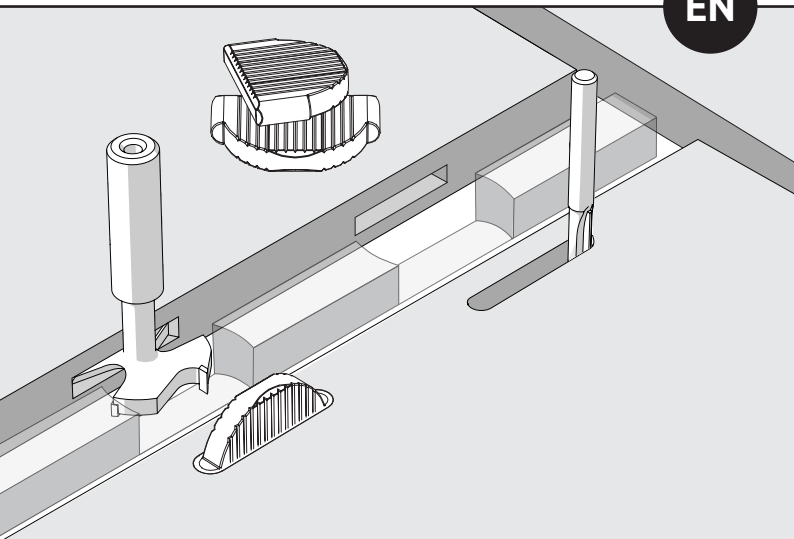


FixChip[®]

smart nesting connectors

EN



FixChip[®] & FixChip[®] Mini

OPERATION AND ASSEMBLY MANUAL

PRODUCT DESCRIPTION

Thank you for choosing the FixChip® system!

Unlock the full potential of CNC nesting with FixChip® – the method for efficient and precise panel joining.

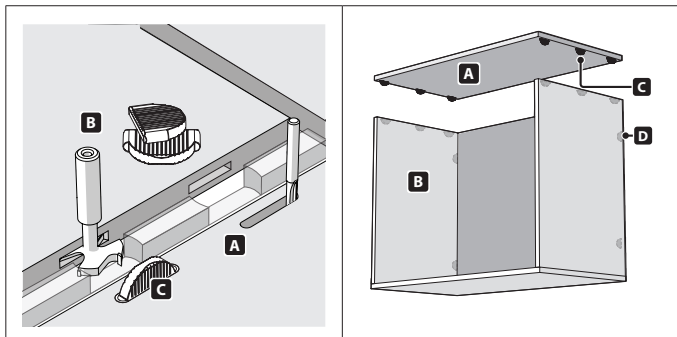
FixChip® is designed for seamless integration with CNC nesting machines, eliminating secondary operations and streamlining your workflow. Save time, reduce production costs and improve overall accuracy.

The FixChip® method works effortlessly across a wide range of materials: from chipboard and fibreboards (MDF, HDF) to uncoated, plastic-coated, veneered surfaces and laminated veneer lumber such as plywood and multiplex. One solution, endless possibilities.

Together with your CNC nesting machine, CAD/CAM nesting software and Leitz's specialized milling tools, you can create perfectly matched grooves for both the FixChip® and the FixChip® Mini.

The result: stable, invisible and precisely aligned connections – every time.

OVERVIEW

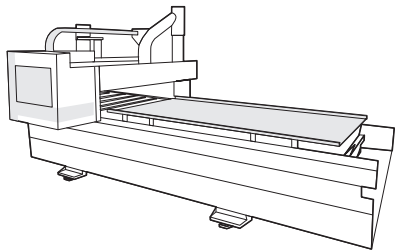


- A** Panel A: 6 mm groove
- B** Panel B: 35 mm groove

- C** FixChip®
- D** FixChip® Mini for back panels

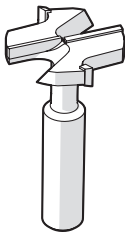
SETUP CHECKLIST

- ! This product is only intended to be used by CNC trained and qualified professionals.
- ! Always follow the instructions in this manual during set-up and operation.



