
PROBLEMS OF MACHINE BUILDING

Abstract

EXPERIMENTAL EVALUATION OF FRACTURE OF TAPS

I.A. SHUROV, M.U. POPOV, I.Y. MIRNOV
e-mail: Igor@instr.tu-chel.ac.ru

South-Ural state university, Chelyabinsk, Russia

Experiments on a research of the mechanism of fracture of taps are circumscribed. The processing on 16K20 and 21 340 machine tools of the bars assembled from two halves by standard taps of diameters from $\bar{1} 6$ up to $\bar{1} 12$ was established. Durine the breakage of the taps, the bars research, analysis of cracks and splinters of tools was made. It was established, that the fracture of the tap begins from the top of the last cutting tooth, where twisting presses and cutting forces are maximum. Photos of exemplars of the bars and the taps are indicated .

Key word: threadcutting tap, stresses, microfracture, fracture of the threadcutting tap.

Pages 5, Figures 3.