

China Steel Chemical Corp.



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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 November, 1998
- 4.CSCC was awarded “Industrial Excellence Award “ and “National Outstanding SMES Award” in 2000 and 2001.
- 5.CSCC achieved OHSAS 18001 certification during 2001~2008.
- 6.CSCC achieved CNLA in April, 2002. And granted authentication in April 2005 and November, 2008.
- 7.Refined Naphthalene Unit expansion completed in April 2009.
8. The capacity 1,400 MT/YR of Green Mesophase Powder Plant completed in January 2010.
- 9.The Light Oil Distillation plant phase 2 completed in April 2010.
- 10.The line G5/G6 of Green Mesophase Powder Plant reaching capacity to 2,600 MT/YR completed during the third quarter 2011.
- 11.The line G1N/G2N of Green Mesophase Powder Plant reaching capacity to 5,000 MT/YR completed by the end of 2012.



The Brief Introduction to CSCC

The structure of shareholder

unit : per thousand stocks

Major shareholder	Shares	Percentage
China Steel Corp	68,787	29.04%
HSBC Hosts Matthews Asia Dividend Fund Investment Account	12,326	5.20%
Fubon Life Insurance Co., Ltd.	12,158	5.13%
China Synthetic Rubber Corp	11,759	4.96%
Ever Wealthy International Corp	4,973	2.10%



The Brief Introduction to CSCC

Table of academic degree in CSCC's employees

Academic Degree	Number	Percentage
Doctor Degree	10	4%
Master Degree	64	26%
Bachelor Degree	108	44%
Junior college and Senior high school	63	26%
Total	245	100%

As of : April, 2018



The Brief Introduction to CSCC

Unit: NT\$ thousands

	Jan-16	Feb-16	Mar-16	Apr-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
Revenue	412,419	394,262	419,290	404,258	437,669	402,458	452,017	348,969	465,890	5,143,442
Operating Income	59,721	85,753	113,773	85,628	96,598	88,862	104,050	95,483	84,972	1,099,799
Net income before tax	78,000	87,832	112,981	92,279	94,359	92,749	114,900	106,995	113,442	1,201,339
Oil Price	30	31	37	41	45	45	49	45	53	43
	Jan-17	Feb-17	Mar-17	Apr-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Revenue	582,273	488,621	616,352	534,801	502,603	541,798	504,040	368,596	604,500	6,242,267
Operating Income	129,849	112,738	88,167	91,629	113,229	106,290	95,515	62,014	181,712	1,249,264
Net income before tax	109,023	96,171	120,944	97,828	113,753	125,429	115,713	61,404	206,084	1,365,166
Oil Price	54	54	51	52	50	53	55	60	61	53
	18-Jan	18-Feb	18-Mar	Apr-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Total
Revenue	708,454	583,994	720,069	675,634						2,688,151
Operating Income	156,645	111,915	152,960	139,986						561,506
Net income before tax	149,252	133,860	135,791	146,578						565,481
Oil Price	66	63	64	69						66



The Brief Introduction to CSCC

Unit: NT\$ millions

	2013	2014	2015	2016	2017	2018/ 1~4
Revenue	8,820	8,904	5,737	5,143	6,242	2,688
Net income after tax	2,221	2,189	1,239	1,038	1,207	*565
EPS(NT\$)	9.60	9.50	5.37	4.45	5.00	-

* The announcement is based on self-reported consolidated net income before tax.

EPS	2015				2016				2017			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
	1.70	1.53	1.30	0.84	1.02	1.04	1.10	1.29	1.14	1.16	1.31	1.39



Dividend Payout

	2011	2012	2013	2014	2015	2016	2017
EPS	9.7	8.5	9.6	9.5	5.37	4.45	5.0
Cash Div.	8.0	7.4	8.3	8.3	4.5	4.5	4.6
Stock Div	0	0	0	0	0	0	0



The Brief Introduction to CSCC

unit : metric tons

<div> <div>Peri</div> <div>Input</div> </div>	2012	2013	2014	2015	2016	2017	2018 /1~4
Coal Tar	203,920	264,578	266,814	257,506	258,214	253,172	88,759
Light Oil	77,971	93,609	100,930	100,220	94,834	100,590	38,299

