

# ACS series Description

CSCC's ACS is new generation products for EDLC application.

CSCC's ACS series has High-Energy, High-Power and General types to meet various application.

The unique properties of ACS series is :

- **Leading in capacitance**

ACS series has high ratio of micropore (0.7~1.0nm) and high capacitance.

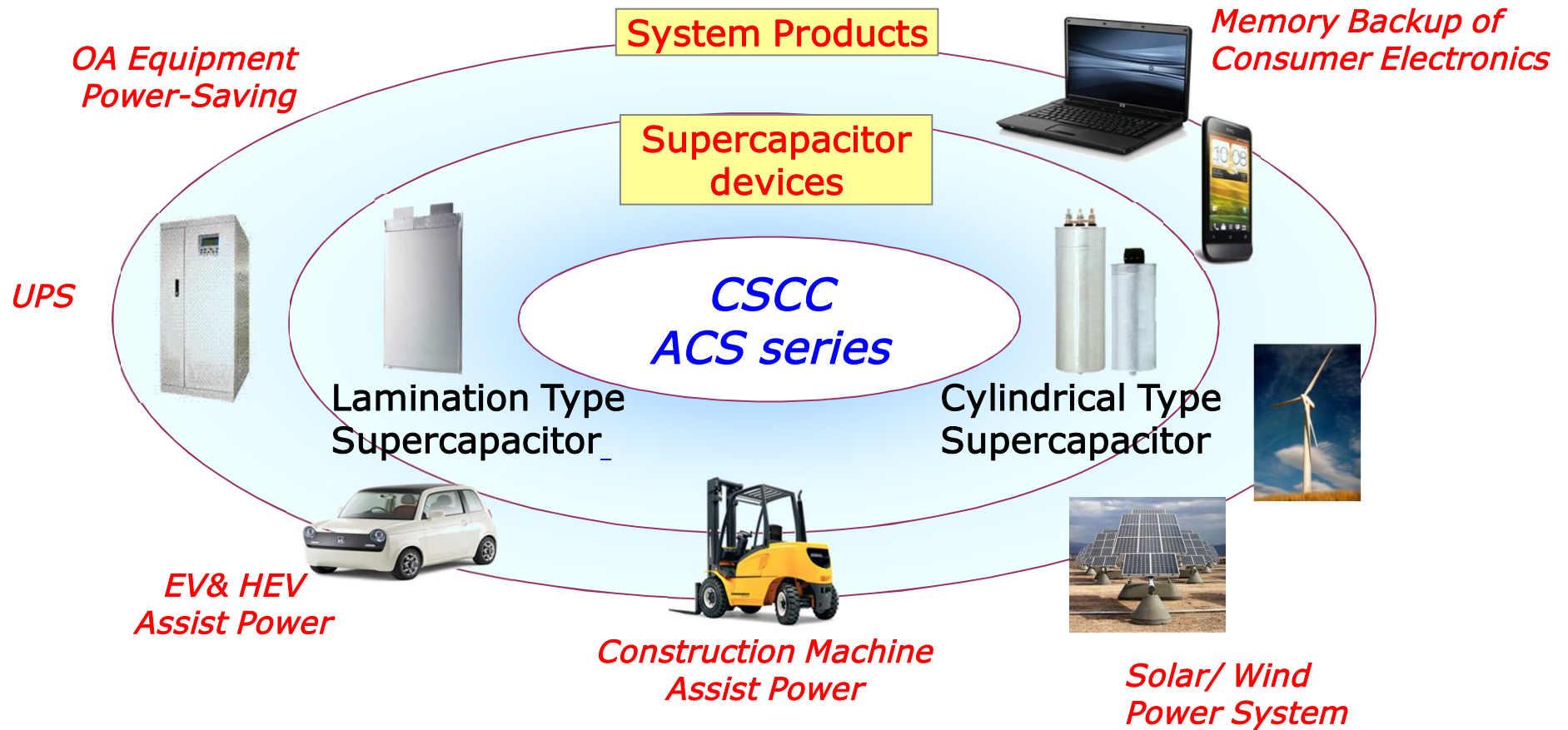
- **Lower ESR**

ACS series has high ratio of large pore (>1.0nm) and make lower resistance.

