

DEVELOPMENT OF A NEW EXPERIMENTAL WEB TENSION CONTROL SYSTEM

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Abstract: *In this paper a new experimental system and controller for web transport system is developed and tested and the related mathematical model investigating the dynamics of the web is validated. The experimental set-up consists of four sections each of which is driven by a servomotor; the speed and the tension control is realised by using the feedback of encoder and tension sensors and driving simultaneously the four servomotors through a real time C programmed D/A board.*

Several considerations about the set-up of this new experimental system and comments about the controller performances are shown in this paper. Moreover some considerations about the lateral moving web are allowed by using a couple of tension sensors for each tension controlled section.

Key words: *Winding systems, Decentralised control, Web tension control, Experimental systems design*



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