

**Specification**

Base size: 220 x 120mm  
 Chuck capacity: 1-3.2mm  
 Chuck travel: 30mm  
 Chuck type: Collet  
 Collets supplied: 1.0, 1.5, 2.0, 2.4, 3.0 & 3.2mm  
 Diameter of column: 20mm  
 Weight: 3.3kg  
 Overall L x W x H: 320 x 240 x 130mm  
 Power: 85W  
 Rating: Hobby  
 Speed range: 1,800, 4,700 & 8,500rpm  
 Throat: 140mm  
 Voltage: 230V

Typical price: £186.55  
 Web: www.brimarc.com

**PROS**

- Compact
- Very accurate
- Excellent depth stop

**CONS**

- Would be an advantage if drill included the Proxxon ROHM chuck, in which case the product would have earned 5 stars

**RATING: 4.5** out of 5

# Proxxon TMB 220 bench drill

Ideal for model making and model engineering, this bench drill from Proxxon is quick to set up and operate as well as being solid and very accurate in use

The Proxxon TMB 220 is a very small precision bench drill. It is ideal for drilling holes in wood, plastic and non-ferrous materials to a maximum depth of 30mm and will therefore be of interest to model makers and jewellery makers in particular. It comes with a six-piece triple slit precision collet set (1.0, 1.5, 2.0, 2.4, 3.0 and 3.2mm). These collets are extremely accurate but they are very small and can easily be lost. The bench drill has a quill diameter of 32mm and the throat depth, column to drill spindle, is 140mm.

I think it is worth spending an additional £13 to buy the Proxxon ROHM Jacobs-style chuck, which will take shanks of 6mm downwards. This chuck is designed to specifically fit the TMB 220 with its 3/8in thread; it is accurate, easy to use and I strongly recommend it.

**Build quality**

The top casing is quickly removed to reveal the flat belt and aluminium pulleys, which transmit the power from the 85W motor and can be set to one of three speeds: 1,800, 4,700 and 8,500rpm. I particularly like the calibrated depth stop, which remains positive when set.

Very small diameter drills are vulnerable to breakage when used in a hand-held drill but the risk is all but eliminated in a bench drill. Suitable drills, burs, polishers, etc. are made by Proxxon and other manufacturers with a 3.2mm or a 6mm shank, if used with the drill chuck.

The drill can be lifted with one hand so it is easy to put



away after use. This drill can only be used in an upright mode; if you wish to drill angled holes, you will need to make a jig for the table.

**Table & optional extras**

The machined die-cast aluminium table measures 220 x 120mm. It has a slot for a fence on to which a vice can be located. The base is drilled to take a micro KT70 compound table. This accessory costs £88 and makes accurate setting up much easier, being fully calibrated and adjustable to a very fine degree. The small MS4 machine vice costs £16. I have seen some negative comments about this vice but it is adequate for the price; a better model will certainly cost considerably more. The hard-chromed steel column is solid and measures 280 high x 20mm diameter.

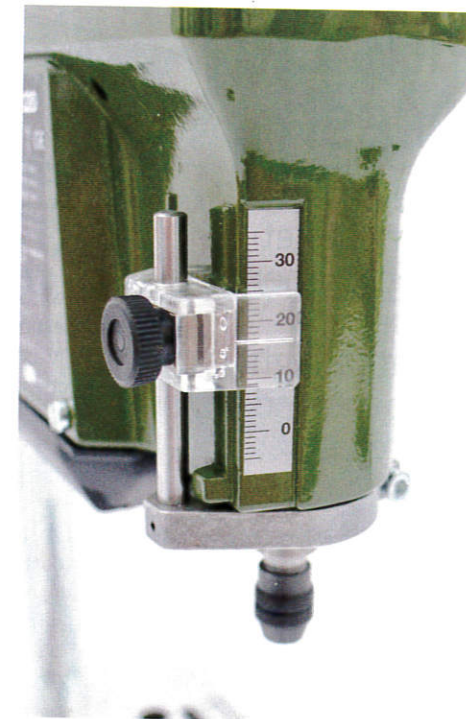
The table also features two holes, which allow the machine to be screwed to a bench or base. I made a wooden base with rubber feet to give maximum stability. I also sometimes like to hold the base in a vice to raise the working height.

