

Mesin Pembuat Benang Nanofiber Nanofiber Spinning Mass Production

Nanofiber
Melt Spinning Report
Patented



Note :

Due to keeping innovation,
the specification and
Machine pictures or color
are subject to alteration
without notice !

Features of melt spinning technology nanofibers

(Features 1) Excellent heat insulation

Fiber diameter	$\Phi 1 \mu\text{m}$ or less
Weight	0.05g/cc (lightweight)
Thermal conductivity	0.03W/mk (high insulation)

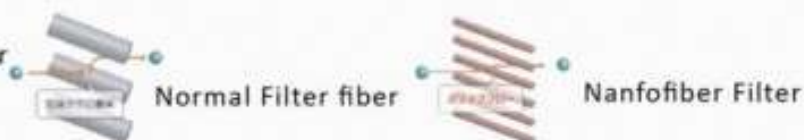
Large surface area for the same volume (many small holes) Nanofiber is more advantageous



Conventional sound absorbing material nanofiber sound absorbing material

(Features 2) Oil – water separation ability due to high water contact and lipophilicity. Adsorb oil around 50 times its own weight

(Features 3) Less pressure loss on the filter



Characteristic of Nanofibers

Fiber called nanofiber have strong intermolecular forces between the fibers, so it allows air to pass through, but provides adsorption power. It is extremely expensive because it could not be mass – produced so far, and application development is progressing. It wasn't, but the fiber with a diameter of about 500 meters by the melting method can now be mass – produced.

Typical types of fiber such as polyurethane, polypropylene, polyethylene, etc. It can be made into nanofiber from synthetic product to biodegradable polylactic acid, and the shape can be used for various purposes. It can be made into a mating tightening letter or a sheet shape.

This fusion type spinning device is as small as 0.5m in width x 1.8m in length x 1.5m in height. Mass production of synthetic nanofiber spinning for 5Kg (maximum 8Kg) or more per hour it is now possible.