Description of ACS-series

ACS-series are advanced carbon materials designed for EDLC, LIC and lead-carbon battery applications.

ACS-series offer High-Energy, High-Power and General Types to meet various EDLC/Battery design formulation.

The unique properties of ACS-series is :

- **Leading in capacitance**
  ACS-series provide high ratio of micropore (0.7~1.0nm) and high capacitance.
- **Lower ESR**
  ACS-series provide high ratio of large pore (>1.0nm) and make lower resistance.
- **Better electrochemical performance**
  After aging test, ACS-series maintain high capacitance and low ESR.

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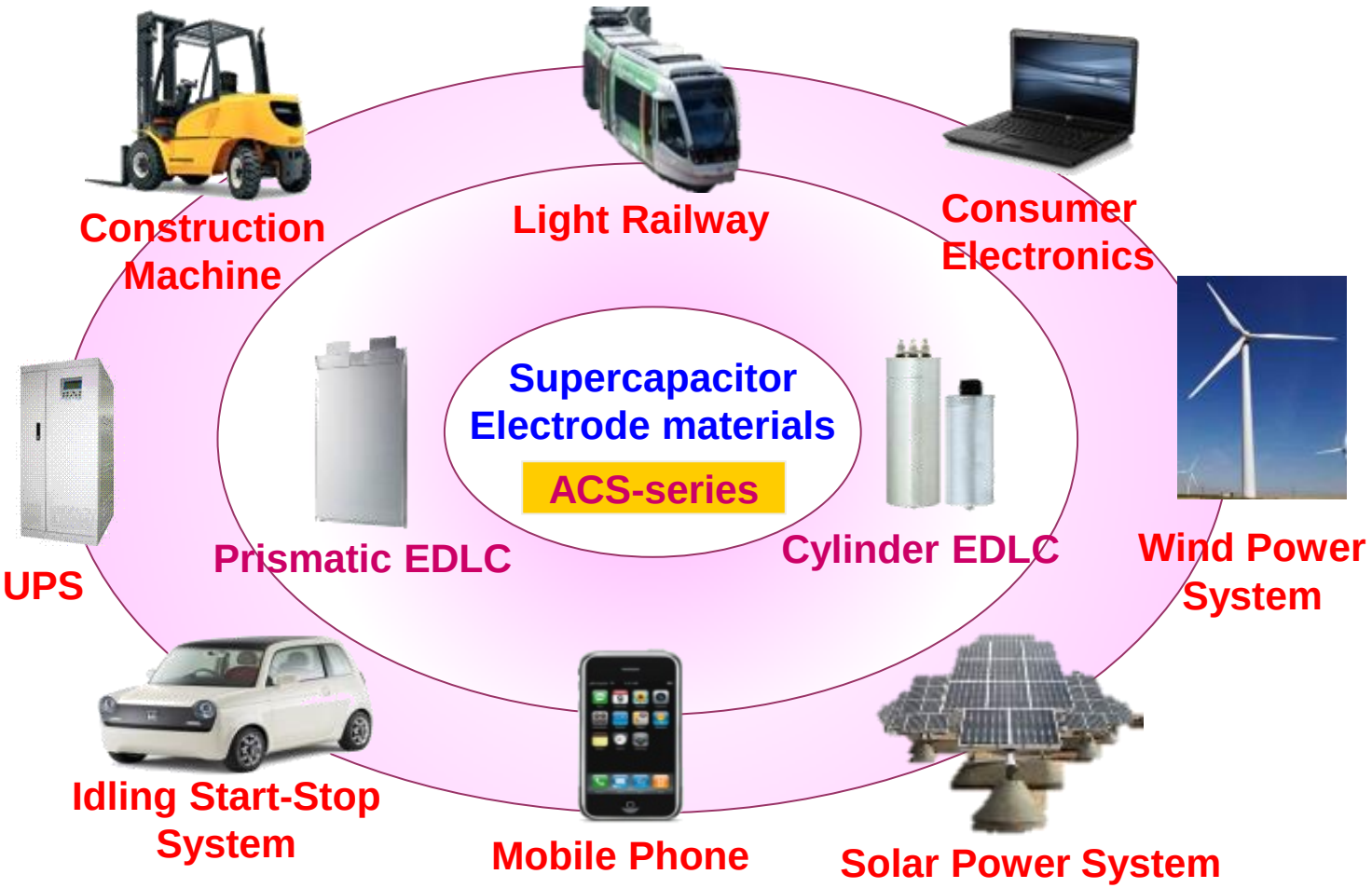
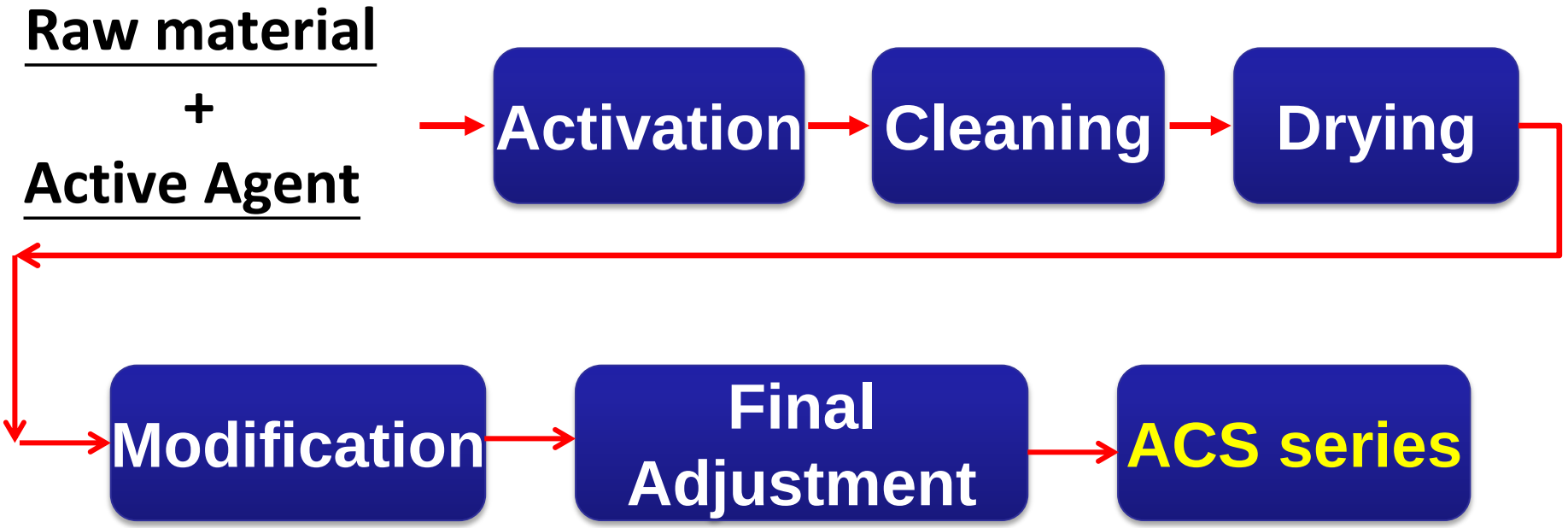
Last update time:2018/06/12

