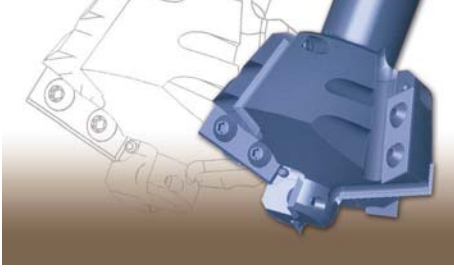


Custom Tooling



Determination of linear cutting Speed (Vc) (Chart 2)

- The linear cutting speed (Vc) can be calculated when the diameter of the tool and rotational speed are known
- The maximum permitted rotational speed, „n max.“, of each tool is etched on the tool body
- This is not the optimum speed, but the maximum safe operating speed which must not be exceeded
- As a rule, the optimum speed is 20% – 30% below the maximum speed

$$n \text{ (r.p.m)} = \frac{1000 \cdot 60 \cdot Vc}{\pi \cdot D}$$

$$Vc = \text{Speed} \frac{\text{M}}{\text{sec}}$$

$$D = \text{Diameter mm}$$

$$n = \text{Spindle R.P.M.}$$

$$Vc = \frac{\pi \cdot D \cdot n}{60,000}$$

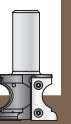
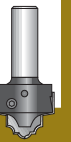
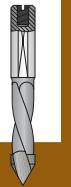
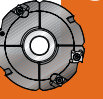
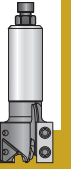
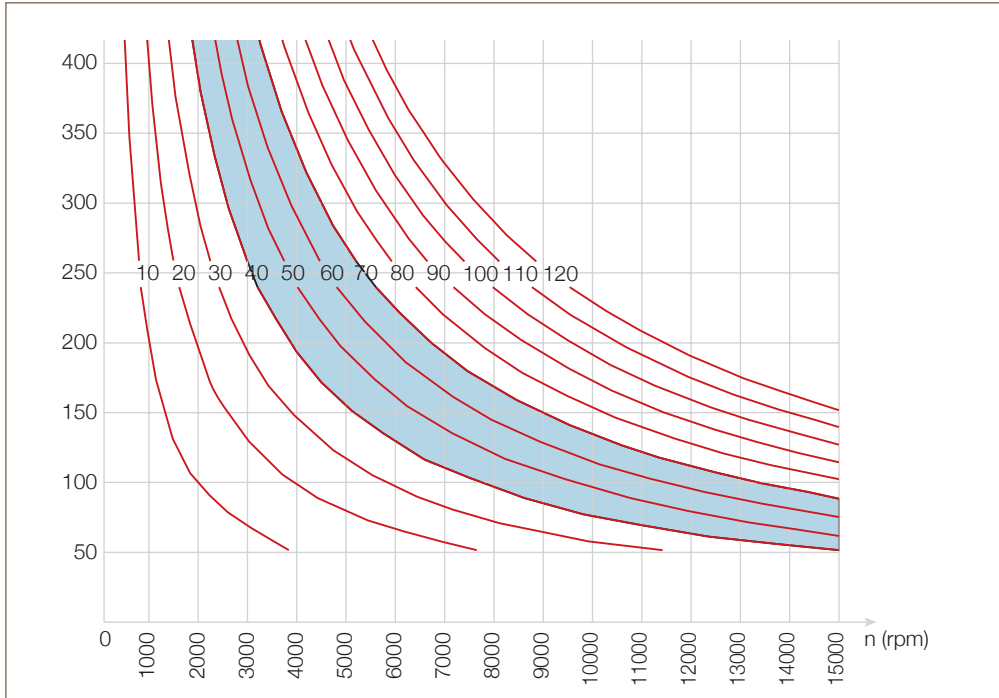
Example:

- D = 140 mm
- r.p.m. = 8000 min-1
- vc = ?
- From the table we obtain vc = 58,6 m · sek-1
- In relation to tool diameter, D, the optimum rotational speed can be obtained from the table

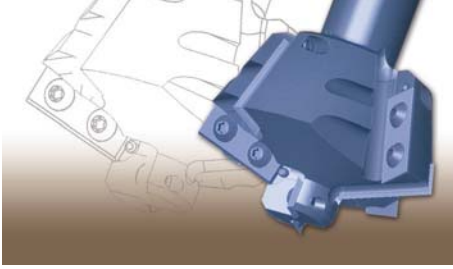
Example:

