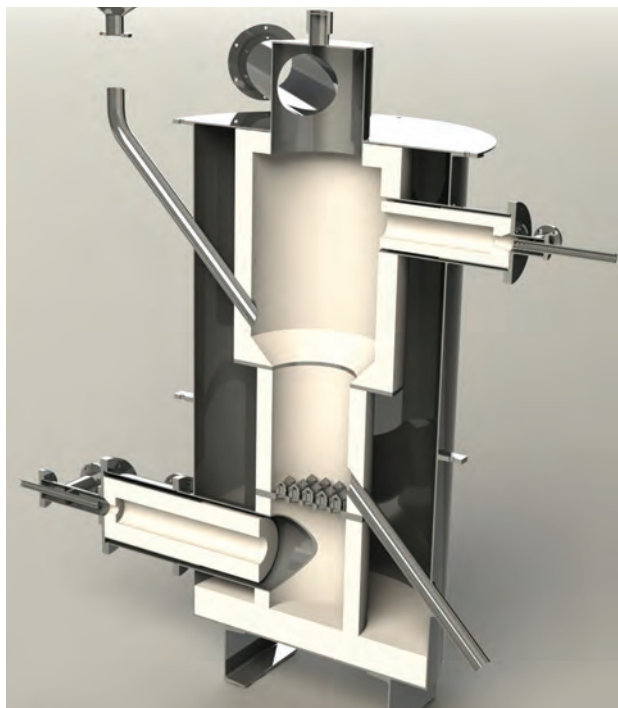


PLANT FOR PRODUCTION OF HIGH-QUALITY ACTIVATED COA



Cross section of the coal activation reactor



Original material for activation



Activation in a fluidized bed of hot product

Areas of Application

The plant is designed to produce activated coal with a high specific surface and a density of 0.5 g/cm³. This material can be used in medicine as sorbent or hemosorbent; in metallurgy, construction, machine building, and power engineering for manufacturing lithium-ion batteries; in military industry for the means of protection (gas masks and bomb shelters) etc.

Specification

Cycle, h	1–2
Natural gas consumption, m ³ /h	1
Operating temperature, °C	900
Yield capacity, kg/h	1–3

IPR Protection

IPR2

Advantages

The high-quality activated carbon is notable for a high specific surface of 2000 m²/g and a high mechanical strength achieved by special activation method. The know-how is the method of pulsed injection of air and ammonia into reactor to induce a non-stationary residual burning of conversion products and formation of radicals

Stage of Development.

Suggestions for Commercialization

IRL7, TRL8

Manufacture, delivery, warranty service, and staff training, upon request

Contact Information

Yevhen V. Strativnov, Gas Institute of the NAS of Ukraine;
+38 044 456 44 71, +38 095 182 73 43, +38 097 306 18 46, +38 044 456 88 30, e-mail: estrativnov@gmail.com