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MICROPROCESSOR CONTROLLED CONVERTER FOR ELECTROMAGNETIC VIBRATORY DRIVE

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Abstract: *In this paper, is shovn microprocessor device for electromagnetic vibratory feeder. This type of device can be used in various systems for dose and transport of scraped materials. Using microprocessor module it is possible to adjust power consumption from power network and also, it is possible to find resonant frequency for all system (vibratory feeder and material). System is now more adaptable and it is not necessary for complicate mechanical adjustment. Software for resonant frequency search and active resonant tuning during working is presented by flow charts. Software is written in C program language and assembler.*

Key words: Electromagnetic vibrator, resonant frequency, microprocessor, power factor

MIKROPROCESORSKI SISTEM KONTROLE PRETVARAČA ZA POGON ELEKTROMAGNETNIH VIBRATORA

Sadržaj rada: *U radu je prikazan mikroprocesorski uređaj koji upravlja pretvaračem elektromagnetnih vibratora. Oblast primene uređaja je u sistemima za izvlačenje i doziranje rasutih materijala. Mikroprocesorski kontrolisan pretvarač podešava snagu koju vibracioni dozator uzima iz mreže i pretražuje rezonantnu učestanost sistema koga čine vibracioni motor i opterećenje. Program koji vrši pretraživanje i aktivno praćenje rezonantne učestanosti u toku rada, će biti predstavljen dijagramima toka. Program je pisan u programskom jeziku C i u asembleru.*

Ključne reči:Elektromagnetni vibrator, rezonantna učestanost, mikroprocesor, faktor snage