EDLC Applications



Preparation of ACS-series

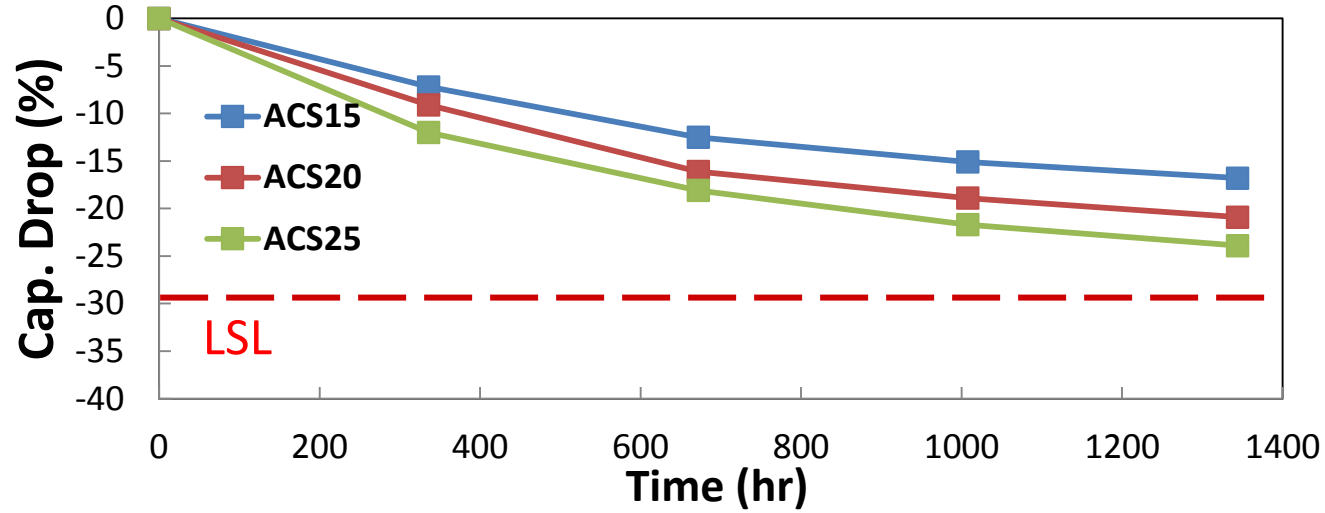


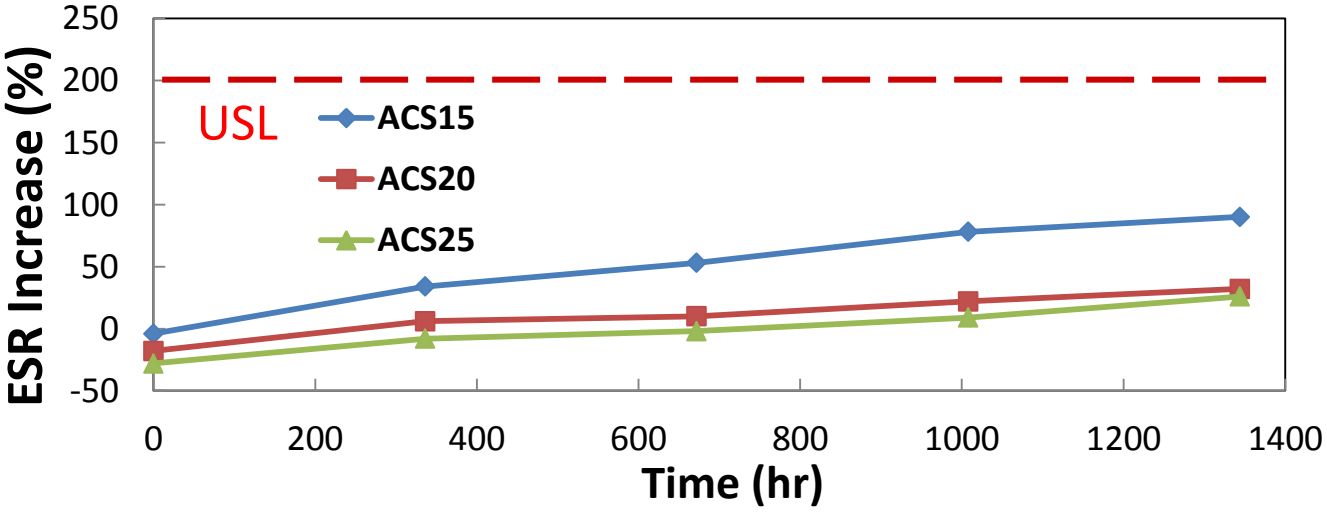
- Stable & consistent quality.

Specification of ACS-series

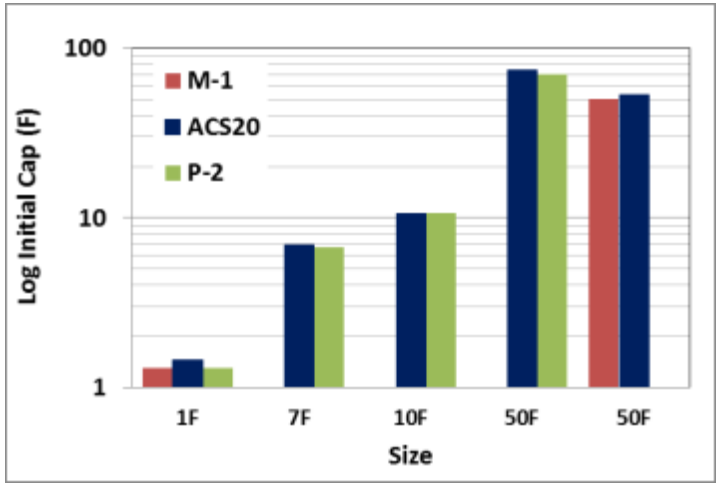
Items / Spec.	ACS15	ACS20	ACS25
	General type	High-Energy type	High-Power type
Total Surface Area(m^2/g)	1500± 200	2150 ± 150	2500 ± 200
PSD, D_{50}(μm)	6.5 ± 1.5 (Adjustable)		
Moisture Content (%)	< 3.0		
Ash Content (%)	< 1.0		
Electrode Capacitance (F/g)	>110	> 130	>135

