Installation tolerance	Long. ± 0.5 mm	
	Strength per connector without dowel (N)		
	Particle board 19 mm Up to	Tensile strength (N)	Shear strength (N)
	Cabineo 8 screw	480 <sup>1</sup>	530 <sup>1</sup>
	Cabineo 12 screw	770 <sup>1</sup>	850 <sup>1</sup>
	Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

See PAGE 32–33 for technical specifications | <sup>1</sup> See comment on load limits on PAGE 51

# Application examples

Cabineo

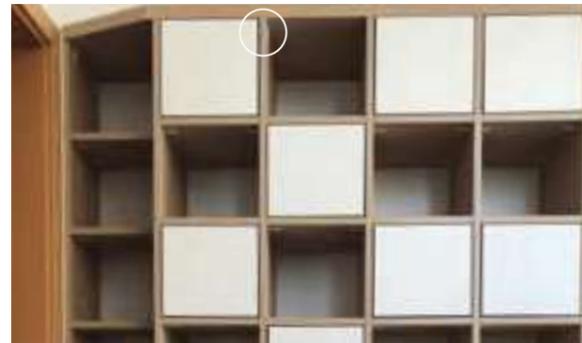
- Furniture manufacturing, interior fitting, trade fair construction, shop fitting, caravans
- Built-in cupboards, free-standing cupboards, kitchen cabinets, wall units, bookshelves, toilet partitions etc.
- Corner connections between the side panel and the base or top panel, dividing wall connections and joints of fixed shelves



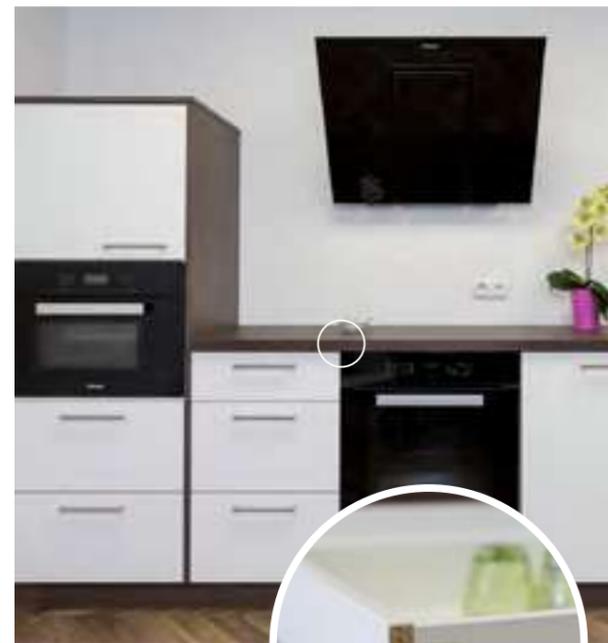
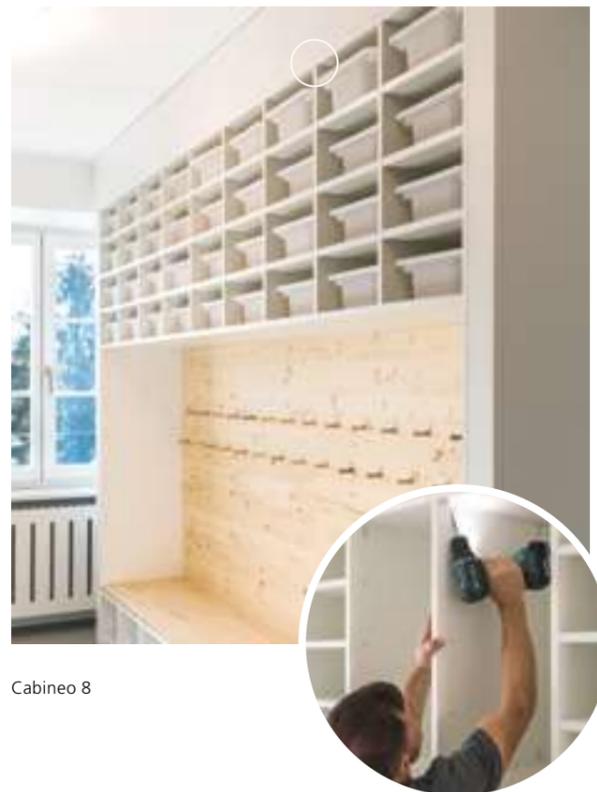
Cabineo 8 M6



Cabineo 12



Cabineo 8



Cabineo 12

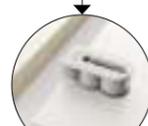
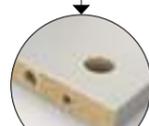
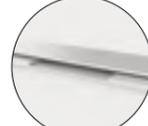
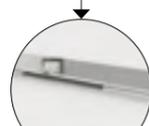


Cabineo 8 M6

# Advantages of Cabineo

Simple, fast and strong

# Cabineo compared with cam and dowel

		Manufacturing process with Cabineo	Manufacturing process with cam
<p><b>1.</b> Advantages in production</p> <p>Time-saving in production</p> 	<ul style="list-style-type: none"> <li>– Optimised process due to surface machining; no edge drilling necessary</li> <li>– Only one tool change from 5 mm to 15 mm drill; no tool change for the dowel hole drill necessary</li> <li>– No dowel holes means less drill holes per connector</li> <li>– Shallow element of 10 mm allows for panels from 12 mm thickness</li> </ul>	  4 surface processing steps 1 tool change  Fit Cabineo into top or bottom shelf	  3 surface processing steps 2 tool changes  2 edge drill holes 1 tool change
<p><b>2.</b> Advantages in transportation</p> <p>Time-saving in transportation</p> 	<ul style="list-style-type: none"> <li>– Efficient pre-installation of the one-piece connector in the factory</li> <li>– Flat pack delivery with pre-installed connectors</li> <li>– No extra bags or loose hardware required with furniture shipment</li> <li>– Detachable for transport or if the fixed shelves need adjusting</li> </ul>	  Flat pack the workpieces	  Prepare fitting bag  Flat pack the workpieces
<p><b>3.</b> Advantages in assembly</p> <p>Time-saving in the assembly</p> 	<ul style="list-style-type: none"> <li>– One-piece connector without dowels; no pre-assembly of screws or dowels in the side panels necessary</li> <li>– Easy positioning of the Cabineo in the corresponding hole due to the protruding screw</li> <li>– Fast assembly with a cordless drill</li> <li>– Installation of fixed shelves or vertical dividers in an already assembled unit</li> </ul>	  Assemble using a cordless drill	  Insert cam into shelf  Install the screw in the side Insert dowel into the side  Assemble using a screwdriver

# Examples of manufacturing and assembly processes

Cabineo



Flatpack workpiece delivery with pre-assembled connector.



