# Lamello
# Pioneering Wood Joining

**As proud inventors of the first biscuit jointer, Lamello continue to incorporate over 60 years of Swiss engineering, developing and delivering products which are renowned for their precision and quality, saving you time and money with outstanding results.**

Lamello

AXMINSTER
Tools & Machinery

# Lamello - Pioneering Wood Joining

## A tradition of innovation – the Lamello story

**Since the beginning of the Lamello company – in those days a cabinetmaker's shop – the search for radically new ideas, continuous improvements and system solutions has stood at its core, as has Hermann Steiner with his revolutionary idea that marked the start of the company as we know it:**

*"It was on a cold and rainy day in December 1955, shortly before Christmas. We had to deliver numerous small joinery goods, which we had prepared for Christmas meeting the requirements of our customers in our joiner's workshop. Fonci, the truck driver in Liestal, was responsible for the transport. Storm, snow and rain did not make things easier. We needed all our strength and accuracy to prevent water damaging these Christmas presents. Back home, my ears started to hurt. Obviously, I had caught a cold again. My wife gave me some painkillers and I went to bed with the comforting thought that this hurry was over now. But when I woke at midnight, it was like a dream. My thoughts had strayed from my pain to another important problem, which I had considered a couple of times before. Like other cabinetmakers we had started using particle board and were encountering difficulties in joining the panels. Down with fever, I suddenly saw a practical approach to the problem, which made me forget everything else. I saw how we could use a groove cutter to cut short opposing grooves into the panels and connect them using small biscuit elements. In contrast to continuous grooves, this procedure would not weaken the board. My wife thought I had visions due to the fever but I myself was entirely convinced of my idea."*

**In an unprecedented fashion, Hermann Steiner's innovative idea reached many joiners around the world and the name Lamello has since become synonymous with this high-quality joining solution. In 2004, the invention was honoured along with other innovations as part of a special exhibition at the Museum of Modern Art (Moma) in New York entitled "the most humble innovations of the 20th century".**

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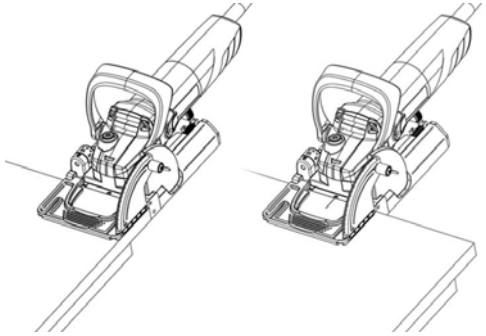
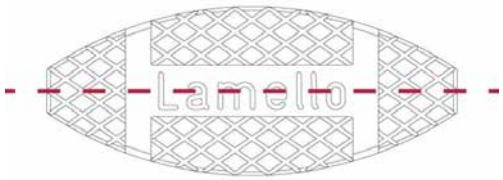
# THE LAMELLO SYSTEM - EFFICIENT, SIMPLE AND PRECISE JOINING SYSTEMS

## THE ADVANTAGES



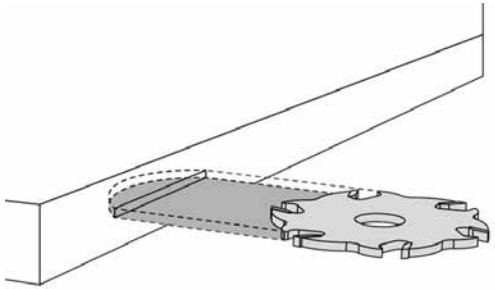
### Fast – lateral tolerance

- Easy positioning of machine to pencil mark
- No additional stops or positioning aids necessary
- Great flexibility during assembly, pieces can be joined together at different angles



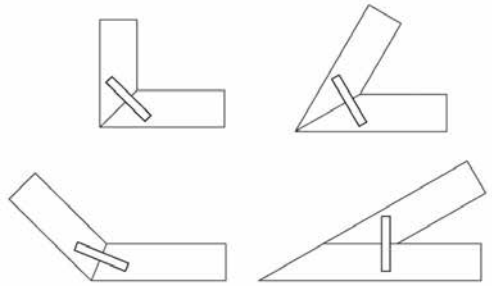

### Simple – same groove on both sides

- No adjustment of cutting depth necessary, eliminating error risk
- Time savings with every join



### Precise – proven cutting principle with disc cutter

- Disc-shaped tools cannot deviate
- Always parallel, precise grooves – even with knots or rapid working
- Cutting for 13 different joining elements without tool change
- Low maintenance cost combined with long service life of the machine; only one tool to maintain



### Versatile – thin and flat joining element with shallow installation depth

- Thin workpieces measuring 8 or 10mm can be joined at any angle
- Minimal material weakening of work pieces
- Non-twisting, cost-effective joining elements

# LAMELLO CLASSIC X BISCUIT JOINTER

## Classic X Biscuit Jointer

*code:* 503650

**Lamello is the founder of the biscuit jointer and as with all of this company's products precision is the key. The Classic X is the successor of the very well known C3 biscuit jointer and features new upgrades to further enhance this leading jointer.**

It is Swiss made with a 780W industrial motor. CNC machined fences give accurate alignment, so you can take full advantage of connectors that can be glued, self-clamped or be detachable.

The main features are a swivelling front stop and the stop square. Both sides of the fences are flush for simple alignment. The multifunctional stop square gives more stability when working vertically, allowing variable height positioning and instantly aligns 22.5° and 45° angles. The swivelling base can be set at any point between 0 - 90° (22.5°, 45°, 67.5° and 90°) and used with or without the stop square for angle locations. If this fence is mounted on the fixed base and the swivel set at 90°, a very secure platform is established for narrow edge work. Scales on both the angle and height adjustment are in metric and a very clear central marker is embossed into the baseplate. There is a choice of six preset depths for the common biscuit/connector sizes with further fine adjustable if required. The body of the machine is slim with a positive 'D' handle for the best grip.

The machine is supplied with a 36mm suction stub, stop square, 4mm spacer, tool set and manual.

