

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	15,589	6.58%
International CSRC Investment Holdings Co., Ltd.	11,759	4.96%
Fubon Life Insurance Co., Ltd.	10,352	4.37%
Ever Wealthy International Corp	4,754	2.01%

As of : Apr, 2019



The Brief Introduction to CSCC

Table of academic degree in CSCC's employees

Academic Degree	Number	Percentage
Doctor Degree	8	3%
Master Degree	78	27%
Bachelor Degree	132	47%
Junior college and Senior high school	66	23%
Total	284	100%

As of : May, 2019



The Brief Introduction to CSCC

Unit: NT\$ thousands

2017	01	02	03	04	05	10	11	12	Total
Revenue	582,273	488,621	616,352	534,801	496,725	504,040	368,596	604,500	6,242,267
Operating Income	129,849	112,738	88,167	91,629	77,181	95,515	62,014	181,712	1,249,264
Net income before tax	109,023	96,171	120,944	97,828	85,081	115,713	61,404	206,084	1,365,166
Oil Price	54	54	51	52	50	55	60	61	53
2018	01	02	03	04	05	10	11	12	Total
Revenue	708,454	583,994	720,069	675,634	678,831	754,445	768,359	688,930	8,559,970
Operating Income	156,645	111,915	152,960	139,986	145,933	135,629	156,050	143,032	1,776,255
Net income before tax	149,252	133,860	135,791	146,578	169,513	160,260	147,542	151,768	1,885,667
Oil Price	66	63	64	69	74	77	62	53	67
2019*	01	02	03	04	05	10	11	12	Total
Revenue	689,967	584,475	744,685	631,257	648,487				3,298,871
Operating Income	154,816	117,582	157,996	137,680	122,028				690,102
Net income before tax	167,368	126,085	184,027	147,816	141,191				766,487
Oil Price	57	61	64	69	67				64

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



The Brief Introduction to CSCC

Unit: NT\$ millions

	2014	2015	2016	2017	2018	*2019
Revenue	8,904	5,737	5,143	6,242	8,560	3,299
Net income after tax	2,189	1,239	1,038	1,207	1,516	767
EPS(NT\$)	9.50	5.37	4.45	5.00	-	-

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

EPS	2016				2017				2018				2019
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
	1.02	1.04	1.10	1.29	1.14	1.16	1.31	1.39	1.40	1.63	1.92	1.55	1.68



The Brief Introduction to CSCC

unit : metric tons

Period Input	2013	2014	2015	2016	2017	2018	2019/ 1~5
Coal Tar	264,578	266,814	257,506	258,214	253,172	257,637	109,932
Light Oil	93,609	100,930	100,220	94,834	100,590	117,102	50,589

2019/1Q Coal Tar 69,528 Light Oil 31,324



Dividend Payout

	2011	2012	2013	2014	2015	2016	2017	2018
EPS	9.7	8.5	9.6	9.5	5.37	4.45	5.0	6.5
Cash Div.	8.0	7.4	8.3	8.3	4.5	4.5	4.6	5.3
Stock Div	0	0	0	0	0	0	0	0

