

PRELIMINARY STUDIES REGARDING THE FOUNDATION PARTICULARITIES OF THE PEELING PROCESS OF HEAVY STEEL BARS

Alexandru Iulian TOMA¹, Claudiu Florinel BISU², Ion DUMITRU³,
Alexandru Daniel TUFAN⁴, Cleopatra CEAUSESCU⁵

Rezumat. *Cojirea este o operație unică și economică de prelucrare pentru producerea de suprafețe cilindrice pe barele grele, cu finisaje de înaltă calitate și precizie dimensională. După ce semifabricatul de tip bară trece prin această operație, toate erorile și impuritățile de suprafață sunt eliminate. Acest lucru implică, în general, o rotație a unui cap de cojit multi-cuțit, instrument ce permite o rată ridicată de alimentare. Această lucrare prezintă un studiu preliminar privind particularitățile de proces la cojirea barelor grele.*

Abstract. *Peeling is a unique and economical processing operation for the production of cylindrical surfaces on heavy bars with high quality finishes and dimensional accuracy. After the work piece undergoes this operation, all the errors and surface impurities are removed. Generally this involves a rotation of a peeling head with multiple tools that allows a high feed rate. This paper presents a preliminary study of the particularities of the peeling process of heavy steel bars.*

Keywords: *peeling, heavy steel bars, peeling head, process.*

1. Introduction

Bar peeling (Fig. 1) is preferably applied to manufacture bright bars, a product with a blank, relatively smooth surface finish and high dimensional accuracy. Blank bar material is used in modern mass production (e.g., automotive industry and its sub-suppliers).

¹Eng. Alexandru Iulian TOMA, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania (tomaalexandruilian@gmail.com).

²As. Prof. Dr. Eng. Claudiu Florinel BISU Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania.

³Eng. Ion DUMITRU, General Manager, Titan Machine Tools, Bucharest, Romania (indproiect@gmail.com).

⁴Eng., Alexandru Daniel TUFAN, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania (alex_tufan@yahoo.com).

⁵Eng. Cleopatra CEAUSESCU, Engineering and Management of Technological Systems, Politehnica University of Bucharest, Romania.