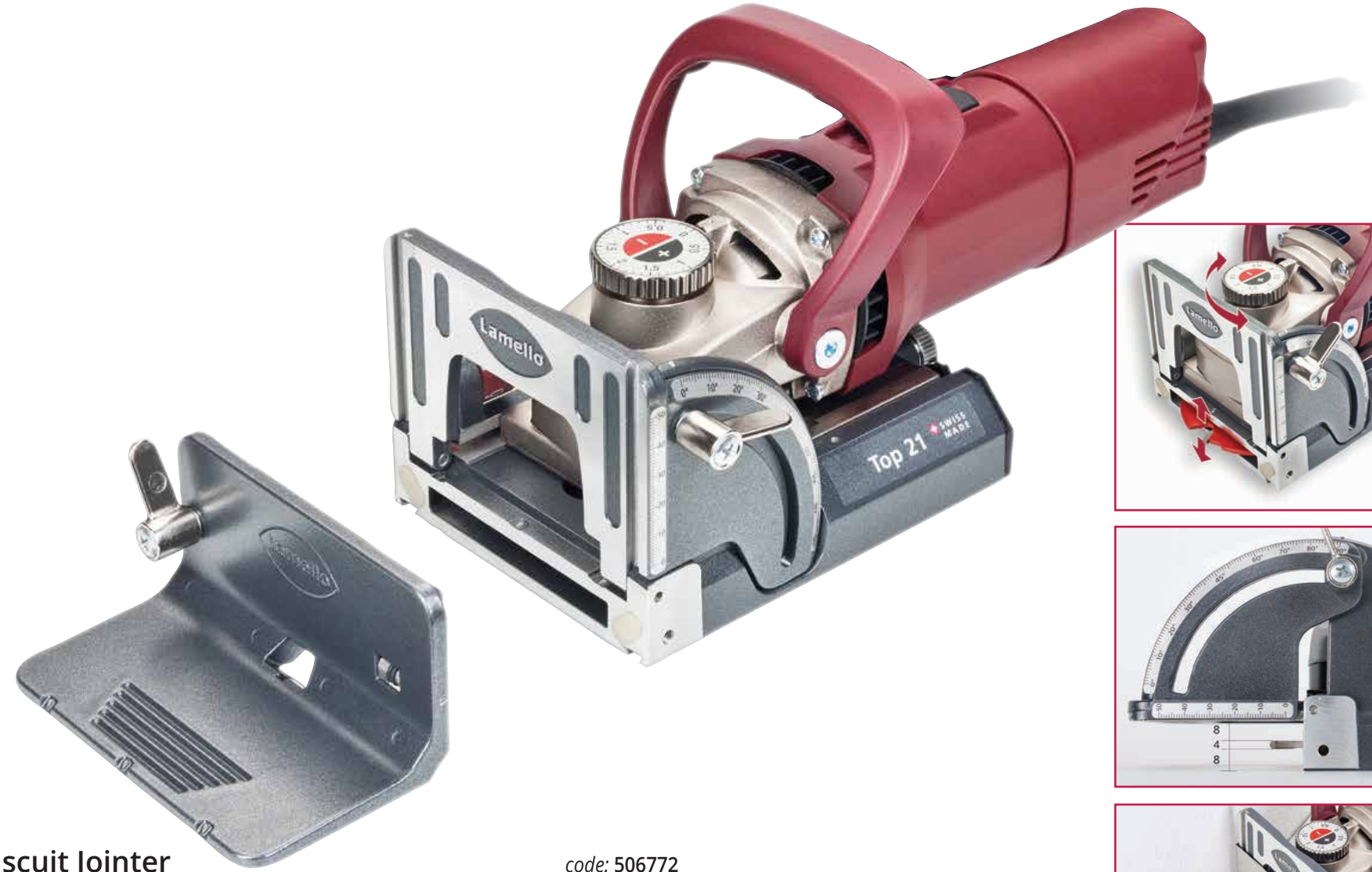
## SPECIFICATIONS

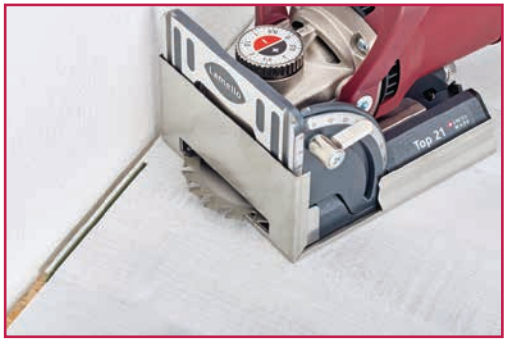
| | |
|---|---|
| Model | **Classic X** |
| Rating | **Industrial** |
| Power | **780W** |
| Tilting Base | **Standard Feature** |
| Dust Extraction | **36mm Outlet** |
| Weight | **3.0kg** |

**Flush base and face sides**

**Flush base and face sides**

# LAMELLO TOP21 BISCUIT JOINTER






## TOP21 Biscuit Jointer

*code:* 506772

**The TOP21 features a height adjustable blade for greater precision. This has to be the ultimate in biscuit jointing from the inventors of the biscuit jointer Lamello. Precise in every way, it is very easy to set cutter and fences for exact placement on your work.**

The cutter can be adjusted for height as well as having 6 preset depth settings. The fences on the TOP21 are flush on the sides for easier positioning; the angle stop/extending front fence is for mitre joints 0-90° with indents 22.5°, 45°, 67.5°and 90°, the square fence stop is used for stability and runs parallel, locking squarely with a quick lever. The soft start 800W electronic motor has no fall off in speed irrespective of the load, the plunge action is extremely smooth and the blade has scoring teeth for the cleanest cutting action. Overall this has to be the ultimate jointer available today.

**Supplied with, dust bag, dust extraction connectors (23 and 36mm), 4mm slip-on plate, tool kit and Systainer case.**

## SPECIFICATIONS

| | |
|---|---|
| Model | **TOP21** |
| Rating | **Industrial** |
| Power | **800W** |
| Tilting Base | **Standard Feature** |
| Dust Extraction | **Dust Bag, 23mm outlet** |
| Weight | **3.3kg** |

# VERSATILE CONNECTING BISCUITS AND FITTINGS

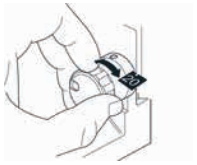
## LAMELLO BISCUITS *Compressed precision beech biscuits*

- Hold tolerance so are never too loose or too tight
- Can be planed leaving a clean solid timber finish
- Expand when immersed in glue

| | Code | | Code |
|---|---|---|---|
| 100 Mixed (50 x 20s, 30 x 10s & 20 x 0s) | 506667 | No 0 (Box 200) | 717652 |
| | | No 10 (Box 200) | 717653 |
| 200 Mixed (100 x 20s, 60 x 10s & 40 x 0s) | 717655 | No 20 (Box 200) | 717654 |
| | | No 0 (Pack 500) | 717647 |
| 500 Mixed (250 x 20s, 150 x 10s & 100 x 0s) | 717650 | No 10 (Pack 500) | 717648 |
| | | No 20 (Pack 500) | 717649 |
| No 0 (Pack 100) | 506668 | No 0 (Box 1,000) | 340944 |
| No 10 (Pack 100) | 506669 | No 10 (Box 1,000) | 340946 |
| No 20 (Pack 100) | 506670 | No 20 (Box 1,000) | 340948 |

## CLEAR PLATE C20 *Alignment plate for joining material, such as Corian®, Varicor® etc.*

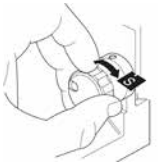
- Made of translucent plastic
- Size 60 x 23 x 4 mm



| | Code |
|---|---|
| Box 250 | 510271 |

## SIMPLEX KD *Aluminium jointing element*

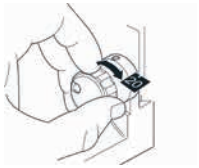
- Joint can be taken apart
- Fits standard No. 20 biscuit joint



| | Code |
|---|---|
| Simplex (50 Pairs) | 166101 |
| Simplex (100 Pairs) | 600115 |