CNC nesting machine or another suitable CNC machine

leitz



35 mm milling cutter

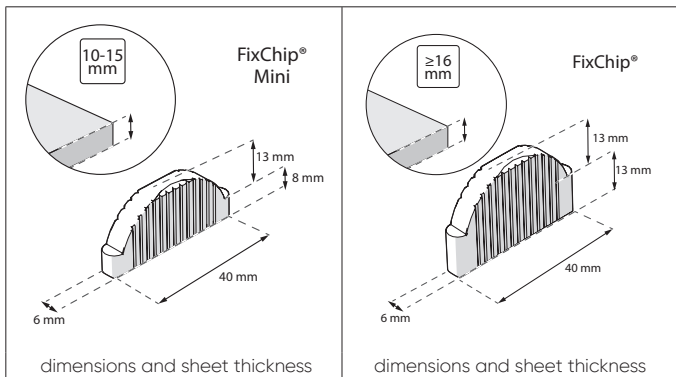


leitz



6 mm milling cutter





- TIP** Scan the QR codes for more information of the milling tools.
- TIP** Use FixChip[®] Mini for back panels or when a vertical divider is combined with shelves at the same height on both sides.

SOFTWARE

Macros

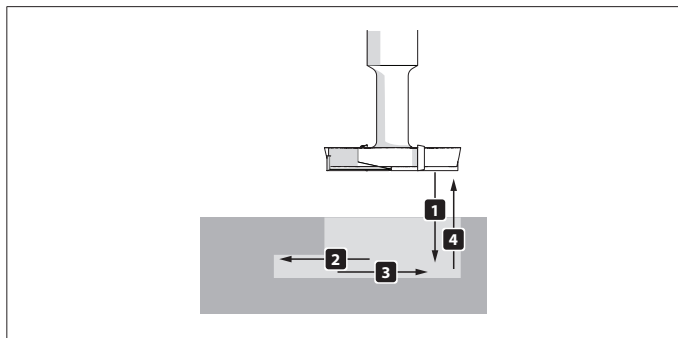
- Use up-to-date FixChip[®] macros in your WOP or CAM software.
- The macros are available from your machine supplier.
- If you are working with CAD/CAM software, please contact your software provider.

Nesting optimization

- Use efficient nesting software within your CAM or WOP software.
- This optimizes material usage and reduces waste.
- Ensure that no double connections occur (max. 36 mm).

TOOLING SPECIFICATIONS

Horizontal grooves – Diamaster 35 mm

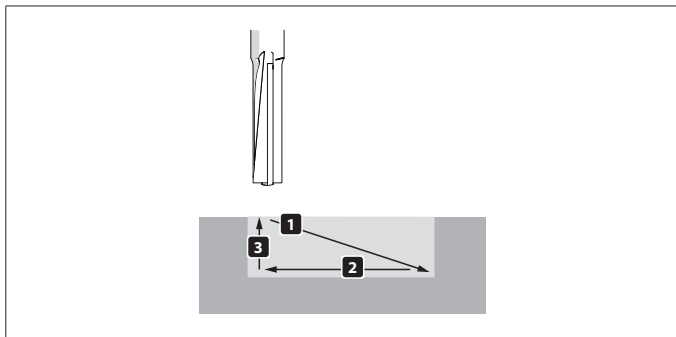


D	GL	NL	S	Z	DRI	ID
Mm	Mm	Mm	Mm			
35	65	6	12 × 40	2 + 2	RL	191130

Spindle speed	18000 rpm
Plunge rate	1,5 – 2 m/min
Feed rate	3 – 4 m/min

* Suitable for chipboard and fiber materials (MDF, HDF, etc.), uncoated, plastic coated, veneered, etc., laminated veneer lumber (plywood, multiplex plywood, etc.).