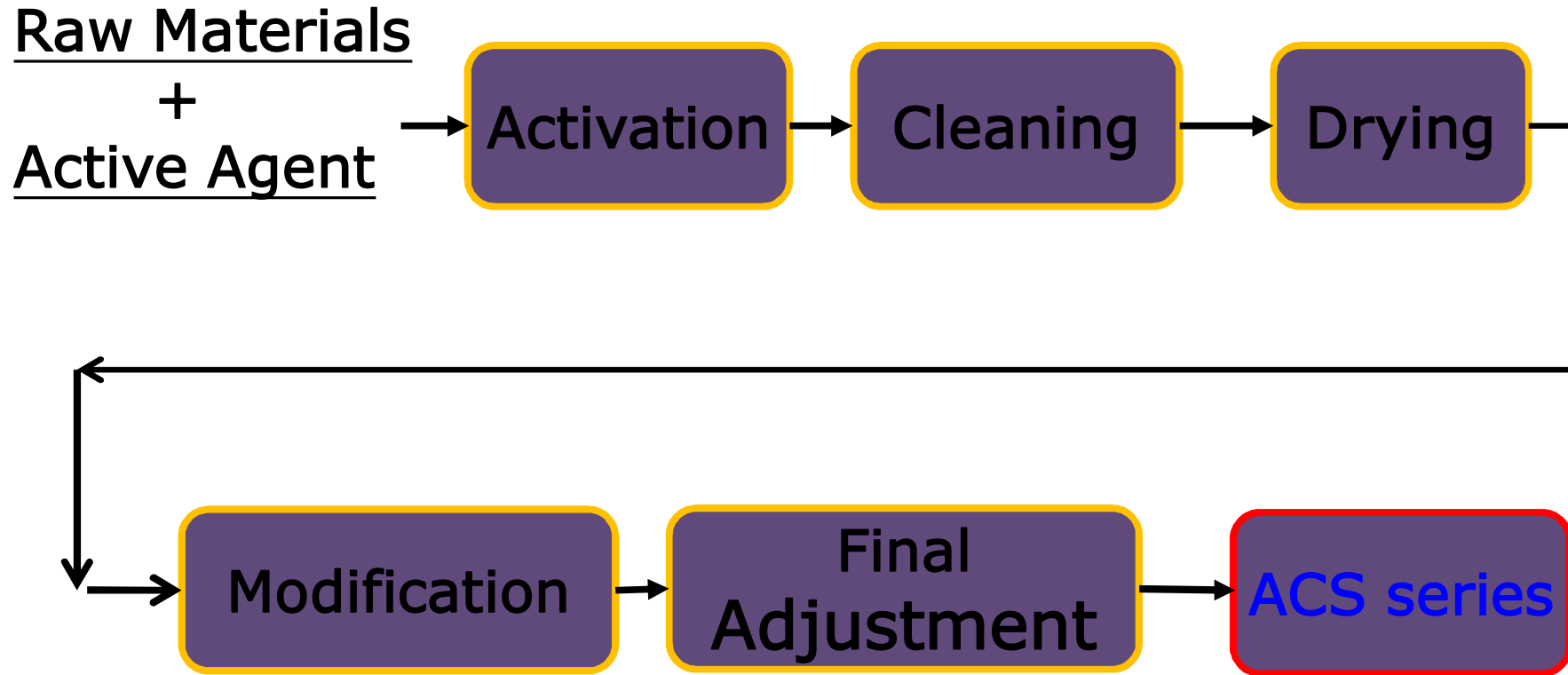
- **Better electrochemical performance**

After aging test,ACS series maintain High Capacitance and Low ESR.

