ENTEK

RAISING EXPECTATIONS.
KEEPING THEM THERE.

ENTEK LR Separators

SEPARATORS FOR HIGH-PERFORMANCE EFB BATTERIES

ENTEK LR enables battery makers to meet tough OEM requirements for the next generation of EFB batteries, delivering the highest cold-cranking performance of any polyethylene separator and outstanding battery cycle life. Combining ultra-low electrical resistance and maximum durability, ENTEK LR is the world's most advanced battery separator.

Separator Design

The electrical resistance of a battery separator is a function of acid resistivity, profile design, pore structure and composition. These factors are expressed in a simple model:

$$\text{Electrical Resistance} \propto \text{Tortuosity}^2 / \text{Porosity}$$

ENTEK LR was formulated and engineered to have:

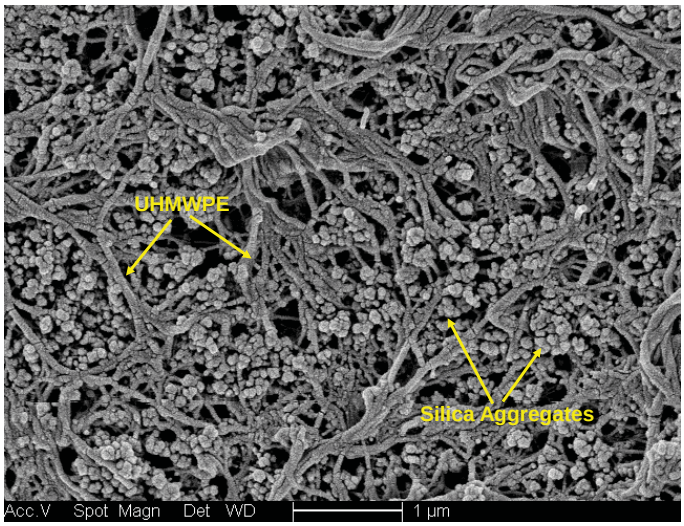
- Higher porosity
- Lower tortuosity
- Faster, more extensive and longer-lasting wettability

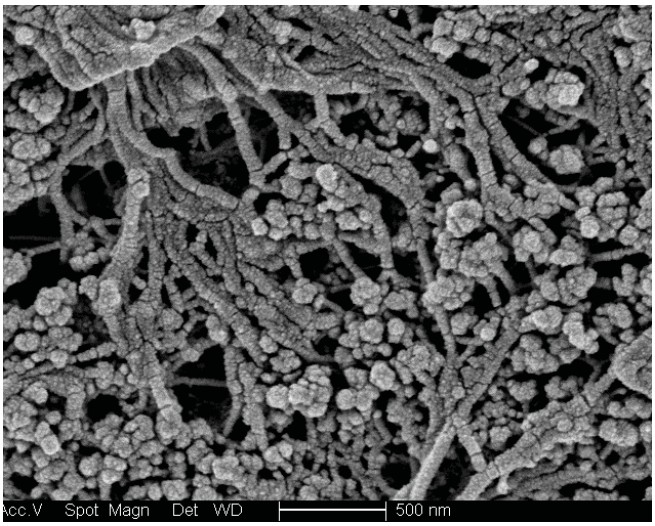
ENTEK LR lowers resistance without compromising durability. The mechanical properties of ENTEK LR are outstanding among all polyethylene separators while excellent runnability and oxidation resistance are maintained.

Delivering Results in EFB Batteries

Lower Internal Resistance:
R_{batt} decreased by 0.07-0.16 mΩ

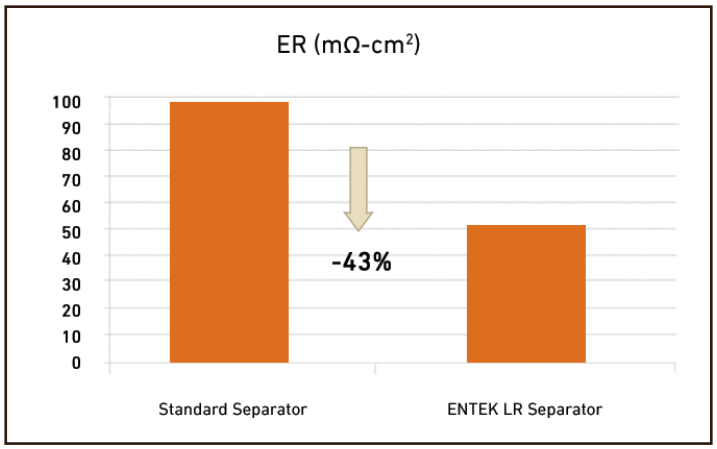
Improved Cold Cranking:
EN U10: increased by 100 to 300mv
EN U30: increased by 60 to 140mv