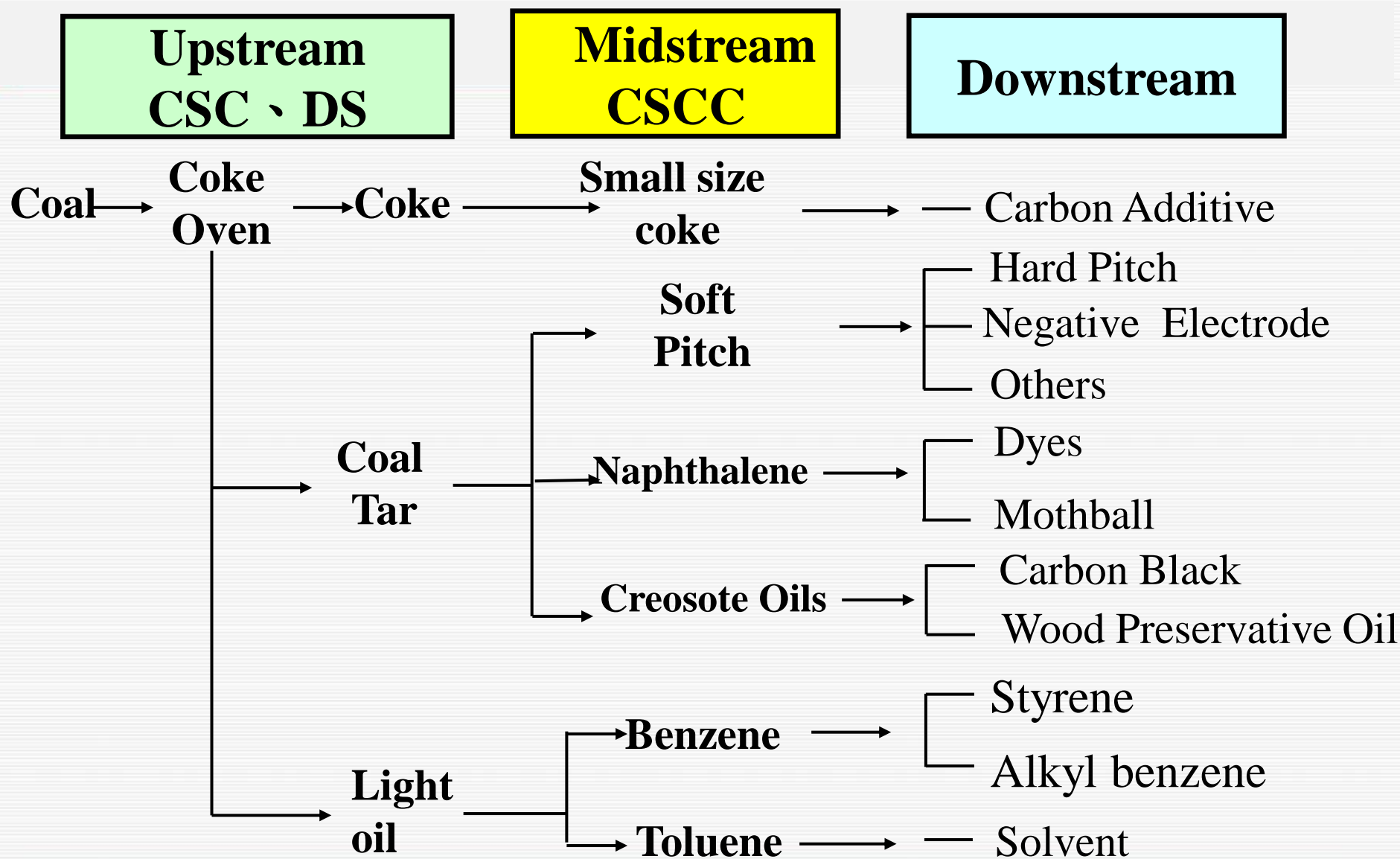


Sales Revenue breakdown by products

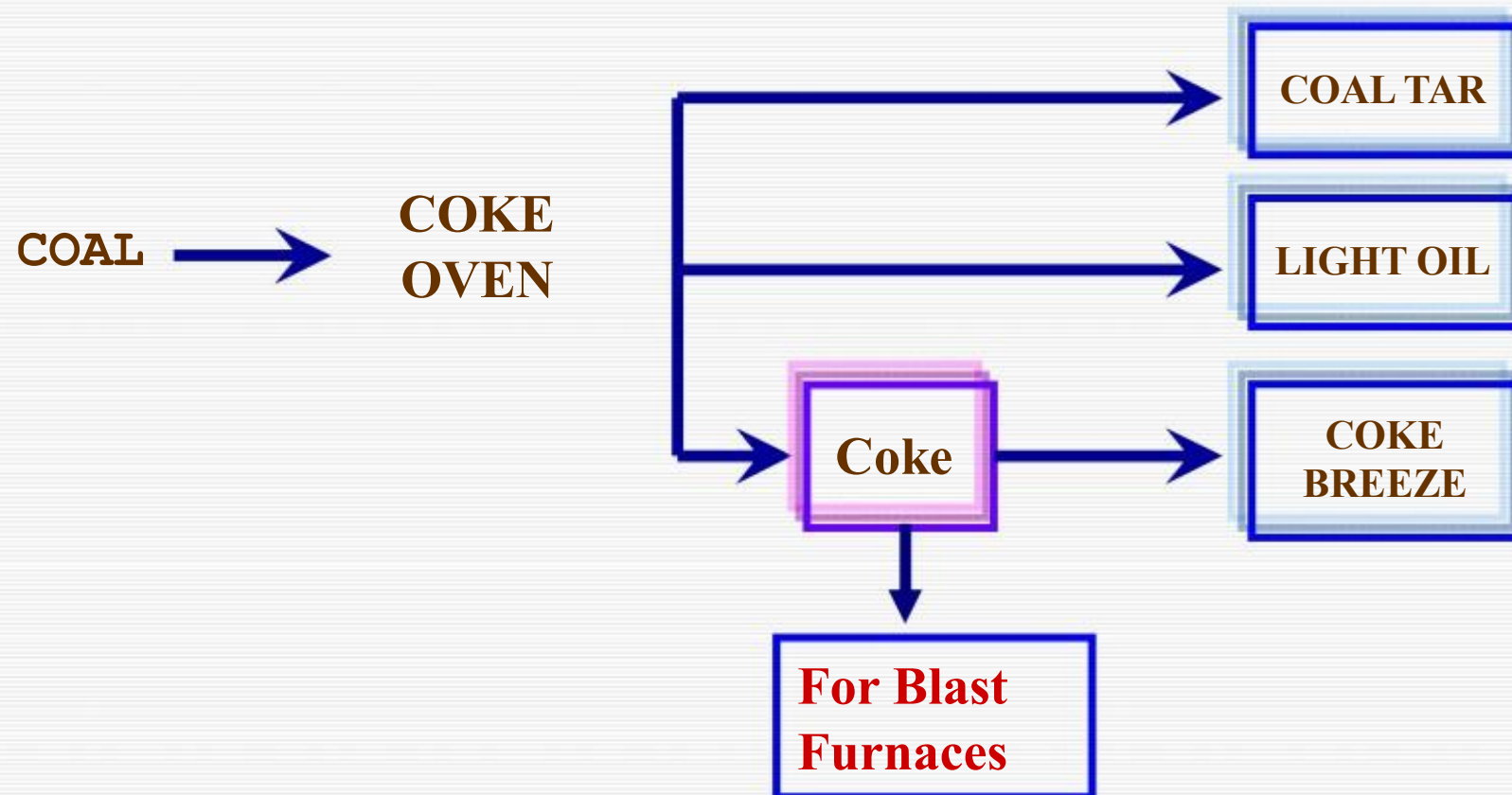
	2015	2016	2017	2018/1~4
Light Oil	33%	33%	36%	34%
Benzene	27%	28%	30%	28%
Coal Tar	44%	44%	47%	44%
Creosote Oils	23%	24%	25%	21%
Soft Pitch	10%	9%	12%	15%
Naphthalene	9%	9%	8%	7%
Mesophase	9%	9%	6%	5%
Coke Breeze	10%	11%	8%	11%