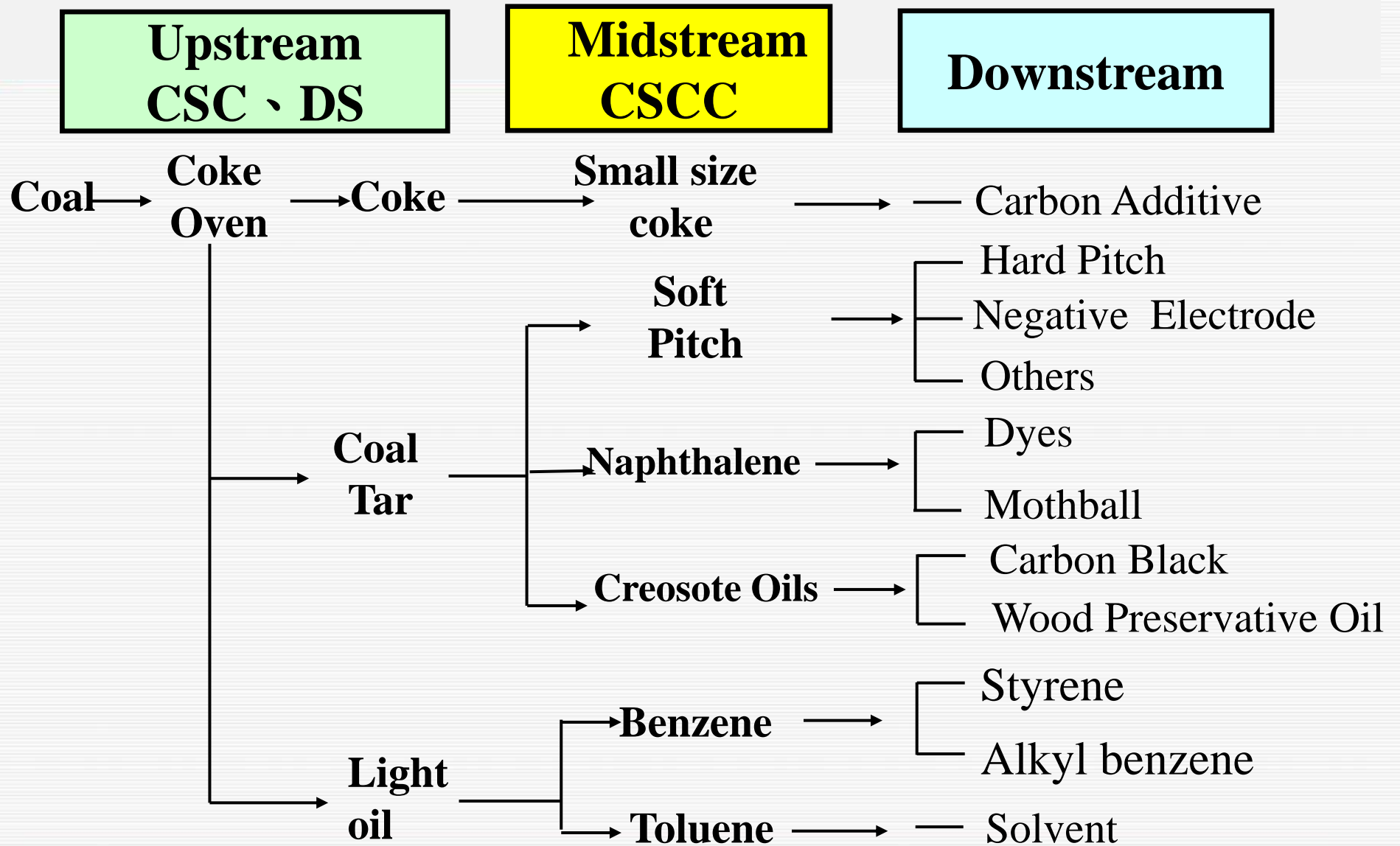


Sales Revenue breakdown by products

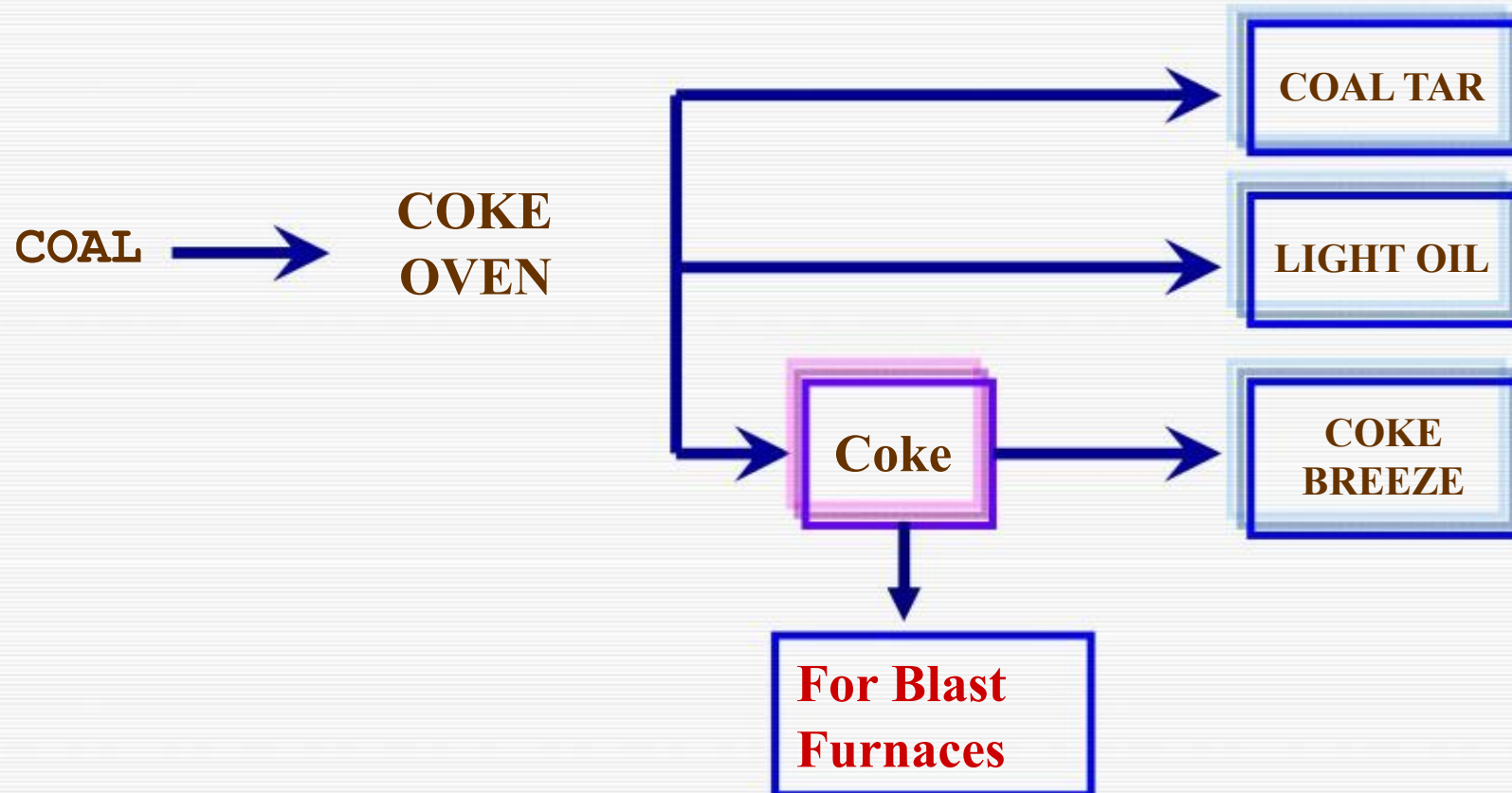
	2018	2018/1Q	2018/2Q	2018/3Q	2018/4Q	2019/1Q	2019/4~5
Coal Tar (JV)	9%	6%	8%	11%	11%	11%	13%
Light Oil	29%	33%	28%	29%	27%	26%	28%
Benzene	25%	28%	24%	24%	23%	21%	23%
Coal Tar	44%	44%	46%	42%	47%	50%	46%
Creosote Oils	21%	21%	21%	20%	23%	28%	28%
Soft Pitch	15%	15%	16%	14%	16%	13%	9%
Naphthalene	7%	7%	7%	7%	6%	7%	8%
Carbon Material	8%	6%	7%	9%	8%	6%	4%
Coke Breeze	8%	11%	11%	6%	6%	6%	7%