## CLAMPING PLATES K20 *Red plastic biscuit for dry assembly*

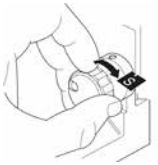
- Barbs moulded onto surface ensure a secure fit
- Standard No. 20 biscuit slot



| | Code |
|---|---|
| Clamping Plates (Box 250) | 600112 |

## SELF CLAMPING E20H *Self clamping insert*

- Pulls together and holds the timber components while the glue cures
- Made from glass fibre reinforced plastic
- Measures 27 x 23 x 4mm
- Suitable for timber thicker than 35mm



| | Code |
|---|---|
| Self Clamping Biscuit E20H (Pkt 80) | 701334 |

# VERSATILE CONNECTING BISCUITS AND FITTINGS

## CLAMEX S-18

***innovative biscuit-shaped connector***

- Aligns and connects, 2 functions in one
- Maximum aesthetics due to minimal hole size for opening and closing of the connection
- No torsional movement due to aligning pins
- Many angles possible
- Stackable, since no parts protruding from the surface
- Easy installation with any Lamello biscuit joiner
- Usable in solid wood and wood composites
- Tolerance lateral ± 0,5 mm (max.± 0,75 mm)
- Made of fibre-glass reinforced plastic
- Knock down furniture connectors

| | Code |
|---|---|
| S Kit - Box of 18 Pairs, Metal Latch | **211284** |
| S Kit - Box of 80 Pairs, Metal Latch | **211285** |
| S Kit - Box of 300 Pairs, Metal Latch | **506779** |

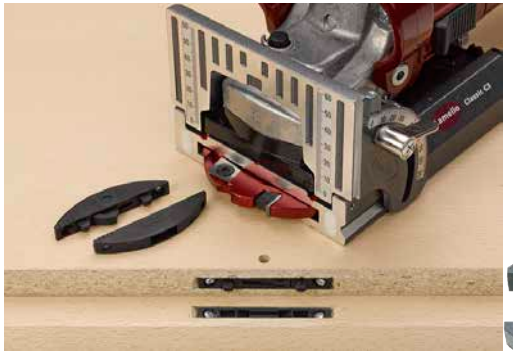
# LAMELLO BISCUIT JOINTING ACCESSORIES

## Minicol Glue Dispenser

*code:* 600497

**The MINICOL glue dispenser consists of a non-slip base and a glue bottle with a nozzle specifically shaped to fit the groove. After use the bottle is put back into the base which seals the nozzle, preventing blockage and drying out of the glue.**

Designed to dispense the glue into the side of the groove with no mess, helping ensuring a stronger hold, a Lamello glue dispenser is a very useful accessory for any biscuit jointer.



## Clamex S Pro Kit

*code:* 718713

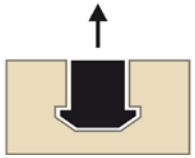
**Aligning, connecting and detachable the Clamex connector is very clever, no need for glue and only a small 6mm hole visible on the whole joint the Clamex system is a great way to joint.**

Cabinetmakers, joiners, carpenters, interior fitters, shop and exhibition fitters and people in the furniture industry would all benefit from using Clamex. These are repeatable, detachable connections without noticeable wear. When on site there is minimal assembly time with full prefabrication possible. It is stackable with no protruding parts on the surface and is easy and efficient to install. There are no additional positioning parts such as dowels or tongues required. No torsional movement due to aligning studs. Groove can be cut with your biscuit jointer fitted with the Clamex HW blade.

This kit contains everything you need for your biscuit jointer as well as jigs and a starter pack of Clamex connectors to make the unique Lamello Clamex S joints. The Clamex jointing element is made up of two halves and aligns and connects at the same time, it can be detached if required so is invaluable for certain projects. All that shows on the assembled joint is a single 6mm hole to allow the hex key to lock and unlock the joint. The kit contains: Jointing blade HW with reversing blades (100mm x 8mm x 22mm bore) 18 pairs Clamex, drilling jig for 35° - 90° with drill bit, marking jig, 1 hex key and 75 screws

# THE LAMELLO P SYSTEM - FORM-LOCKING, TOOL-FREE INSTALLATION OF FITTINGS

## THE ADVANTAGES



### Strong and form-locking

Form-locking anchorage across large surface areas ensures optimum tensile strength even with weaker materials.

### Fast fitting installation

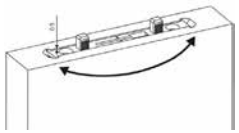
Insertion instead of screwing or gluing means no waiting for adhesive to dry.

### Tool-free fitting installation

The connecting fittings are inserted manually into the profile groove without the need for tools.

### Wear-free disassembly

The connecting fittings can be removed from the profile groove for surface treatment without causing wear.

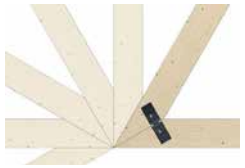


### Lateral tolerance in the profile groove

The ridges on the sides of the fittings ensure that they stay in the groove, even when transporting parts with pre-fitted P-System fittings.

### Lateral ridges

Form-locking anchorage across large surface areas ensures optimum tensile strength even with weaker materials.



### Lateral ridges

Form-locking anchorage across large surface areas ensures optimum tensile strength even with weaker materials.

### Versatile angle joints

P-System fittings can be used for virtually any angle. The groove is always positioned at a 90° angle to the joint.

## THE PROCESS

### Install connecting fittings with a power tool

Installation of connecting fittings at all angles using a power tool, be it on the move, in the workshop or at the construction site.

### Very short installation

Corner joint with two Clamex P connectors in less than 2 minutes!

### Minimal setup time

Regardless of the angle, the Zeta P2 is rapidly configured and ready for use.

### Familiar application

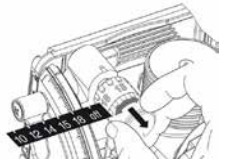
Fast, simple and precise working in the familiar manner using Lamello biscuit joiners without positioning aids with application against the work piece edge.

### Same process on both sides

Time savings and minimised error risk due to identical processing of both workpieces without changing the cutting depth.

### Automatic P-System cutter movement

Automatic, fast cutting movement when maximum depth is reached – powered by secure, reliable, mechanical, low-wear technology.

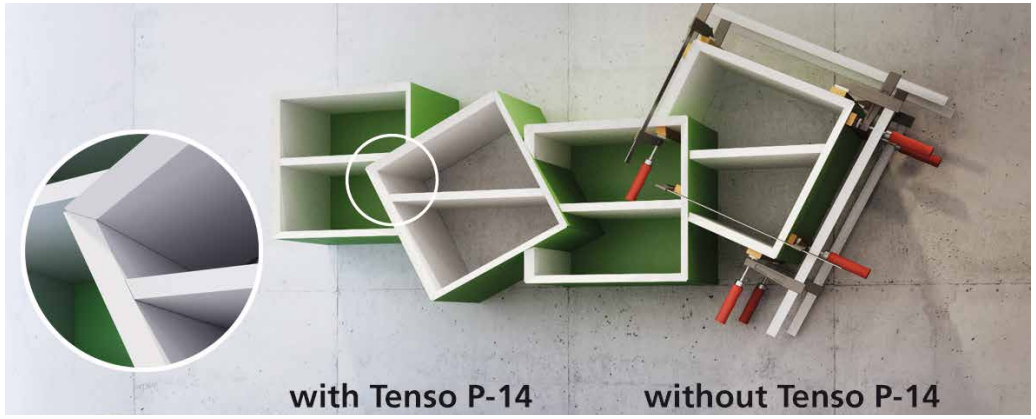


### Rotating depth adjuster

Fast changing of connector size by turning the depth adjuster, without the need to switch tools.

### Turn off the profile groove function

P-System fittings can be used for virtually any angle. The groove is always positioned at a 90° angle to the joint.



