

# Nitrogen generator for tire thermal cracking, 30 m<sup>3</sup>/h, 99.99% purity, 5 KG/CM<sup>2</sup> working pressure



Suzhou XITE installed a 30 m<sup>3</sup>/h nitrogen generator for thermal tire cracking with 99.99% purity and 5 KG/CM<sup>2</sup> operating pressure.

The environmental and safety problems of these plants were caused by fire hazards, emissions of fine carbon particles and odor disturbances as well as the need to burn excess high temperature gas. To solve these problems, nitrogen is added to the reactor according to the process requirements and XITE has supplied nitrogen generators to many tire thermal

cracking plant customers. Pyrolysis is a thermal degradation process that produces oil, pyrolysis gas (hot gas), carbon black carbon and steel through the tire and rubber products in the absence of oxygen. During the pyrolysis process, the spontaneously generated pyrolysis gas is used as fuel and the tires are manually fed into the pyrolyzer and the steel wire and carbon are manually removed at the end of the process. This results in large amounts of carbon spillage, exposure of workers to fine carbon particles and working in an unsuitable environment in the pyrolyzer. Some explosions have also been reported in some facilities due to frequent opening of the reactor in high temperature conditions. The environmental and safety problems in these plants are caused by fire hazards, emissions of fine carbon particles and odor disturbances and the need to burn excess pyrolysis gases.

To overcome these problems, nitrogen is added to the reactor according to the process requirements and Seagate has supplied nitrogen generators to many tire thermal cracking plants.

The range of products sold by Suzhou XITE for tire thermal cracking is as follows

Model	Capacity m <sup>3</sup> /h
XTFD-30	30 m <sup>3</sup> /h