Place furniture side on base. The element is correctly positioned by the protruding screw.



Join furniture elements with cordless drill and Cabineo tool. Easy, fast working with preset torque approx. 2.5 Nm.



Position top and push towards the furniture side.



Screw front corner in place with a cordless drill. This makes one-man assembly easy.



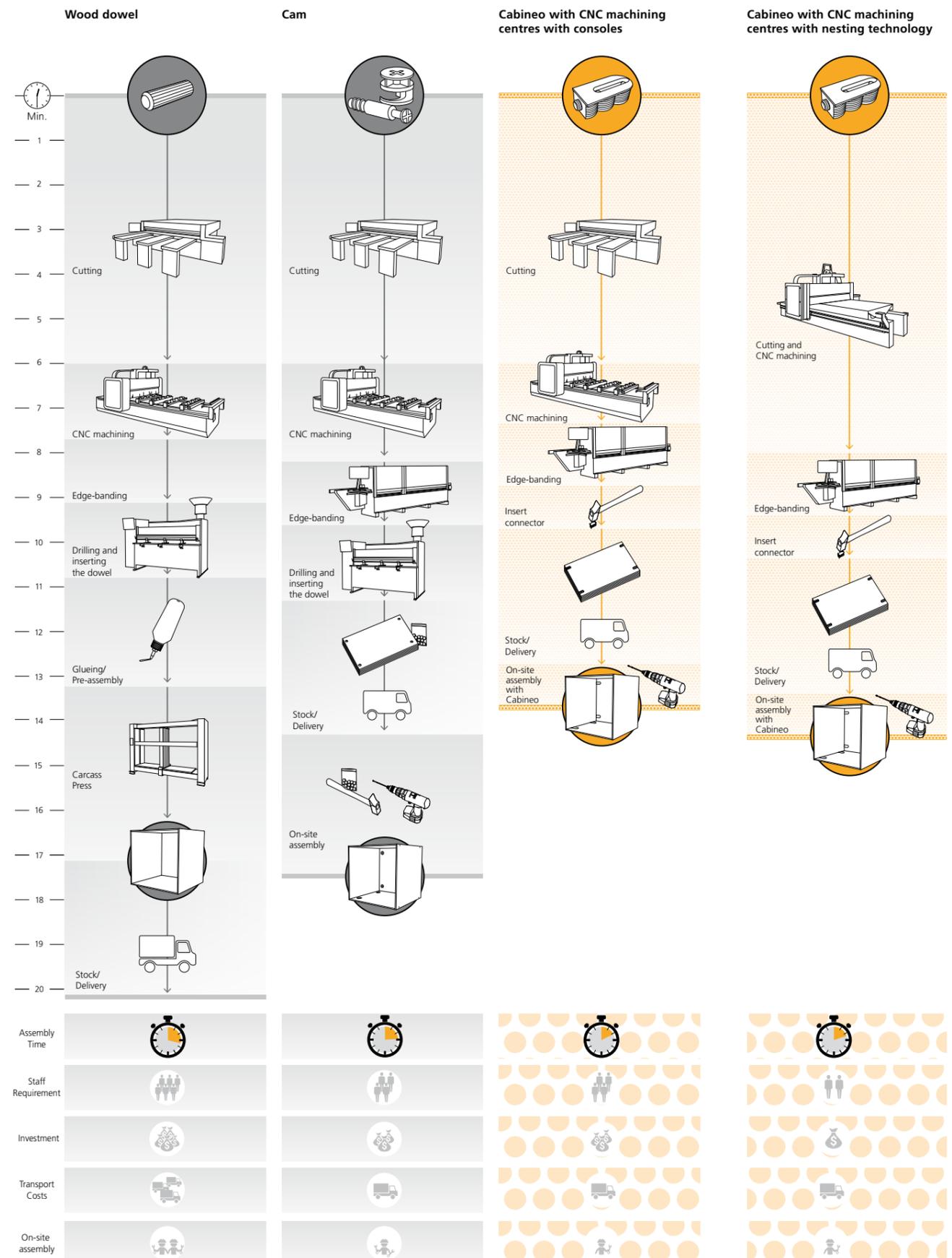
After assembly, fasten the fixed intermediate shelves in the required positions.



- Tip:
- Place one side of the shelf on the shelf support and fasten the other side
  - Retract the screw to facilitate installation.



If required, use cover caps on the Cabineo.



# Strong partnerships

For efficient production with CNC technology

## CAD/ERP/CAM software



## CNC machines/Aggregates/CNC tools

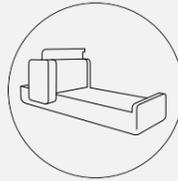


## Networked production

- Extensive network of planning and processing partners
- Efficient integration of Lamello products into production
- Continuous productivity in planning, processing and installation

# Cabineo with CNC

Specific equipment options for CNC machines for Cabineo



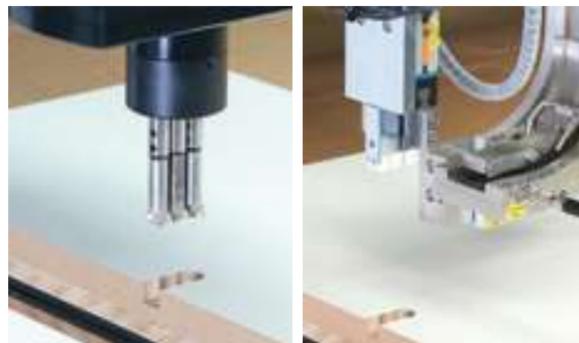
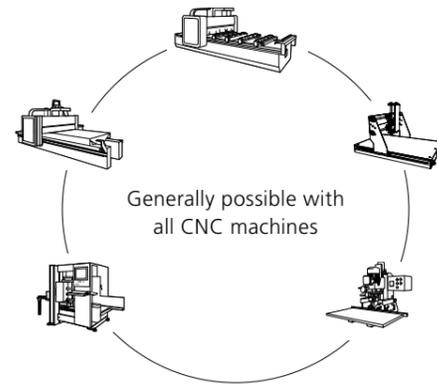
CNC machine

## Homag CENTATEQ N-600

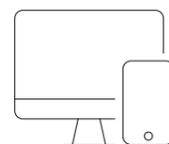
Homag has developed the unmanned installation of the Cabineo connector on its nesting CNC machine CENTATEQ N-600. First, the multi spindle aggregate from Benz creates the drill shape, consisting of 3 drill holes, in one plunge. Once the panels are cut to size, the machine will commence with the fully automated insertion of the Cabineo into the board.