# LAMELLO P SYSTEM CONNECTORS

## CLAMEX P *Detachable connecting fitting*

### Fast installation
Inserting instead of screwing or gluing

### Detachable
Open the connection time and time again with the rotating lever

### Aesthetic
The small, hardly visible opening (Ø = 6mm) serves to close and open the connector

### High clamping force
Clamp and glue workpieces at any angle, ~ 80kg

### Stackable
Workpieces with pre-installed P-System fittings are stackable for storage and transport

### Versatile
The shallow element depth allows for mitres from 22.5 – 180°, surface, corner and dividing panel connections

**Clamex P-14 Connectors**
Pack of 80 *code:* **506628**
Pack of 300 *code:* **506629**
Pack of 1,000 *code:* **506630**

**Clamex P-10 Small**
Pack of 80 *code:* **503672**
Pack of 300 *code:* **503673**

**Clamex Medius**
Pack of 80 *code:* **502891**
Pack of 300 *code:* **502892**

## TENSO P *With preload function. Self-clamping fitting as gluing aid, for all angles*

### Fast installation
Inserting instead of screwing or gluing

### Gluing
Fixed joints of two workpieces

### Invisible
No visible fitting

### High clamping force
Allows for perfect alignment and clamps the workpieces ~ 15kg

### Versatile
Simple gluing of mitre joints

### Lower assembly force
Only a short power impulse necessary to join, regardless of the number of connectors

**Starter Set**
*Inc. preload clips*
Pack of 80 *code:* **101608**
Pack of 300 *code:* **101613**

**Tenso P Connectors**
Pack of 80 *code:* **101609**
Pack of 300 *code:* **101610**
Pack of 1,000 *code:* **101611**

**Preload clips**
Pack of 300 *code:* **101614**
Pack of 1,000 *code:* **101615**

## DIVARIO P *Self-clamping, invisible fitting for slide insertion*

### Fast installation
Inserting instead of screwing or gluing

### Sliding Insertion
Insertion between two fixed sides or shelves via a guiding groove

### Invisible
Guiding groove covers the fittings

### Quick setup
Quick installation of the fittings without glue after transport

### Assemble by sliding
Partially routed guiding groove for completely invisible furniture joints

**Divario P Connectors**
Pack of 80 *code:* **101279**
Pack of 300 *code:* **101280**
Pack of 1,000 *code:* **101281**

# LAMELLO ZETA BISCUIT JOINTER

## Zeta P2 Biscuit Jointer HW

*code:* **506673**

The Zeta P2 is the second generation Zeta fitted with the new P-system depth adjuster. The Zeta offers more than the standard biscuit jointer, with an undercut function to allow for the fitting of special concealed Clamex P connectors that slide into the 'T' slot produced. The connector also clamps, so no additional clamping methods are required. Almost totally concealed, the only visible sign is a single 6mm hole, making it ideal for many applications such as furniture, shop fitting and exhibitions. It is also suitable for solid wood and man-made boards, overcoming many design issues.

Unique to Lamello, the jointer has a special vertical mechanical drive (VMD) engaging when the jointer is at full plunge, moving the cutter up and down in one full turn and only then disengaging to produce the 'T' slot to accept the special Clamex biscuit. The undercut function can be switched off and a 7mm slot will be produced; a 'Bisco' biscuit can then be used. Replace the special blade with a 4mm biscuit blade and use as a standard biscuit jointer. The new P-System depth adjuster has five settings for the ever growing range of Clamex connectors and when used with a standard biscuit jointing blade.

As with all Lamello products, design and build are of the highest quality. Other features include precise plunge with clear depth setting and jointer fences with flush sides to make positioning simple; the fence fits with 'V' grooves for accuracy and clear angle scale.

**The jointer is supplied in a Systainer case with a special 7mm blade, assorted fittings, drill bit, drill stop collar, drill guide and suction adaptor.**

## SPECIFICATIONS

| | |
|---|---|
| Model | **Zeta** |
| Rating | **Industrial** |
| Power | **1,050W** |
| Tilting Base | Standard Feature |
| Dust Extraction | **Yes** |
| Weight | **3.7** |

# ZETA & P-SYSTEM BISCUIT JOINTING ACCESSORIES & KITS

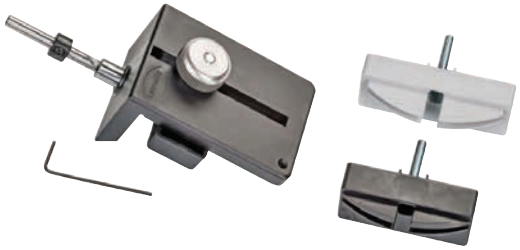
## Clamex P Installation Tool *code:* 506666

- Flexible screwdriver with 4mm hex
- Especially designed for use with Clamex P connectors
- Get into tight spaces quickly and with ease

## Clamex P-15 Drill Jig & Drill Bit *code:* 503850

**Drill jigs suitable for drilling the 6mm hole required to gain access to the locking mechanism for the Clamex P 15 joint.**

Use for angles 30° - 150°, supplied complete with drill bit and depth collar. With 100mm drill bit.



## P-System Drill Jig P-14, P-15 and P-10 *code:* 506631

**This drill jig is suitable for drilling the 6mm hole required to gain access to the locking mechanism for the Lamello Clamex S and Clamex P joints.**

Use for angles up to 22.5°. Supplied with drill bit and depth collar. Use with Lamello P-14, P-15 and P-10 connectors.

## Divario P-18 Installation Tool *code:* 101282

**After placing the main body of the Divario P-18 connector into its slot, this installation tool ensures that the alignment of the body of the connector is correct. A sharp tap with a hammer sets the positioning pins, keeping everything in the perfect position.**

Divario connectors allow easy installation of dividers or shelves into a fixed frame or structure. The result is a strong joint with no visible connectors or shelf pin supports. Slide the shelf into place and the Divario forms a tight fitting, flush joint. The Divario P-18 supports the shelf or divider during insertion, making assembly even more straightforward. Final assembly requires no further use of tools, glues or clamps. In this respect the connector makes possible assembly on site, as the transport of parts in flat pack form is an easy option.

This narrow connector allows use in shelves from 19mm thick and sides as little as 12mm thick. The Divario P-18 is a completely concealed connector. It results in a clean appearance thanks to closed joints and allows greater design freedom without sacrificing stability. Cut the P-System groove for the connector either manually in a workshop or on site using a Lamello Zeta P2 machine or with CNC machinery in a factory.

## Divario P-18 Connector Starter Set *code:* 101278

- Pack of 80 connectors plus installation tool
- Lamello's ingenious, self clamping, sliding connector
- Forms a strong joint with no visible connectors or shelf supports
- Supports the shelf during insertion, making assembly straightforward
- Final assembly requires no further use of tools, glues or clamps
- Ideal for flat pack transportation and assembly on site
- Minimum shelf thickness 19mm, min 12mm thick sides
- P-System slot cut with either Lamello Zeta P2 or with factory CNC machine

## Divario P-18 Marking Jig With Drill *code:* 101283

**Use the Divario marking jig to precisely mark both positions for the slot and the holes required for these unique connectors. The jig includes a lip and spur drill bit complete with depth stop. There is a choice of five positions up to 250mm from an edge. Laser cut press-outs allow precise alignment on the edge of 16mm boards.**

Divario connectors allow easy installation of dividers or shelves into a fixed frame or structure. The result is a strong joint with no visible connectors or shelf pin supports. Slide the shelf into place and the Divario forms a tight fitting, flush joint. The Divario P-18 supports the shelf or divider during insertion, making assembly even more straightforward. Final assembly requires no further use of tools, glues or clamps. In this respect the connector makes possible assembly on site, as the transport of parts in flat pack form is an easy option.

