MINIROBOTS WITH ADAPTABLE STRUCTURE

TATAR, O.; ALUTEI, A.; MANDRU, D. & LUNGU, I.

Abstract: The possibilities to use robots for inspection, exploration and maintenance of the pipes are highlighted. In this paper, the authors’ contribution in this field is discussed. The minirobot presented in this paper is composed of slider-crank mechanisms and uses three geared mechanisms which are driven by a DC geared motor placed in the central region of the module. For the in-pipe inspection, the minirobot uses a wireless video mini-camera fixed inside of a protection system. The control of the minirobot is achieved through a CEREBOT II circuit using a graphical interface developed using the DELPHI visual programming environment. This minirobot is used as a driving module in the modular robotic system.

Key words: minirobot, structure, adaptable, mechanism, pipe

Authors’ data: Assoc. Prof. Dr. Eng. Tatar, O[limpiu]; PhD. Student Eng. Alutei, A[drian]; Prof. Dr. Eng. Mandru, D[an]; PhD. Student Eng. Lungu, I[on], Technical University of Cluj-Napoca, Constantin Daicoviciu 15, 400020, Cluj-Napoca, Romania, olimpiut@yahoo.com, adrian.alutei@mmfm.utcluj.ro, mandrud@yahoo.com, lungu_ion@yahoo.com

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