## Gannomat Basica Variabel 0194

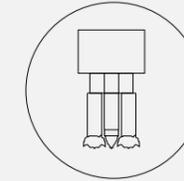
First, the 3 spindle aggregate drills the 15 mm drill holes in one plunge. Following this, the Cabineo is held by an insertion aggregate and is pressed into the board. The 5 mm holes for the Cabineo screw are drilled either with the boss hinge aggregate or the 11 spindle shelf pin aggregate.



[www.lamello.com](http://www.lamello.com)



Experience CNC live and receive comprehensive product information!



CNC tools - aggregate

Benz was the first company to develop a triple multi-spindle head in order to drill the Cabineo with a single stroke. This reduces the machining time to approx. 1–2 seconds.

Supplier of triple drilling unit for Cabineo:

## Benz MULTI V3 CABINEO

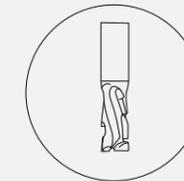
Vertical multi-spindle head (direction of rotation of the drills 1 piece left hand rotation, 2 pieces right hand rotation)

## Atemag VERTINEO FUNCTION LINE

Drilling unit for Cabineo connector All-In-One. (Direction of rotation of the drills 2 pieces left hand rotation, 1 piece right hand rotation)

## Grotefeld DPL-03-03-CABINEO

Multi-spindle drilling unit DPL (Direction of rotation of the drills, both options possible: 1 drill left hand rotation, 2 drills right hand rotation or 2 drills left hand rotation, 1 drill right hand rotation)



CNC tools

Leuco was the first company to develop the interlocking drills for the triple multi-spindle units.

## Leuco drills for triple drilling units\*

Solid carbide (VHW), special LEUCO cutting edge and pre-cutter geometry for minimum cutting force and cutting pressure.

## Leitz drill bits for triple drilling units

Solid carbide, round pre-cutter geometry for very good drill edge quality, extremely wear-resistant carbide grade.

\* Cabineo drills for aggregate see **PAGE 28**



# CNC tools

For Cabineo



## Drilling System

### Cabineo drill/cutter

	Art. No.
Cabineo drill, HW, Ø 15 mm	<b>136312</b>

	Art. No.
Cabineo cutter DP, Ø 10 mm	<b>136310</b>

	Art. No.
Cabineo cutter DP, Ø 12 mm	<b>136311</b>

### Cabineo drills for triple aggregate\*

	Art. No.
Cabineo aggregate drill, HW, rotation right, Ø 15 mm, shank Ø 6/4.5 x 18 mm, L 57.5 mm	<b>136314</b>

	Art. No.
Cabineo aggregate drill, HW, rotation left, Ø 15 mm, shank Ø 6/4.5 x 18 mm, L 57.5 mm	<b>136315</b>

\* For triple drilling units: Benz MULTI V3 Cabineo, Atemag VERTINEO FUNCTION LINE, Grotefeld DPL-03-03-Cabineo, ...

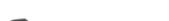
« *Lamello is an asset to us because it allows us to expand our possibilities.* »

Andreas Kuhlmann, Managing Director,  
Adolf Kuhlmann GmbH & Co. KG furnishing workshops,  
Schwerin, Germany



# Accessories/ Spare Parts

## Cabineo

	Art. No.
	Cabineo installation tool, with handle incl. hex bit 1/4" <b>256300</b>
	Cabineo hex bit 1/4" GL 120 mm <b>276312</b>
	Cabineo hex bit 1/4" GL 80 mm <b>276308</b>
	Cabineo hex bit 1/4" GL 80 mm, 100 pieces <b>276309</b>
	Cabineo drill, HW, Ø 15 mm <b>136312</b>
	Cabineo cutter DP, Ø 10 mm <b>136310</b>
	Cabineo cutter DP, Ø 12 mm <b>136311</b>
	Cabineo aggregate drill*, HW, rotation right, Ø 15 mm, shank Ø 6/4.5 x 18 mm, L 57.5 mm <b>136314</b>
	Cabineo aggregate drill*, HW, rotation left, Ø 15 mm, shank Ø 6/4.5 x 18 mm, L 57.5 mm <b>136315</b>
	Cabineo cover cap, 100 pieces, RAL 9003 signal white ○ <b>186350S</b>
	Cabineo cover cap, 100 pieces, RAL 9010 pure white ○ <b>186350W</b>
	Cabineo cover cap, 100 pieces, RAL 9018 papyrus white ● <b>186350P</b>
	Cabineo cover cap, 100 pieces, RAL 1015 light ivory ● <b>186350H</b>
	Cabineo cover cap, 100 pieces, RAL 1011 brown beige ● <b>186350B</b>
	Cabineo cover cap, 100 pieces, RAL 8007 fawn brown ● <b>186350R</b>
	Cabineo cover cap, 100 pieces, RAL 7040 window grey ● <b>186350F</b>
	Cabineo cover cap, 100 pieces, RAL 7005 mouse grey ● <b>186350A</b>
	Cabineo cover cap, 100 pieces, RAL 9005 jet black ● <b>186350T</b>
	Cabineo cover cap, 100 pieces, Metal look, silver ● <b>186350C</b>
	Cabineo cover cap, 100 pieces, Metal look, nickel ● <b>186350N</b>
	Cabineo cover cap, 100 pieces, Metal look, dark steel ● <b>186350D</b>

\* For triple drilling units: Benz MULTI V3 Cabineo, Atemag VERTINEO FUNCTION LINE, Grotefeld DPL-03-03-Cabineo, ...



