

Sludge & biogas

Construction:

Heat exchanger type **WCrr** - for heating sludge, process suspended solids and other media with total dry matter content of 8%.

Heat exchanger in compact housing, one or multi-section construction.

Made as sludge recuperators with independent heat systems and external heat circulation.

Heat exchanger **WCmr** - for heating biogas, air and process gases.

Heat exchangers with multistream, one section construction with mixing chambers at device inlet and outlet.

For both exchanger types - exchange pipes thermo insulated with 50mm thick mineral wool coated with aluminium sheets.

Supporting structure, pipes and fittings made from stainless steel.

Technology:

Heat transfer occurs through exchange pipe walls during countercurrent medium flow.

Sludge heat exchangers type **WCrr** are designed for low heating medium temperatures up to 75°C for mesophilic fermentation - in order to avoid excess sludge sintering at internal pipe walls.

Biogas heat exchangers are most often used as an essential element of biogas drying station. Heating medium may be both warm biogas from process (b-b system) and hot water from central heating system (hw-b).

Overall heat transfer coefficient is calculated individually for each system.

Protection against excess pressure increase in installation is provided by protection system.

- **simple construction;**
- **high overpressure resistant;**
- **easy maintenance & cleaning;**
- **one or multi-section construction;**
- **exchanger wprk checked for whole type of series for 8% dry matter medium;**
- **exchange pipes from 1/2" to DN350;**
- **thermo insulated.**



Construction:

Type WCrr:

- main exchanger construction with sludge and heating water connector pipes and exchange pipes;
- heat exchanger supporting structure,
- thermal insulation - thickness-50mm,
- aluminium insulation coating.

Model WCmr:

- main exchanger construction with biogas and heating water connector pipes, mixing chambers and main heat exchange chamber;
- heat exchanger supporting structure or heat exchanger hanger,
- thermal insulation of heat exchange chamber - thickness-50mm,
- aluminium insulation coating.

Options:

- valves/safety plates for sludge space.

More options are available on request