China Steel Chemical Corp.

March, 2022

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The Brief Introduction to CSCC

Chronology of Major Events

1. CSCC established in February 1989.
2. Plants completed during 1991~1993.
3. CSCC IPO listed in Taiwan in NovemAber, 1998
4. CSCC was awarded “Industrial Excellence Award “ and “National Outstanding SMES Award” in 2001.
5. CSCC achieved OHSAS 18001 certification in 2002.
6. CSCC achieved CNLA in 2002.
7. The Light Oil Distillation plant phase 2 completed in 2010.
8. CSCC achieved AEO in 2002.

The Brief Introduction to CSCC

Chronology of Major Events

9. Obtained the CNS15506 certification in April 2012.
10. Obtained ISO50001 certification in July 2013.
11. Obtained IATF 16949 certification in 2018.
12. The line of Green Mesophase Powder Plant reaching capacity to 7,500 MT/YR in 2019.
13. Mesophase Powder Plant go into operation in June 2019.
14. Received the Sustainable Elite Award issued by SGS, and 2019 Corporate Sustainability Award - Corporate Comprehensive Performance, and 2019 Taiwan Sustainable Enterprise Comprehensive Performance Award and Corporate Sustainability Report - Gold Award from TCSA in November 2019.
15. Received the Corporate Sustainability Report - Gold Award from TCSA in November 2020.

The Brief Introduction to CSCC

The Structure of Shareholder

unit：per thousand stocks

Major shareholder	Shares	Percentages
China Steel Corp.	68,787	29.04%
Fubon Life Insurance Co., Ltd.	16,578	7.00%
International CSRC Investment Holdings Co., Ltd.	11,759	4.96%
Cathay Life Insurance Co., Ltd.	6,331	2.67%
Ever Wealthy International Corp.	4,753	2.01%

As of：Aug. , 2021

The Brief Introduction to CSCC

Table of academic degree in CSCC's employees

Academic Degree	No.	Percentages
Ph.D.	9	3%
Master's Degree	79	27%
Bachelor's Degree	138	47%
Junior College and Senior High School	68	23%
Total	294	100%

As of：Dec., 2021

The Brief Introduction to CSCC

Unit：ten thousand metric tons

	2018	2019	2021	2022 January
Coal Tar	25.5	26.0	25.2	2.0
Light Oil	12.4	11.6	10.9	0.9

Sales Revenue breakdown by products

	2019	2020	2021
Light Oil	29%	28%	30%
Benzene	24%	24%	26%
Coal Tar	47%	47%	41%
Creosote Oils	26%	26%	24%
Soft Pitch	12%	13%	11%
Naphthalene	7%	7%	5%
Carbon Material	5%	4%	6%
Coke Breeze	8%	11%	10%
Tranding	11%	10%	13%

The Brief Introduction to CSCC

Unit: NT$ thousands

2019	Q1	Q2	Q3	Q4	Total
Revenue	2,019,127	1,865,753	2,159,028	1,498,082	7,541,990
Operating Income	430,394	366,659	446,611	198,729	1,442,393
Net income before tax	477,480	406,381	501,851	209,613	1,595,325
WTI Oil Price	**55**	**60**	**56**	**57**	**57**

2020	Q1	Q2	Q3	Q4	Total
Revenue	1,599,177	1,149,670	1,161,772	1,453,155	5,363,774
Operating Income	229,003	145,622	154,805	240,469	769,899
Net income before tax	231,660	191,736	195,262	232,361	851,019
WTI Oil Price	**46**	**27**	**41**	**42**	**39**

2021	Q1	Q2	Q3	Q4	Total
Revenue	1,668,856	1,951,885	2,295,800	2,065,900	7,982,441
Operating Income	262,559	305,591	371,083	254,221	1,193,454
Net income before tax	285,695	340,556	404,094	282,828	1,313,173
WTI Oil Price	**58**	**66**	**71**	**77**	**68**

◆ Monthly information for January 2022 (Same as information on MPOS.)

Revenue - $830,092 thousand ； Operating Income - 140,105 thousand ； Net income before tax - 138,946 thousand.

WTI Oil Price – USD $68.

Dividend Payout

	2017	2018	2019	2020	2021
EPS	5.0	6.5	5.57	3.09	4.73
Cash Div.	4.6	5.3	5.0	2.8	4.0*
Stock Div.	0	0	0	0	0

*The appropriations of earnings for 2021 are subject to the resolution in the shareholders' meeting to be held in June 2022.

Governance-ESG executive summary

Environment

To construct ISO-14001 energy management system and establish ISO-14064 Emissions Inventories and Verification.

To commence the introduction of the Task Force on Climate-related Financial Disclosures (TCFD), disclose guide for financial information.

Social

To take care the community and join the donation to social care activities, visit neighborhoods and villages nearby the Company from time to time and sponsors community activities to achieve healthy interactions with community residents.

Governance

To establish Corporate Governance and Sustainability Committee for the corporate social responsibility and sustainable operations.

Organizational structure of energy-saving and carbon emission reduction

To achieve short - term , medium term and long - term goals of ESG.

To disclosure of progress report about sustainable development for 2021.

To commence the introduction of the Task Force on Climate-related Financial Disclosures (TCFD).

Achievement of sustainable development through governance

Governance

To commence the introduction of the Task Force on Climate-related Financial Disclosures (TCFD).

Strategies

To form the cross-functional communication and evaluate the risks and opportunities of the climate.

Risk management

To hold the TCFD meeting to sort the risks and opportunities of the climate.

Goals

To set short - term , medium term and long - term goals of resource management.

Governance-medium term and long - term goals of ESG

Environment

To implement long-term plan of energy-saving and carbon emission.

