



ASCO-12 – Cool-down Chamber

The Cool-down Chamber (ASCO) is used in photovoltaic production lines. Its purpose is to cool down multiple PV panels at once after their active amorphous silicon layer is deposited. The layer has to be laser cut on a laser scribing machine. To shorten production time, a cooling device, the ASCO is used.



The Cool-down Chamber (ASCO-12)

It's an open air circulation chamber using filtered air. A special transport vehicle, the Box Carrier holds 48 panels – the ASCO blows air through it. As the deposited silicon layer is vulnerable, the laser scribing after the deposition is performed in a cleanroom. The end of the ASCO is designed to protrude into this cleanroom. The Box Carrier is loaded and removed at the front of the Chamber to help keeping the cleanness of the silicon layer during the laser scribing. The ASCO has the most possible common parts with the Preheat Oven (ASPO).

ASCO-12 – Cool-down Chamber



Specifications

Power:	1.1 kW
L × W × H:	2045 × 1045 × 2460 mm
Mass:	480 kg (empty)
Workpiece:	48 solar plates loaded in the Box Carrier
Glass size:	1245 × 635 mm (thickness: 3.0 ~ 3.3 mm)
Cycle time:	2 h 30 min

Features

Uniform temperature level
Uses filtered air for minimal environmental impact
Cleanroom compatible
Easy to use
Exhaust air is harmless to the environment
European CE-compatible