- Cutter diameter D = 140 mm optimum rotational speed range n = 5500 – 9000 min-1

(Chart 2)



Custom Tooling



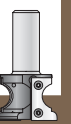
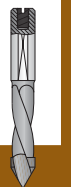
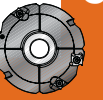
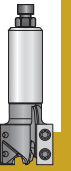
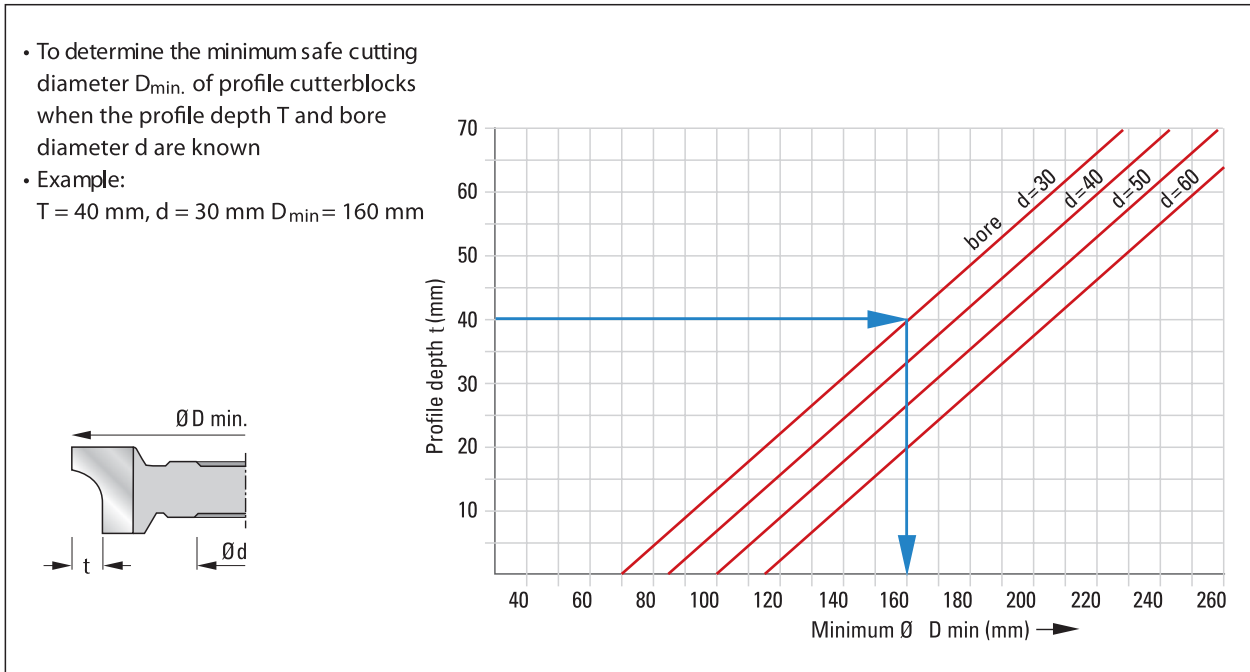
Minimum diameter (Chart 3)

the table below the relation between the profile cutting depth and the minimum tool diameter.

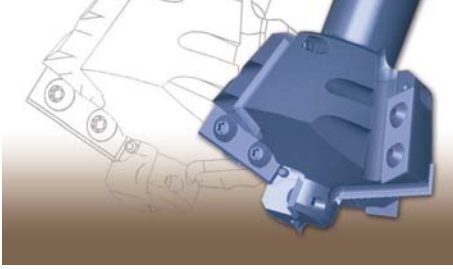
In tools with replacable tips the final diameter might be bigger.