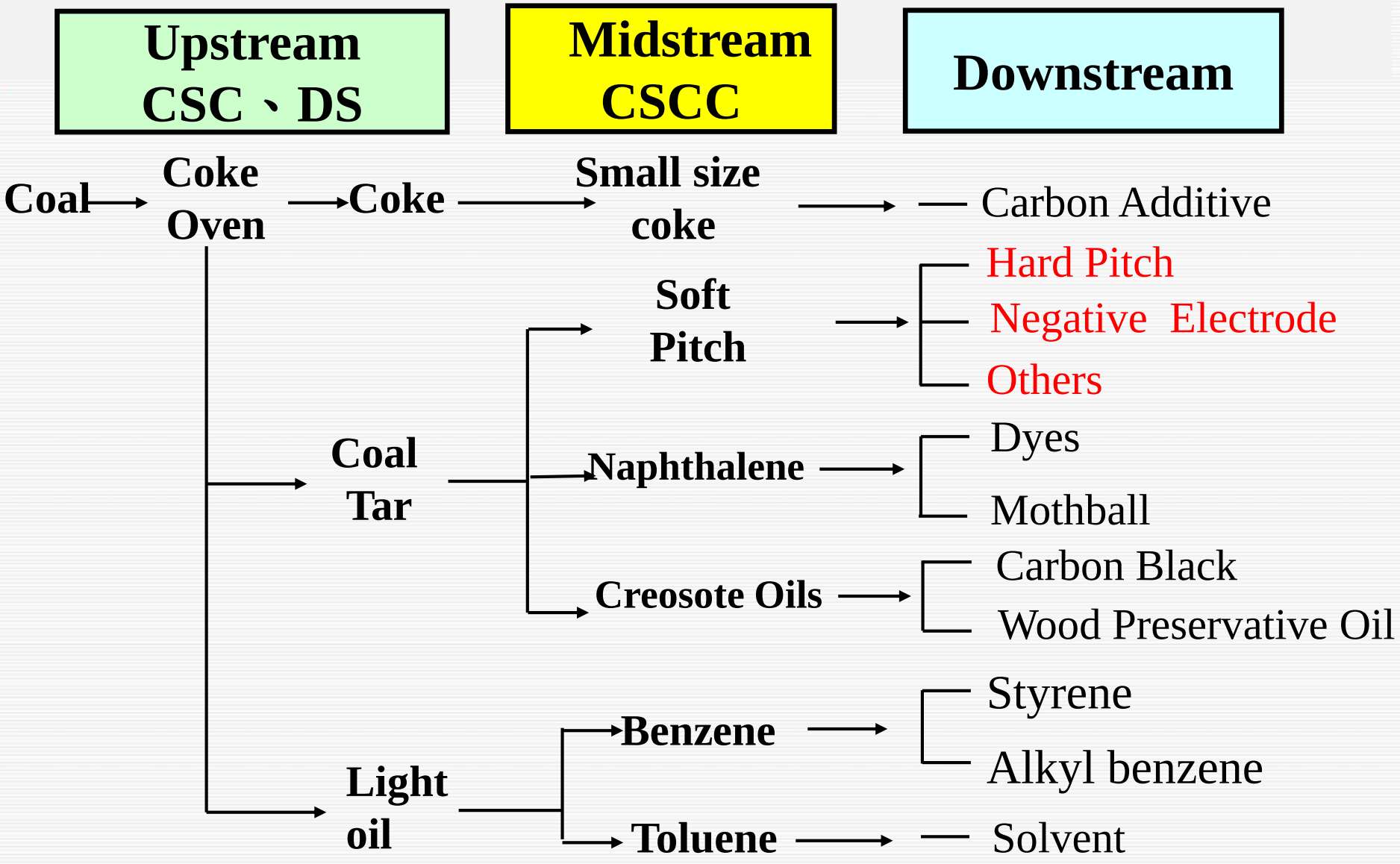
Social

To promotes green life, tree planting, beach cleaning, mountain climbing, green life lectures.

Governance

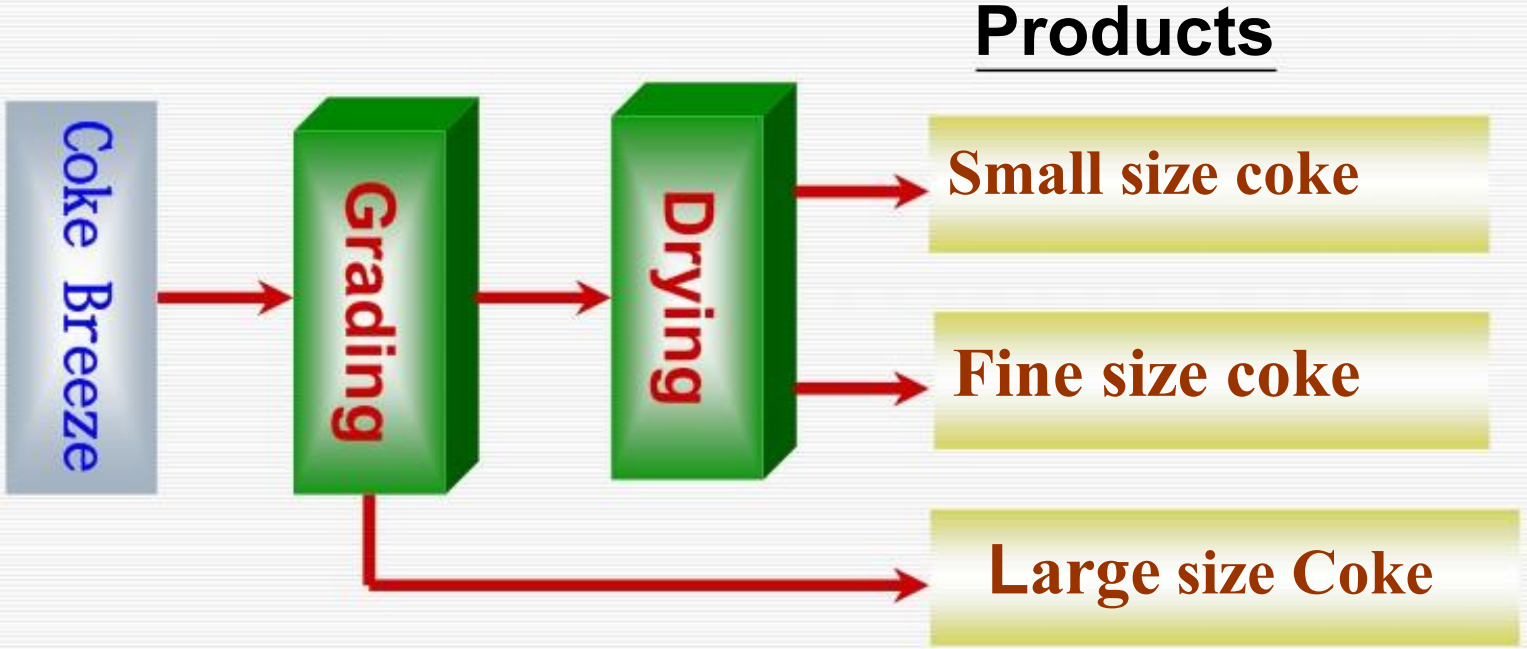
To engage external expert to evaluate Directers' performance.

