

9x19 mm Cartridge Case Manufacturing Line

CAPABILITY SHEET · TURNKEY PLANT · BOXER + BERDAN

THE PLANT

WHAT	Integrated eight-process plant converting 70/30 cartridge-brass cups (JSS 9535-2) into finished, gauged 9x19 mm cases - Boxer and Berdan primer configurations on one line.
OUTPUT	Rated 15,000 cases/hr at the forming press; wet-process and thermal blocks balanced at 30,000 parts/hr so washing, annealing, and finishing never bottleneck the line.
DUTY	Continuous two-shift operation, tropicalised for 50 degC / 90% RH; IP-55 machines, IE3 motors, 415 V 50 Hz; CPCB-compliant fume scrubbing and effluent handling.

EIGHT PROCESSES

P.01-02	Rotary SS316 cup washing (pickle, soap, dry) -> multi-station transfer press: draw, pinch trim, indent, head & stamp, Boxer fire-hole pierce, taper - one automatic cycle with anti-wrong-calibre feed protection.
P.03-05	Rotary degreasing (two passes, pH-neutral) -> Berdan twin fire-hole drilling with laser verification and instant arrest -> head turning, length trimming, mouth reaming at Cpk >= 1.33.
P.06-08	Stress-relief annealing in rotary double-drum furnace (+/-2 degC, SCADA-recorded) -> vibro brighten & passivate, hot-air dry -> 100% full-form GO/NO-GO gauging, attribute gauges, packing.

QUALITY SYSTEM

GAUGING	100% full-form GO/NO-GO acceptance; attribute gauges for pocket, mouth, fire holes, head stamp; multiple calibrated sets per parameter.
SPC	Cpk >= 1.33 on critical dimensions with X-bar-R charts (5 pcs / 30 min); lot acceptance per IS 2500-1 tightened Level-II, zero critical acceptance.
DESTRUCTIVE	Mercurous-nitrate season-cracking, air-tightness, internal sectioning, and live case-proof firing of temperature-conditioned rounds, per lot.
ARREST RULE	Non-conforming product stops at its own machine - it cannot travel downstream.

TURNKEY DELIVERY

PHASES	Design -> Build & Integrate -> FAT at works -> Install -> Commission -> SAT performance run at site (both primer systems) -> Training -> Handover with long-term support.
INCLUDED	Production tooling with per-station life accounting, complete gauge sets with drawings and calibration certificates, manuals and PLC programs in English, multi-year spares provisioning.
PEDIGREE	Engineered against Indian ordnance factory specification requirements, by the team whose component QA delivers an in-service programme to the Indian Navy.

DEFENCE PROGRAMMES DESK

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This sheet contains no controlled specification data. Plant configuration is scoped per contract against site, calibre mix, and volume. (c) Neometrix Defence Limited.