- The minimum safe cutting diameter of the tool is determined within the meaning of VBG 7 (Federal German Industrial Law), and can be calculated from the following tables. No consideration is taken of the number of knives, feed rate or cuttingspeed

(Chart 3)



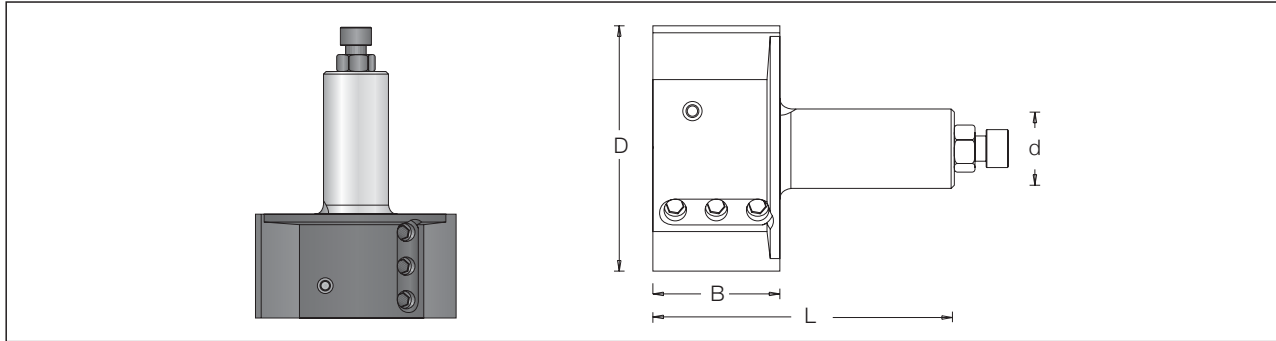
Custom Tooling



Universal Profile Tools

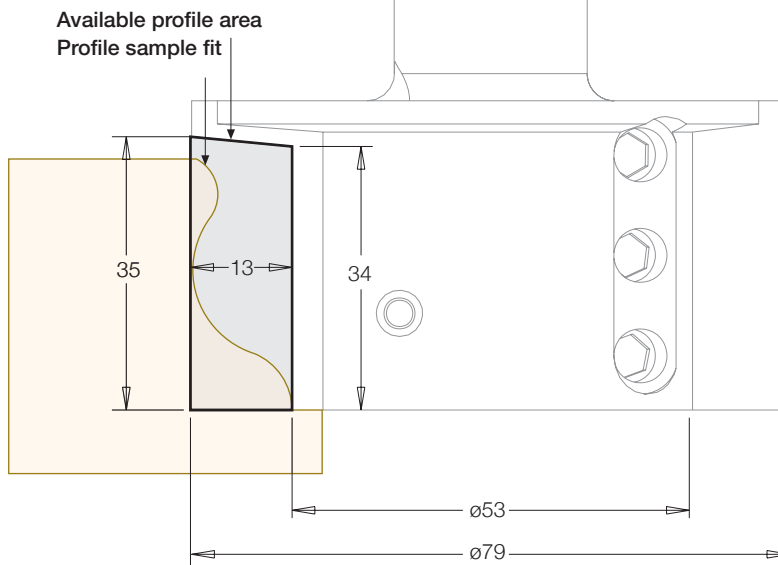
Dimar standard Universal Profile Tool Can assemble profile knives on these tools according to the customer's request. These tools are supplied as standard with a 20mm or 25mm shank. These tools are supplied with 2 or 3 profile knives (according to the tool) and supporting plates for certain tools. For your convenience, please find the attached transparencies with dimensions of 1:1 ratio of the knife area on which the profile can be produced according to the customers request. When assembling a special knife on these tools the catalog number will change accordingly.

1. Catalogue number 8560010 (Page 2.34)



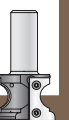
The router will be supplied with knives grinded according to customer specification that fit into the marked area.

For every new profile, 2 supporting plates need to be ordered.