Vertical grooves – Diamaster 6 mm



D	GL	NL	S	Z	DRI	ID
Mm	Mm	Mm	Mm			
6	60	22	6 × 30	2	RL	191131

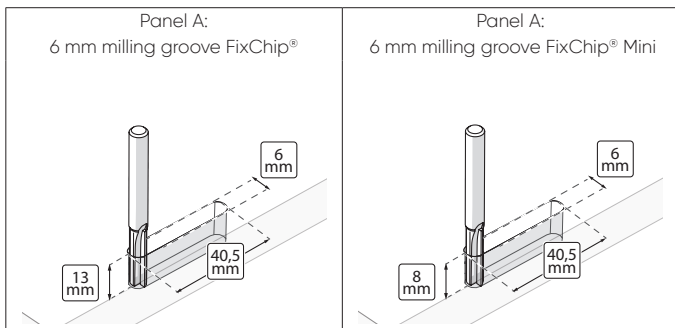
Spindle speed	18000 rpm
Plunge rate	3 – 6 m/min
Feed rate	3 – 6 m/min

* Suitable for chipboard and fiber materials (MDF, HDF, etc.), uncoated, plastic coated, veneered, etc., laminated veneer lumber (plywood, multiplex plywood, etc.).

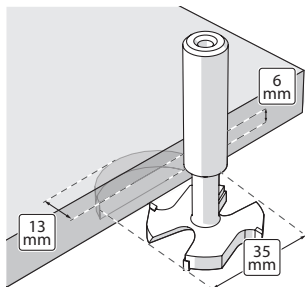
MILLING SPECIFICATIONS

Take the following tips and prerequisites into account before milling:

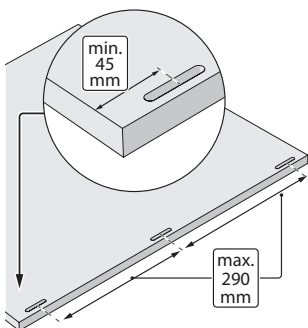
- ! Pre drilling 35 mm groove is not necessary. The original FixChip® Diamaster 35 mm is designed to drill and mill the groove in one operation.
- ! Use the FixChip® Diamasters for optimal results.
- ! Always use a CNC shrink-fit holder or a high-tolerance collet holder, chucks with a high runout accuracy of $\leq 0,05$ mm are required.
- ! Ensure the CNC machine's nesting table is properly planed.
- ! Only use a clean and well maintained CNC machine.
- ! Ensure the spindle is perfectly aligned.
- ! Make sure the nesting vacuum provides sufficient vacuum power.
- ! The tool speed on the CNC machine and in the software must be identical.
- ! Ensure all nested panel labels are oriented inward to achieve maximum accuracy.
- ! Never re-sharpen tools when using the FixChip® system.



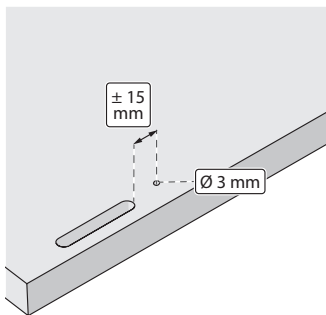
Panel B:
35 mm groove FixChip® & FixChip® Mini



General milling distance corners
and edges



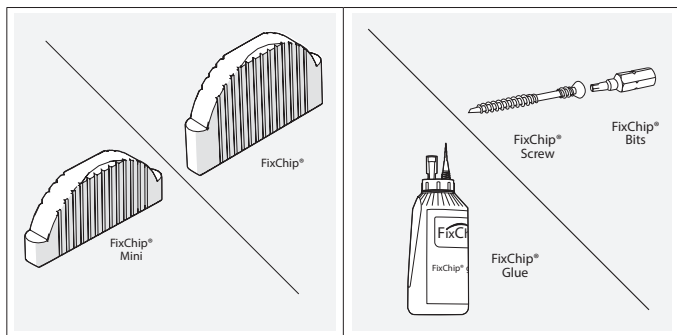
Measurements screw hole
(screw assembly only)



- ! Refer to your local Leitz representative or FixChip® directly for tool related questions.
- ! Refer to the CNC machine's documentation for more information on use, maintenance and troubleshooting.