The Relating Product Map of Coal Chemical Industries

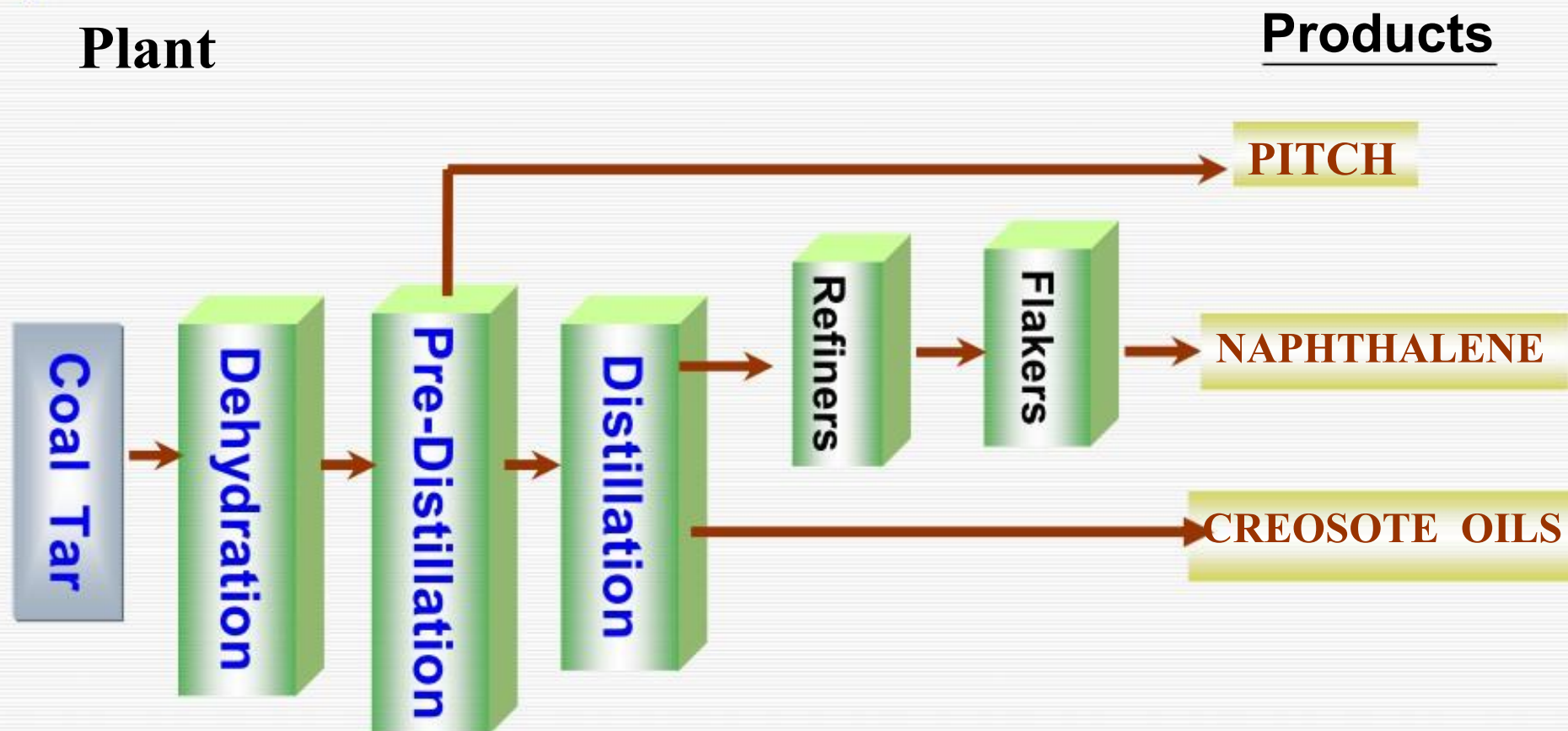


The Relating Product Map of