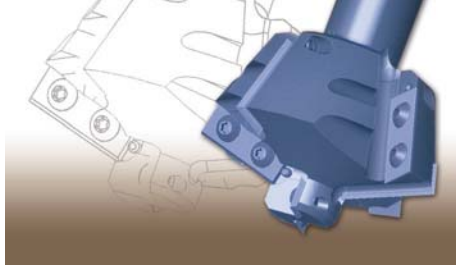


Scale - 1:1

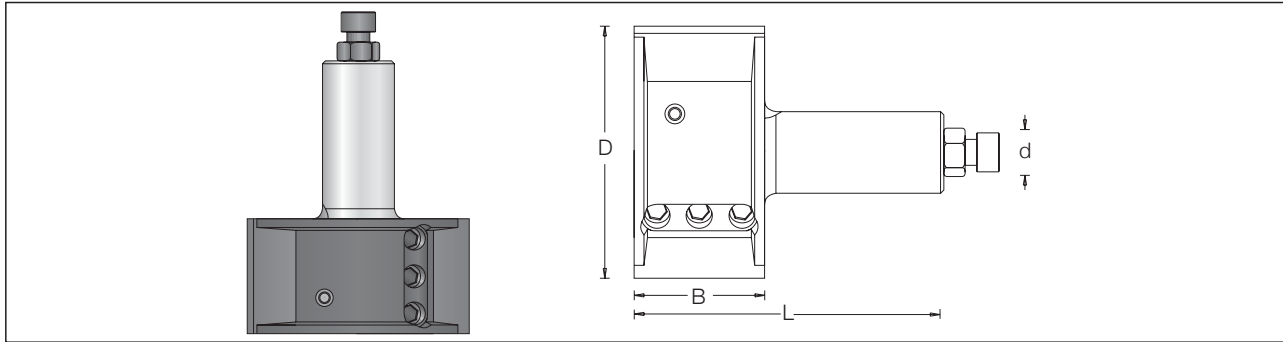
In addition to the two profile knives and the two profile supporting plates that are supplied with a special tool, need to order a minimum quantity of 10 additional profile knives for each profile. For every new profile, need to order a profile supporting plate suitable for the profile and the knife.



Custom Tooling

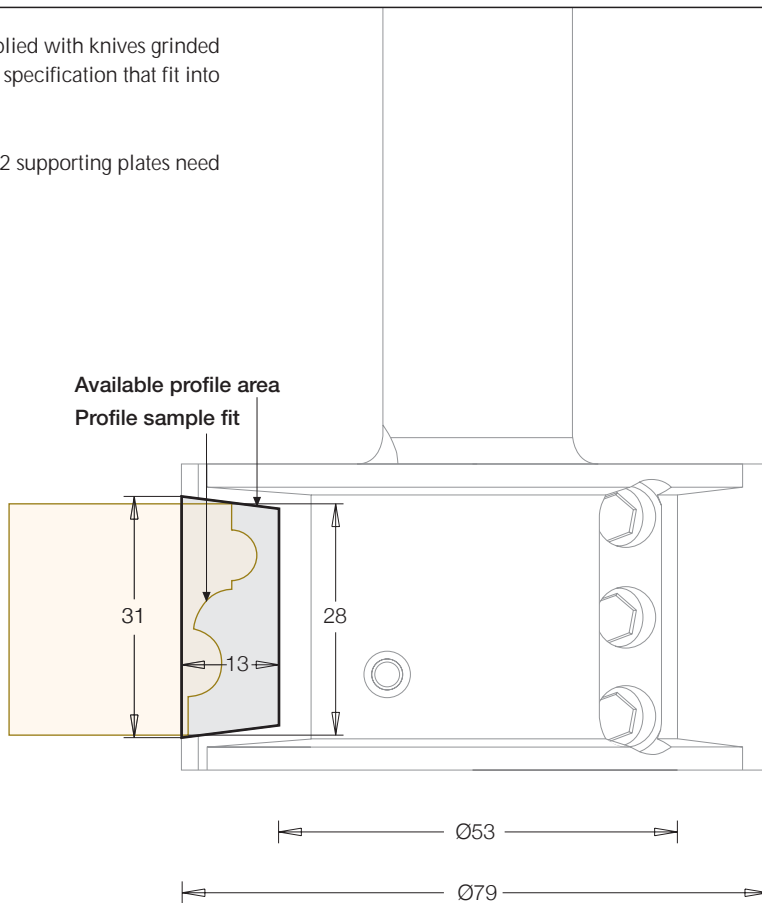


2. Catalogue number 8560020 (page 2.34)



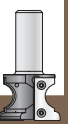
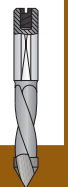
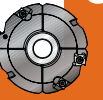
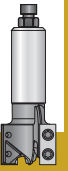
The router will be supplied with knives grinded according to customer specification that fit into the marked area.

For every new profile, 2 supporting plates need to be ordered.