The Relating Product Map of Coal Chemical Industries

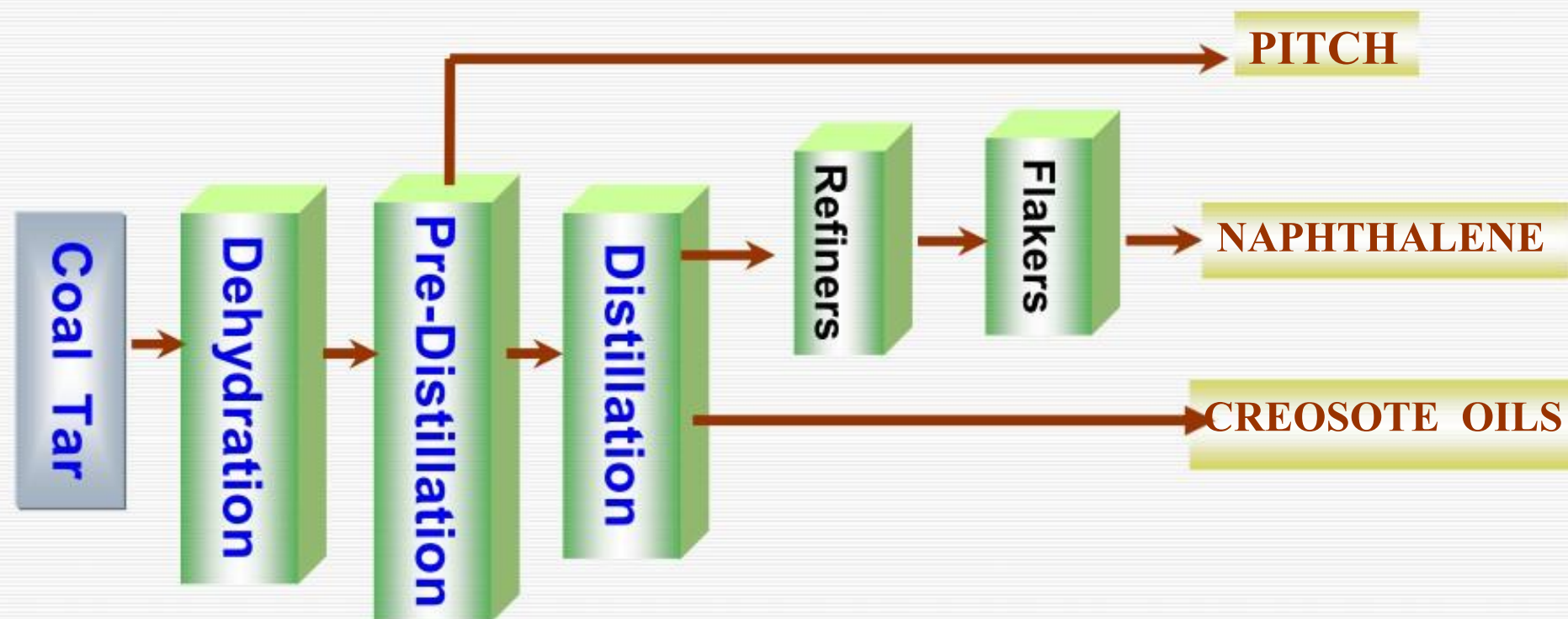


The Relating Product Map of Coal Chemical Industries



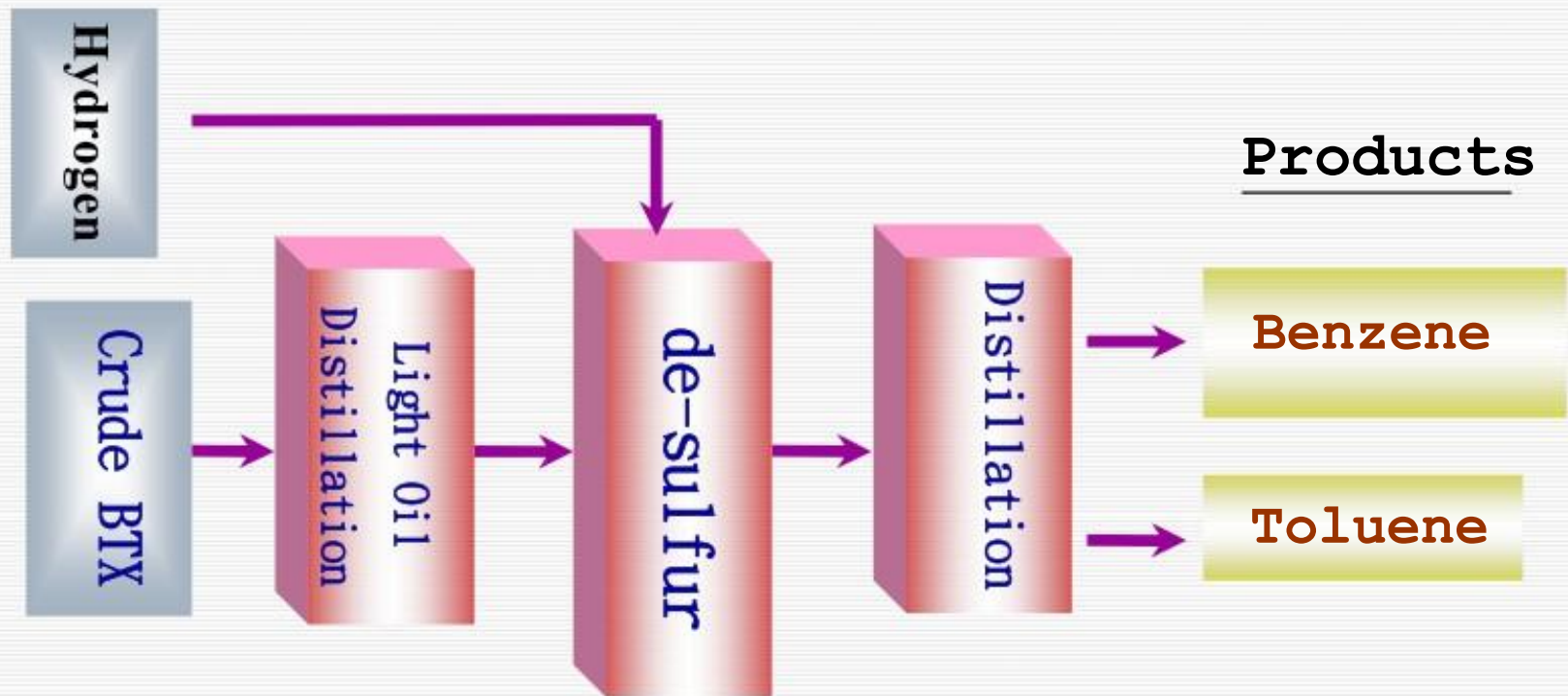
The Relating Product Map of Coal Chemical Industries