Coal Chemical Industries



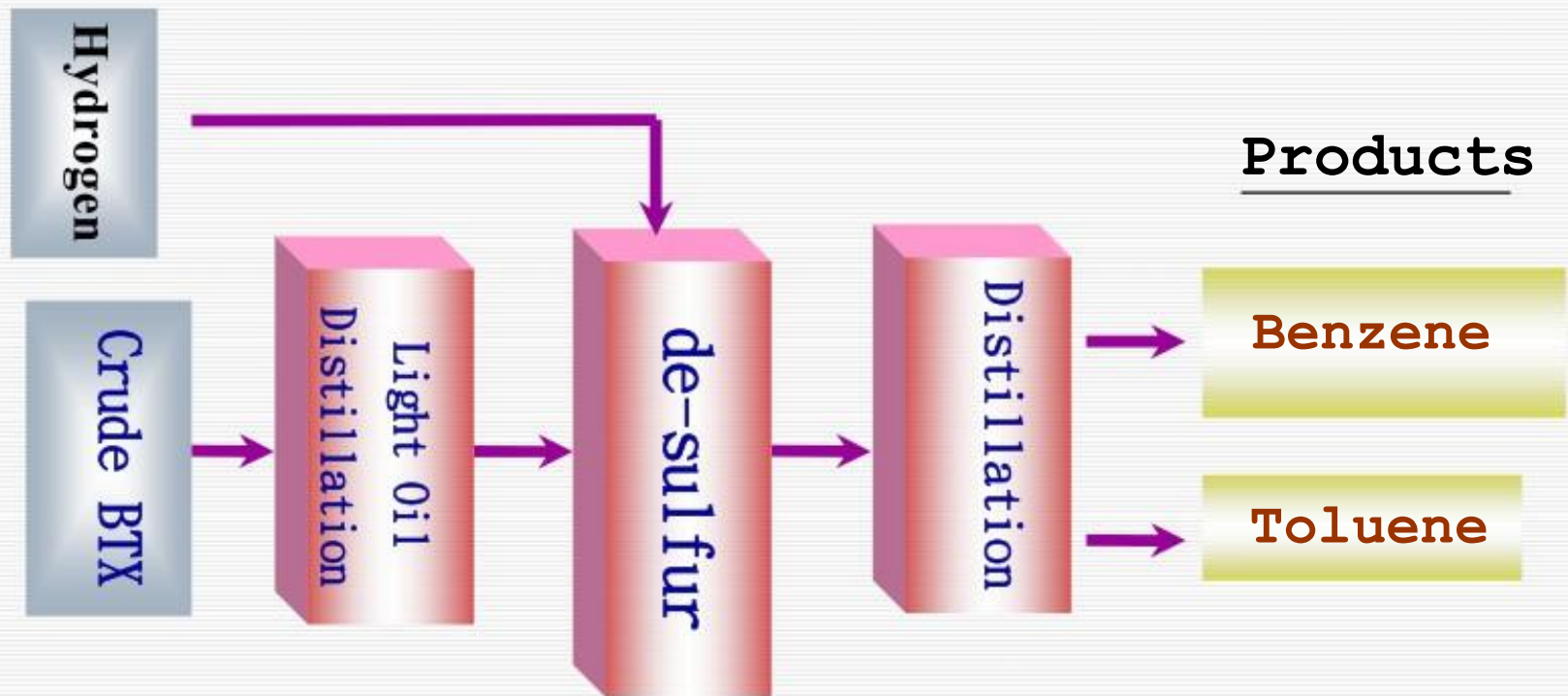
The Relating Product Map of Coal Chemical Industries