You may also wish to consider the larger Proxxon TBH bench drill at £382, which is a more powerful machine designed for heavier duty work, but still in relative terms a small bench drill.

Another option to look at, if you already have a Proxxon hand-held drill such as the FBS, is to add the MB200 drillstand



With this combination of an FBS drill fitted in a drill stand, angled drilling is possible



The calibrated depth stop, which remains positive when set



The drill can be lifted with one hand so it is easy to put away after use

at £88. The base and the upright column are identical to the TMB and the head is designed with a 20mm collar to hold the wide range of Proxxon drills. The vice and the compound table can be fitted as optional extras. Unlike the TMB, the whole headstock can be tilted through 90° to the exact angle required using the calibration settings. It is a simple matter to remove the drill, which will reduce the height, and to store the stand away when not in use.

**In summary**

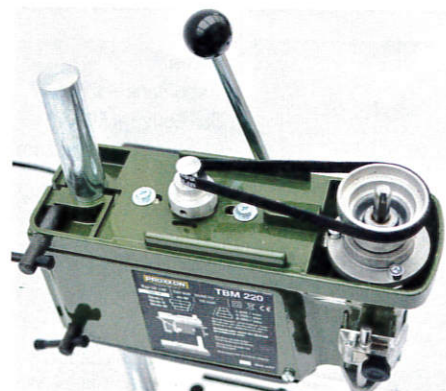
I think a bench drill is an essential tool for the serious hobbyist who wishes to drill accurate holes. Using a bench drill considerably reduces the risk of breaking drills and with the addition of jigs for repetitive drilling, it is quick to set up and operate. The TMB does not have a safety guard and it makes sense to wear protective glasses when drilling and to hold the material being drilled securely in a vice to avoid any mishaps. As always, the choice of equipment boils down to what it is to be used for and how much the budget allows. I found the Proxxon TMB bench drill to be well made, solid and very accurate; it should give many years of reliable service. It is expensive but I don't know of any other bench drill of this size that is particularly suited to the modeller, and if you shop around you may find a better price or deal. **IW**



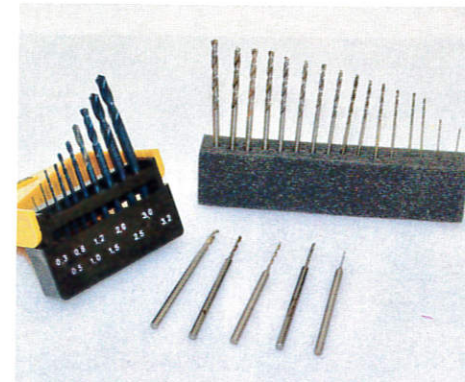
You may also wish to consider the larger Proxxon TBH bench drill at £382, which is a more powerful machine



Another option to look at, if you already have a Proxxon hand-held drill such as the FBS, is to add the MB200 drillstand



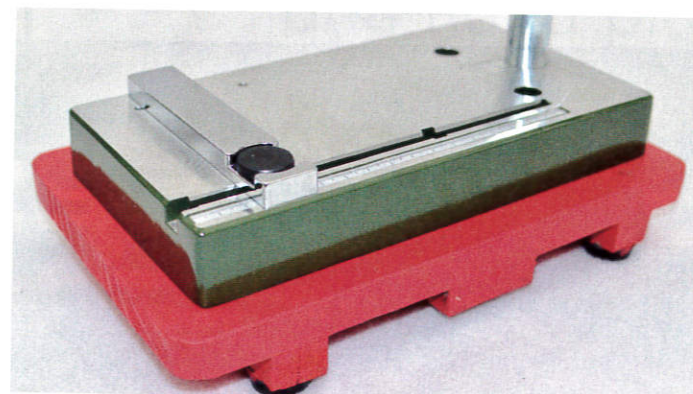
The top casing is quickly removed to reveal the flat belt and aluminium pulleys



Suitable drills, burs, polishers, etc. are made by Proxxon and other manufacturers with a 3.2mm or a 6mm shank, if used with the drill chuck



The machined die-cast aluminium table measures 220 x 120mm



The table also has two holes, which allows the machine to be screwed to a bench or base



It is easy to screw the ROHM chuck to the threaded drill shank in place of the collet holder