

Transportable Steam Power Station

These units serve for thermal energy generation in the form of saturated or superheated steam or electric energy, or they provide the cooling capacity required. PECPs have practically unlimited thermal and electric outputs, obtained by combining individual containerized steam boiler rooms, supplied within the output range from 100 kg/h to 30 t/h. In PECP, electric power is generated by modules with high-speed steam turbo-generators (MPTG) installed next to the steam boiler room, with an output range from 20 kW to 3 MW, or MKJ modules with co-generating units based on gas engines or diesel generator sets with electric outputs from 20 kW to 1 MW. For potential cooling function MC modules with absorber coolers are available using the PEC waste heat. PECP stations may be supplemented with steam storage reservoirs of AT type.

Some examples of PECP modulation and configuration:

1. *separate KK transportable steam boiler room*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - requires electricity supplies from the distribution network of other sources for the station service consumption
2. *transportable KK steam boiler room + MKJ module with co-generating unit based on gas engine or diesel generator set*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - provides power supply for the station service ("island") operation
3. *transportable KK steam boiler + MPTG module with steam turbo-generator*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - provides power supply into the distribution network or for the station service consumption
 - requires power supply from the distribution network or other sources for putting into operation or in case of MPTG block failure
4. *transportable KK steam boiler room + MPTG module with steam turbo-generator + MKJ module with co-generating unit based on gas engine or diesel generator set*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - provides power supply for the station service ("island") operation
5. *transportable KK steam boiler room + MC module with absorber cooler*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - cooling performance for technological purposes
 - requires power supply from the distribution network or other sources for the station service ("island") consumption
6. *transportable KK steam boiler room + MC module with absorber cooler + MKJ module with co-generating unit based on gas engine or diesel generator set*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - cooling performance for technological purposes
 - provides power supply for the station service ("island") operation
7. *transportable KK steam boiler room + MPTG module with steam turbo-generator + MC module with absorber cooler*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - cooling performance for technological purposes
 - provides power supply for the station service ("island") operation
 - requires power supply from the distribution network or other sources for putting into operation or in case of MPTG block failure
8. *transportable KK steam boiler room + MPTG module with steam turbo-generator + MC module with absorber cooler + MKJ module with co-generating unit based on gas engine or diesel generator set*
 - heat source in the form of saturated or superheated steam for technological or heating purposes
 - cooling performance for technological purposes
 - provides power supply for the station service ("island") operation

For more detailed information on transportable KK steam boiler rooms, MPTG modules with steam turbo-generators, MKJ modules with co-generating units and MC modules with absorber coolers see the following pages.