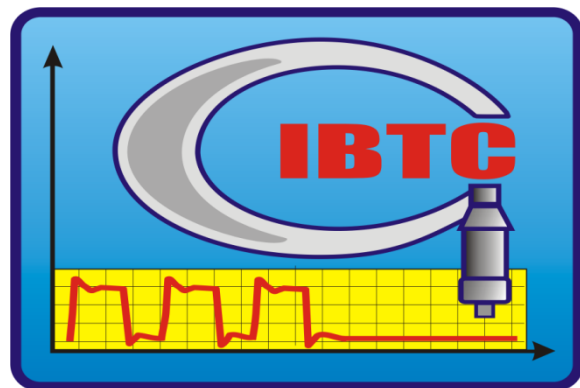




National Technic university
"Kharkiv polytechnic institute"



Department of
information and
measuring technologies
and equipment

Proposition for cooperation

Information and measuring technologies and equipment

Head of Department doctor of technical sciences,
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- Scope of knowledge: (15) "Automatics and Instrument-making"
- Bachelors and masters in the specialty: (152) "Metrology and information and measuring equipment"
- Specialization (masters):
- "Metrology and measuring technique";
- "Informational and measuring systems"

Subject of scientific researches:

- Methods and devices for accuracy enhancement of informational and measuring systems for control and diagnostics of operative condition of industrial equipment in conditions of self-control indeterminacy.
- Evolution of methods and devices of multiparameter electromagnetic quality control and diagnostics of the stress-strain state of mechanical products and structures of energy equipment.
- Scientific basis of provision of the growth of innovation technologies in electro technical industry of Ukraine in XX-XXI centuries.

The standby power supply source for the gas distribution stations

The standby power supply source is intended for the self-contained or standby power supply to gas distribution stations with the output gas pressure of 0,3 MPa to 1,2 MPa. This system includes turbogenerator, piping with locking and regulating fittings, electric power equipment, monitoring and automatic control system (MACS). The principle of operation of this source is based on partial use of the gas pressure difference in the process of gas consumption by a consumer.

Technical performances:

- Parameters of the produced electric power:
- Power, kW - 5,0;
- Voltage, V - 380/220;
- Frequency, Hz - 50
- Gas dynamic parameters:
- Standard volume of gas consumption, St.m³/year - 3000-5000;
- Inlet gas working pressure is within, MPa - 0,33 1,2;
- Inlet -outlet gas pressure difference, °C - 5,0;
- Inlet gas pressure is within, MPa -0,3 + 1,0



The automatized electric drive based on the drive with rolling curl

The invention has a series of advantages as compared to other drives. The electric drive has increased reliability at the expense of exception of a reducer. The electric drives can operate in the mode of an emergency stop without breakdown. Starting current is equal to nominal current. Mass and size metrics are diminished. The electric drive can be integrated in a composition of automatized control systems of technical processes.

Characteristics:

- Supply voltage (single-phase 50 Hz) 220 V
- Time of rotation displacement on coner 15...60
- Turningcouple 1...20

The electric drive provides accuracy of positioning 5, automatic and hand-held control modes with the appropriate signal system. The electric drive has handles from the remote console, operation (on a stop) with the function of limitation of a torque on a shaft, fast reverse, indication of a position of an operation mechanism. The electric drive has a fast response time. Acceleration time and stopping time are from 0.2 to 0.05 seconds.