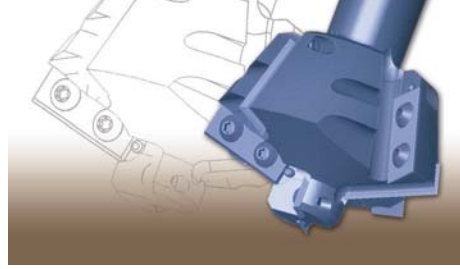


Scale - 1:1

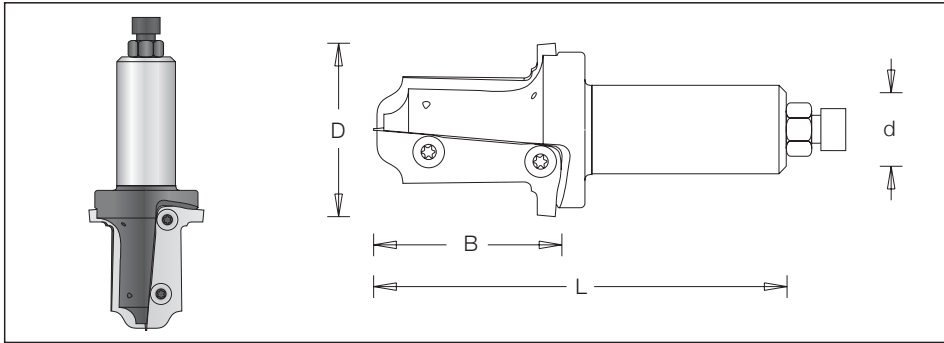
In addition to the two profile knives and the two profile supporting plates that are supplied with a special tool, you need to order a minimum quantity of 10 additional profile knives for each profile. For every new profile, need to order a profile supporting plate suitable for the profile and the knife.



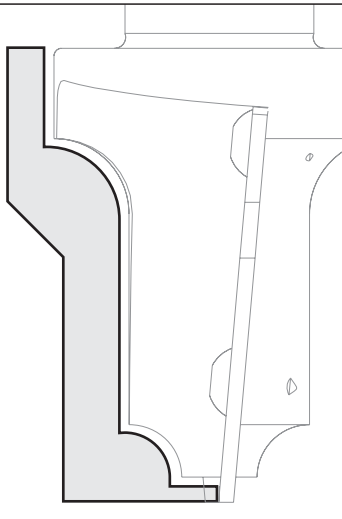
Custom Tooling



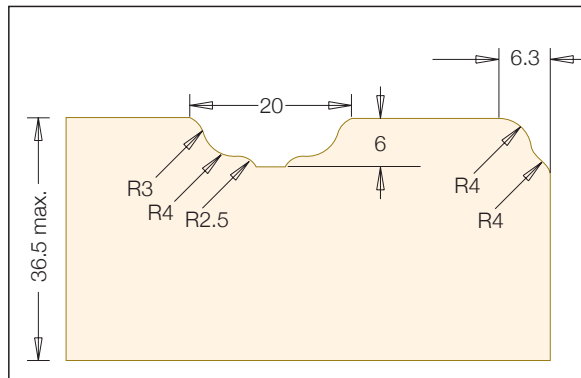
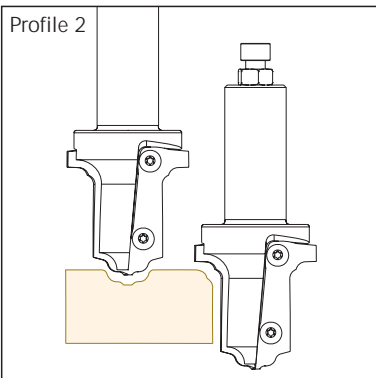
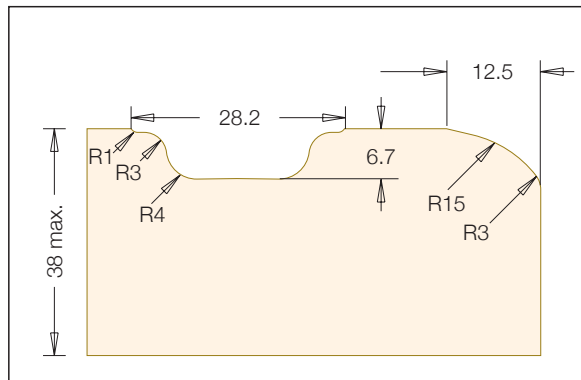
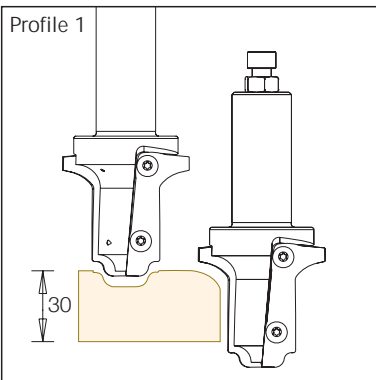
3. Catalogue number 853001H (Page 2.44)



