ABSTRACTS

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VALUE OF DEFORMATION ENERGY DEPENDING ON DEFORMATION OF FLEXIBLE PNEUMATIC ELEMENT

(pages 19-22)

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Keywords: flexible coupling, elastic element, rubber, deformation energy
Abstract: The article describes a flexible element used in flexible pneumatic couplings. These elements are manufactured by various manufacturers and are mostly made of rubber. Each element, depending on the number of bellows and diameter, has permissible stroke values. It is necessary to expend a certain amount of energy to compress and expand them. The article examines the amount of deformation energy required to compress and expand this elastic element.

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EMBEDDED SYSTEMS – CONTROL OF POWER SUBSYSTEMS

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ABSTRACTS

Keywords: embedded systems, controlling, power systems, signal
Abstract: The main role of embedded system is to control the product behaviour or control of outside world. Microcontroller as embedded system obtains information through the sensors and makes adequate impact to outside world after sensor data processing. The microcontroller impact is realized through the actuators which convert the electrical energy (or different type of energy) to mechanical work. These processes are executed because of fulfil customer requirements. Microcontrollers as signal controllers work only with low power signals. This paper discusses the possibilities and application of controlling the power subsystems via using the embedded systems.

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SIGNAL NOISE REDUCTION AND FILTERING

(pages 29-34)

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Keywords: measurement, noise, filter
Abstract: The paper deals with noise reduction in signal. Normally measured signal very frequently includes noise and data processing includes the activities for its reduction. The best choice is to reduce the source of noise, but often it is not possible to reduce noise source. Filtering is another activity, which helps us to reduce noise in measured signal. Data processing can be executed only with filtered signal.