Transportable Power Stations

For the structure of transportable power stations see the following chart. A "transportable power station" (PEC) consists of individual modules with heat sources that can, upon request, be complemented with modules for electricity generation or with modules with absorber cooling units in a wide output range. According to the form of the thermal output of PEC, the stations are split into "Transportable steam power stations" (PECP) and "Transportable hot water power stations" (PECT).

Transportable steam power stations – PECP

The core of this plant is a containerized steam boiler room (KK), supplying heat in the form of saturated or super-heated steam. The "steam turbo-generator module" (MPTG), fitted with a steam turbo-generator and a complex protective and control system, serves for the generation of electricity and its supplies into the distribution network and/or for the boiler room or production technology needs. In the case that cooling output supplies for technological purposes are needed, a containerized boiler room (KK) can be supplemented with an "absorber cooler module" (MC) using waste heat from the PEC module to produce the necessary cooling capacity. Another module which can be added to the power plant is a "module with a co-generating unit" (MKJ) formed by a gas engine or a diesel generator set, allowing for combined generation of electricity to be supplied into the distribution network and/or used to power the power plant itself (the so called "island" operation). The above mentioned modules may be tailored to fit specific requirements.

Transportable hot water power stations – PECT

This module is based on a PV or KK containerized hot water boiler room with heat transfer fluid in the form of hot (up to 110°C) or superheated water (over 110°C). The PECT station may be supplemented with the same modules as transportable steam power stations, except for the MPTG module with a steam turbo-generator.

Individual modules are designed in a wide output range, which allows us to tailor PECs according to the client's requirements for the power source capacity, the output heat transfer fluid and the electrical or cooling output required. The entire PEC is supplied in a short time, at minimized assembly costs. These modules may be supplemented with steam or hot water storage reservoirs, which are also part of the PolyComp delivery programme. By combining these modules a transportable power station (PEC) may be devised with practically unlimited thermal, electric and cooling functions.

The main advantages of transportable power stations (PEC) of this design are:

- almost unlimited thermal, electric and cooling capacity applying the heat transfer fluid required
- "island" operation of the entire transportable power station
- full-value transportable energy source
- rapid delivery times for the client
- minimum requirements for construction space and its development
- minimum installation requirements and costs
- possibility of dismantling and transfer to another location

For specifications of individual transportable power stations with their respective scopes of thermal and electric outputs and examples of individual module combinations into transportable power stations, see the following pages.

PolyComp, a.s.
Na Hrázce 22
290 01 Poděbrady
Tel.: +420 325 604 111
Fax: +420 325 604 666
E-mail: polycomp@polycomp.cz
Internet: www.polycomp.cz