

SPECIFIC CRITERIA FOR ESTIMATION OF THE MACHINABILITY OF MINERAL MATERIALS AND THE RUBBER USED AT THE MANTALS OF THE ROLLERS IN PAPER AND BAKERY INDUSTRY

Petre VALEA¹, Eugen STRĂJESCU²

Rezumat: *Prezenta lucrare prezintă aspecte tehnologiile de prelucrare a acoperirilor valțurilor utilizate în industria hârtiei și în industria morăritului, cu referire la abrazarea materialelor minerale și a cauciucului dur folosite pentru acoperirea acestor valțuri. S-a insistat asupra criteriilor de estimare a prelucrabilității acestor materiale și s-au propus noi criterii de apreciere specifice abrazării granitului, bazaltelor și cauciucurilor utilizate la prelucrarea superficială a valțurilor.*

Abstract: *The present paper presents aspects concerning the technologies to manufacturing the cambered rollers used in paper industry which refers to the grinding machinability of mineral materials and rubber used that mantle for rollers. We are insisting on the estimation criteria and propose new criteria for the grinding procedure at the manufacturing of granite, basalt and rubbers used at the superficial coverage of rollers.*

Keywords: rollers with granite and rubber coat, cutting capacity, cutting machinability, estimation criteria.

1. Introduction. The Importance of the Cambered Rollers' Realisation on Grinding Machines.

The rollers of the presses from the machines to produce paper can be assimilated to balks that are deformed under the action of the proper loudness and of the supplementary charges of the pressing process. The quality of the final product (paper), and the normal functionality of the machines to manufacture paper can be negatively affected by the shaft formed by the rollers and which can produce an uneven distribution of the pressure on the width of the machine to manufacture the paper. In the specialised literature [11] it is recommended that the ratio between the shaft of the roller and its length be no bigger than 1/6000...1/7000 for the inferior roller and 1/12000...1/14000 for the superior roller. The technical solution proposed by the specialist in technology to eliminate this inconvenient

¹Eng. Phd. student, Politehnica University of Bucharest, petrevalea@gmail.com

²Professor, Politehnica University of Bucharest, eugen_strajescu@yahoo.com