This narrow connector allows use in shelves from 19mm thick and sides as little as 12mm thick. The Divario P-18 is a completely concealed connector. It results in a clean appearance thanks to closed joints and allows greater design freedom without sacrificing stability. Cut the P-System groove for the connector either manually in a workshop or on site using a Lamello Zeta P2 machine or with CNC machinery in a factory.

## Diamond Tipped Blade For Zeta *code:* 506242

- Long lasting diamond tipped cutter
- Cuts P-System groove
- For Zeta jointing machine
- 100.4 x 7 x 22 mm

## Zeta Jointer Blade *code:* 952761

- Tungsten carbide tipped groove cutter
- 100mm x 7mm
- 22mm bore

## Clamex HW Blade *code:* 702314

HW (tungsten tipped) - Reversing blades cutter for 8mm groove, 100 x 22 x 8 mm.

## P-System CNC Diamond Tipped Blade *code:* 212615

- Diamond tipped P-System cutter
- 100.4mm x 7mm
- 30mm bore
- For use with CNC machinery
- Requires arbor

## P-System Drill for CNC Blades *code:* 503704

- Lamello 6mm solid carbide drill bit
- For mitres on the Lamello P-System
- Overall length 100mm, 35mm spiral length, 10mm shank
- Fitting CNC machinery

## Profila E Plus Laminate Trimmer (1/4", 6 & 8mm )

*code:* 950819

**Profila E plus is power tool for mobile use and is ideal for simultaneous flush trimming and rounding of protruding PVC, melamine or veneer edges.**

The unique opening on the baseplate allows protruding edges to be processed with the device applied on the surface rather than on the edge and thus effectively preventing wobbling. The processing of workpieces with inside or outside radius is also possible.

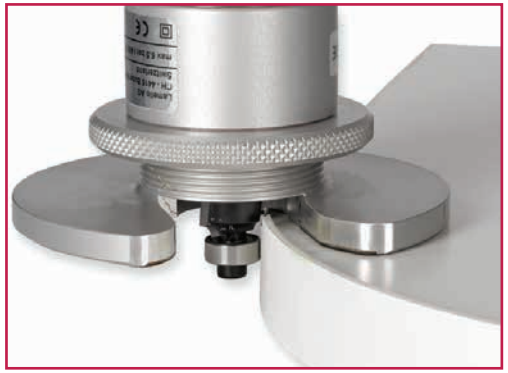
**Applications**

- Flush trimming and rounding of 3mm PVC, melamine or veneer edges on curved workpieces.

MADE TO ORDER

**Variable tool opening, 25mm or 34mm depending on the cutter size.**

**Stepless fine adjustment. Simple rotation nut ensures the baseplate remains stable and correctly angled.**



**Stablity when working protruding edges is enabled by vertical positioning of the machine using the gap in the baseplate.**

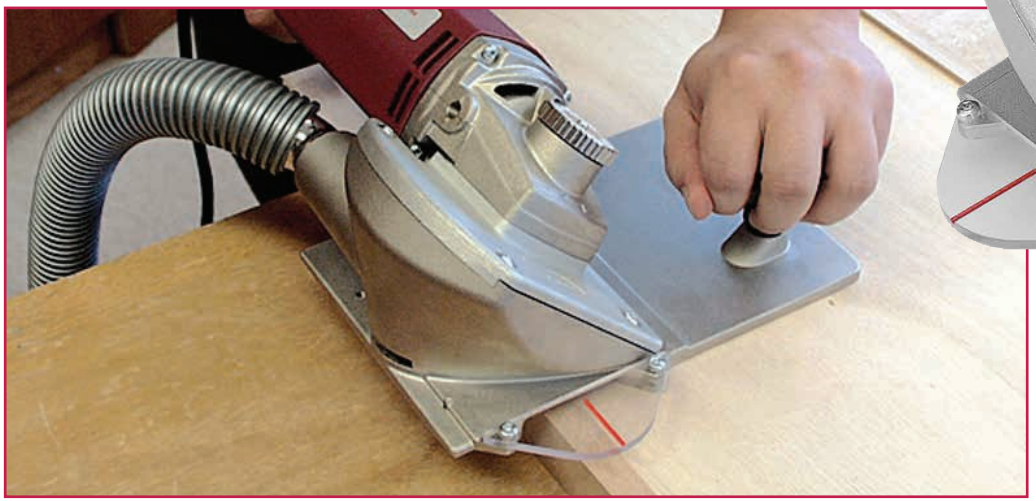
**All shapes, any job. Whether curved inwards or outwards, if straight or rounded. Whether the top layer or the edging protrudes.**

## Cantex Lipping Machine

*code:* **702777**

**The Lamello Cantex Ergo is a truly professional machine aimed at specialist cabinet makers and furniture manufacturers that require a machine for the flush planing of projecting edge lippings, patch type repairs, knots and jointed panels.**

The machine has recently been updated and now has an improved baseplate for the fast and precise trimming of corners where two lippings meet. The quality of the cut on this machine is outstanding even when used against the grain and this is due to the shearing action of the three knife cutter block. The machine comes complete with three knives and service tools.



**Flush-planing efficient and clean**

**Tear-free work in cross grained wood**

**Rounded base plate**

### Side Fence for Cantex *code:* 121290

Parallel guide fence for the Lamello Cantex planer. For flush milling, to prevent cutting into the finished surface.

## Plano 45 S2 Flush Milling Machine

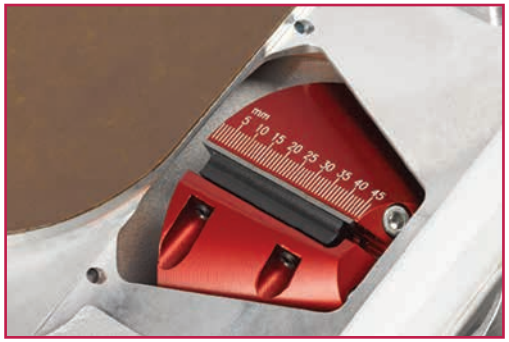
*code:* 508534

**Plano 45 S2 is a power tool for planing protruding wood pieces and perfectly complements the Minispot system. The unique cutting geometry produces a shearing cut which ensures clean results without tearing. This shearing cut is essential for knot patches which are cut across the grain.**

The cutting height of the Plano 45 S2 can be finely adjusted in increments of 0.035mm without the need to sand the workpiece.

**Applications**

- Flush trimming of Minispot patches, knot patches and glue joints in a carpenter's or joiner's workshop as well as in glulam plants.




**Tear-free cut**

**Adjustable milling height**

MADE TO ORDER

MADE TO ORDER

## Variocut

*code:* 508548

**Variocut is the ideal solution for cutting expansion gaps. To allow for the expansion and contraction of the wood, a gap must be provided between the wall and roof panelling or flooring.**

For aesthetic reasons, this gap must be even and relatively small. The saw blade can be set to the minimal cutting width of 4mm via the rotary knob, thus enabling clean and efficient cutting of this groove.