	Art. No.
	Cabineo cover cap, 2000 pieces, RAL 9003 signal white ○ <b>186351S</b>
	Cabineo cover cap, 2000 pieces, RAL 9010 pure white ○ <b>186351W</b>
	Cabineo cover cap, 2000 pieces, RAL 9018 papyrus white ● <b>186351P</b>
	Cabineo cover cap, 2000 pieces, RAL 1015 light ivory ● <b>186351H</b>
	Cabineo cover cap, 2000 pieces, RAL 1011 brown beige ● <b>186351B</b>
	Cabineo cover cap, 2000 pieces, RAL 8007 fawn brown ● <b>186351R</b>
	Cabineo cover cap, 2000 pieces, RAL 7040 window grey ● <b>186351F</b>
	Cabineo cover cap, 2000 pieces, RAL 7005 mouse grey ● <b>186351A</b>
	Cabineo cover cap, 2000 pieces, RAL 9005 jet black ● <b>186351T</b>
	Cabineo cover cap, 2000 pieces, Metal look, silver ● <b>186351C</b>
	Cabineo cover cap, 2000 pieces, Metal look, nickel ● <b>186351N</b>
	Cabineo cover cap, 2000 pieces, Metal look, dark steel ● <b>186351D</b>



Cabineo installation tool for insert M6	<b>276310</b>
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## Cabineo X



Cabineo 12 screw, 500 pieces	<b>186380</b>
Cabineo 12 screw, 2000 pieces	<b>186381</b>
Cabineo 8 screw, 500 pieces	<b>186382</b>
Cabineo 8 M6 screw, 500 pieces	<b>186384</b>
Cabineo X shelf support Ø 5, 500 pieces	<b>186386</b>
Cabineo X shelf support Ø 3, 500 pieces	<b>186388</b>
Cabineo X screw-in aid, suitable for Cabineo hexagon bit 1/4" GL 80 mm	<b>276313</b>

# Technical information

## Machining Cabineo

Installation options

On the surface

Flush with the surface

Flush cover cap

HPL on the surface

Machining options

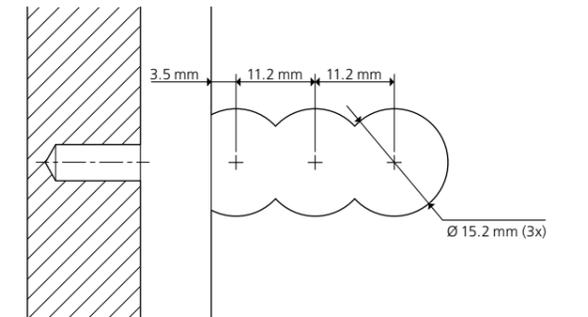
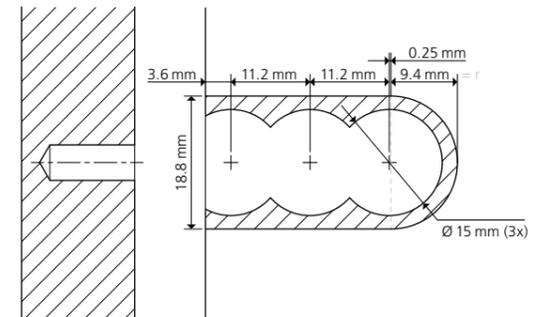
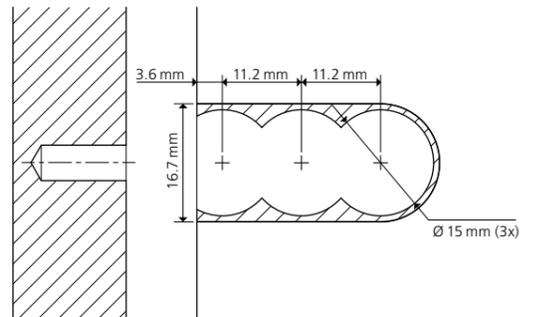
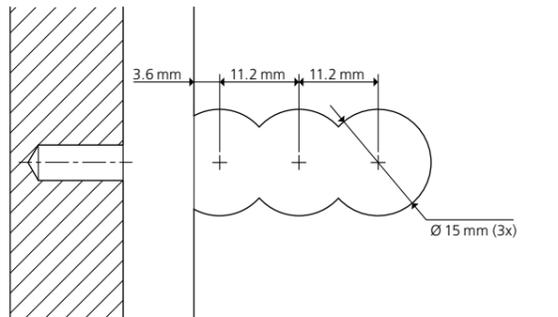
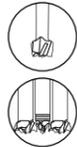
**Cabineo 8: X = 8 mm, black screw**  
**Cabineo 12: X = 12 mm, nickel-plated screw**  
**Cabineo 8 M6\*: X = 8 mm, yellow galvanised screw**  
 \* Metric ISO thread DIN 13-1  
**Cabineo X shelf support Ø 5: X = 8 mm / Y = 5 mm**  
**Cabineo X shelf support Ø 3: X = 8 mm / Y = 3 mm**

**Cabineo 8: X = 8 mm, black screw**  
**Cabineo 12: X = 12 mm, nickel-plated screw**  
**Cabineo 8 M6\*: X = 8 mm, yellow galvanised screw**  
 \* Metric ISO thread DIN 13-1  
**Cabineo X shelf support Ø 5: X = 8 mm / Y = 5 mm**  
**Cabineo X shelf support Ø 3: X = 8 mm / Y = 3 mm**

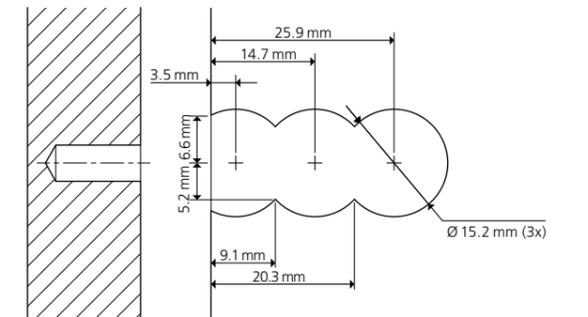
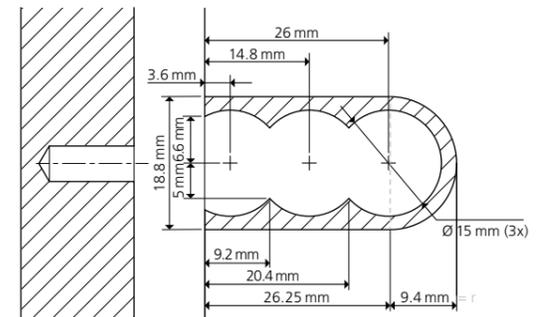
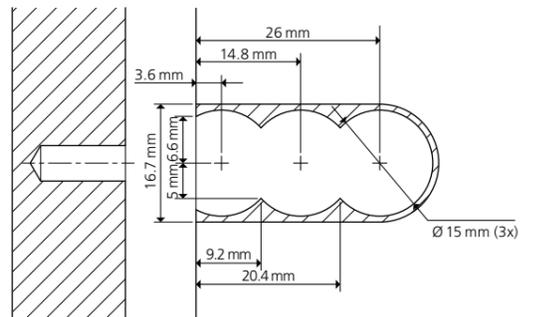
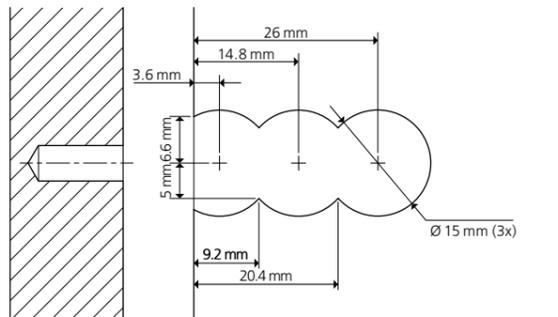
**Cabineo 8: X = 8 mm, black screw**  
**Cabineo 12: X = 12 mm, nickel-plated screw**  
**Cabineo 8 M6\*: X = 8 mm, yellow galvanised screw**  
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**Cabineo X shelf support Ø 3: X = 8 mm / Y = 3 mm**