The Relating Product Map of Coal Chemical Industries



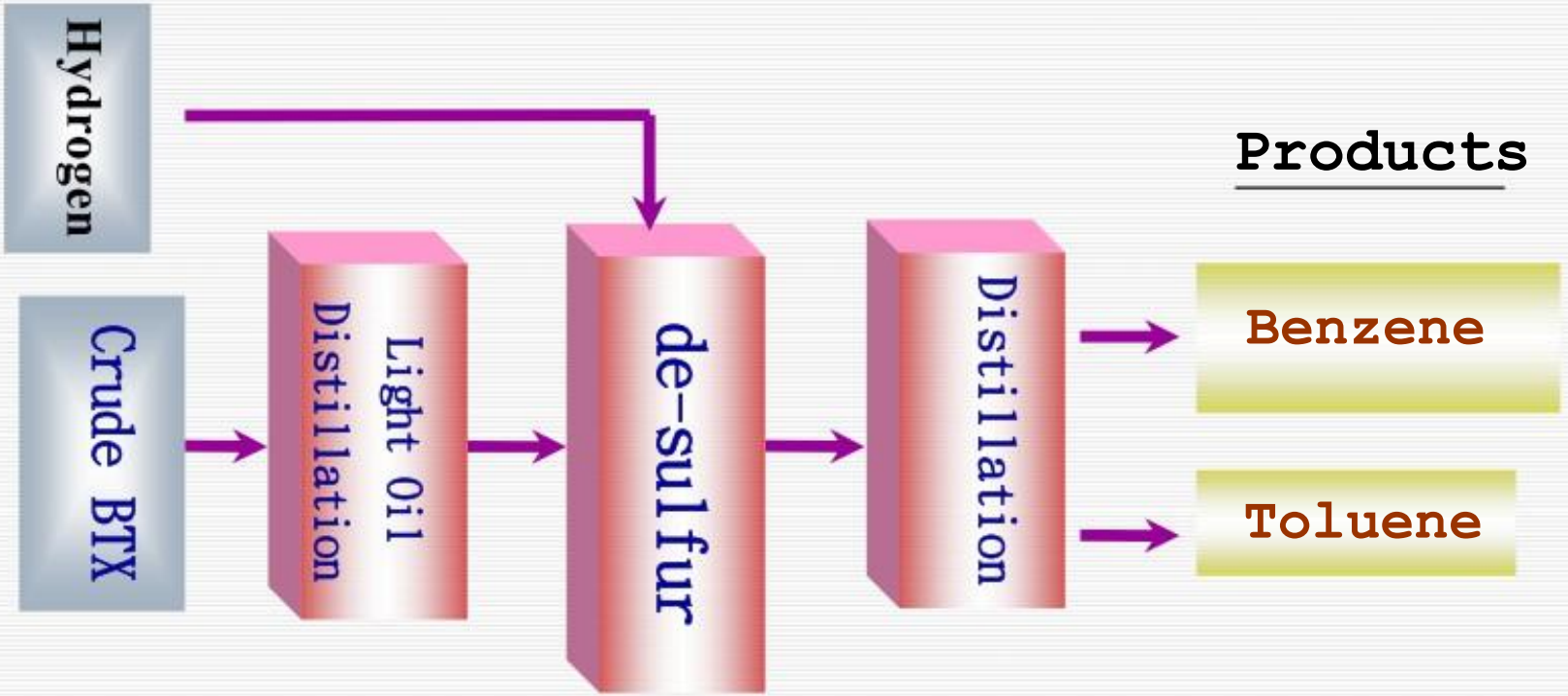
The Relating Product Map of Coal Chemical Industries

- The Process of the Coke Breeze Plant



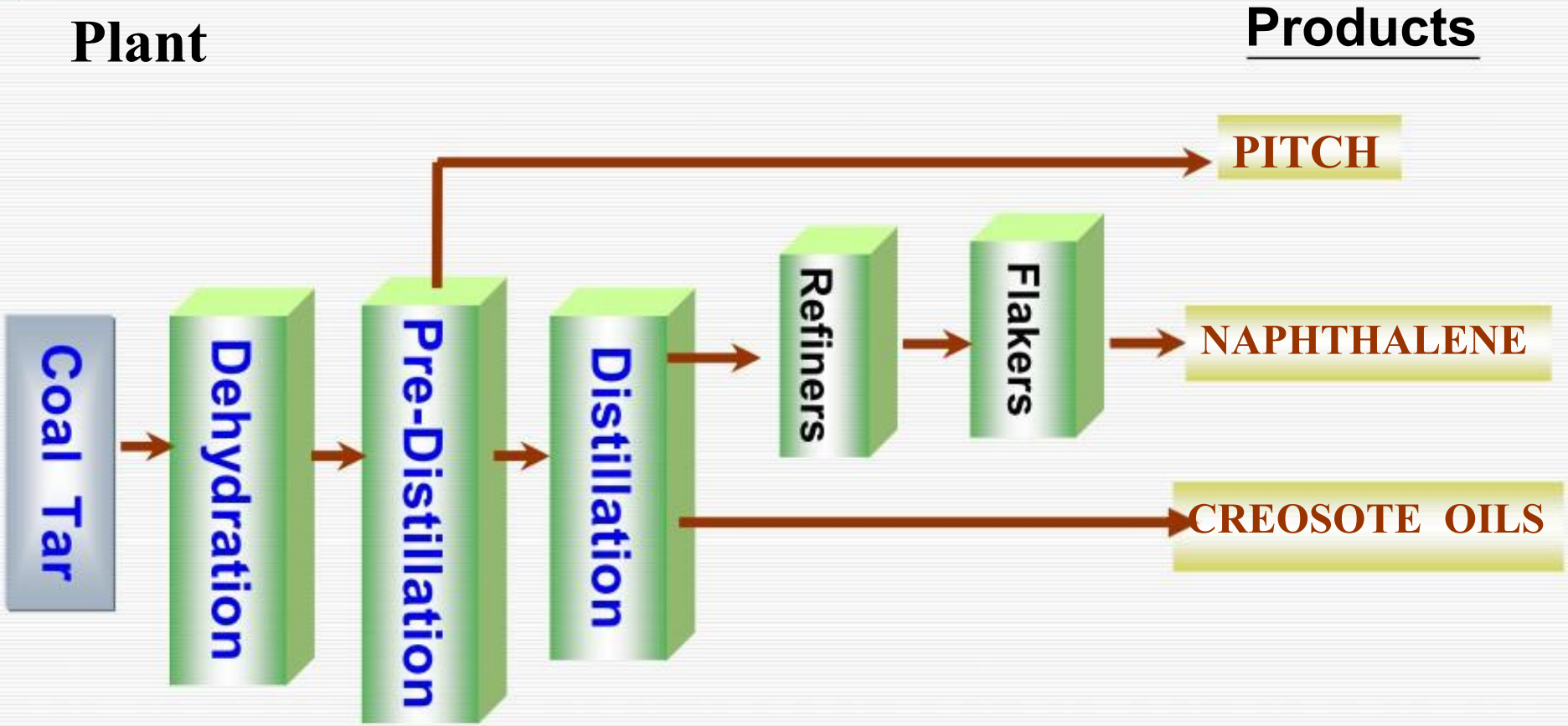
The Relating Product Map of Coal Chemical Industries