**Applications**

- Expansion gaps on roofs or in flooring
- Expansion gaps between wall panels, cladding and floor
- Various longitudinal and transverse cuts
- Can be used for wood repairs with Minispot cutter

**Expansion gaps**

**Cutting gap**

**Wood repair**

# WINDOW REPLACEMENT WITH THE LAMELLO TANGA DELTA

## HOW IT WORKS

1. Cut the window out

2. Pull the window out

3. Install the new window

# LAMELLO TANGA DELTA S2 WITH DIAMOND BLADE

## Tanga Delta S2 with Diamond Blade

*code:* 508546

**Tanga Delta S2 is a powerful multi-purpose cutter equipped with a 1,600W motor for the efficient removal of old window frames by cutting into the brick wall.**

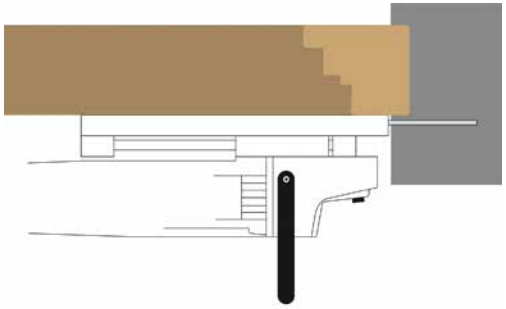
The all-round cut allows windows to be removed without damaging the surrounding brickwork or the windowsill. Cutting into brick, concrete or tiled walls separates the window anchorage and releases the window from the brickwork.

The Tanga Delta S2 is characterised by its impressive 58mm cutting depth, smooth running guidance and powerful motor for high working speed.

Another useful feature is the additional baseplate for corner cuts, which can be easily attached via the quick release mounting.

**Applications**

- Efficient window removal, re-cutting of window reveal to fit new wider window, cut-outs for weather boards, wall breakthroughs, cuts in tiled walls.



# WINDOW REPLACEMENT WITH THE LAMELLO TANGA DELTA

## ADVANTAGES AND PROPERTIES

### High working speed

Powerful 1600W motor with ideal weight/power ratio

### Cuts into the corner

Deep cuts into the corner with the Tanga Delta S2

### High Quality

Clean cuts into wood, stone and tiles without damaging surrounding structures

### Only one cut

Cutting depth up to 68mm

### Low dust emission

Ideal airflow channelling minimises dust emissions

### Safe

Smoothly running baseplate is instantly retracted by the strong spring

## LAMELLO TANGA DELTA H

### Tanga Delta H

*code:* **508544**

**Tanga Delta H is a powerful multi-purpose cutter equipped with a 1,600W motor for the efficient removal of old window frames by cutting into the wood frame. The all-round cut allows windows to be removed without damaging the surrounding brickwork or the windowsill.**

The Tanga Delta H is characterised by its impressive 68mm cutting depth, smooth-running guidance and powerful motor for high working speed.

**Applications**

- Efficient removal of windows and doors
- Expansion gaps with minimal groove width of 6mm
- Shortening of door leaves

# LAMELLO CABINEO CNC CONNECTERS

**Lamello hss introduced a new furniture connector that is set to take on cam dowels and locks. The new Cabineo furniture fixing securely pulls together boards and panels to form a secure, hidden joint.**

With a promise of faster processing times, simpler production and stronger connections, here we take a look at its properties and how you can incorporate them into your designs.

## What are the applications?

Built-in wardrobes, free-standing cabinets, kitchen units, wall units, bookshelves, corner joints, dividing panel connections, fixed shelves.

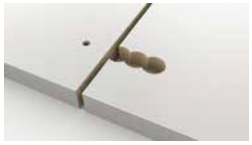
## How does the furniture fitting work?

The Cabineo works by drilling or routing a shape with CNC machinery to create space for the fitting. A 5mm drill hole is then made in the corresponding workpiece. As the furniture fixing is concealed, and almost flush with the surface, you can insert the connectors prior to transportation or when ready to assemble. The Cabineo contains a pre-installed screw inside the fitting and when in position, simply use the ball end allen key and a cordless drill, set to the correct torque settings, to join the two pieces together. The result is a connection that's simple, fast and strong.

## WHAT PROBLEMS CAN IT SOLVE COMPARED TO OTHER FURNITURE FIXINGS?

### Simpler manufacturing

What makes the Cabineo unique is the actual manufacturing process. You don't have to drill on the edge as the holes for the connectors are made on the surface. Traditionally when using cam dowels and locks there are a number of stages but the manufacturing process with the Cabineo is much more streamlined. The final connection is also considerably stronger with a high tensile strength. Additionally, if you're working with narrow panels the connector only needs a space of 10mm, meaning you can work with panels from 12mm.



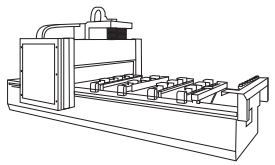
1. Process the materials surface

2. Fit Cabineo into top or bottom of shelf

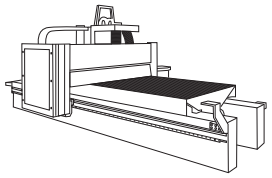
3. Flat pack the workpieces

4. Assemble using a cordless drill

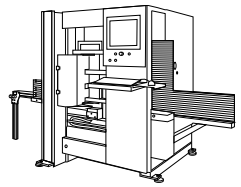
## COMPATIBLE WITH ALL TYPES OF CNC MACHINERY



Pod & Rail CNC processing centres



Nesting CNC processing centres



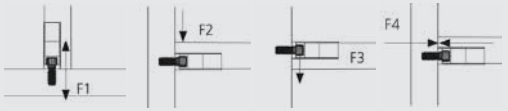
Vertical CNC processing centres

## TECHNICAL DATA

| | |
|---|---|
| **Size** | 33.8 ×16.5×10.8 mm |
| **Cutter** | Ø 12 mm or smaller |
| **Drill** | Ø 5 mm and Ø 15 mm |
| **Material housing** | Fibre-glass reinforced plastic |
| **Installation tolerance** | Longitudinal ± 0.1 mm |

## TECHNICAL VALUES WITHOUT DOWEL (N)

| In 19mm Particulate Board | Cabineo 12 | Cabineo 8 |
|---|---|---|
| **Tensile Strength (F1)** | 900 | 500 |
| **Shear Strength (F2)** | 850 | 550 |
| **Shear Strength (F3) [VAR.3]** | 400 [-13%] | 450 [-13%] |
| **Clamping Force (F4)** | 900 | – |




Tensile Strength | Shear Strength | Shear Strength | Clamping Force

### Easy transportation

As you can flat pack the panels and pre-install the connectors if necessary, this can save a considerable amount of space for easy transportation.

### Save on assembly time

No fiddling around with dowels or locks, the Cabineo is just a one piece connector that joins pieces with a cordless drill. The connection is much quicker and so when you're assembling the final components this significantly reduces your setting up time.

