

ASPECTS ON THE USE IN THE MANUFACTURE OF COMPOUND TOOLS FIX DOORS AND WINDOWS TYPE WINDOWS

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Abstract:

Abstract the application of modern technologies for manufacture of doors and Windows Thermo type is not possible without increasing the mill's working performance profiled composed structure.

Key Words: compound mills, tools.

INTRODUCTION

Exterior doors and Windows meet the closing function and heat and sound insulation of buildings, and to some extent and therefore light transmission and exchange of air.

Manufacture of doors and Windows of laminated wood requires the use of equipment and tooling.



Fig. 1. Milling machine for doors and Windows with double glazing FELDER F 700
Milling and cepuire Z.

MATERIAL AND METHOD

Mechanical processing of wood, especially milling operations involves getting some surfaces perfectly smooth, precise joints and a superior quality in general.

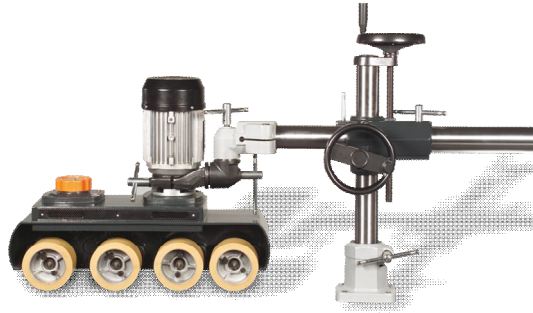


Fig. 2. Device for mechanical advance

The cutters are used are those with removable pads Allied steel, with a structure composed on the cutter.



Fig. 3. Set of tools with removable plates for doors and Windows of laminated wood

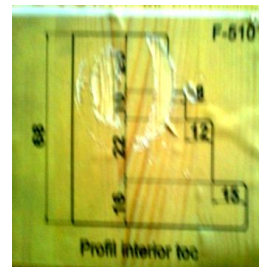


Fig. 4. Profile milling

The machines used are milling machines with normal shaft type FELDER F 700 Z

To obtain a high productivities using machining centres with numerical control.

Colombo CNC machining system profiling Windows offers concrete solutions for various needs in the field. Factories specializing in Colombo profiling Windows systems, offers on the basis of experience gained in the field the most complex and complete solutions.



Fig. 5. Machining Center NC Colombo.

Spindle support with $L = 620$ mm allows installation of the entire group of mills required to cepuire without needing to stop for making some changes.



Fig. 6. Tool shed

RESULTS AND DISCUSSIONS

Working arrangements

Milling profiles window and door laminated wood.

Material machined:

Laminated wood (brad wood, oak, meranti)

Recommended cutting speed:

$$V_a = 40 \div 70 \text{ m/s}$$

$$V_a = \frac{\pi D n}{60 \cdot 1000} \text{ (m/s)}$$

Advance/tooth cutting data: / tooth:

$F_z = 0,3 \div 0,8$ (mm) finishing

$F_z = 0,8 \text{ H} \div 1,5$ (mm) half finishing

Advance work:

$$F = \frac{(F_z * Z * n)}{1000} \text{ (m/min)}$$

CONCLUSIONS

Processing under conditions of quality wood for binalele type double stacked can be done with machinery and tooling, machining centres CNC type wood and plated steels special tools.

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