



PHOTOGRAPHS BY GMC/ANTHONY BAILEY

# Record Power DML305-VS Midi Lathe

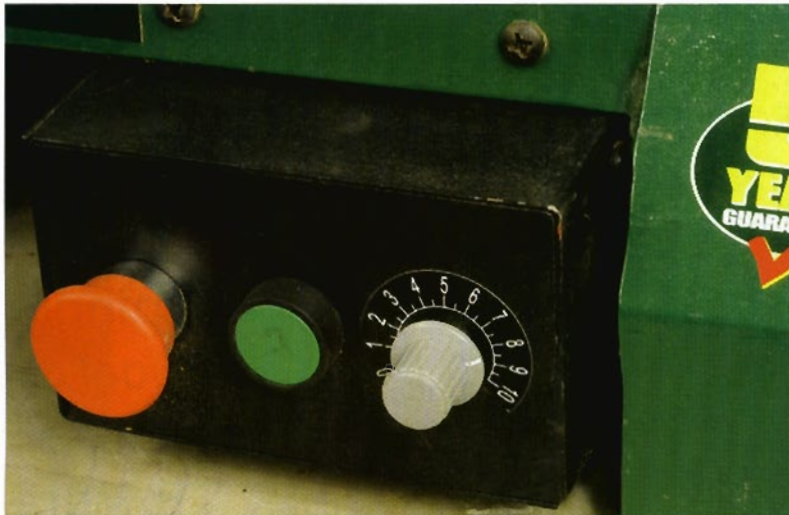
George Foweraker puts the DML305 variable-speed lathe through its paces and considers it to be a lot of lathe for the money

**T**he Record DML305-VS is the variable-speed version of the DML305 lathe. It is driven by a ½ hp three-phase motor with an inverter system to convert the single-phase electrical supply to three-phase, giving the motor more torque than a single-phase motor. The electronic variable-speed system is made by Schneider of Germany and gives smooth control through a speed range of 400-3,950rpm. The speeds ranges are changed in three steps via a pulley system, accessed by opening the front of the headstock. The spindle thread is 20mm (¾in) x 16tpi and incorporates a 1MT for the four-prong drive centre, as does

**RIGHT:** The DML305-VS lathe fitted on a bench, together with a few items made on it



PHOTOGRAPHS BY MANUFACTURER



the tailstock.

The lathe gives a turning capacity of 305mm diameter over the bed with 393mm between centres; however, there is the option of extending the length of the lathe bed with the addition of a bed extension, which can also be purchased.

### First impressions

On first impressions, I found the DML305-VS to be very sturdy and well made due to the lathe's cast-iron construction. The banjo and tailstock, also made of cast-iron, meant that both could be moved easily via single-handed operation. The cam locks and handles are also solid and give good positive locking, again, via single-handed operation. For this review, the lathe was fixed to a solid wooden bench. It was easy to assemble from the box and I encountered no problems. However, for an additional cost you can purchase a well constructed metal stand, which is a useful addition if you want to transport the lathe to different locations etc.

### First test

Firstly, the drive centre was placed into the headstock and the tailcentre was brought up to allow the alignment to be gauged. I discovered that this was precise and in line.

During the test I decided to firstly turn a 50 x 255mm (2 x 10in) spindle between centres. I first roughed down the blank with the lathe running at around 1,500rpm. I found the variable-speed control to be smooth and immediate, and for the size of the motor, gave good torque under what I would class as a heavy cut for the size of the lathe. I then changed to the highest speed range. To do this I needed to alter the drive belt configuration, which is

accessed via a door at the front of the headstock. Firstly, a hex-head screw has to be undone in order to open the door – a safety feature to stop access to the moving parts while the lathe is running. The addition of a micro switch also cuts the power to the motor if the door is opened whilst in operation. A simple lever in front of the motor then alters the belt tension, and the belt is changed and locked in place by tightening the lever. I found this to be a bit of a chore, but realised this is a necessary and important safety feature.

I used various tools to produce beads, coves, 'V' and other cuts, and found the lathe to perform well with no vibration.

### Second test

Next, I roughed out a 200mm (8in) bowl blank which I attached to the 75mm (3in) faceplate, which comes with the lathe. The speed control enabled me to fine tune the speed while the blank was out of balance. I balanced the blank using a 15mm (½in) bowl gouge and found the lathe to be smooth and solid. Using the variable-speed enabled the blank to be roughed as efficiently as possible, once balanced. With the addition of a chuck – which can be purchased separately – I turned the inside of the bowl; the lathe coped well with this. The chuck ran true and again, the variable-speed added the fine tuning and therefore made the process as efficient as possible.

### Verdict

All in all I found this to be a very good lathe but I did find having to use a hex-head key to undo the belt change access doors a bit of a tribulation, but realise this is important for safety reasons. The variable-speed gave a very good range of speeds between belts, which negated the

need to change belts frequently. After a bit of practice, I found belt changing to be easy and quick.

The positioning of the control panel on the front of the lathe bed was easy to access and the controls were positive. I am not easy to please, as I always buy the best tools I can lay my hands on, but I cannot fault this lathe; I liked everything about it. I consider it to be a lot of lathe for the money.

ABOVE LEFT:  
Variable-speed control

ABOVE RIGHT:  
Pulleys and 12-point indexing system

### SCORE

Versatility: 90% Ease of use: 95% Value for money: 95%  
Performance: 95%

### DETAILS

Maximum between centres: 393mm  
Maximum bowl diameter over bed: 305mm  
Maximum bowl diameter with bowl bracket: N/A  
Spindle speeds: 400-3,850rpm Spindle nose: 1MT  
Motor: 1/2hp Weight: 39kg Overall height: 455mm  
Overall width: 280mm Overall depth: 1,030mm  
Price: £599.99 (inc VAT) Contact: Record Power  
Tel: 01246 561 520 Website: www.recordpower.co.uk

### SECOND OPINION – MARK SANGER

I found this lathe to be solid, well made and finished. The variable-speed is a very good addition to the DML305, which I currently own. From personal experience, I would advise spending extra on the variable-speed version. It is compact and solid with a good capacity for its size. This lathe is ideal for those who have limited space or who want a lathe to move about for demonstration purposes etc. Also, at the current price, it is great value for money.