The Process of the Coal Tar Distillation Plant



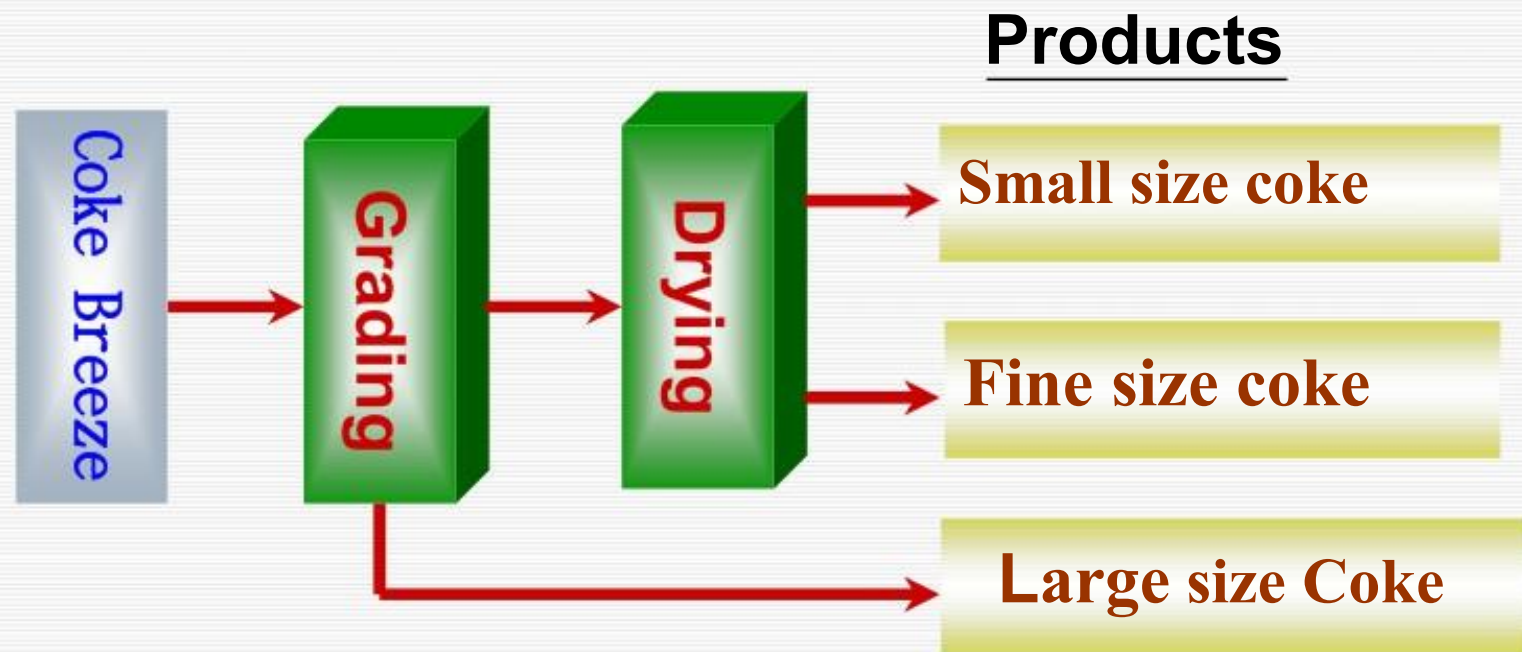
The Relating Product Map of Coal Chemical Industries