**Cabineo 8 M6\*: X = 8 mm, yellow galvanised screw**  
 \* Metric ISO thread DIN 13-1

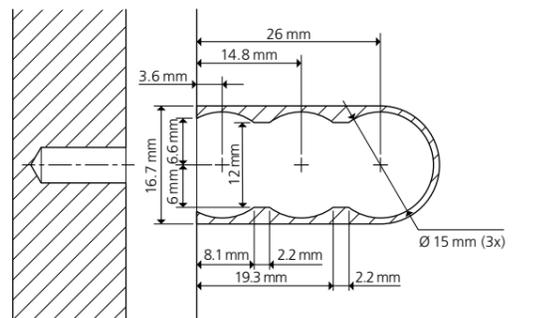
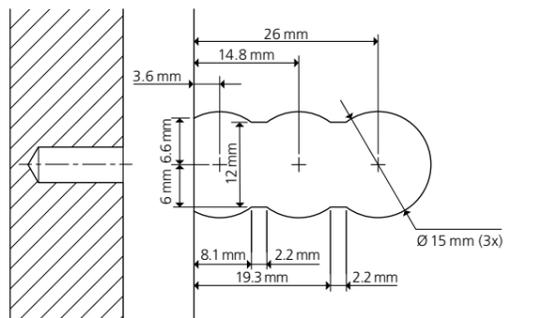
Drill 15 mm



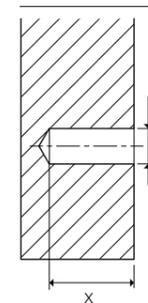
Cutter Ø 10 mm



Cutter Ø 12 mm



Machining Cabineo Insert



	X	Y = Ø
	[mm]	[mm]
Cabineo 8 M6*	8	5
Cabineo insert M6 x 12.3	13.5	8
Cabineo insert M6 x 15.3	16.5	8

\* Metric ISO thread DIN 13-1

A man with short brown hair, wearing a grey zip-up jacket over a light-colored t-shirt, is smiling and holding a large white board. The board has a grid of small holes and several larger circular holes along its edges. He is standing in a workshop or factory setting, with various pieces of wood and machinery visible in the background. The lighting is bright and even.

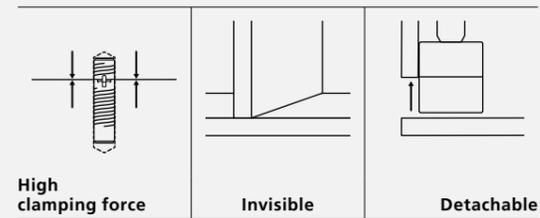
*« If you want to modernise as a  
carpentry company, there is no way  
around the Cabineo in my view. »*

Wolfgang Füreder, Managing Director of Holzvision Füreder, Austria

# Invis Mx2

Magnet-driven connecting fittings

## Features



- Magnetically driven, detachable furniture connector
- Enormously high clamping force of up to 250 kg per connector
- Invisible connection for maximum aesthetics
- Wear-free detachable with MiniMag Mx2 and cordless screwdriver
- Ideal for high-quality furniture, lacquered or molded workpieces, tables, stairs

Invis Mx2 is a unique, magnet-driven connection for the highest demands on aesthetics, stability and productivity. With no visible openings, Invis Mx2 is connected and disconnected quickly again and again, using its magnetic drive. Invis Mx2 connectors are screwed into the 12 mm drill holes in the panel. Using the MiniMag with a cordless drill, the connection closes and creates a clamping force of up to 250 kg per connector. Ideal for high gloss painted furniture, molded workpieces, stairs, etc.

## Articles



Art. No.

Invis Mx2 connector set, 20 pairs incl. 14 mm studs **6012300**



Invis Mx2 connector set, 20 pairs incl. 30 mm studs **6012301**



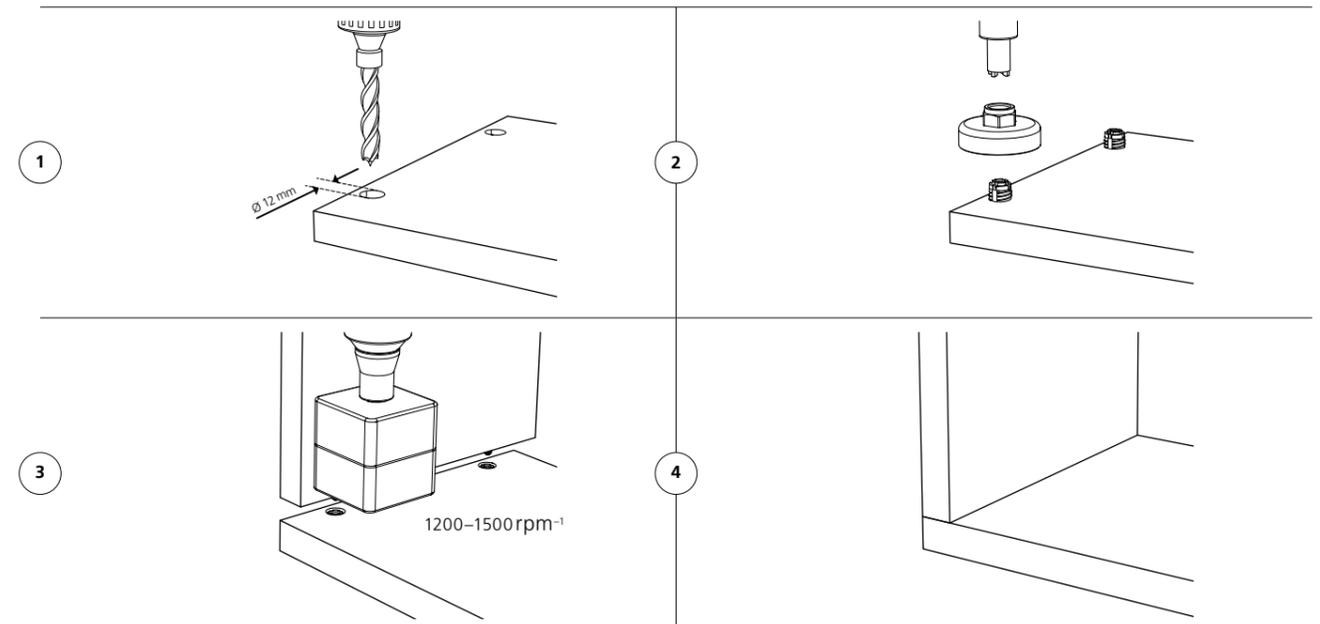
Invis Mx2 Starter Set, in systainer **6100302**

