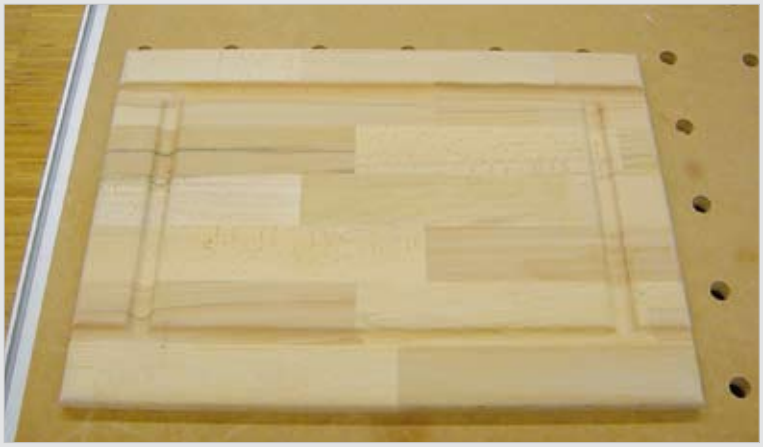
FESTOOL

No. 228

Designing and profiling furniture front sections

A Description

Apart from classic door construction which can be carried out quickly and easily with facing and counterprofile cutters, it is also possible to profile laminated boards and thus create the impression that it is a counterprofile construction. This gives the carpenter the option of upvaluing materials that are very easy to process, such as laminated boards, in order to design furniture front sections, e.g. of kitchen cabinets or wall units.
To produce such profiles, a basic distinction must be made between three work steps. In the first step, cuts are executed in vertical direction and in horizontal direction in the second step. The third work step is rounding off the outside edges.
If you only wish to make vertical cuts, the second step is of course omitted.



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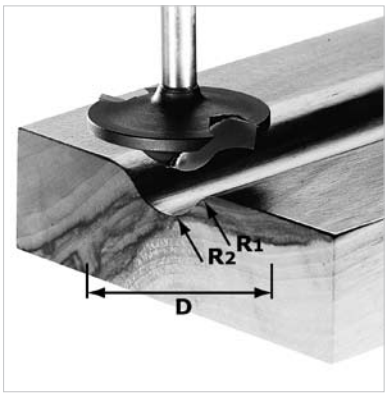
Two cutters are essential for producing such decorative elements.

On the one hand, a roundover cutter with ball bearing and a radius of 6 mm (NL = 14 mm, D= 42 mm).



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On the other hand, a profile cutter with two different radii, R1 = 6 mm and R2 = 12 mm (NL = 13 mm, D= 42 mm).

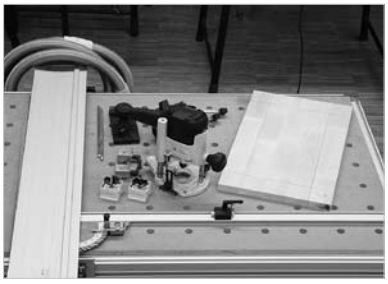
The furniture front section shown here can only be produced with both cutters. Needless to say, both cutters can also be used individually in other areas and are therefore very flexible.

B Tools/accessories

Basic equipment:

Denomination	Order no.
Router (Festool OF 1010)	*

*Please obtain the Order No. from the Festool main catalogue or from the Festool website.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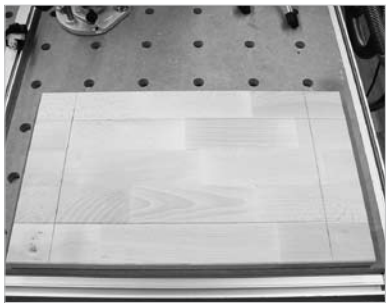
The following is required to perform the work step:

- Profile cutter with ball bearing (Ref. no.: 491137) and profile cutter (Ref. no.: 491137)
- Guide limiter
- Multifunction table MFT (optional)
- Clamping elements or clamp clips (optional)
- The extractor required is one of the Cleantec mobile dust extractors CTL MINI/MIDI – CT 55.



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C Preparation/set-up

Please make the following preparations before this routing operation:

For all routing operations, mark the respective cutter centre line and its limitation.

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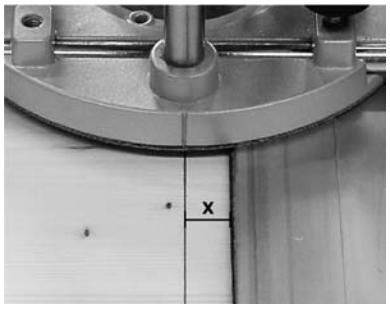
Now align the router. Proceed as follows:

- Fit the router with the profile cutter without guide ring; the router shank should be inserted at least 2.5 cm in the chuck to ensure the cutter is held firmly.
- Mount the guide rail adapter on the router so that it can be guided on the guide rail.
- Place the OF 1010 for setting on the guide rail.
- Set the speed level according to the type of wood, cutter and cutter diameter (please obtain the values from the corresponding table in the Operating Instructions).