The Process of the Light Oil Distillation Plant



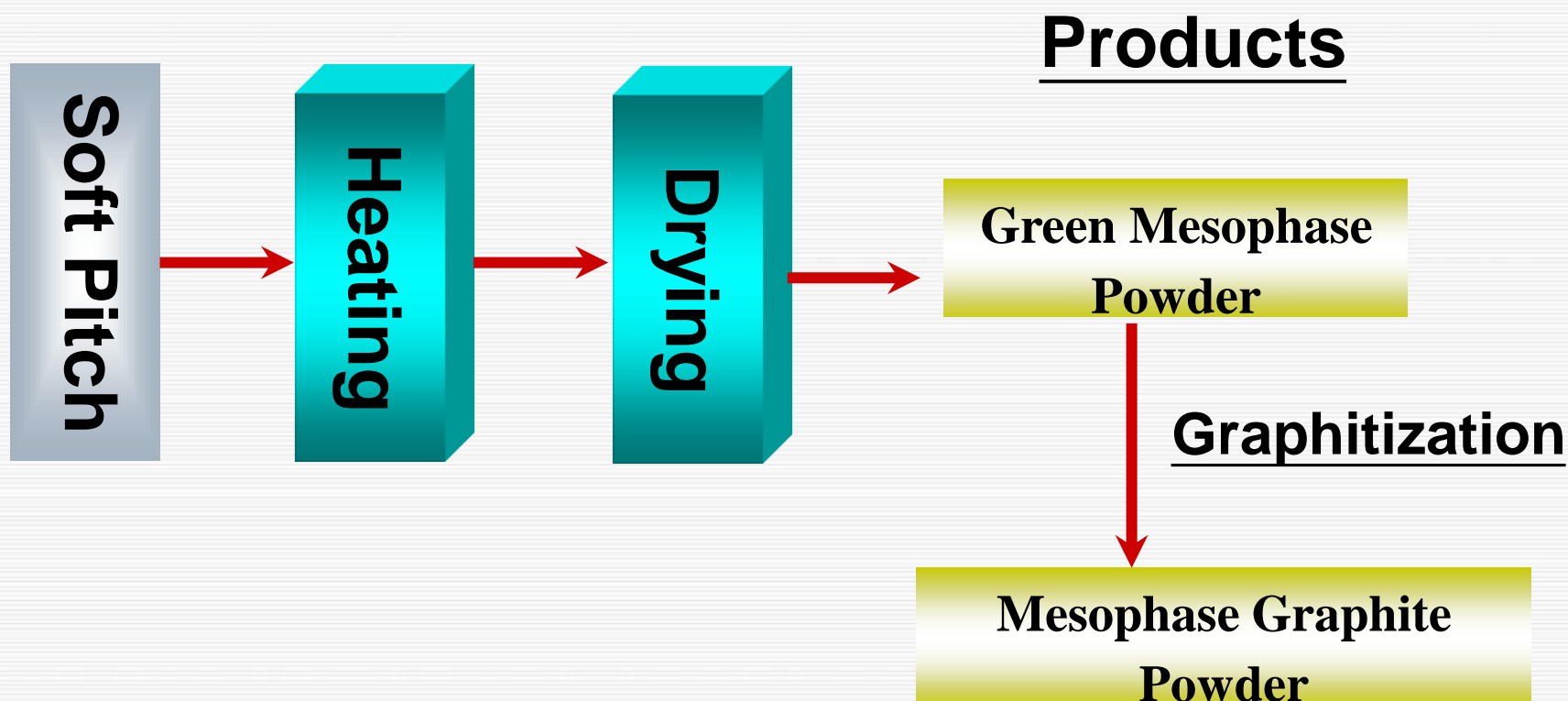
The Relating Product Map of Coal Chemical Industries

