

# THE ROBUST SERVO OF THE ELECTRIC INDUSTRIAL ROBOT II.

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This paper deals with the problems of acceleration loop speed servos with a subordinate acceleration controller. The acceleration signal is generated by the analog speed sensor. By using an acceleration loop in speed (and position) control circuit we are able to achieve better qualities of such circuit. This solution has the properties of a robust system. The solution is suitable to meet the requirements of a wide range of rpm regulation, run uniformity as well as the devices featuring either non-stationary or extremely high load inertia moment. This paper deals also with the results of application of acceleration loop in the servosystem of industrial robot APR – 20. Experimental results correspond to previous theoretical assumptions.

**Key words:** speed servo, robust servo, parametric invariant system, speed control, industrial robot

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