The router bit will be supplied with standard profiles or with knives grinded according to customer specification that fit into the marked area.

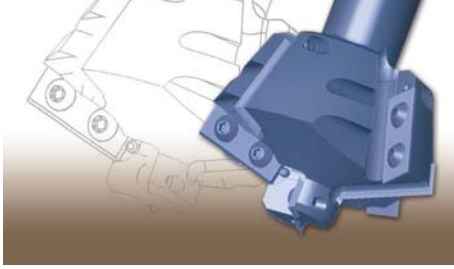


Scale - 1:1



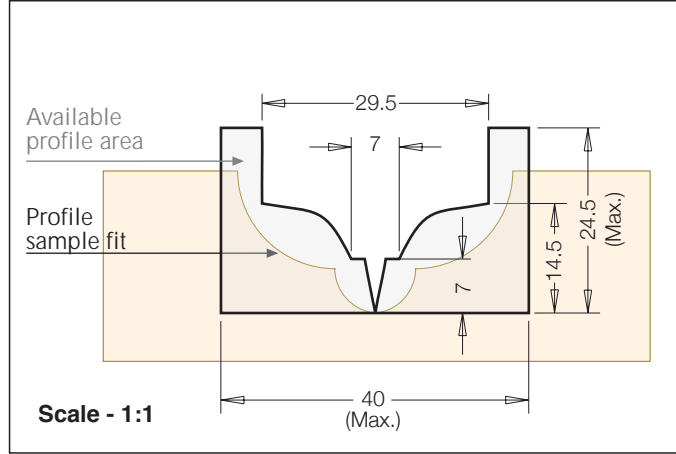
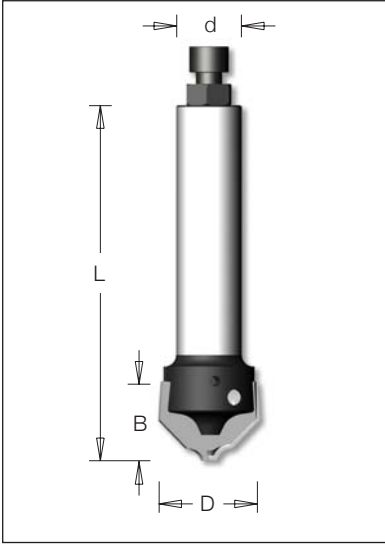
Two profile knives are assembled on the tool. need to order a minimum quantity of 10 additional profile knives for each profile.

