

LABOBLUE – full double jacket water cooling without wasting water, Version MSL

- full double jacket cooling
- for open and completely closed vessels without loss of liquid
- no waste of cooling water due to integrated storage system and recirculation

The unit is equipped with a high efficient recooling system to dramatically reduce cooling down times when sterilizing liquids. The double jacket is floated with cold demineralised water, by circulating the water around the chamber the energy is transported out of the system. As a result the cooling down time can be reduced up to 80% (depending on loading volume and vessel size). The main advantage is the full double jacket. Different from a cooling coil around the chamber the double jacket guarantees the contact of cooling liquid onto the full surface of the chamber and a fast transport of heat energy.

The integrated counter pressure option, sterile filtered compressed air is fed into the chamber, ensures, that no loss of liquid appears and that pressure tight vessels will not burst. The chamber is kept at higher pressure than the pressure inside the vessels to be cooled down. The into the lid integrated fan, magnetically driven, avoids temperature layers inside the chamber due to limited natural convection of steam and air and enhances the cooling capacity. (An external connection to compressed air is required).

The cooling system is being fed from the storage tank of demineralised water. After circulation around the double jacket the water is being pumped back into the tank. Integrated into the tank is a heat exchanger, mainly using the water required for the exhaust steam condenser, to cool down the water inside the tank. Additionally more cold tap water can be used for heat exchange purposes, the values can be set in the relevant programmes. With the offered cooling up to 5 batches per shift are possible.

Up to now autoclaves with integrated water cooling usually consume approx. 50 l of demineralised water for cooling purposes. This water is pumped into the drain and wasted. The Laboklav system offers real cost savings and saves our limited natural resources.