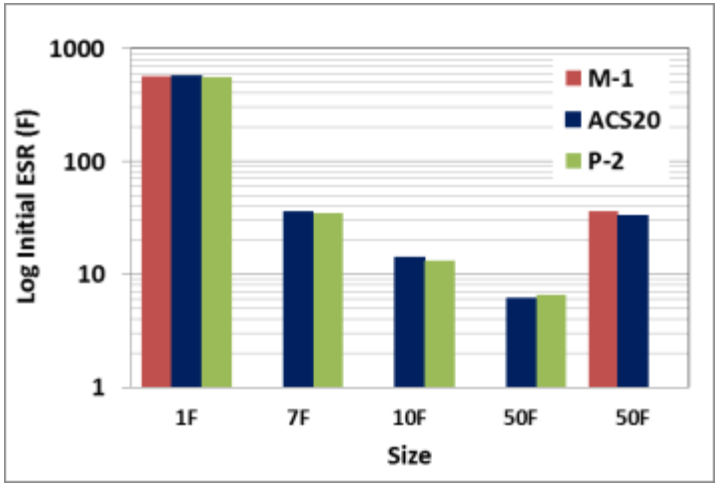
ACS-series Reliability Characteristics

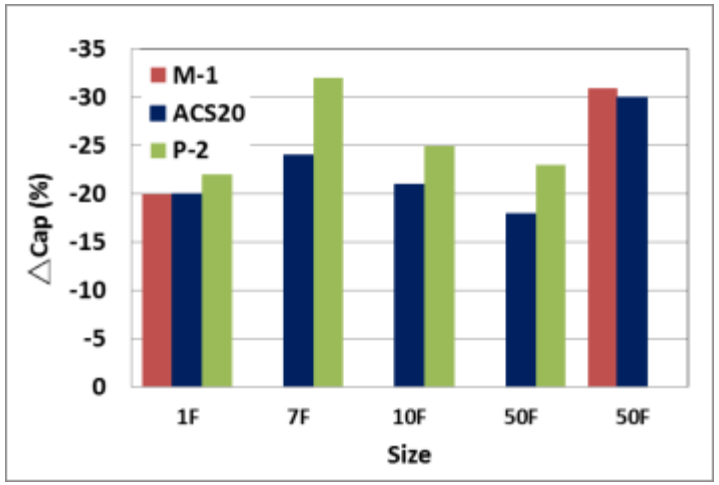


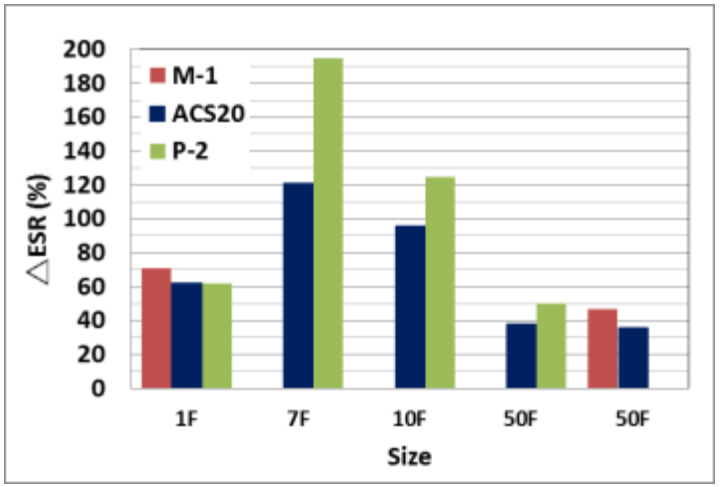


Customer feedbacks









ACS20 delivers competitive electrochemical performance!

Customer Feedback

50F (18X40) Cylinder Supercapacitor Test

Aging test / Items	Cap (F)	ESR (mΩ)	Height (mm)	Cap (F)	ESR (mΩ)	Height (mm)	Five days Self-Charge (Volt)
	Initial			Aging after 2000hrs			
ACS15	**89.3**	**7.6**	**41.1**	**70.0**	**12.0**	**42.6**	**2.21**
Coconut AC	63.3	7.0	41.1	53.0	10.4	42.6	2.22

Electrolyte: $SBPBF_4$/AN. Aging condition: 2.7V/70℃.

- The capacitance of ACS15 is 42% higher than Y-1.
- The Self-charge of ACS15 are in the same level with Y-1.
- ACS15 passed 2000hrs aging test.