

DecFill® STU Sterilization Tunnel



Sterilization tunnels provide optimum hot air depyrogenation within a short period of time

- Air convection pre-heating and sterilizing zone for energy efficiency and gentle heating of the containers
- Integrated transport belt with monitoring features
- Temperature and differential pressure indicators
- Optimum temperature distribution is achieved by multiple control sensors
- System control and monitoring of all process relevant data via PLC
- Servo controlled baffles aiding cross flow regulation

Technical Data	DecFill® STU-73	DecFill® STU-168	DecFill® STU-273	DecFill® STU-438	DecFill® STU-602
Output	up to 73 kg/h	up to 168 kg/h	up to 273 kg/h	up to 438 kg/h	up to 602 kg/h
Conveyor Belt Width	500 mm	700 mm	1250 mm	1250 mm	1250 mm
Electrical Supply	3 x 400V, 50/60Hz	3 x 400V, 50/60Hz	3 x 400V, 50/60Hz	3 x 400V, 50/60Hz	3 x 400V, 50/60Hz

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Laminar flow tunnel for continuous sterilization of vials, syringes, cartridges & ampoules

Containers are fed automatically from an upstream machine or manually using trays. Subsequently they enter the single frame tube divided in to 3 major zones:

- a) Pre-heating zone (up to 120°C)
- b) Sterilization zone (up to 350°C)
- c) Cooling zone, (pre-filter up to 60°C / HEPA up to 120°C)

The depyrogenation is performed using hot air, which is heated by an electric heating coil and constantly recirculates. Heat resistant high-capacity particle filters guarantee a Class A (100) clean room specification. The filters are mounted without a gasket to minimize generation of particles. The cooling zone gently cools down the containers before they are automatically transferred to a machine downstream.



Visual Monitoring



Heat Exchanger



Baffle Plates



Transport System

Many options available such as sterilized cooling zone with an integrated heat exchange, additional cooling of the container by circulated filtered laminar flow and stainless steel heat exchanger or/and intake air system to ensure that the cooling zone remains pressurized once the closing plate of the isolator is closed.



- 1 Infeed
- 2 Pre-Heating Zone
- 3 Sterilizing Zone
- 4 Transport
- 5 Cooling Zone
- 6 Discharge
- 7 Visual Monitoring
- 8 HMI