The Process of the Light Oil Distillation Plant



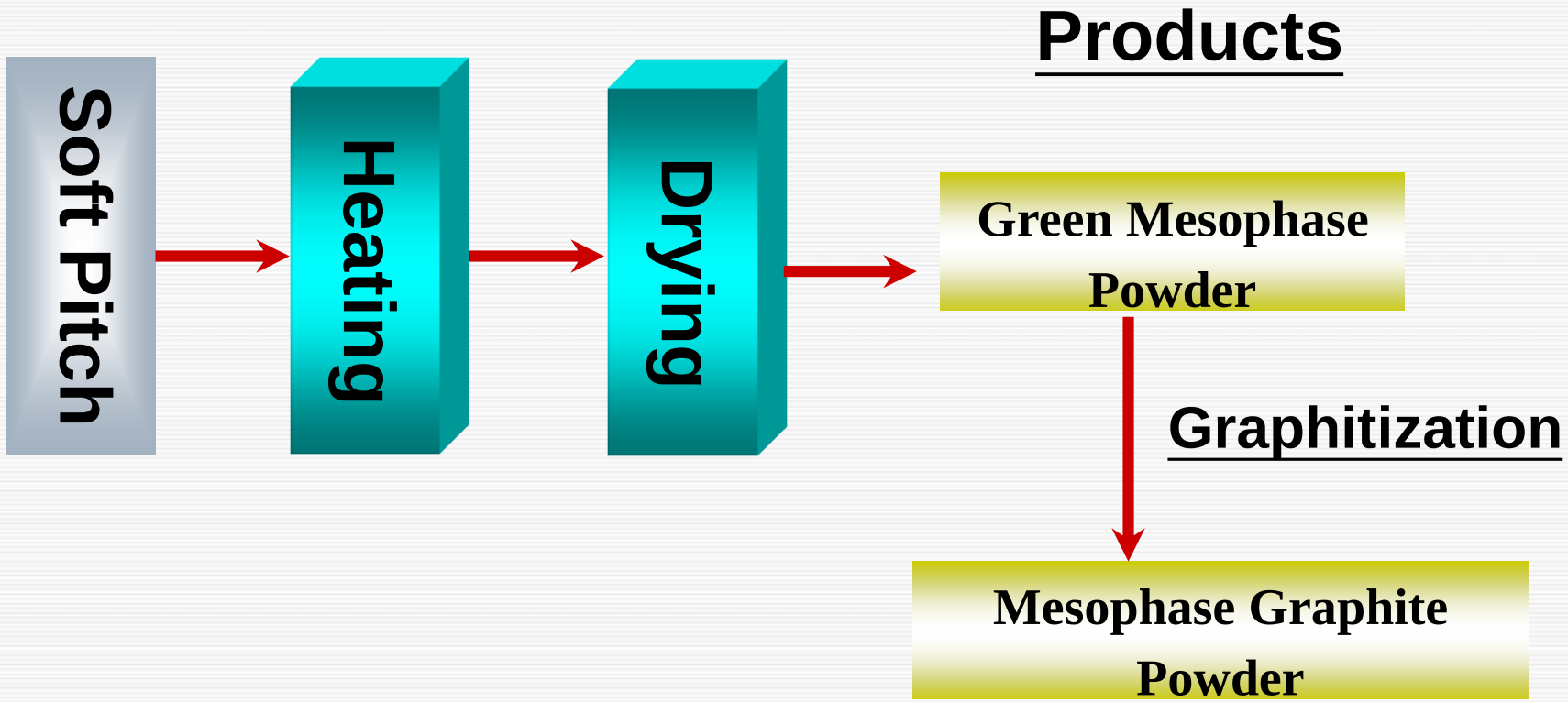
The Relating Product Map of Coal Chemical Industries

- **The Process of the Coal Tar Distillation Plant**



The Relating Product Map of Coal Chemical Industries

- The Process of the Green Mesophase Powder plant



The Appliance of Benzene

Benzene

- **Styrene** → External shell for 3C's product and sport materials

- **Phenol** → Epoxy resin paint

- **Caprolactam** → Nylon 6

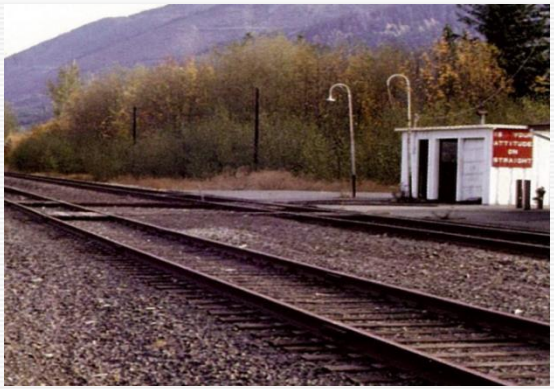
- **Alkyl-benzene** → detergents

The Appliance of Creosote oils

Creosote oils

Carbon black

Wood preservative oil



Wash oil

The Appliance of Naphthalene

Naphthalene

Sulfonated naphthalene formaldehyde condensates

Water-reducing admixture

B-naphthol, Tobias acid, J-acid

Dyestuffs pigment

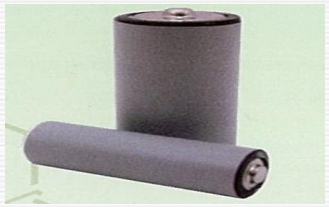
Mothballs

Phthalic anhydride (PA)

