

M101280 VERTICAL SPRAY SCALDING

Description:

The vertical pig scalding system is, the most efficient and sanitary scalding system for productions from 120 pigs per hour.

The machine comprises a tunnel of variable length and layout along which the pig carcasses are showered with water for a time ranging between 4.5 and 6.5 minutes at temperatures between 60 and 64°C. The carcasses are transported by a track system conveyor continuously and vertically along the tunnel, receiving a continuous shower of hot water.

The equipment has a water basin in the lower part that serves to submerge the animal's head, heat the water to the required temperature, and to aspirate and shower the carcasses with it. The scalding system is made entirely of stainless steel, while the water basin is made of tube and sheet, and the tunnel is made of sandwich-type insulating panels, also made of AISI 304 stainless steel. The water is heated by direct steam controlled by pneumatic valve and temperature control panel that allows temperature control with a sensitivity of one tenth of a degree centigrade.

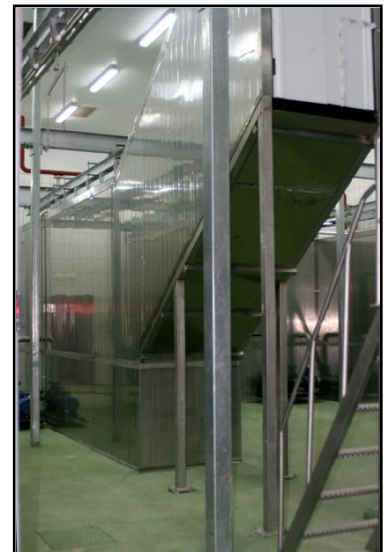
The showering system is manufactured with AISI 304 stainless steel pipes and water diffusers, with water pumps, which provide the necessary flow for correct scalding. The tunnel is designed in such a way as to avoid the loss of temperature inside.

The tunnel includes level temperature control systems with water renewal control valves, overflow, and automatic defoamer dosing system, filling and emptying of water. Using the general board it is possible to programme in advance the filling and heating of the water.

The Mecanova vertical shower scald incorporates insulated doors for maintenance, as well as exterior and interior stairs for easy access for maintenance and cleaning. To facilitate daily cleaning work, the scalding system incorporates interior lighting.

The quality of the water has a direct impact on the quality and efficiency of scalding, that is why Mecanova offers the possibility of scalding with several independent scalding zones to better adjust the renewal of the water and the required temperature depending on the contamination, as at the entrance, the water gets dirty more quickly than in the final part. Therefore, these variables should be adjusted differently to achieve greater efficiency.

Mecanova's extensive experience in the design and manufacture of vertical scalding systems for showering pigs guarantees optimal scalding of pigs with minimal water consumption, which makes it a sustainable scalding system with the environment.



Compared to other scalding systems:

- Compared to immersion scalding, whether by dragging or waterwheel type:

- Sanitary: vertical scalding, by not submerging the carcass, eliminates the risk of contamination of it, either through the mouth or through the lungs through the wound.
- Water consumption: The vertical scald by shower consumes 58% less than the scalding system by dragging.
- Investment: The largest length required by dragging scald means a saving of 5% in the space inside the slaughterhouse for the machine with the consequent saving in the investment of the building.

- Compared to direct steam scalding

- Scalding quality and dehairing: vertical scalding by showers achieves a higher quality of scalding in less time. The reason is that the thermal transmission of water to the hair follicle is greater than that of steam. This difference in quality is significant in the heads and skin folds in hams and shoulders.
- Energy cost of operation: direct steam scalding has higher steam consumption as well as higher temperature loss. On the other hand, it requires a higher electrical consumption in the recirculation of steam inside the tunnel.
- Investment: Steam scalding requires an operation time of 9 minutes, compared to vertical scalding by showers, which means a higher cost of machine, conveyor, and hooks, and more space for scalding in the dressing building.



Technical Data:

- Made of stainless steel AISI 304
- 5 mm thick stainless steel sheet
- 80 mm thick stainless steel insulating panels on the top and ceiling and 60 mm on the bottom
- ARIS brand steam control valves
- Water pump 3kw 100m3 h
- Number of pumps according to production
- Swing entry and exit doors
- Electrical panel for protection, control and temperature control with IP65 protection

