STUDY OF DESIGNING AND MANUFACTURING SIMILI FILM – COATING MACHINE

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Abstract:

The purpose of this paper is to present research results of designing and manufacturing of simili film coating machine on plastic profile to produce wood simili products. Based on advantages and disadvantages of the products which have been used widely in the market recently, the researchers decided to choose a method of using simili film coating on plastic materials to make new products that can replace others made from wood. The study designed 3D drawing of Coating machine system thanks to Solidworks software, including four main units such as stock feeding unit, coating unit, cutting and heating unit, glue providing and glue drying unit. The system was fabricated successfully on CNC machine. Experimental coating process was carried out at Quang Thanh Plastic Company, Hoa Khanh industrial Zone, Danang City and the experimental result shows that recommended coating temperature is about 122^0C. These wood simili products initially showed their effectiveness of coated-surface quality and easier pressing roller adjustment.

Key words: Simili film; Plastics profile; CAD/CAM/CNC; Coating; Heat treatment.