# LAMELLO CABINEO CNC CONNECTERS

## Cabineo 8 for Centre Panels

Cabineo 8 is designed for use on intermediate elements such as shelves in material of 16mm thickness and above.

| | Code |
|---|---|
| Cabineo 8 for Centre Panels 500 pcs | 103934 |
| Cabineo 8 for Centre Panels 2,000 pcs | 103935 |

## Cabineo 12 for Corner Joints

Cabineo 12 is designed for use on corner joints in material of 16mm thickness and above.

| | Code |
|---|---|
| Cabineo 12 for Corner Joints 500 pcs | 103936 |
| Cabineo 12 for Corner Joints 2,000 pcs | 103937 |

*Signal White* | *Brown Beige* | *Window Grey* | *Papyrus White* | *Dark Grey*

## Cabineo Cover Caps

**Cabineo cover caps simply clip over the Cabineo connector, preventing debris entering the fixing slot and offering a neat, clean finish to the Cabineo system.**

The cover caps are available to suit most commonly used colours of laminate.

| | Code |
|---|---|
| Cabineo Cover Caps Signal White RAL9003 100 Pce | 103951 |
| Cabineo Cover Caps Signal White RAL9003 2,000 Pce | 103952 |
| Cabineo Cover Caps Brown Beige RAL1011 100 Pce | 103953 |
| Cabineo Cover Caps Brown Beige RAL10112,000 Pce | 103954 |
| Cabineo Cover Caps Window Grey RAL7040 100 Pce | 103955 |
| Cabineo Cover Caps Window Grey RAL7040 2,000 Pce | 103956 |
| Cabineo Cover Caps Papyrus White RAL9018 100 Pce | 103957 |
| Cabineo Cover Caps Papyrus White RAL9018 2,000 Pce | 103958 |
| Cabineo Cover Caps Dark Grey RAL7016 100 Pce | 103959 |
| Cabineo Cover Caps Dark Grey RAL7016 2,000 Pce | 103960 |

## Cabineo 15mm Drill Bit with Centre Point *code:* 103947

**Set in a CNC machining centre, the 15mm Cabineo drill bores 3 slightly overlapping holes 10mm deep to produce the perfect recess for the Cabineo connector.**

With a 15mm diameter, it has a short centring point of 0.8mm. The drill features tungsten carbide tips to ensure the longest possible life in man-made boards.

## Cabineo Cutter - 10mm *code:* 103949

**This is an industrial CNC milling cutter 10mm diameter. The CNC cutting of the recess for the Cabineo body can be done either from the top with a 15mm CNC drill bit or from the side using a CNC milling cutter.**

Lamello produce the drill and a choice of cutters to suit the requirements of a variety of CNC machines. Fully dimensioned drawings are available for programming the CNC machine for each of the milling cutters and the drill option.

## Cabineo Cutter - 12mm *code:* 103950

**This is an industrial CNC milling cutter 12mm diameter. The CNC cutting of the recess for the Cabineo body can be done either from the top with a 15mm CNC drill bit or from the side using a CNC milling cutter.**

Lamello produce the drill and a choice of cutters to suit the requirements of a variety of CNC machines. Fully dimensioned drawings are available for programming the CNC machine for each of the milling cutters and the drill option.

## Cabineo Fitting Tool with Handle *code:* 103938

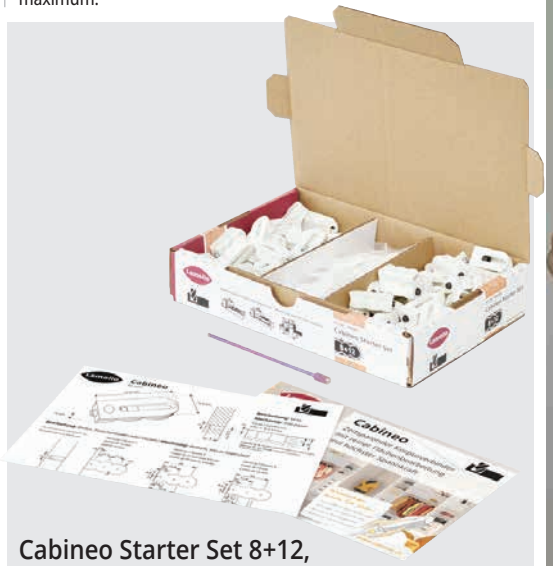
**The Cabineo tool consists of a screwdriver handle with a 1/4" hex holder and an extra long ball-end hex bit with a 1/4" hex shank.**

The ball-end allows you achieve the necessary drive angle in order to tighten the Cabineo fixing. The large comfortable handle transfers maximum torque without causing the discomfort of blisters.

## Cabineo Hex Drive 1/4" Bit *code:* 103946

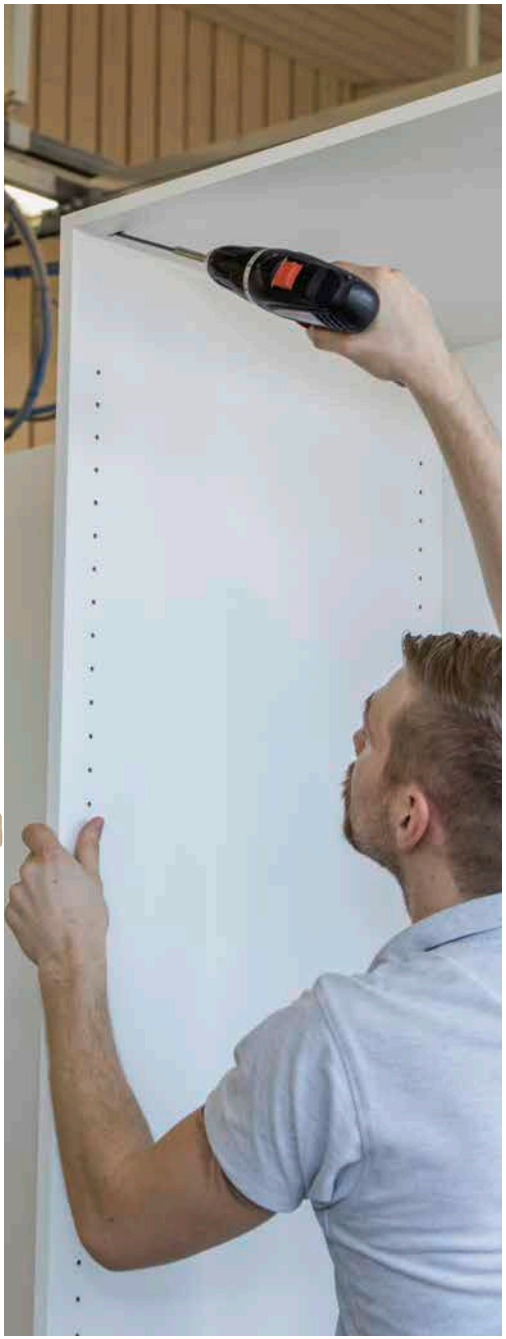
**The Cabineo extra long ball-end hex bit with a 1/4" hex shank is for use with cordless screwdrivers.**

It enables rapid assembly or disassembly of furniture built with Lamello Cabineo connectors. Recommended torque setting 25Nm maximum.



## Cabineo Starter Set 8+12, Tool & Cover Caps *code:* 103911

Cabineo Starter Set consisting of 40 pieces Cabineo 8, 40 pieces Cabineo 12, 40 cover caps and a Cabineo tool.



# Magnet-driven connections with an even higher clamping force

*Powerful mechanical connections. Detachable within seconds. Completely invisible*

## 60% higher clamping force

*250kg clamping force per connector*

## FAST AND EASY INSTALLATION

### Completely invisible connecting fittings

Satisfies the highest demands for aesthetics, stability and productivity. With no visible openings, Invis Mx can be quickly detached and reconnected at any time via its magnet drive.

### Powerful

Powerful screwed connections with 250 kg clamping force per connector via the M5 stainless steel screw.

Perfectly clamped joints without the need for screw clamps.

### Installation with insertion jig

Installation tolerance ensures easy handling. Invis Mx is screwed into 12mm holes and then connected with the MiniMag Mx on the cordless drill.