Custom Tooling



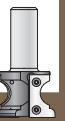
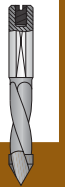
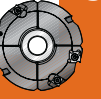
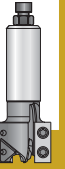
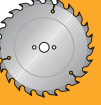
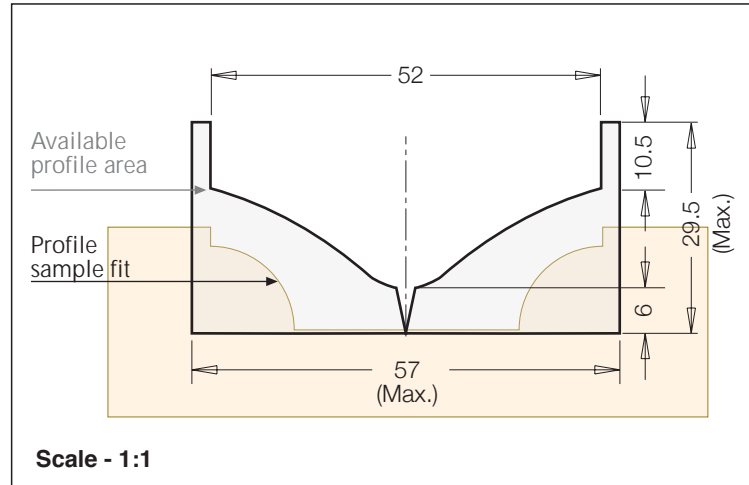
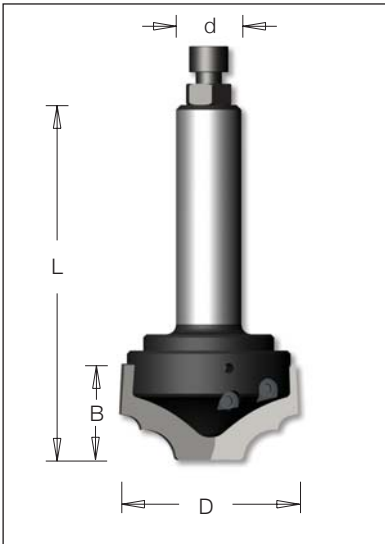
4. Catalogue number 8080110 (Page 2.40)

Two profile knives are assembled on the tool. need to order a minimum quantity of 10 additional profile knives for each profile.

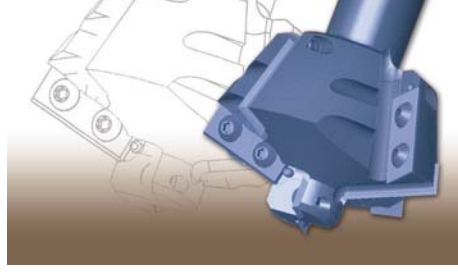


5. Catalogue number 8080350 (Page 2.39)

Two profile knives are assembled on the tool. need to order a minimum quantity of 10 additional profile knives for each profile.

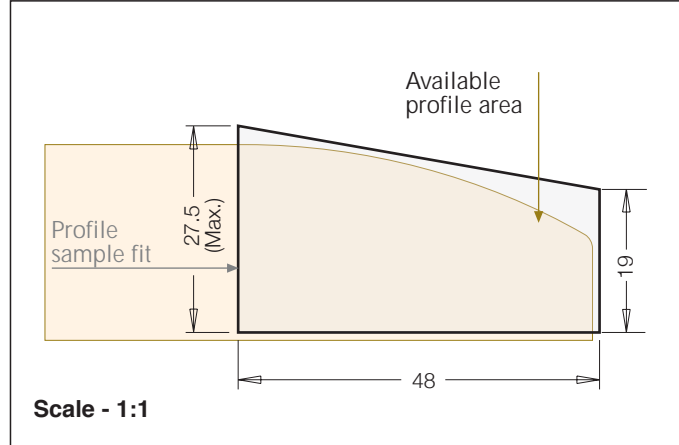
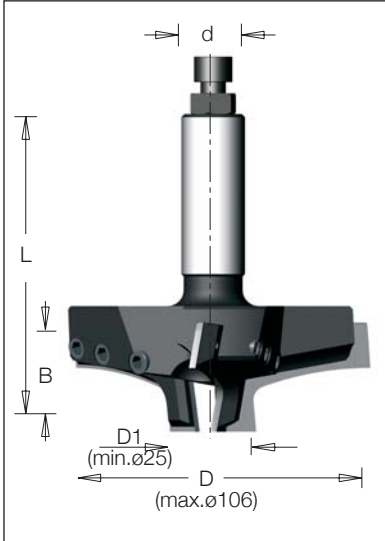


Custom Tooling



6. Catalogue number 8171X30 (Page 2.41)

Three profiled knives and three profile supporting plates are assembled on the tool. need to order a minimum quantity of 9 additional profile knives for each profile and need to order the suitable supporting plates for each profile.



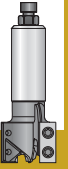
Scale - 1:1

Index

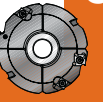
Sawing



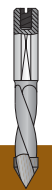
CNC



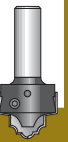
Cutting



Drilling



Routing



Custom Tooling