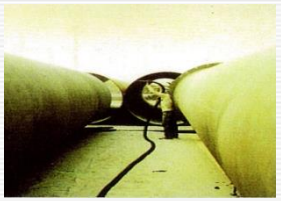
The Appliance of Soft Pitch

Soft Pitch

Primary electrode rod



Water and rust proofing materials



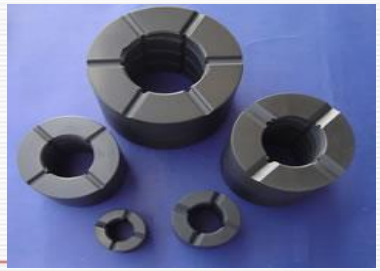
Green Mesophase Powder

Mesophase Graphite Powder

Lithium Ion Battery

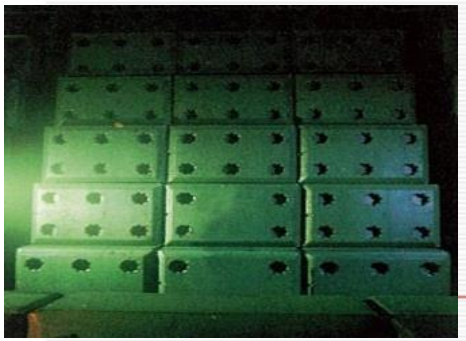
Active Carbon for Supercapacitor

Isotropic Graphite



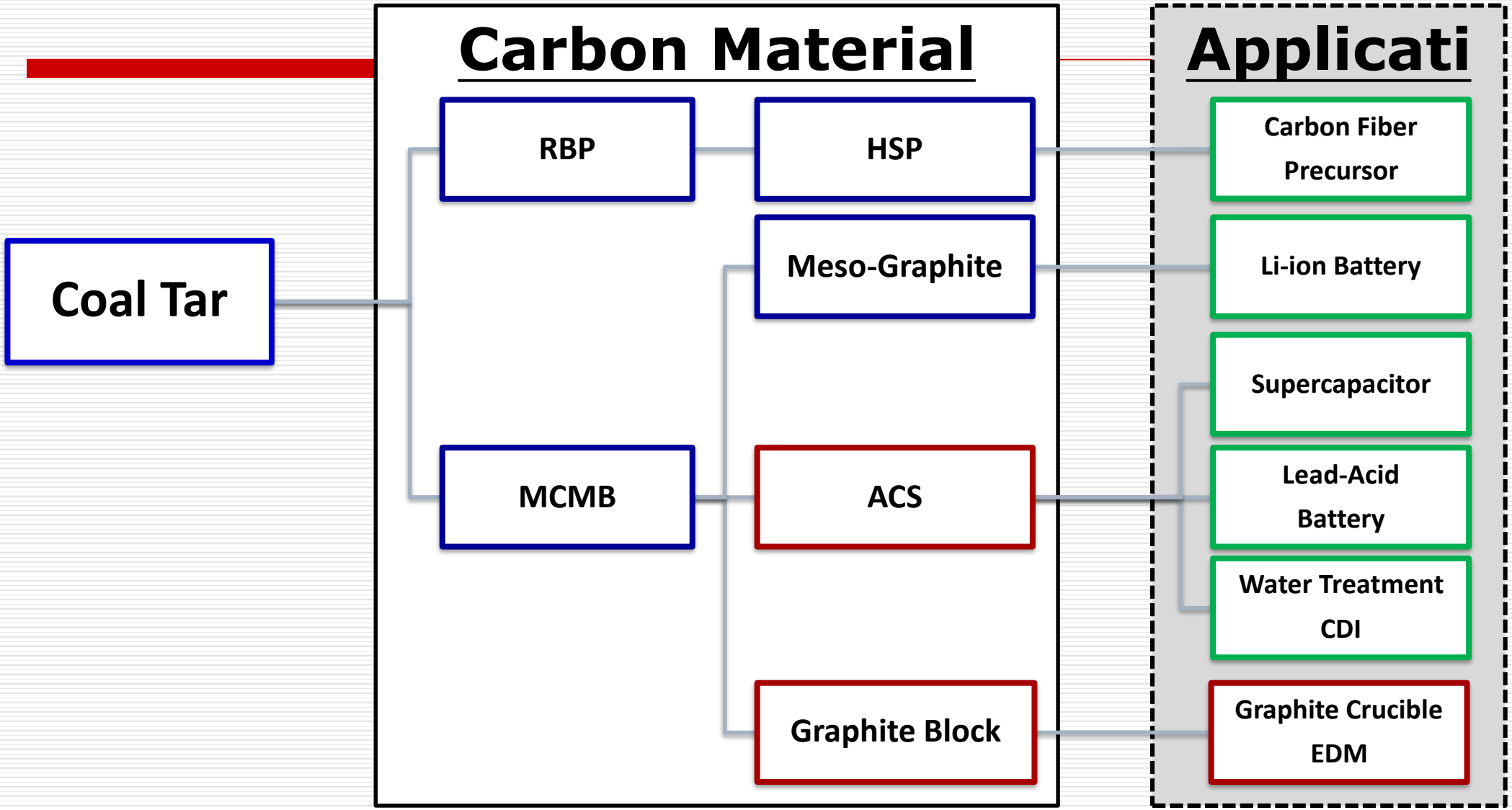
Hard Pitch

Electrode binder



Roofing Pitch

New Product Development Architecture



CSCC's Meso-Graphite

- Application: High Energy & Power density in LIB
- Feature: High first columbic efficiency, high energy density, high discharge capability and long cycle life.