Kit contains: 20 x Invis Mx2 with stud 14 mm, Invis Mx2 screw bit, Invis Mx2 insertion jig, MiniMag Mx2 inkl. flexible shaft, Rasto perforated plate, positioning bolts, fastening screw, Rasto drill bushings Ø 12 mm drill Ø 12 mm, depth adjuster, spacer

**Matching accessories starting on PAGE 44**

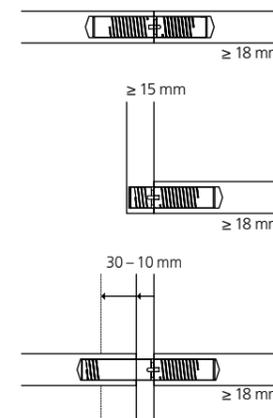


## Installation



## Technical data

### Joining methods



Size connector	Ø 12 x 35 mm	
Size stud	Ø 12 mm x 30/14 mm	
Size centre-wall stud	Ø 12 mm x 30 mm	
Drill	Ø 12 mm	
Speed MiniMag	Must be 1200–1500 rpm <sup>-1</sup>	
Material housing	Zinc	
Installation tolerace	Long. ± 0.1 mm	
Clamping force per connector	250 kg <sup>1</sup>	
Tensile strength (N) Up to	Connector sets with stud	14 mm    30 mm
	MDF	1460 <sup>1</sup> 2260 <sup>1</sup>
	Particle board	1220 <sup>1</sup> 1580 <sup>1</sup>
	Beech	3280 <sup>1</sup> 5130 <sup>1</sup>
Material range	Particle board, MDF, plywood, softwood, hardwood etc.	

## Articles



Art. No.

Invis Mx2 connector 35 mm, 20 pieces

**6012317**



Invis Mx2 stud 14 mm, 20 pieces

**6012312**



Invis Mx2 stud 30 mm, 20 pieces

**6012309**



Invis Mx2 centre wall stud, 10 pieces

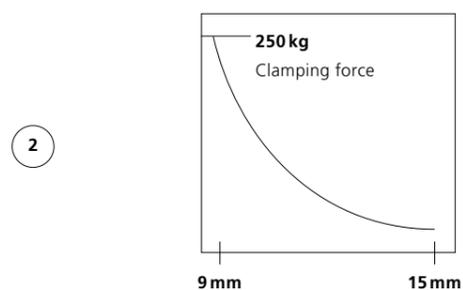
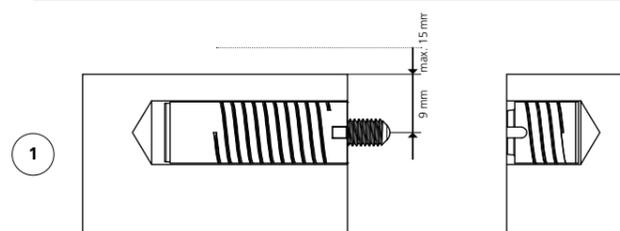
**6012208**



Invis Mx2 MiniMag, incl. screw bit

**6100301**

## Function



Small distance from the edge for high clamping force

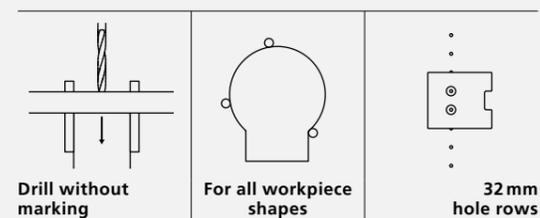


# Rasto drill jig

Universal drill jig without measuring or marking



## Features



- Precise drilling jig for timber joints with Invis Mx2 connecting fittings
- Transfer drilling position from workpiece to workpiece instead of marking it
- With three positioning pins for clamping on almost all workpiece shapes
- Drill bushes with different diameters for many applications
- Ideal for Invis Mx2 connectors, furniture handles, pot hinge cross plates, 32 mm rows of holes

Rasto is a universal drilling jig and is used for creating precise drilled holes for Invis Mx2. The drilling jig can be clamped onto almost any workpiece shape by means of three positioning pins without measuring or marking. After the first workpiece has been drilled, the position is transferred unchanged to the second workpiece. Working in this way means the holes will always line up with each other. Rasto is also suitable for 8 mm dowel holes or 5 mm holes for handles or for row hole drilling.

## Articles



Art. No.

**Rasto Duo Set, in systainer incl. accessories 126007**  
Kit contains: 2 x Rasto perforated plate, 8 x Rasto drill bushes Ø 5, Ø 8, Ø 10, Ø 12 mm, 3 x drills Ø 5, Ø 8, Ø 12 mm, with depth adjuster, 6 x Rasto positioning pins, 2 x Rasto fastening screw, Rasto connection rod 500 mm two-part, Invis Mx2 insertion bush, Invis Mx2 spacer Ø 12 mm