### MiniMag Mx & Driver Bit *code:* 212605

**The MiniMag Mx houses the rotating magnet that drives the jointing connectors of the Lamello Invis system, it attaches to any standard drill and running at between 120 - 1500rpm.**

Supplied with a special screwdriver bit to screw the Invis connectors into the drilled holes. Spare driver bits also available.

### Invis Mx Screw Driver Bit *code:* **212612**

- Driver for both the jointing element and stud of the Invis
- Four point drive system
- Large contact area for perpendicular alignment
- Hex shank

## Invis Mx2 Starter Kit with 20 connectors and Rasto Drill Jig

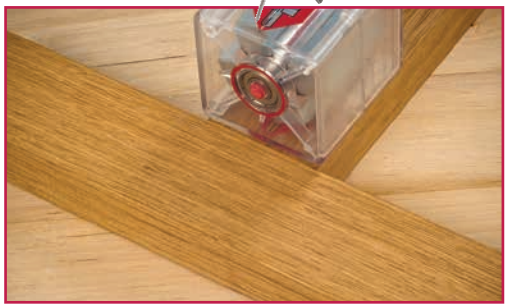
*code:* 506241

**The Invis Mx2 starter kit is supplied with a MiniMag Mx2 magnetic driver, two driver bits, a flexi shaft for tight corners, 20 Invis Mx2 connectors, a Rasto drill jig with 12mm drill bit, depth adjuster and an Mx2 insertion bush all packed in a Systainer storage case.**

The Invis connector is a 12mm diameter steel dowel in two parts. It has a central male thread in one-half and a corresponding female in the other. To make the joint, a 12mm hole must be bored in each workpiece. The Rasto Drill Jig ensures complete accuracy for perfectly aligned holes. Each half of the connector has a deep outer setting-thread for a firm grip in the timber. Bring the two halves together and place the MiniMag Mx on the joint. Driven by a suitable cordless power drill, the rotating magnetic field remotely drives the connector just as one cogwheel drives another. An Invis connector has 250kg clamping force ensuring a tight and secure joint.

The Invis connector gives you an invisible means of making a joint. Invis joints are just as easy to take apart and reassemble at any time.

The Rasto is a unique drill jig that will give precision alignment of Invis connectors as well as many other drilling tasks such as dowelling.



# LAMELLO INVIS MX2 SYSTEM

## Invis Mx Flexi Shaft
*code:* 212611

**Part of the range of accessories and connectors for the Lamello Invis Mx system.**

Fitting to the MiniMax Mx allows you to get into small areas and angles the drill away from the work surface.

## Invis Mx2 Connector Sets *code:* 506243

**This connector set forms part of the range of accessories and connectors for the Lamello Invis Mx system.**

This MX2 is the latest connector with 250kg of clamping force and has with a hard nickel surface for a high quality look. The stud has a deeper set thread making the threading of the screw easier. The two part Invis connector is made up of a stud and jointing element, both 12mm in diameter with a coarse outer thread that will 'bite' into the drilled 12mm hole. The internal threaded stud is 14mm in length and the threaded jointing element is 35mm. Supplied as a pack of 20.

## Invis Mx2 Jointing Element *code:* 506239

**This is part of the range of accessories and connectors for the Lamello Invis Mx2 system.**

The 35mm jointing element is the female part of the Invis connnector. Mx2 is the latest version. When used with the stud, it will provide 250kg of clamping force and it has a high quality hard nickel surface. Supplied in packs of 20.

## Invis Mx2 Studs *code:* 506237

**These are part of the range of accessories and connectors for the Lamello Invis Mx system.**

The latest Mx2 Invis connector gives 250kg of clamping force and has a hard nickel surface for a high quality look. This stud has a deeper set thread making the threading of the screw easier. Use with Mx2 connector. This 30mm version will give a stronger hold in materials like particle boards and is especially suitable for jointing worktops. Pack of 20.

## Invis Mx Centre Wall Stud *code:* 212609

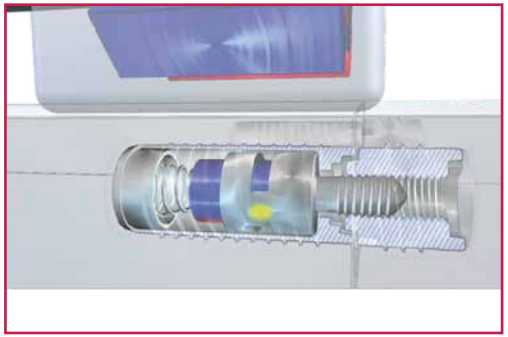
**The wall stud is the longer version of the standard 14mm studded part of the Invis connector and allows the jointing of two items such as shelves through a maximum 30mm upright.**

30mm of the stud length is not threaded and left plain. Pack of 10.

## Invis Connecting Screw *code:* 501844

**Part of the range of accessories and connectors for the Lamello Invis MX system.**

This is an M5 x 17mm connecting screw with left hand thread for use with the Invis stud. Supplied in packs of 30.



The rotating magnetic field of the MiniMag Mx drives the connector just as one cogwheel drives another. The thread on the connector screws into the internal thread of the stud, driven by the contact-free magnetic field.

The MiniMag Mx drive magnet is compatible with any standard cordless drill with a speed of 1200-1500 rpm.

Quick assembly and dismantling of large furniture items

Easily connect and clamp moulded parts

Clamp high gloss painted furniture without causing damage

# LAMELLO RASTO DRILL JIG SYSTEM

## UNIVERSAL DRILL JIG WITHOUT MEASURING OR MARKING

Precise drilling into any workpiece shape without measuring or marking.

Three pins and 180 possible positioning holes secure the transparent drill jig. Both workpieces are drilled without marking and without moving the pin positions.

Ideal drill jig for the Invis Mx connecting fittings.

## Rasto Drilling Jig Basic Kit

*code:* 212514

**Using pins, placed a network of holes, as reference stops, Rasto even works on oddly shaped work pieces, such as the ends of handrails.**

Screw your chosen size of drill bush into the jig to guide your drill bit. Once drilled, remove pins and bushes relocate in the same holes on the opposite side of the plate. This will guide place the drill bush in the exact mirror position, ready for the corresponding hole.

The Basic kit contains; Rasto drill plate, 3 guide pins, 4 drill bushes (6, 8 10 and 12mm) and fixing screw.

The Duo Kit contains; 2 drill plates, 6 guide pins, drill bits 5, 8 and 12mm diameter with stop collars and 8 guide bushes, jointing bar and length stop all packed in a Systainer case for storage.

## Rasto Drilling Jig Duo Kit

*code:* 212604

**This is a very clever jig and will allow you to very accurately position holes in the exact place and reposition on an opposite member if required for dowelling.**

Simple to look at and use the secret is in the precision with which the jig has been made that ensures accurate hole position every time, especially designed for the Lamello Invis system it can also be used for other drill and dowelling hole positioning.

A network of holes in the jig and pins are used as reference stops against your work so no matter what the shape the hole position can be repeated. Simply choose the correct drill bush and screw this into the jig so that it will guide your drill bit. Once drilled, remove pins and bushes, relocate in the same holes, protruding from opposite side of the plate, this then guides the plate and drill in place for an exact mirror hole position. The Duo kit contains; 2 Drill plates, 6 guide pins, drill bits 5, 8, and 12mm with stop collars and guide bushes 5, 8, 10 and 12mm, jointing bar and all packed in a Systainer case for storage.