Energy Density(Wh/Kg):Low → High

Power Density(W/Kg):Strong ← Low

MG10
MG08

MG11
FMGP

MG12
MGP

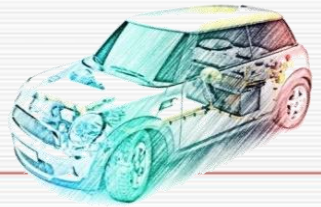
MG13

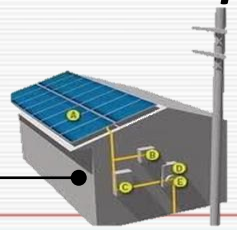
PT/HEV

EV/ESS

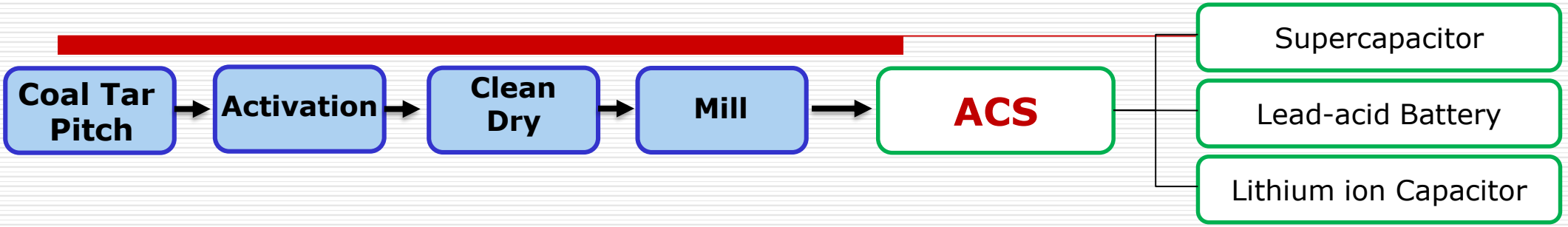
Tablets/3C








Advanced Carbon for Supercapacitors (ACS)



Features of ACS

- ✓ High Surface Area
- ✓ High Capacitance
- ✓ High Quality

- **ACS annual production capacity is 45MT/year, and the second production line is planed to increase total annual production capacity to 90MT/year 。**

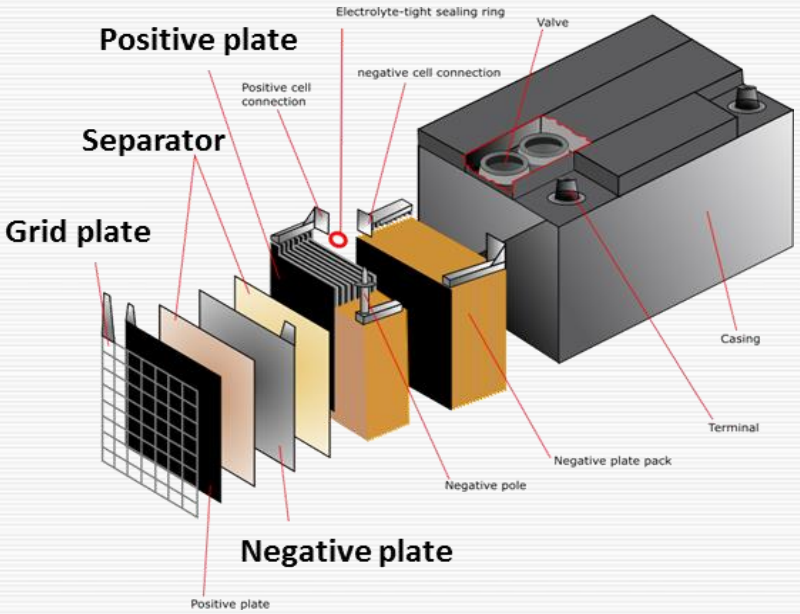
Applications of Supercapacitors

Light Rail Transit

Wind turbine

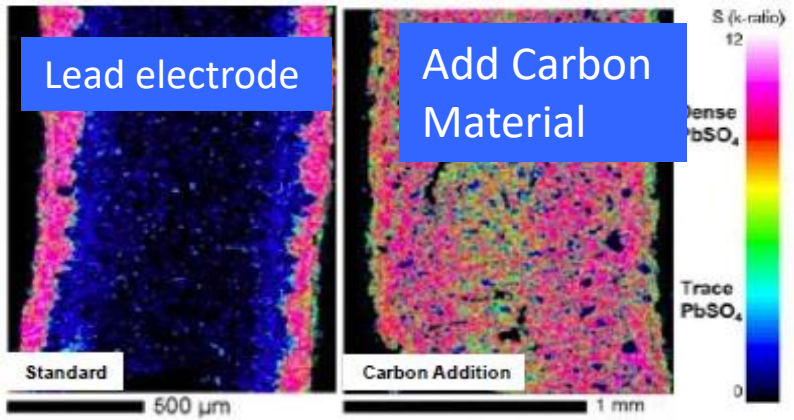
Introduction of Advanced Lead-Acid Battery