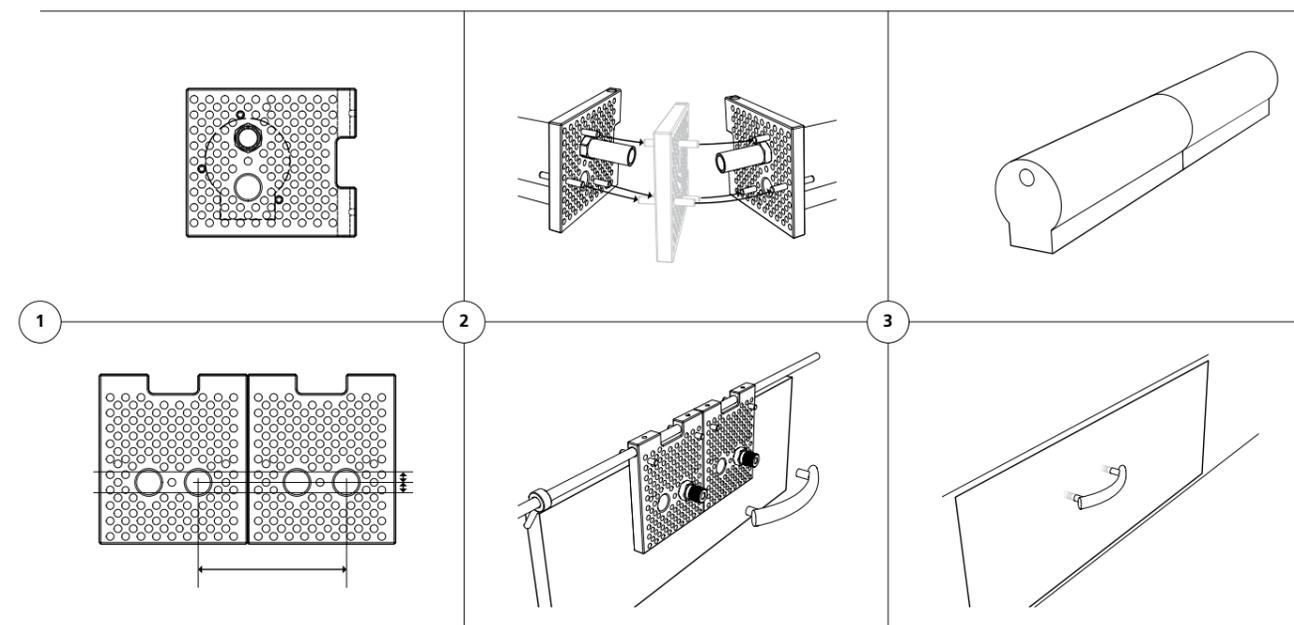
**Rasto Basic Set, in carton incl. accessories 126005**  
Scope of delivery: Rasto perforated plate, positioning pins, screw, 4 x Rasto drill bushes Ø 5, Ø 8, Ø 10, Ø 12 mm

**Rasto Mono Set, in systainer incl. accessories 126006**  
Kit contains: Rasto perforated plate, 4 x Rasto drill bushes Ø 5, Ø 8, Ø 10, Ø 12 mm, 3 x wood drill bits Ø 5, Ø 8, Ø 12 mm, with depth adjuster, 3 x Rasto positioning pins, 2 x Rasto fastening screw, Invis Mx2 insertion bush, Invis Mx2 spacer Ø 12 mm

Matching accessories starting on PAGE 44

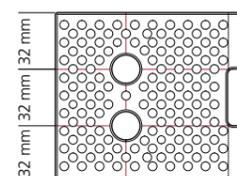


## Installation



## Technical data

### Rasto perforated plate



Size Rasto plate	110 x 96 x 12 mm
Material Rasto plate	Polycarbonate

# Application examples

Invis Mx2

Tables, shelves and wardrobes, Shopfitting systems, handrail pre-production, boat interior fittings, exhibition constructions, quality furniture, stairs, substructures, partition elements, wall panels, furniture, table legs, dividing panels



Invis Mx2



# Accessories/ Spare Parts

## Invis Mx2

	Art. No.
	Invis Mx2 screw bit <b>6112205</b>
	Invis Mx2 MiniMag, incl. screw bit <b>6100301</b>
	Invis M2 MiniMag flexible shaft <b>6100204</b>
	Invis Mx2 insertion tool, for 14 mm stud <b>6112333</b>
	Invis Mx2 insertion bush for Rasto, for 14 mm stud <b>6112330</b>

## Rasto

	Art. No.
	Rasto spiral drill for wood, Ø 5 mm <b>6100160</b>
	Rasto spiral drill for wood, Ø 6 mm <b>6106161</b>
	Rasto spiral drill for wood, Ø 8 mm <b>6108060</b>
	Rasto spiral drill for wood, Ø 10 mm <b>6110162</b>
	Rasto spiral drill for wood, Ø 12 mm <b>6112060</b>
	Rasto depth set collar, Ø 5 mm <b>6100059</b>
	Rasto depth set collar, Ø 6 mm <b>6100063</b>
	Rasto depth set collar, Ø 8 mm <b>6100060</b>
	Rasto depth set collar, Ø 10 mm <b>6100064</b>
	Rasto depth set collar, Ø 12 mm <b>6100061</b>
	Invis Mx2 spacer for Rasto <b>6112331</b>
	Rasto perforated plate <b>6160000</b>
	Rasto drill bush, Ø 5 mm <b>6100065</b>
	Rasto drill bush, Ø 6 mm <b>6100056</b>
	Rasto drill bush, Ø 8 mm <b>6100057</b>
	Rasto drill bush, Ø 10 mm <b>6100067</b>
	Rasto drill bush, Ø 12 mm <b>6100058</b>
	Rasto fixing screw, 4.5 x 35 mm, TX25 <b>6560450</b>
	Rasto positioning pins, Ø 5 x 40 mm <b>6160001</b>
	Rasto connection rod, 500 mm, two-part <b>6160601</b>



# Added value

This is what you can expect from us.

## Support in person

Do you have any questions concerning our products or a certain application? Would you like to learn more about the process benefits for your business? Our qualified employees and sales partners will be happy to help you quickly and competently, whether by telephone, online or during a personal support on site.



## Latest news

Stay up-to-date and sign up for our Lamello News and e-newsletter. Become part of the Lamello community on social media and be inspired, or visit our stand at one of the numerous trade fairs. We are always happy to hear from you.



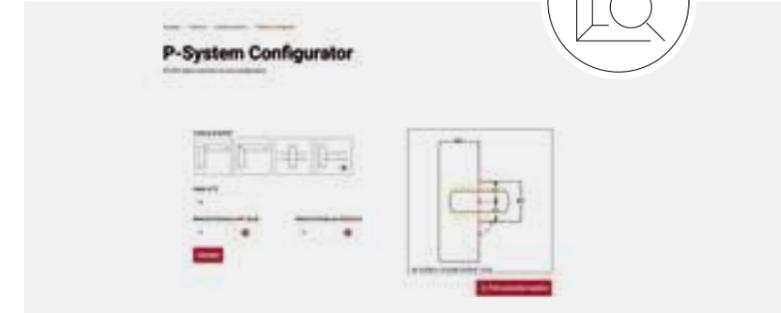
## Our services

Quality is one of the cornerstones of our business, and so our products are designed to last. If a repair is necessary, we can offer you uncomplicated service through our certified Lamello service partners and a spare parts warranty of at least 10 years.