ASSEMBLING

Fix it fast and firm with glue or screws



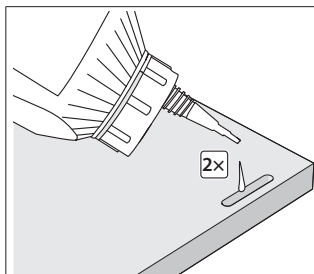
Materials

Materials	Article number
FixChip®	100111 / 100112 / 100119 / 100120
FixChip® Mini	100115 / 100116 / 100123 / 100124
FixChip® Screw	300103 / 300108
FixChip® Glue	300104
Bits	300106

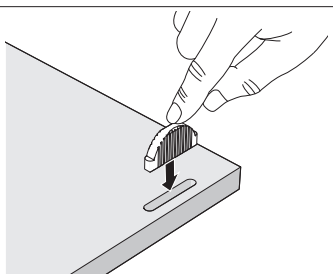
- 1 FixChip® and FixChip® Mini are available with both FSC® and PEFC certification. Aside from the certification, the products are identical in quality, performance, and specifications.

Glue assembly

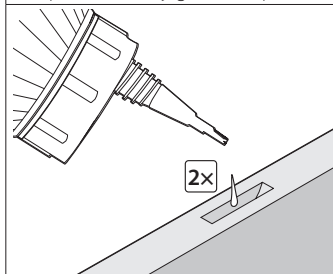
- ! Ensure all wood chips and saw dust are removed before assembling.
- ! Use FixChip® Glue to reduce the clamping time to 5 minutes in clamps or in the press, followed by 25 minutes of additional drying.
- ! Use the FixChip® Glue Tank, if required, in combination with a press to optimise the gluing process.



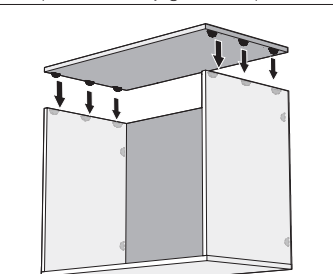
*Repeat for every groove of panel A

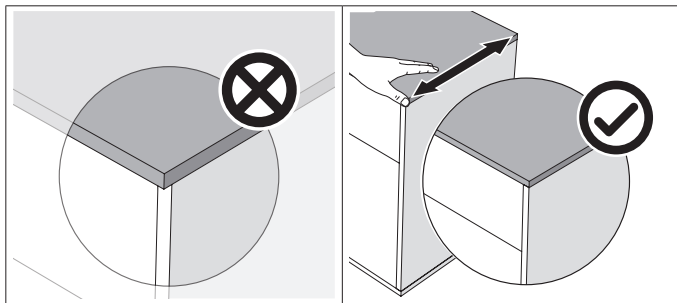


*Repeat for every groove of panel A



*Repeat for every groove of panel B





- I** Slide the panels slightly until they align. Use a clamp or tape if needed to hold them until the glue has set.

Drying times

Ensure you follow the drying times in the following table:

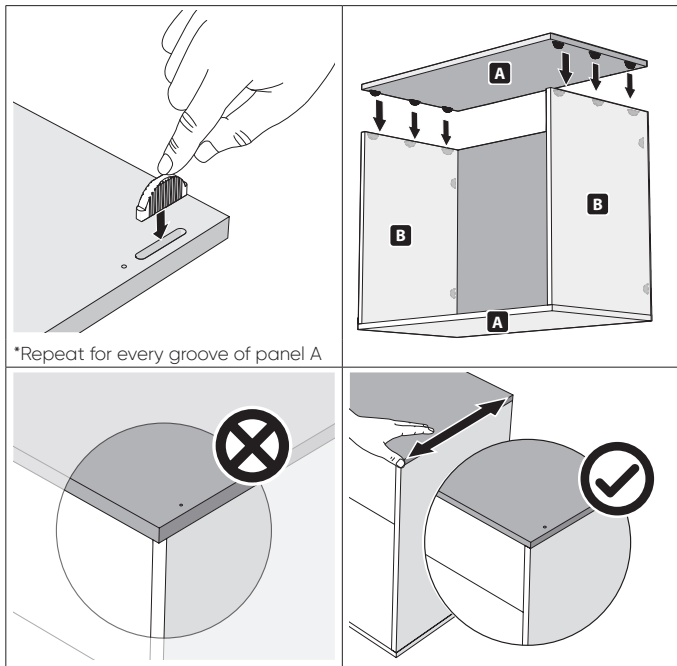
Applying cabinet clamps	5 minutes
Cure time after removing the clamps	25 minutes