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- Clamp the workpiece to be routed on the multifunction table with the help of the clamping elements or clamp clips so that first one of the vertical lines can be processed. The distance x of the marked line to the edge of the guide rail depends on the cutter diameter and is calculated as follows:

$$x = \frac{\text{Cutter diameter}}{2}\ \text{mm} + 2\ \text{mm}$$

For a 42-mm profile cutter, this equals a distance of 23 mm.

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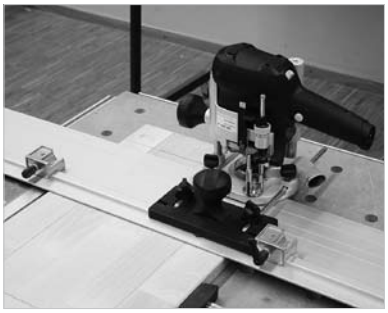
- Set a routing depth of 8 mm for the profile cutter. Handling of the routing depth setting will not be explained in detail at this point. It is described in the Operating Instructions.
- Set the clearance of the router to the rail. When doing this, use the marked lines and the notches in the router table that mark the middle of the cutter precisely.



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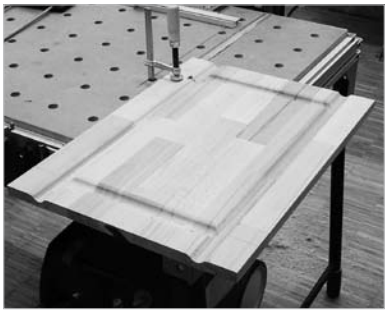
- Now guide the router to the first limitation line and position a guide limiter there. Move the machine to the end of the cut and position the second guide limiter here. The previously drawn limitation lines and the millimetre display on the support can help ensure that this setting is very exact.
- Set the depth stop to 8 mm.
- The guide limiter is not necessary for vertical routing.



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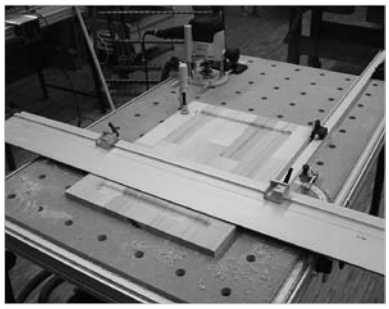
- For the third work step - rounding over the outside edges of the workpiece - the roundover cutter with guide ring must be clamped in the router.
- For this work step, the workpiece is clamped onto the MFT so that two edges are accessible. Always process the lid sides first to ensure that the cut surface is neat all round.
- When setting the depth of the router, the screw of the guide ring can be placed on the workpiece to make the zero setting. Now set a routing depth of 18 mm.

E Procedure



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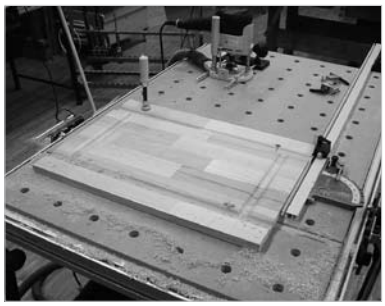
Carry out routing as follows:

- Set the router down correctly on the rail.
- Now switch on the router and plunge into the workpiece. When switching on the router, always ensure that the cutter does not touch the workpiece so that the router can start up freely.
- Move the router along the rail, making sure that movement is not too slow because the cutter could otherwise burn the material.
- When routing is complete, move the router out of the workpiece and then switch it off.
- Only take the router down from the rail when the router has come to a standstill.



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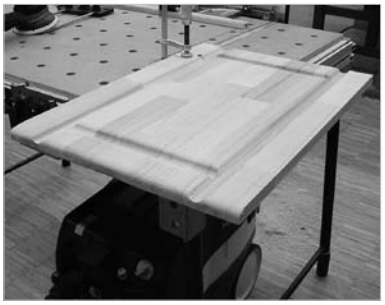
If the vertical cuts are continuous, the guide limiter can be omitted. With the router running, simply plunge into the workpiece and exit the workpiece again at the end of the cut. Otherwise, the same procedure for vertical routing applies as for horizontal routing.



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- When rounding over the outer edges of the workpiece, the lid edges of the workpiece are processed first. Then the longitudinal wood edges of the workpiece are processed.

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