The Process of the Coke Breeze Plant



The Relating Product Map of Coal Chemical Industries

✚ The Process of the Green Mesophase Powder plant



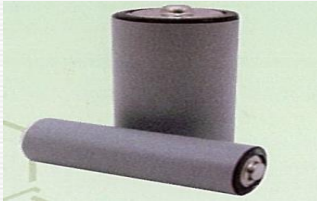
The Industrial Use for CSCC



The Appliance of Soft Pitch

Soft Pitch

Primary
electrode rod



Water and rust
proofing materials



Green Mesophase
Powder

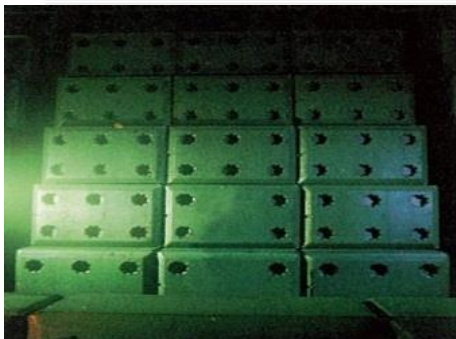
Mesophase
Graphite Powder

Active Carbon for
Supercapacitor



Hard Pitch

Electrode binder



Roofing Pitch



Lithium Ion
Battery



The Appliance of Naphthalene

Naphthalene

Sulfonated
naphthalene
formaldehyde
condensates

B-naphthol,
Tobias acid, J-
acid

Mothballs

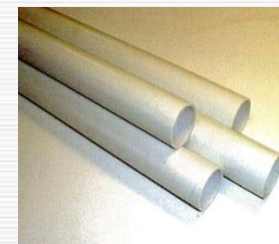
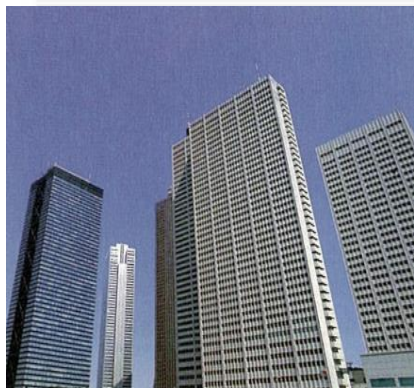
Phthalic
anhydride (PA)

