GTES-2.5 GAS TURBINE POWER PLANT



GTES-2.5 power plant is designed for electric and heat power supply to industrial, municipal and residential customers and also to oil and gas fields as normal or stand-by source of electric and heat power. This power plant is able to operate in simple cycle (production of electric energy), in CHP cycle equipped with WHRU in order to produce electric energy and heat power or in CCPP cycle if combined with an appropriate HRSG. The design of the GTES-2.5 outdoor automated gas turbine set was developed jointly with Centre of the Power Stations Design ROSEP.

DO49R gas turbine engine (manufactured by UEC-Saturn) rated at 2.5 MW is used as a drive.



Technical features	
Drive	DO49R
Drive manufacturer	UEC-Saturn
Rated output, MW	2.5
Voltage at generator terminals, kV	6.3 / 10.5
Electrical efficiency (operating conditions), %	25,5
Fuel utilization factor (cogeneration), %	79.5
Gas fuel flow rate at nominal rating, kg/h	850
Gas fuel pressure, GT inlet, MPa	21 - 25
Overhaul life expectancy, h	20 000
Assigned life expectancy, h	120 000