

**OMEC 650-A  
A USER-FRIENDLY SYSTEM  
FOR FIXED-PITCH  
MILLING MACHINES**

After designing the CNC-operated variable pitch milling machines, Omec is starting the renovation of its range of fixed-pitch milling machines.

The first machine that has been designed is the electronic version of the manual 650M milling machine.



Starting from the base of the manual milling machine, the electronic one has been fitted with a small CNC system with two axes and a centric spindle that uses the same milling cutters with two sharp sides that are fitted on the high-range milling machines.

The mechanical design of this machine has been improved and the use of suitable components

allows Omec to offer a machine with virtually the same size as its mechanical version.

Despite being a fixed-pitch machine, you can choose two different pitches: 25mm and 50mm.



This milling machine is very easy to use. To change the size of the work-piece, you don't need to move the stroke-pieces on the machine top to find the right position. Vertical stroke-pieces (where normally sides are machined) are stationary, whereas horizontal stroke-pieces are assisted by two position blocks that adjust the right offset between the vertical work-piece and the horizontal work-piece. By moving the horizontal stroke-pieces towards the outer blocks, the machining position for the 25mm pitch is obtained, whereas by moving them towards the inner blocks, the machining position for the 50mm pitch is achieved.



The CNC system also allows operators to move the position of joints on the work-piece by increasing or decreasing the distance of the first joint

from the edge.

It is also possible to adjust the thickness of the male-piece, the depth of the female-piece and tool feeding speed on wood. These adjustments are possible from the CNC system and there is no need for all adjustments that are normally found on mechanical machines.

The variation of tool diameter allows operators to easily adjust the coupling of male-female joints, and also to sharpen the tool several times without replacing it.

All machining data can be entered with a simple procedure by following the software instructions viewed on the machine's monitor. The numeric control runs a Windows® CE operating system.



Parallel joints can be manufactured using cylindrical milling machines.

It is possible to fit integral Widia tools with diamond facing, with or without deburring tool. A wide range of the tool feeding speeds allows operators to obtain the best results with all types of wood and composite materials (hardboard, plywood and MDF), avoiding splinters and machining burrs.

In addition to the position of horizontal stroke-pieces, the only manual adjustments that need to be done concern pushers' and spindle's height,

and are obtained with specially designed adjustments screws.

The machine's output is 40 complete drawers per hour.

Previous experiences with high-range CNC-operated milling machines have enabled Omec to offer this machine at just a slightly higher price than the Omec 750 electro-mechanical milling machine..

The 650-A milling machine will probably replace traditional fixed-pitch mechanical milling machines.