PEN resin
BON-6

Water-reducing admixture

Dyestuffs pigment

Plasticizer



The Appliance of Creosote oils

Creosote oils

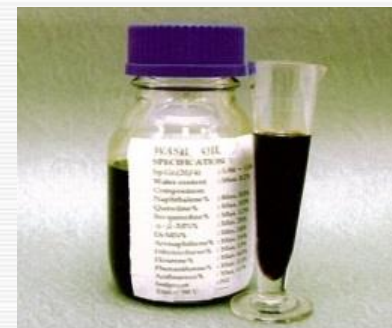
**Carbon
black**



Wood preservative oil



Wash oil



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



New Products Development

- ✚ High Soft Point Pitch (HSP):utilized as wrapping materials to cover carbon for Li-ion Batteries anode or as binder material for fireproofing material.
- ✚ High Soft Point Pitch is a special pitch which possesses a soft point higher than 260°C and have high fixed carbon ratio (ca. 80-85%). It is also utilized as carbon fiber precursor, because the production procedure of HSP is similar to the one of carbon fiber procedure.
- ✚ Nowadays, the pre-launch sample is provided to customers for testing as wrapping material for Li-ion batteries anode and fireproofing material. Mass production process design had been completed and evaluation of mass product line will be made after market expands.



New Products Development

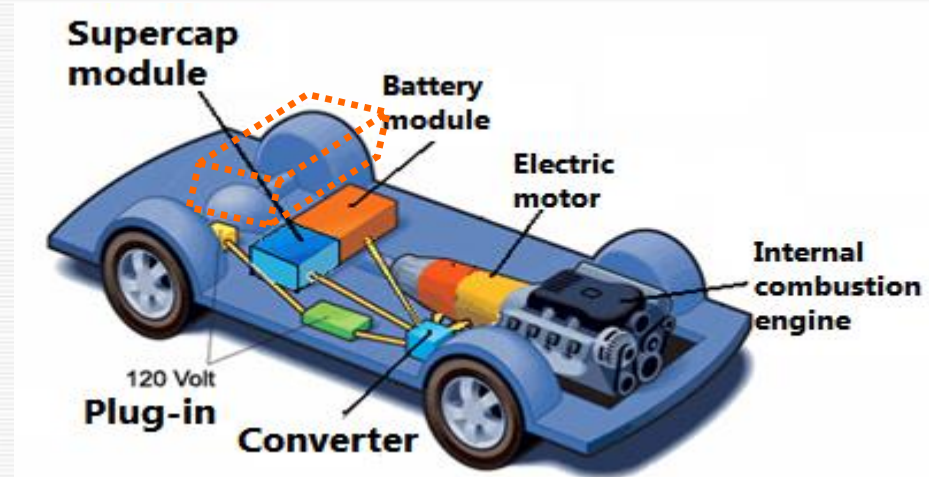
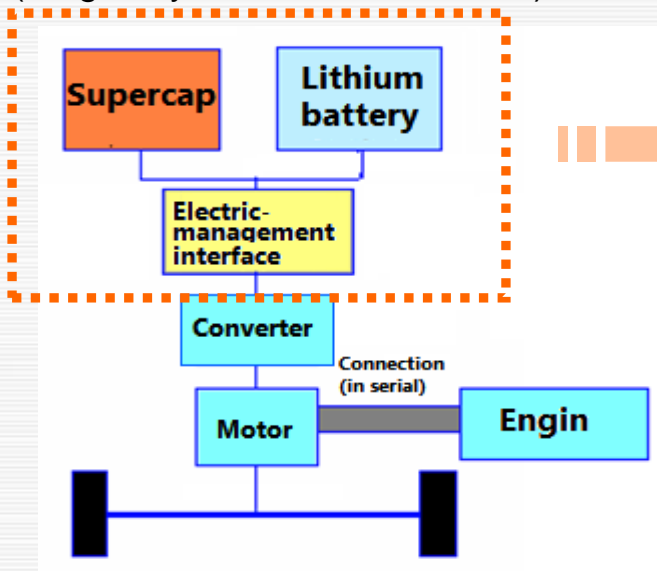
- ✦ The quality of AC is great as Japan leading brand. The AC has already been sold worldwide.
- ✦ Due to the expansion of Li-ion batteries anode material, establishing graphitizing factory is planning. Studying abroad techniques of graphitization, evaluation of inductive graphitizing furnace and mass production plan are progressing.



Applications of Supercapacitors

PHEV

(Plug in hybrid electric vehicles)



Also in..



E-Bus



Light Rail Transit



Wind turbine





Thank You