# ACS for EDLC Application



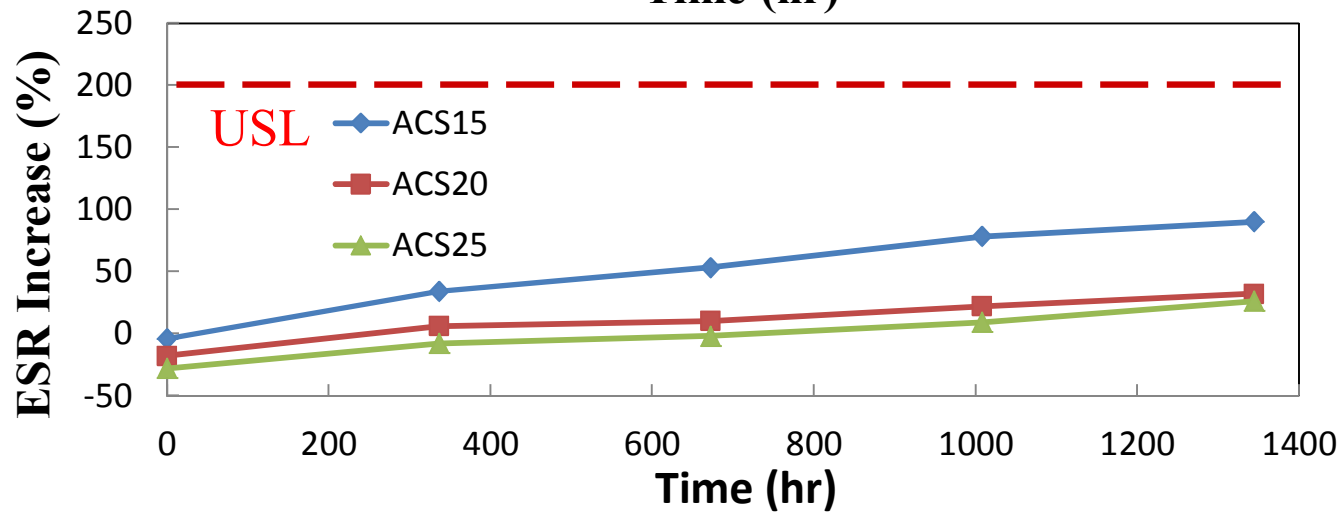
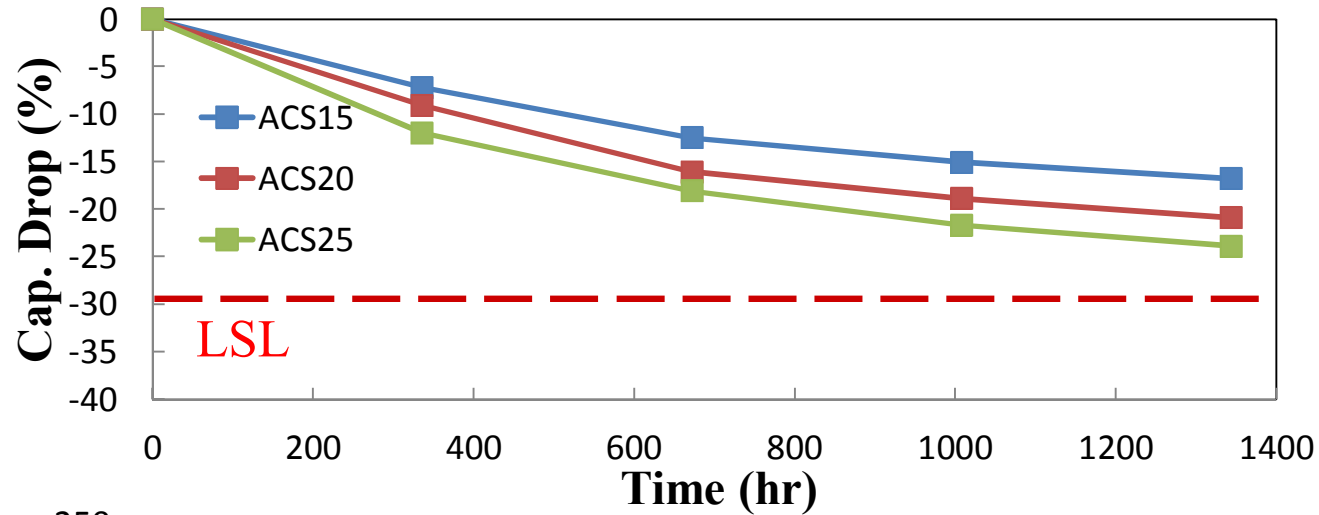
# ACS Manufacture Procecss



# ACS Specification

	<b>ACS15</b>	<b>ACS20</b>	<b>ACS25</b>
<b>ACS series</b>	<b>General type</b>	<b>High-Energy type</b>	<b>High-Power type</b>
<b>Total SurfaceArea(m<sup>2</sup>/g)</b>	<b>1500± 200</b>	<b>2000 ± 200</b>	<b>2500 ± 200</b>
<b>PSD, D<sub>50</sub>(μm)</b>	<b>6.5 ± 1.5 (meet to custom's need)</b>		
<b>Moisture Content(%)</b>	<b>&lt; 3.0</b>		
<b>Ash Content(%)</b>	<b>&lt; 0.1</b>		
<b>Capacitance(F/g)</b>	<b>&gt;85</b>	<b>&gt; 100</b>	<b>&gt;130</b>

