

DESIGN, FABRICATION AND TESTING OF ADSORBED NATURAL GAS (ANG) CYLINDER

Lightweight multicellular innovative cylinders made of SS304 material have been designed and developed by CMERI, Durgapur for Adsorbed Natural Gas (ANG) storage.

When natural gas is filled in a cylinder packed with adsorbent, its energy density is greater than that of the same cylinder without adsorbent and filled with natural gas at the same pressure. Since natural gas within ANG cylinder is stored at low pressure (35 bar) as compared to the storage pressure (200 bar) of CNG, it is safe for domestic use. Also ANG cylinder is lighter, space efficient, more economical than CNG cylinders. It needs lower pressure generating compressor at filling station. The cost of adsorbent is also low and it doesn't involve any chemical process with natural gas.

