

No. 229

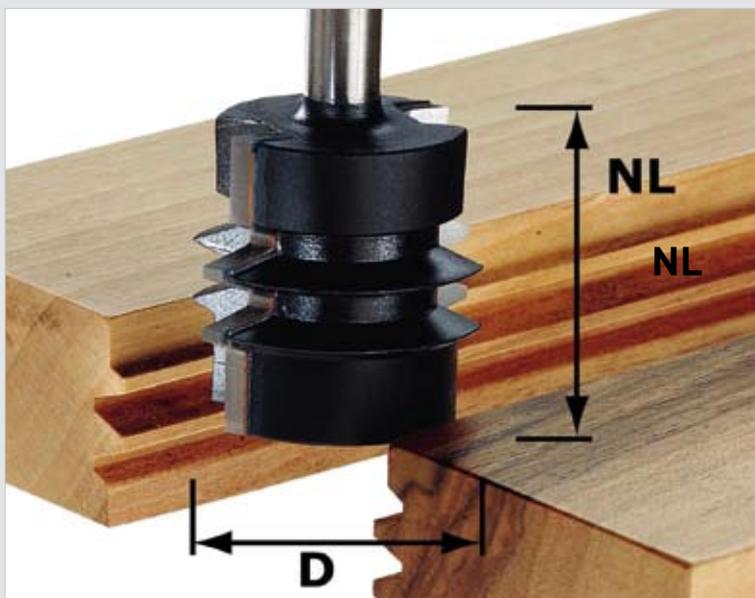


Wide joints with crown joints

A

Description

The crown joint is a classic wide joint which emphasizes visible wide joints and, at the same time, enlarges the glued joint in comparison to the butt joint. For this joint the longitudinal edges of the boards are routed using a tongue and groove cutter and then glued along the width like the butt joint. A prerequisite for creating this joint is that the individual boards have to be planed to the same thickness before joining so that they can be routed. (NL: 32.0 mm, D: 34.0 mm, The routing depth of the cutter is 5.0 mm)



229/01

D



229/02



229/03

B

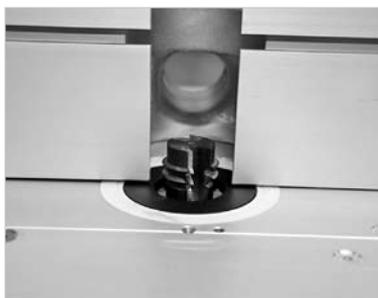
Tools/Accessories

Basic equipment:

Designation	Order No.
Festool basic unit CMS-GE	561228
Festool module mounting CMS-OF (for Festool routers OF 900, 1000, 1010, 1400 and 2200)	570251
Alternative:	
Festool triple chip grind saw blade 2200 - Set	570262
Festool triple chip grind saw blade 1400 - Set	570256
Mobile dust extractor CTL 26 E	583491
Extractor set CS 70 AB (Dust extraction is possible directly at the cutter stop and at the router)	488292
Tongue and groove cutter HW S8 D34/NL32	491034

C

Preparation/Set-up

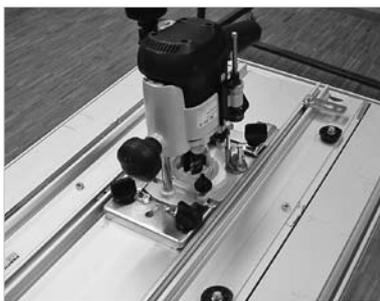


229/04

The correct routing height and depth must be calculated and set for performing the cut. This is a key element of the preparation work. With a cutting height, the projecting end of the cutter is meant to be over the plate. The cutting height set depends on the thickness of the material. Calculate as follows:

$$h = \frac{\text{Material thickness}}{2} + 16,00\text{mm}$$

For a board thickness of 18 mm there is a cutting height $h = 25.0$ mm. For a board thickness of 28.0 mm there is a cutting height $h = 30.0$ mm. The board thickness to be processed is restricted to 32.0 mm as a result of the height of the cutter. In the following the cut is performed using the example of a 28.0 mm thick beech board.



229/05

Align the router as follows:

- Position the tongue and groove cutter in the chuck of the router. The shaft of the cutter should be clamped at least 2/3. (marking for minimum clamping length)
- Mount the router OF1010 in the module mounting CMS-OF as per the operating instructions. Ensure that the machine is well secured so that nothing slackens during the cutting process.

Mount the module mounting with the respective router (Fig. 229/5, OF 1010 EBQ) in the basic unit CMS-GE.



229/06

Set the calculated height of the router using a height gauge. A set square can also be used in place of a height gauge.



229/07

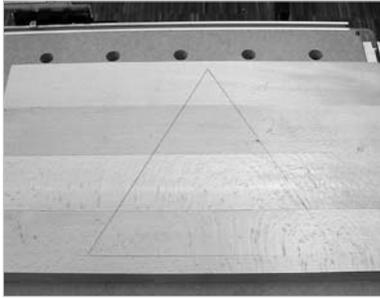
Adjust the parallel stop so that the deepest points of the cutter (between the two crowns) are in a line with the parallel stop. This can also be optimally set using a set square. To check the correctness of this setting you should cut two test pieces of wood and check the accuracy of fit of these.



229/08

- If the workpieces have a larger length (from approx. 100 cm), it is recommended to attach two extension tables VL (Order No. 492092) on each side of the CMS basic unit in order to be able to bring the workpieces to the cutter properly.
- All boards must be planed and trimmed fully to the correct thickness. If the wood is positioned for a long time in a trimmed state, you should check the angularity of the boards and their accuracy to fit. Otherwise it cannot be guaranteed that the boards cut later will be custom-fit.

Now connect the dust extraction at the router and parallel stop.

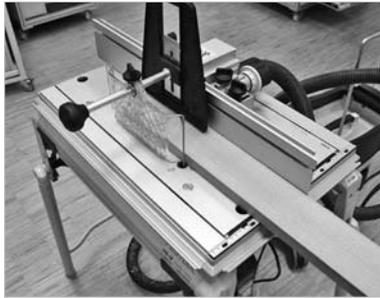


229/09

D Procedure

Proceed as follows when routing:

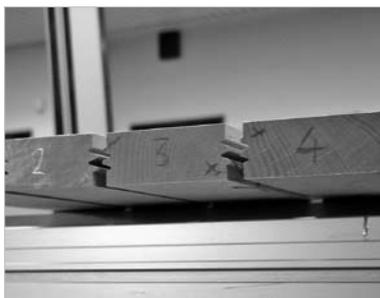
The sides of the boards must be turned to each other and processed using the tongue and groove cutter. Hold the boards to be joined on the area with the marking.



229/10

Now position the first board with the marking on the router table and guide it along the cutter. The second board must be positioned with the marking facing up and cut. Proceed in the same way for all butt joints. This means position the first board of the joint with the marking facing down and the second with the marking facing up. If necessary you can also mark the sides of the boards to be fitted.

Slowly guide the workpiece against the passage of the cutter to the cutter. Ensure consistent feed and that the workpiece touches the stop fully at all times.



229/11

The boards cut can now be glued together.

FESTOOL

Our example for use is a recommendation tried and tested in practice. However the actual conditions pertaining in each situation are completely outside of our control. We therefore do not provide any form of guarantee. Any legal claims arising out of this are not to be made against Festool. Please observe without fail the safety and operating instructions included with the product.

www.festool.com