The Process of the Coal Tar Distillation Plant



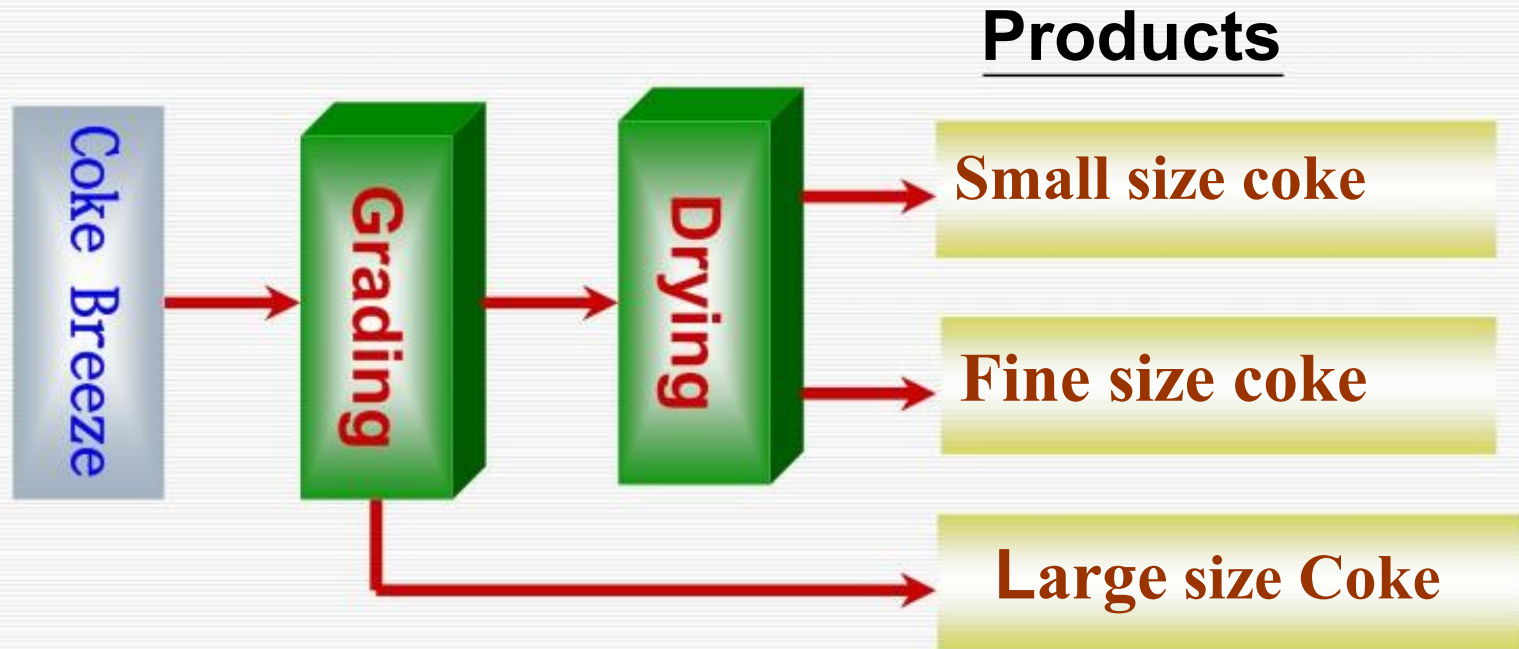
The Relating Product Map of Coal Chemical Industries