The result

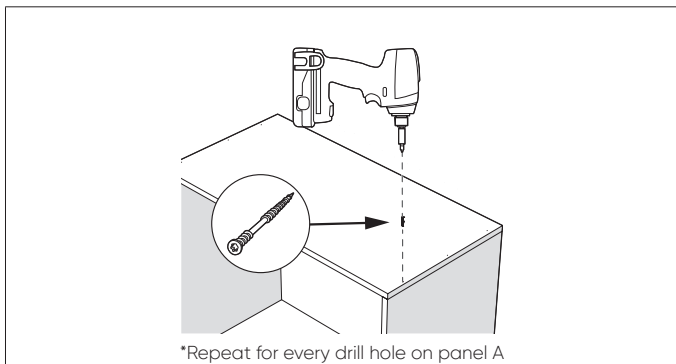
A strong, fast and durable construction with perfectly aligned connections, delivering a clean finish.

Screw assembly

- ! Ensure all wood chips and saw dust are removed before assembling.
- ! The FixChip® Screw eliminates the need for pre-drilling at the end face, enabling easy alignment of the parts prior to fastening.



- ! Slide panels slightly until they align, then fix with FixChip® Screws.



The result

A strong, fast and demountable construction with perfectly aligned connections, delivering a clean finish.

SAFETY INFORMATION

WARNING

- **Keep FixChip® dry. Always store in the original buckets and a dry environment to prevent swelling.**
- Make sure the user and assembler have read the complete manual before using the FixChip® and FixChip® milling cutters.
- Make sure the nesting operations are implemented properly by a qualified CNC technician before milling and cutting.
- For more information (speed rates, fixturing, etc.) of the milling cutters, refer to your Leitz representative, www.leitz.org or at www.fixchip.com.
- Refer to the CNC machine's documentation for more information on use, maintenance and troubleshooting. Ensure that the CNC machine's nesting table is planed properly.
- Only use a clean and well maintained CNC nesting machine and tools.
- Only use the accessories recommended in this manual for the best results.
- Do not pre drill before using the 35 mm milling cutter. The milling cutter is designed to cut through the panel to make space for the groove.
- Make sure to check whether all panels are fitted correctly (labels inward) and the corners are smooth when assembling before fixing with glue or screws.

DISCLAIMER

Usage and Load Limits

It is the user's responsibility to assess whether the product is suitable for the intended application. Actual load limits depend on external factors beyond our control, such as the properties of the carrier material, the adhesive and/or screws used and the mounting or installation conditions. Any advice or product recommendations provided by us are non-binding and do not constitute a guarantee of suitability. The user remains solely responsible for conducting a thorough evaluation and assessment.

Limitation of Liability

Failure to read, understand and follow all instructions, warnings and safety information provided in this manual may result in personal injury, death, property damage or damage to the product. The manufacturer shall not be liable for any damages or losses arising from improper use, misuse, negligence, unauthorized modifications, use outside the intended purpose or failure to comply with the instructions and safety warnings contained herein. All instructions, warnings and safety information form an integral part of the product's intended use. To the fullest extent permitted by applicable United States law, the manufacturer disclaims all implied warranties, including but not limited to warranties of merchantability and fitness for a particular purpose and shall not be liable for any indirect, incidental, consequential or special damages arising from the use or inability to use the product.

FixChip®

FixChip B.V.
www.fixchip.com



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