## Support in your planning

With the connector search and the P-System configurator on our website, you can quickly find the right connector for your design and requirements. With CAD data for our connectors, tips and tricks, as well as videos about the wide range of applications, we can guide and support you in your planning on our website and on the Lamello YouTube channel.



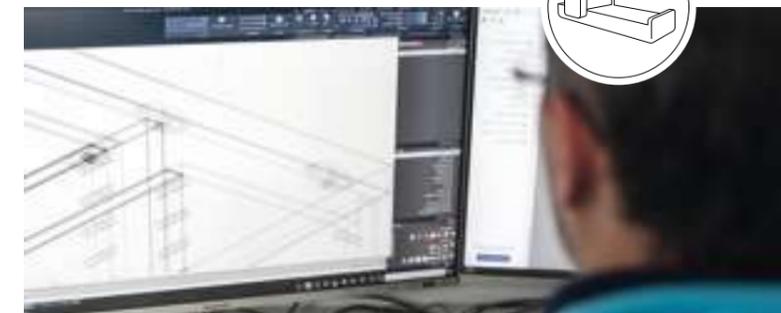
## Qualified sales partners

Our professional and committed sales partners provide you with qualified advice, always keeping you informed about new products. This way, you can see the benefits of our products first hand.



## Competent planning and machining partners

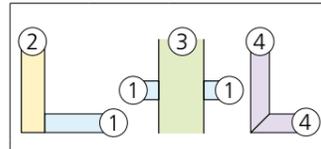
From planning and design to the right tool to machine with the CNC machine: more than 40 industry-leading partner companies support the efficient use and integration of our products into your production.



# Overview of connectors

# Disclaimer regarding load limits

Quantity ⊖ Pairs ⊖ Pieces	Art. No.	Minimum material strength (mm)				Depth adjustment	Product page	Product drawing 1:1
		1	2	3	4			



## Drilling System

	<b>Cabineo</b> Detachable	<b>Cabineo 12</b>	⊖ 500 2000	<b>186320</b> <b>186321</b>	≥ 12	≥ 13	≥ 24	-	-	P. 8	P. 32
		<b>Cabineo 12 black</b>	⊖ 500 2000	<b>186330</b> <b>186331</b>					-	P. 8	P. 32
	<b>Cabineo 8</b>	⊖ 500 2000	<b>186310</b> <b>186311</b>	≥ 12	≥ 9	≥ 16	-	-	P. 10	P. 32	
		<b>Cabineo 8 black</b>	⊖ 500 2000					<b>186340</b> <b>186341</b>	-	P. 10	P. 32
	<b>Cabineo 8 M6</b>	⊖ 500 2000	<b>186315</b> <b>186316</b>	≥ 12	≥ 9	≥ 16	-	-	P. 12	P. 32	
		<b>Cabineo 8 M6 black</b>	⊖ 500 2000					<b>186345</b> <b>186346</b>	-	P. 12	P. 32
	<b>Cabineo insert M6 x 12.3 mm</b>	⊖ 100 500	<b>186370</b> <b>186371</b>	≥ 14	≥ 14	14-16	-	-	P. 14	P. 33	
		<b>Cabineo insert M6 x 15.3 mm</b>	⊖ 100 500					<b>186375</b> <b>186376</b>	≥ 14	≥ 17	17-25
	<b>Cabineo X</b> Detachable	<b>Cabineo X</b>	⊖ 500 2000	<b>186360</b> <b>186361</b>	≥ 12	≥ 9	≥ 24	-	-	P. 16	P. 32
		<b>Cabineo X black</b>	⊖ 500 2000	<b>186365</b> <b>186366</b>					-	P. 16	P. 32
	<b>Cabineo 12 screw</b>	⊖ 500 2000	<b>186380</b> <b>186381</b>	-	≥ 13	≥ 24	-	-	P. 16	-	
	<b>Cabineo 8 screw</b>	⊖ 500	<b>186382</b>	-	≥ 9	≥ 16	-	-	P. 16	-	
	<b>Cabineo 8 M6 screw</b>	⊖ 500	<b>186384</b>	-	≥ 9	≥ 16	-	-	P. 16	-	
	<b>Cabineo X shelf support Ø 5</b>	⊖ 500	<b>186386</b>	-	≥ 9	≥ 16	-	-	P. 16	-	
	<b>Cabineo X shelf support Ø 3</b>	⊖ 500	<b>186388</b>	-	≥ 9	≥ 16	-	-	P. 16	-	
		<b>Invis Mx2</b> Detachable	<b>Invis Mx2 connector set</b> incl. 14 mm studs	⊖ 20	<b>6012300</b>	≥ 18	≥ 15	-	-	-	P. 36
<b>Invis Mx2 connector set</b> incl. 30 mm studs			⊖ 20	<b>6012301</b>	≥ 33		-	-	-	P. 36	P. 46
<b>Invis Mx2 connector 35 mm</b>			⊖ 20	<b>6012317</b>	-		-	-	-	P. 38	-
<b>Invis Mx2 stud 14 mm</b>			⊖ 20	<b>6012312</b>	≥ 15		-	-	-	P. 38	P. 46
<b>Invis Mx2 stud 30 mm</b>			⊖ 20	<b>6012309</b>	≥ 33		-	-	-	P. 38	P. 46
<b>Invis Mx2 centre wall stud</b>			⊖ 10	<b>6012208</b>	-		10-30	-	-	-	P. 38

Wherever we list information on material strength or loads for our products, they are empirical values of load limits, based on specifically defined test conditions similar to DIN 68501:2016-11. Specific characteristics, in particular to the effect that the products will reach the listed loads in the actual used case, are not thereby guaranteed. Rather, it is the responsibility of the respective user to check and ensure the suitability of the products for each specific used case. Since actual load limits substantially depend on circumstances unrelated to the products themselves, e.g. the properties of the carrier materials used, the selection of suitable screws, the assembly or the installation environment, any advice provided by us in the form of a product recommendation with regard to a specific suitability is always non-binding and does not release the user from his or her own examination.

**To the maximum extent possible under the law, all warranties, express or implied are DISCLAIMED. This includes, but is not limited to, any warranty of fitness for a particular purpose or merchantability. We undertake no responsibility that the goods except as may be included in any contract, and we assume no responsibility that the goods will be fit for any particular purpose, except as may be provided in any contract.**



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