Structure of Lead-Acid Battery



Advantages of addition activated carbon into LAB

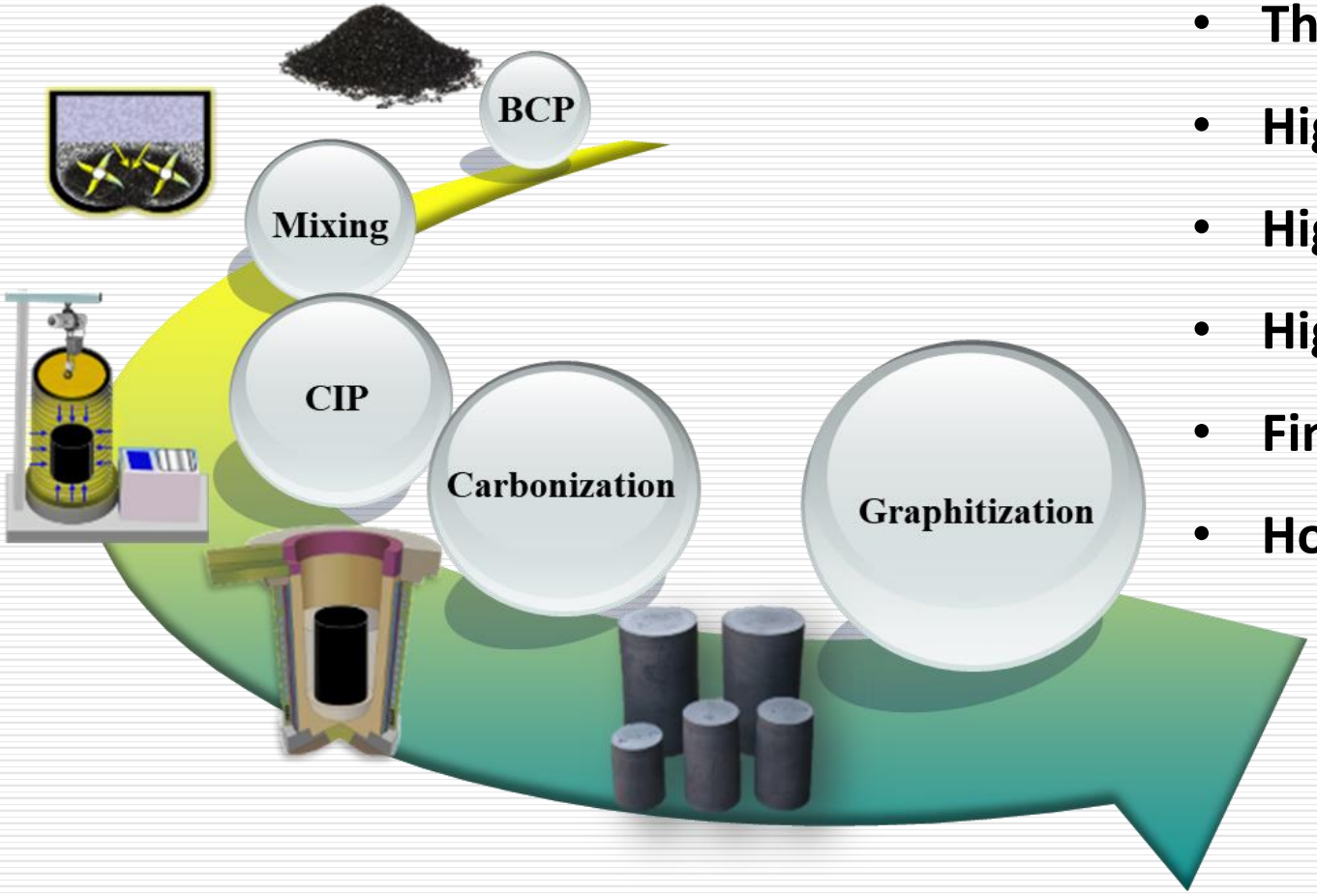
1. Increasing conductivity
2. Improving the uniformity of $Pb/PbSO_4$
3. Capacitance effect
4. Low amount of maintenance
5. Extending the life of LAB



Elimination of hard sulfation by carbon additions, allowing more complete usage of the battery (both images are from cells at end of life). Fernandez et al., *2010.*

Source: Pavlov D., Lead-acid Batteries: Science and Technology. *Elsevier,* 2011.

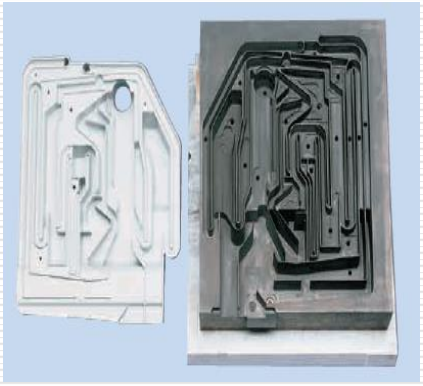
Graphite Block



- Thermal and Chemical Resistance
- High Thermal Conductivity
- High Purity
- High Density
- Fine Structure
- Homogeneous

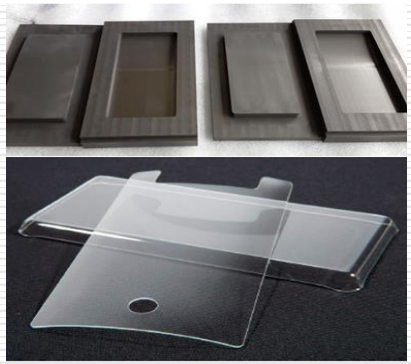
Graphite Block Application

Continuous Casting



EDM

Graphite Block for large Size (>30cm) EDM continuously study high-end product.



