

Ground Air Supply Station

CAPABILITY SHEET · 2.0 kg/s BLOW-DOWN AIR · ENGINEERED TO ORDER

THE STATION

WHAT	The turnkey compressed-air plant behind a gas-turbine engine test cell: a screw-compressor fill loop charging an open-yard storage farm, and a regulated spend loop delivering 2.00 kg/s to the test article - store slowly, spend fast.
THE CORE IDEA	2.00 kg/s made live would be a megawatt-class plant idling between tests. Banked, it is 700 kW for twenty minutes. Average power in, peak flow out - and the promise is the FIFTH start, not the first.
STATUS	Engineered to order. Reference configuration, not yet built - quoted against an Indian defence research establishment's engine-test campus; no delivered station is claimed.

FILL LOOP

COMPRESSORS	Three screw compressors (2 working + 1 standby), each ≥ 13 kg/cm ² (g) and ≥ 36 m ³ /min FAD at the honest ambient corner - 40 degC and 100 % RH simultaneously. FAT at the maker's works: rated pressure, flow and shaft power demonstrated before despatch.
CONDITIONING	Each stream owns a 5 m ³ receiver, filtration and a blower-reactivation desiccant drier - oil below 0.01 ppm and moisture dealt with before storage, not after.
THE FARM	Minimum four air storage cylinders in the open yard, charged 0 to 13 kg/cm ² (g) within 20 minutes at no more than 700 kW grid draw; farm volume submitted as a design calculation against the five-start duty.

SPEND LOOP

REGULATED BLOW-DOWN	Supply from the falling farm at 4 kg/cm ² (g) held within ± 0.35 at 2.00 kg/s - two-minute continuous draws, five successive starts with two-minute gaps, the article inlet never out of band; alternate duty 2.00 kg/s at 8 kg/cm ² (g).
AT THE ARTICLE	No more than 50 degC, oil below 0.01 ppm, dryness -65 degC atmospheric dew point - because 200 m of stainless line and every expansion stage will find any water left in the air.
THE ISLAND CONSTRAINT	During supply, one compressor and its drier replenish storage on an islanded site generator at no more than 400 kW - soft-started, frequency undisturbed, with the electrical design submitted and proven.

SECOND UTILITY & ENGAGEMENT

INSTRUMENTATION AIR	An independent clean-air utility: two reciprocating, non-lubricated, water-cooled, oil-free compressors, each ≥ 40 kg/cm ² (g) and ≥ 150 CFM, with their own driers, filters, storage and relief - alive precisely while the main farm is spent.
SCOPE	Equipment enclosure constructed by the builder; ~200 m stainless distribution; trenched power to IS norms; redundant PLC with facility-control-system integration via dedicated junction panels; commissioning and on-site performance demonstration.
ENGAGEMENT	Send the article's air demand curve, the start cadence and the site's power constraints to sales@neometrixgroup.com - compliance matrix within two working days.

DEFENCE PROGRAMMES DESK

sales@neometrixgroup.com · +91 7777 876 876 · neometrixgroup.com

Neometrix Defence Limited · E-148, Sector 63, Noida, Uttar Pradesh, India