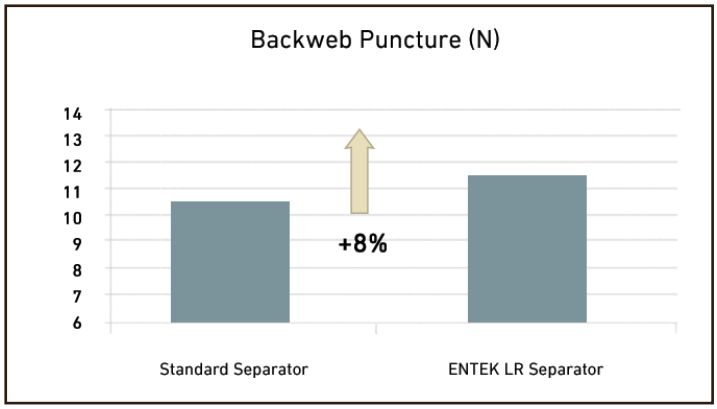


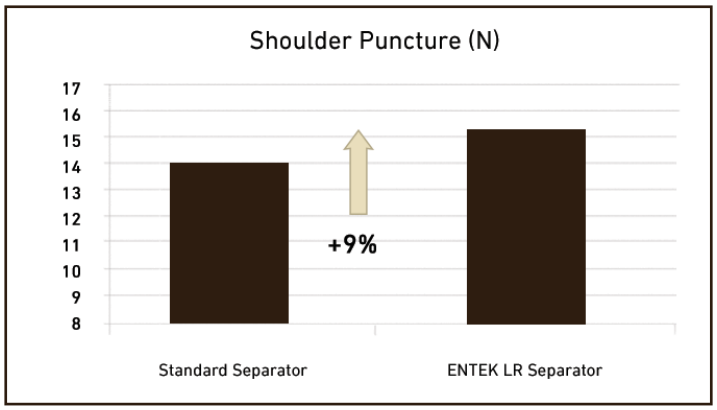


SEMs - ENTEK LR Separator

LAB TEST RESULTS

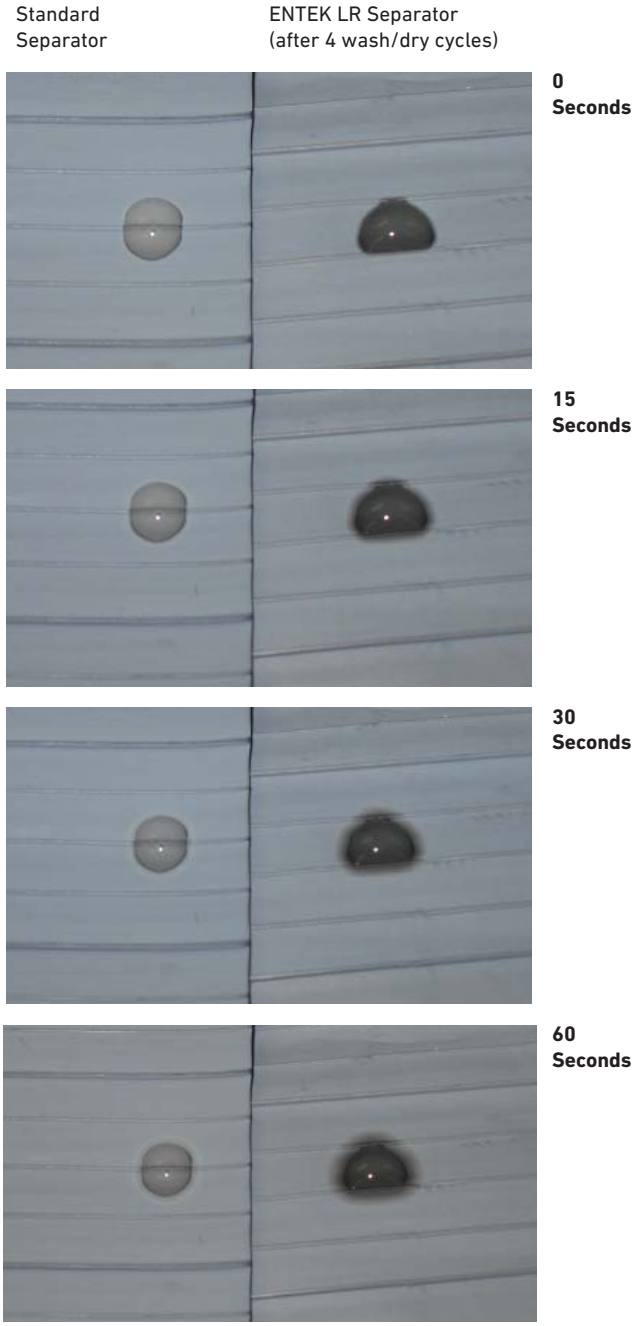






ENTEK LR separator combines the lowest resistance with outstanding mechanical properties to maximize battery performance and service life.

SUSTAINED WETTABILITY



ENTEK LR Separator maintained wettability after being boiled in water and dried multiple times. Standard separator has a breakthrough time of 6.8 s while ENTEK LR has an average breakthrough time of 1.1s.

ENTEK'S commitment to innovation in battery separator technology and extruders keeps production lines humming around the globe. But it's our customer service that's fueled our rapid expansion. For over 25 years, we've helped customers exceed their business objectives. How can we help you?

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