

S&M; Reflow Oven Product Program

Air, nitrogen, dual-track, wide-body and vacuum reflow configurations for EMS and OEM SMT production lines. This program is a selection overview; final configuration is checked against PCB size, process target, UPH, factory layout and destination before quotation.

Product Program Overview

Program	When to choose	Representative models
DS air	Standard lead-free SMT reflow with 8, 10 or 12 heating zones.	DS-0802 / DS-1003 / DS-1204
DS nitrogen	When oxidation control or nitrogen processing is required.	DS-0802-N / DS-1003-N / DS-1204-N
DS dual-track	Two-lane line matching where board mix and throughput justify dual tracks.	DS-0802D / DS-1003D / DS-1204D and N variants
VS air / nitrogen	Broad model program including standard, dual-track and special-width configurations.	VS-0802 / VS-1003 / VS-1204 and N variants
Wide-body / mesh belt	For wider products or process-specific mesh-belt transport requirements.	VS-1003W / VS-1204W
Vacuum reflow	For projects where voiding control requires an independent vacuum stage.	VTS-1013-N
High-zone / special	For projects requiring extended heating-zone or customized line configurations.	ERS-1004N / VS-1303D-N / VS-1504-N / Custom

Current Model Matrix

Family	Zones / format	Atmosphere	Track / board fit	Model links
DS standard	8 / 10 / 12	Air	Single-track; verified DS pages list 50-400 mm, optional to 610 mm	DS-0802, DS-1003, DS-1204
DS nitrogen	8 / 10 / 12	Nitrogen	Single-track; full-zone nitrogen filling supported	DS-0802-N, DS-1003-N, DS-1204-N
DS dual-track	8 / 10 / 12	Air / nitrogen	Dual-track	DS-0802D, DS-1003D, DS-1204D and N versions
VS standard	8 / 10 / 12	Air / nitrogen	Single-track	VS-0802, VS-1003, VS-1204 and N versions
VS dual-track	8-13 zone range	Air / nitrogen	Dual-track	VS-0802D, VS-1003D, VS-1204D, VS-1303D-N
VS wide / extended	10 / 12 / 15	Air / nitrogen	Wide-body, mesh-belt or extended-zone by model	VS-1003W, VS-1204W, VS-1504-N
Vacuum	12-zone nitrogen vacuum system	Nitrogen + vacuum	Independent vacuum zone; PCB 70x50 to 300x350 mm on verified page	VTS-1013-N

Selection Path

Production condition	Recommended path	What S&M; needs to confirm
Standard mixed EMS/OEM production	Start with 8/10/12-zone air reflow.	PCB size, target UPH, alloy/profile, board mass and available line length.
Oxidation-sensitive process	Review nitrogen DS or VS models.	Target oxygen level/process acceptance criteria, nitrogen supply and operating-cost limit.
Voiding is the main constraint	Review VTS-1013-N vacuum reflow.	Package/joint target, PCB size, cycle-time tolerance and vacuum recipe.
High throughput or mixed products	Review dual-track configurations.	Lane widths, board mix, upstream/downstream takt and changeover logic.
Wide board or special carrier	Review VS wide-body / mesh-belt / custom.	Maximum panel/carrier size, mass, edge clearance and transport method.
Non-standard factory interface	Use custom configuration review.	Line height, direction, SMEMA/MES, utilities, floor space and destination standards.

Verified Common DS Data

Control: PC + PLC + PID **Conveyor speed:** 400-2000 mm/min **Direction:** Left-to-right standard, right-to-left optional
Component clearance: top 22 mm / bottom 25 mm on verified DS pages. Values vary by family and final configuration; use the individual model datasheet for procurement approval.

What to Send Before Quotation

PCB and panel size; target UPH; product mass and component height; lead-free profile/process; air, nitrogen or vacuum requirement; single or dual track; factory layout and available line length; line direction and conveyor height; destination country; expected delivery window.

Request the current model datasheet and configuration review at:

<https://sunandmountain-smt.com/resources/datasheets/>

<https://sunandmountain-smt.com/reflow-oven/>

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