



A new choice for Industrial Separators is here.

ENTEK International now offers world-class industrial battery separators to add power and reliability to your heavy duty batteries. Our industrial separators' best-in-class technology and unmatched customization options give you maximum control over performance and efficiency. *The choice is now yours.*

Six Ways to Customize.

With multiple ways to customize our industrial separators, you can get exactly what you want, exactly how you want it.

Process and Materials: ENTEK produces industrial separators using the same proven technology and quality systems we use for OEM and after-market Starting, Lighting, and Ignition (SLI) separators. The silica, UHMWPE, and other raw materials have been qualified for both industrial and SLI applications. ENTEK's expertise and consistency ensure that our industrial separators will exceed your requirements in the toughest applications.

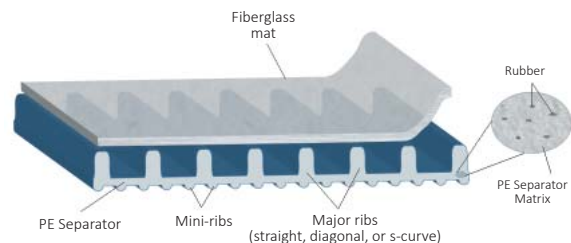
Rubber Content: ENTEK industrial separators can have non-porous rubber powder distributed throughout their bulk structure, which is particularly helpful in Pb-acid batteries using Sb-containing grids. The percent of rubber can be customized to fit your battery's performance goals.

Rib Pattern: There are three different rib patterns to choose from: straight, diagonal or S-rib.

Glass Layer: Available with or without glass mat.

Mini Ribs: ENTEK industrial separators are available with or without mini ribs on the back.

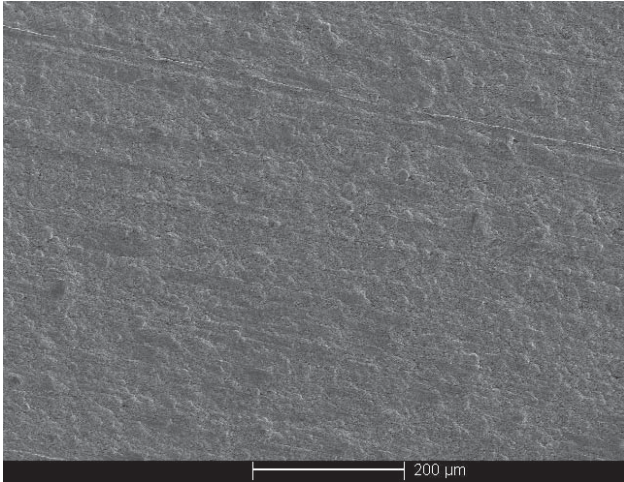
Delivery Spec: Have us deliver ENTEK industrial separators already cut-to-size, or in roll stock.



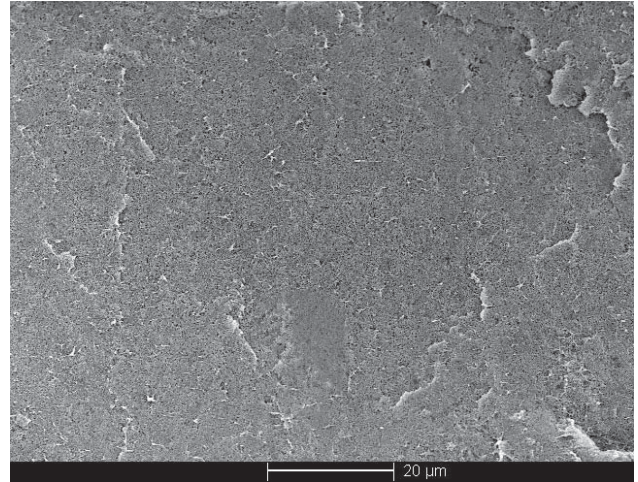
Key Characteristics	Unit	Typical Values or Performance
Overall thickness	mm	1.0 - 3.4
Backweb thickness	mm	.25 - .64
Rib design		Straight, Diagonal, S-rib
Electrical resistance	mΩ-cm ²	150 - 250
Total oil content	%	19 - 26
Backweb oil content	%	14 - 18
Elongation (CMD)	%	400 - 600
Oxidation resistance		Excellent
Porosity	%	52 - 58
Crosslinked rubber powder*	%	0 - 100

* As % of UHMWPE in formulation; value is customer and application specific

Standard Industrial Separator

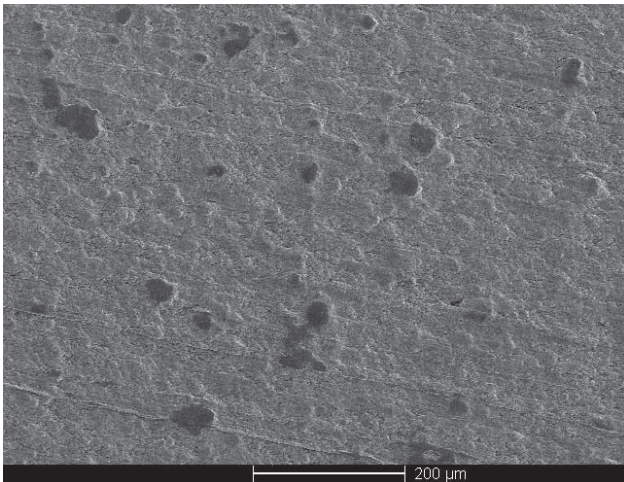


Surface SEM of the separator.

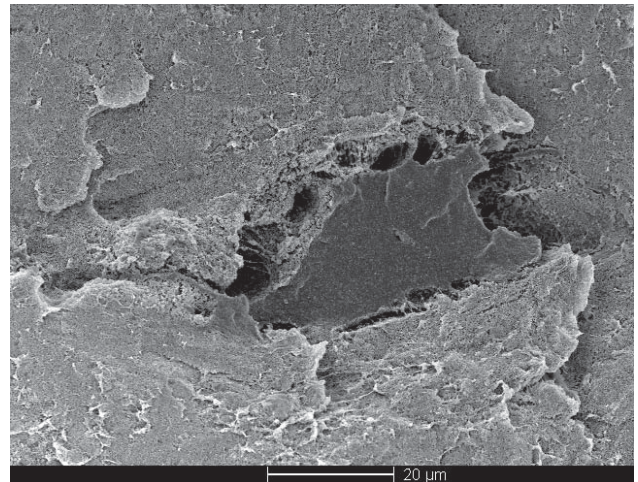


Fracture SEM showing ultrafine pore size of the separator.

Rubber-Containing Industrial Separator



Surface SEM of the separator with rubber particles observed as dark spots.



Fracture SEM showing a rubber particle embedded within the separator.

ENTEK is the leading world-wide producer of microporous polyethylene battery separators for lead-acid batteries. ENTEK is privately held and headquartered in Lebanon, Oregon, USA with manufacturing facilities in Lebanon and Newcastle-upon-Tyne, U.K.
