

CNG Storage & Mobile Cascades

CAPABILITY SHEET · 250 BAR CASCADE SYSTEMS · ENGINEERED TO ORDER

THE SYSTEM

WHAT	High-pressure CNG cascades: banks of gas cylinders in a certified frame with manifold, valves, instrumentation and safety train, storing gas at a station or carrying it by road where no pipeline runs.
WHY STORAGE	Buffer storage lets a station fill more vehicles than the compressor could serve directly, fill each faster than drawing off the machine, and stops the compressor short-cycling.
STATUS	Engineered to order. Reference configuration, not yet built - engineered against city gas distribution tenders and technically qualified; no order followed, so no delivered cascade is claimed.

CONFIGURATIONS

STATIONARY	Three-bank cascade (low / medium / high) from 3,000 water litres at 250 bar(g), banks isolated by non-return valves, charged through a priority panel and drawn through a sequencing panel, pressure gauge on each bank and temperature gauge on the high bank.
MOBILE - TYPE I	Single-bank seamless steel cascade from 4,500 water litres, skid or trailer mounted, for mother-to-daughter station transport.
MOBILE - TYPE IV	Fully wrapped composite cylinders to 9,360 water litres - lighter than steel for the same volume, so more gas moves within the same axle limit.

SAFETY & BUILD

SAFETY TRAIN	Per cylinder: isolation valve, check valve, tube pigtail, fusible burst disc and safety relief device. The burst disc ruptures on excess pressure or excess temperature; all discharges are manifolded to a common vent header.
RELIEF SIZING	Relief capacity sized to vent the compressor's maximum flow, set no higher than 20% above maximum allowable working pressure or the pressure giving 75% SMYS hoop stress, whichever is lower.
FRAME & MANIFOLD	Frame certified by a 4 g static case with all cylinders mounted and filled. Two inlet/outlet manifolds (1 working + 1 spare), each with isolation valve, double compression ferrule fittings. Shipped fully assembled.

APPROVALS & ENGAGEMENT

CODES	Cylinders to IS 7285:2004, or Type IV composite to ISO 11439 / IS 15490 as nominated; valve fittings to IS 3224:2002, IS 5844. Every cylinder hydrostatically tested by its manufacturer with certificates reviewed by the third-party inspector.
APPROVALS	PESO / CCOE approval, BIS certification and third-party inspection carried as part of the scope of supply; calibration and test certificates for all instruments. Service -20 to +65 degC in Type I steel, -10 to +55 degC in Type IV composite.
ENGAGEMENT	Send storage duty, compressor rating, cylinder type, stationary or mobile, and site conditions to sales@neometrixgroup.com - compliance matrix within two working days.

PROJECTS DESK

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

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

Reference configuration. Water capacity, bank split, cylinder type and frame are sized to the customer's storage duty, compressor and site, and settled at design review. Cylinders are sourced from approved manufacturers; Neometrix engineers and builds the cascade around them.