# ACS Long-term Reliability Characteristics



# Electrode materials for Supercapacitors

# ACS

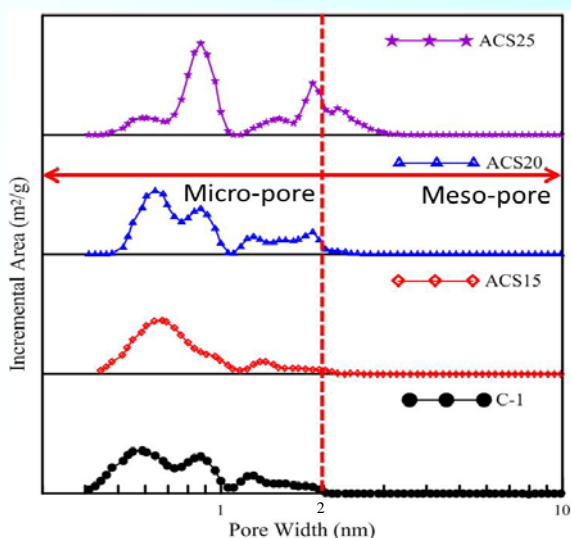
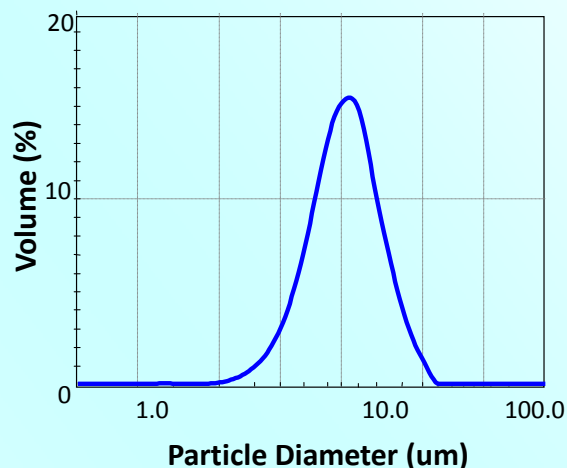
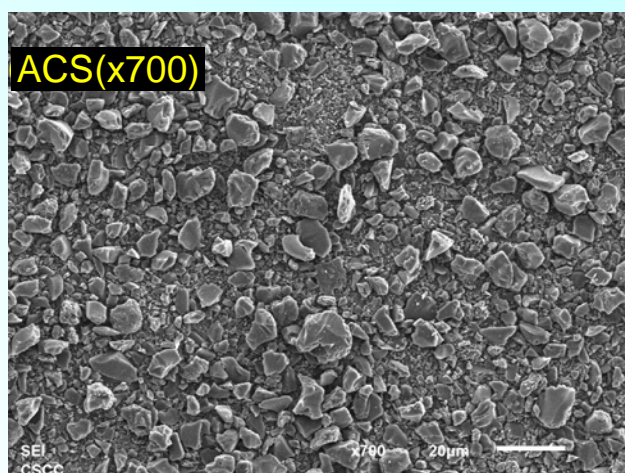
## Supercapacitors design solutions



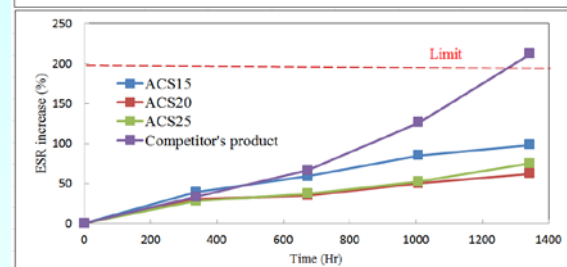
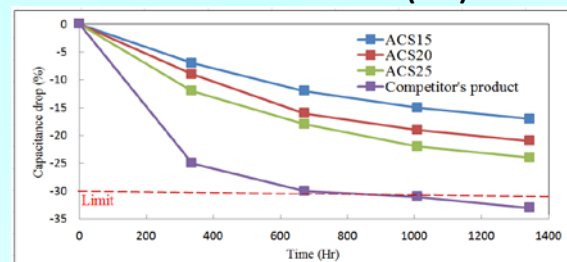
- High surface area
- High mesopore content
- High performance
- High purity activated carbon

## Activated Carbon for Supercapacitors

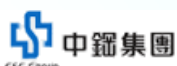
Products	BET (m <sup>2</sup> /g)	D50 (μm)	Ash (%)	Moisture (%)	Organic Capacitance (F/g)
ACS 15	1500± 200	6.5± 1.5	< 1.0	≤ 3.0	≥ 80
ACS 20	2000± 200	6.5± 1.5	< 1.0	≤ 3.0	≥ 120
ACS 25	2500± 200	6.5± 1.5	< 1.0	≤ 3.0	≥ 130



Pore size distribution analysis



Long-term reliability characteristics



member of CSC Group



China Steel Chemical Corp.