

Aerospace & Industrial Autoclave

CAPABILITY SHEET - COMPOSITE CURING - ENGINEERED TO ORDER

THE AUTOCLAVE

WHAT	A turnkey heated pressure vessel that cures composites under controlled heat, pressure and vacuum; the same machine serves industrial pressure processing.
NOT AN OVEN	An oven only gives heat. An autoclave adds pressure (to ~10 bar) that compacts the layup and vacuum that pulls out voids - a dense laminate, not a porous one.
STATUS	Engineered to order and delivered turnkey; quoted across autoclave requirements. No specific delivered autoclave is claimed on this sheet.

UNIFORMITY & VACUUM

UNIFORMITY IS THE JOB	A composite cures right only if every point sees the same heat-time history. A circulation fan makes the load isothermal, held to +/-3 C and proven by survey to AMS 2750.
VACUUM + PRESSURE	Multi-line vacuum removes air and volatiles from each bag while vessel pressure compacts the layup - together they give a dense, void-free laminate.
RECIPE & TRACEABILITY	Multi-zone PLC recipe control of ramp, soak, pressure and vacuum, with part thermocouples, data logging and Nadcap-style traceability - a certified cure is a recorded cure.

PRESSURE VESSEL & SAFETY

PRESSURE VESSEL FIRST	Coded to ASME VIII (or PED) and hydrotested above working pressure. Working pressure up to ~10 bar; temperature up to ~420 C.
DOOR INTERLOCK	The quick-opening full-diameter door has a safety interlock that prevents opening under pressure - the greatest hazard on any autoclave, engineered out.
PROTECTION	Pressure relief sized to the vessel, independent over-temperature protection, forced cooling, and a nitrogen / inert option for flammable or high-temperature processes.

RANGE & ENGAGEMENT

AEROSPACE + INDUSTRIAL	Aerospace composite curing, adhesive and metal bonding; and industrial pressure processing - rubber vulcanizing, glass lamination, sterilization.
SOURCING	Fan, vacuum pumps, heaters, instrumentation and the door lock are proprietary items from established makers; Neometrix engineers and integrates the autoclave.
ENGAGEMENT	Send the part envelope, cure recipe and throughput to sales@neometrixgroup.com - a clause-by-clause compliance matrix within two working days.

DEFENCE PROGRAMMES DESK

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