The Process of the Light Oil Distillation Plant



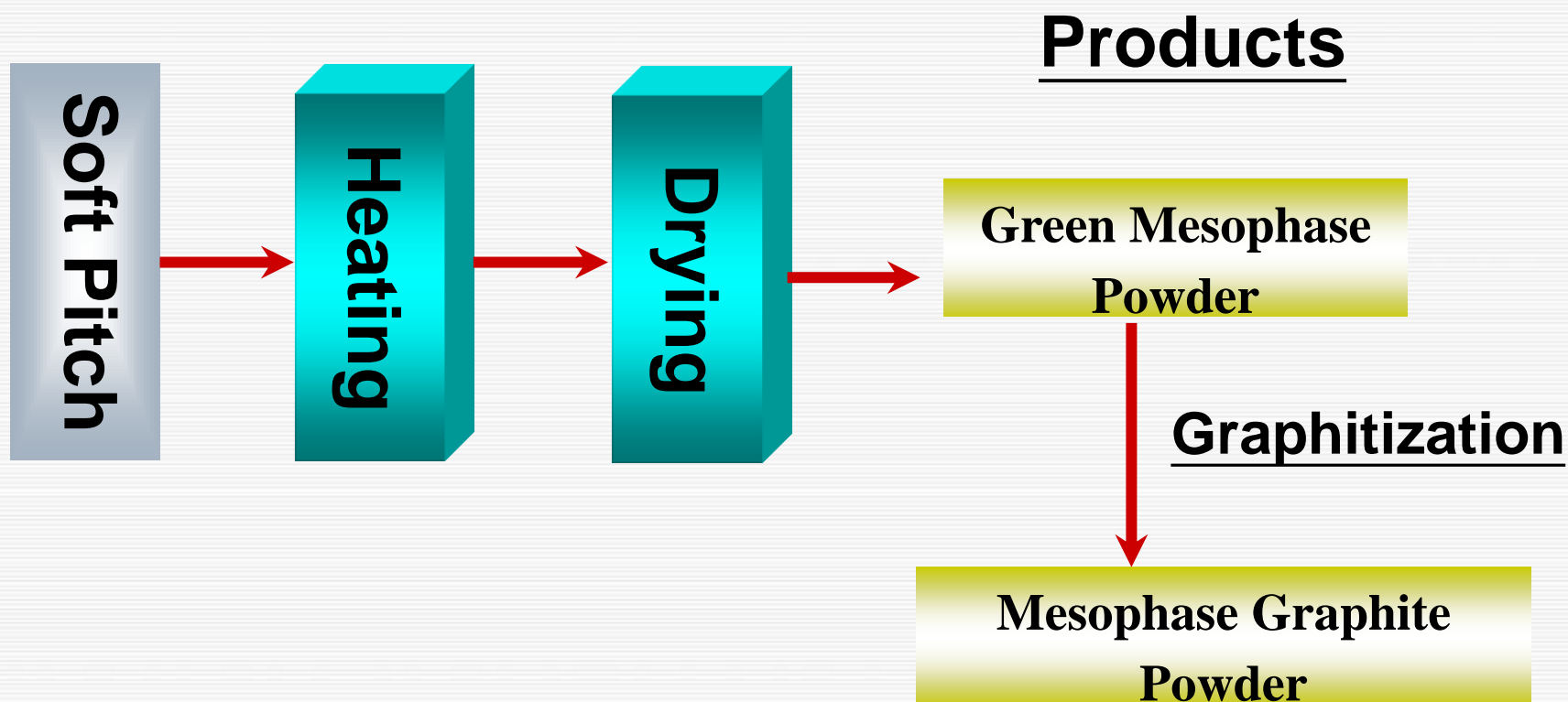
The Relating Product Map of Coal Chemical Industries

