

STUDY OF STRESS STATE IN AN EXPERIMENTAL DEVICE FOR PRECISION SHEAR CUTTING

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Abstract: Research conducted over several years has led to the development of a family of precision cutting devices for cold shearing of metal bars with elastic radial clamping of the workpiece. All devices are original, compact and utilizable on a wide range of cold forming machine-tools, automated or not. One of the devices has already been granted a patent [3].

The novelty of the construction and operation of the device requires theoretical and experimental thorough research. The paper presents certain results obtained by modelling and utilization of the finite element analysis.

Key words: experimental device, precision cutting, finite element.