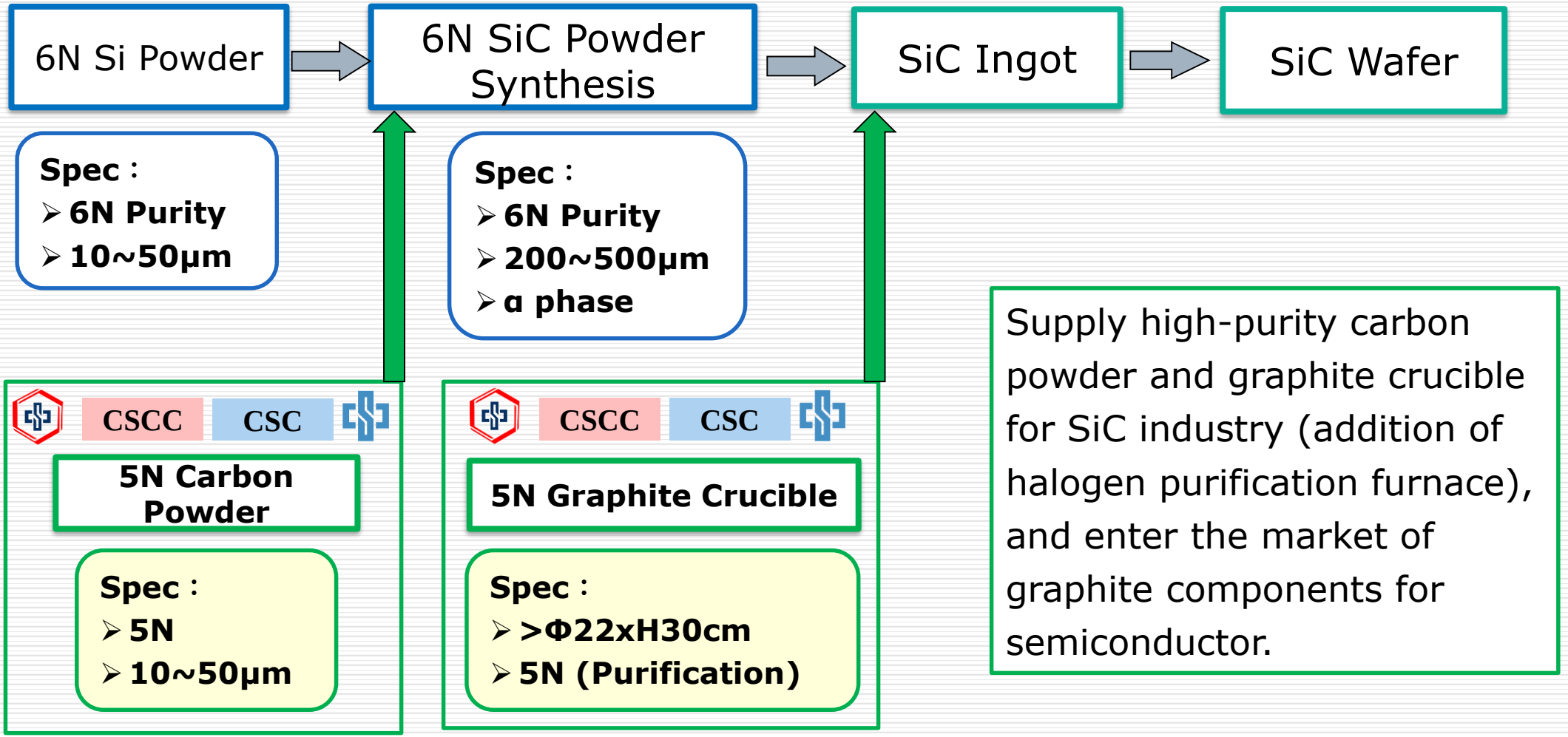
3D Glass Mold

Being verified by customers.

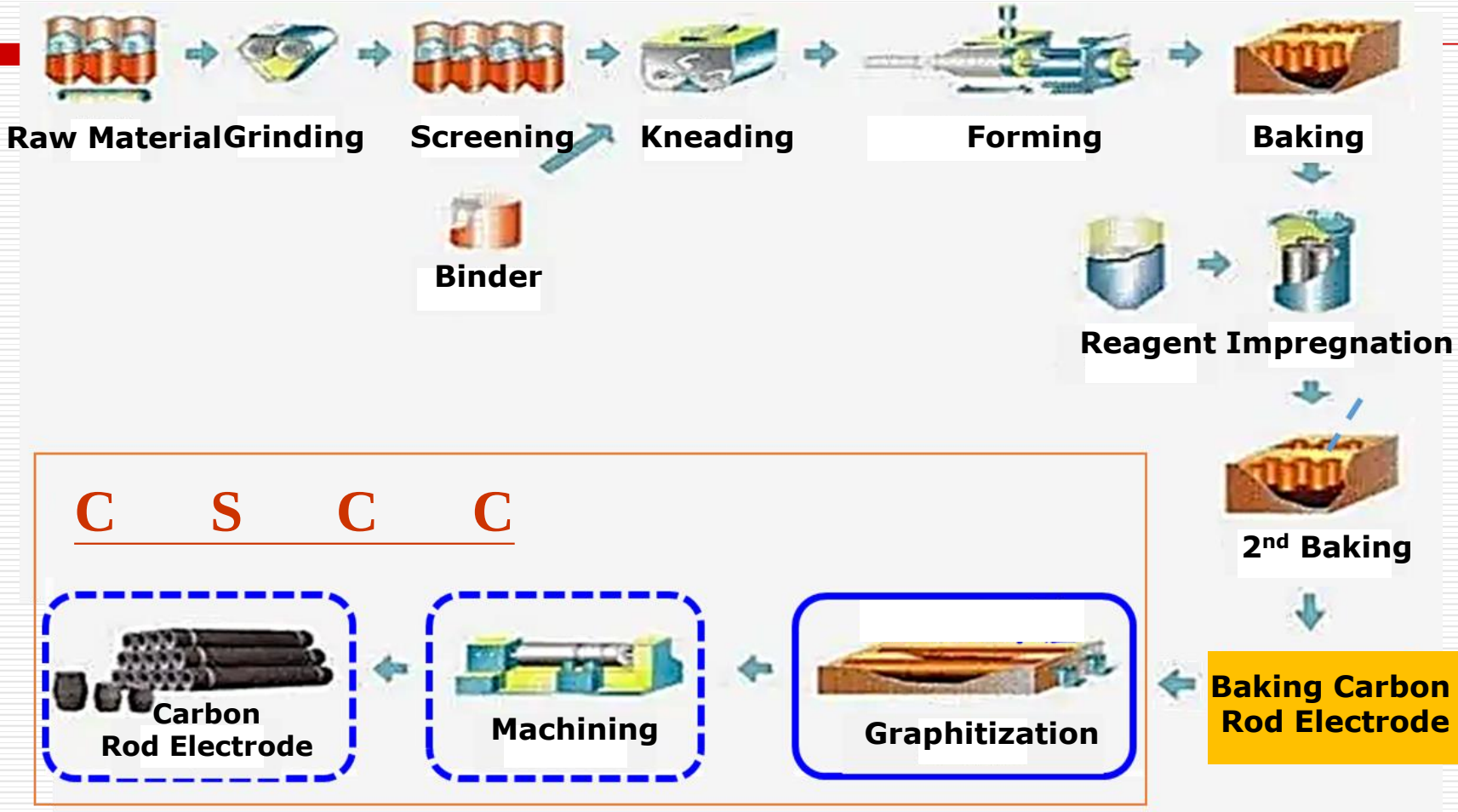
Crucibles

Graphite crucible for SiC industry are being verified by customers.

Carbon Material for Compound Semiconductor（SiC)



Graphite Rod Electrode Manufacturing Flow



- **Introduce roasted carbon rods for graphitization and machining for home market.**

Q&A