The Process of the Coke Breeze Plant



The Relating Product Map of Coal Chemical Industries

✚ The Process of the Green Mesophase Powder plant



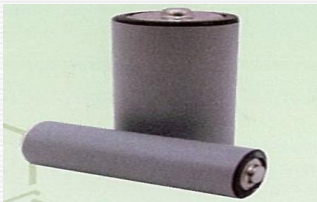
The Industrial Use for CSCC



The Appliance of Soft Pitch

Soft Pitch

Primary
electrode rod



Water and rust
proofing materials



Green Mesophase
Powder

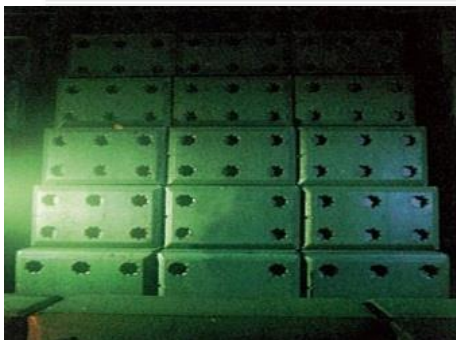
Mesophase
Graphite Powder

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

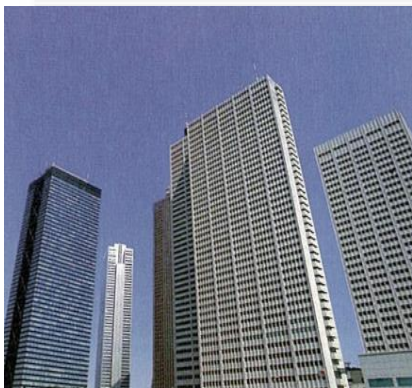
Phthalic anhydride (PA)

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

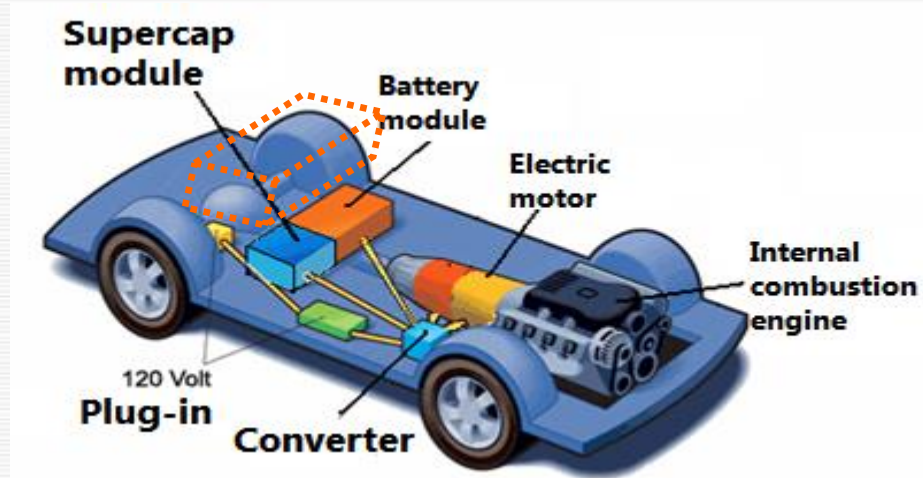
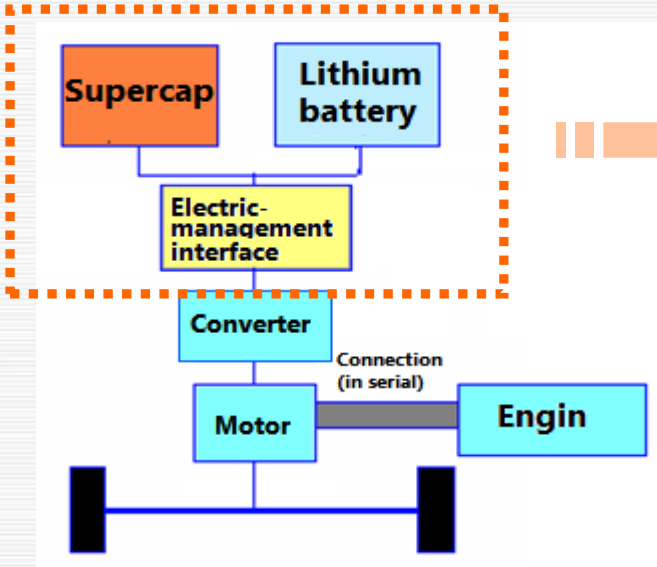
- ✦ The quality of AC is great as Japan leading brand. The AC has already been sold worldwide.
- ✦ Due to the expansion of Li-ion batteries anode material, establishing graphitizing factory is planning. Studying abroad techniques of graphitization, evaluation of inductive graphitizing furnace and mass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



Applications of Supercapacitors

PHEV

(Plug in hybrid electric vehicles)



Also in..



E-Bus



Light Rail Transit



Wind turbine





Thank You

