

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 Corporation	68,787	29.04%
China Synthetic Rubber Corp	11,759	4.96%
Fubon Life Insurance Co., Ltd.	9,735	4.11%
Ever Wealthy International Corp.	5,077	2.14%



The Brief Introduction to CSCC

Table of academic degree in CSCC's employees

Academic Degree	Number	Percentage
Doctor Degree	10	4%
Master Degree	64	27%
Bachelor Degree	99	42%
Junior college and Senior high school	64	27%
Total	236	100%

As of : Jan, 2017



The Brief Introduction to CSCC

Unit: NT\$ thousands

	Jan-15	Feb-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Total
Revenue	522,952	483,543	485,647	474,265	434,130	472,108	313,467	379,087	5,737,544
Operating Income	119,655	99,624	102,461	83,114	71,336	100,534	37,230	58,628	1,199,917
Net income before tax	122,152	170,883	126,091	94,037	129,546	100,394	50,927	79,659	1,441,863
Oil Price	48	55	55	46	47	47	44	37	51
	Jan-16	Feb-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
Revenue	412,419	394,262	469,737	437,669	402,458	452,017	348,969	465,890	5,143,442
Operating Income	59,721	85,753	108,868	96,598	88,862	104,050	95,483	84,972	1,099,799
Net income before tax	78,000	87,832	109,380	94,359	92,749	114,900	106,995	113,442	1,201,339
Oil Price	30	31	44	45	45	49	45	53	43
	Jan-17	Feb-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Total
Revenue	582,273								582,273
Operating Income	129,849								129,849
Net income before tax	109,023								109,023
Oil Price	54								54



The Brief Introduction to CSCC

Unit: NT\$ millions

	2012	2013	2014	2015	2016	2017/1
Revenue	8,257	8,820	8,904	5,737	5,143	582
Net income after tax	1,974	2,221	2,189	1,239	*1,201	109
EPS(NT\$)	8.58	9.60	9.50	5.37	-	-

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

	20151Q	20152Q	20153Q	20154Q	20161Q	20162Q	20163Q
EPS	1.70	1.53	1.30	0.84	1.02	1.04	1.10



Dividend Payout

	2010	2011	2012	2013	2014	2015
EPS	8.3	9.7	8.5	9.6	9.5	5.37
Cash Div.	7.2	8.0	7.4	8.3	8.3	4.5
Stock Div	0	0	0	0	0	0



The Brief Introduction to CSCC

unit : metric tons

Period Input	2012	2013	2014	2015	2016	2017/1
Coal Tar	203,920	264,578	266,814	257,506	258,214	25,877
Light Oil	77,971	93,609	100,930	100,220	94,834	9,086

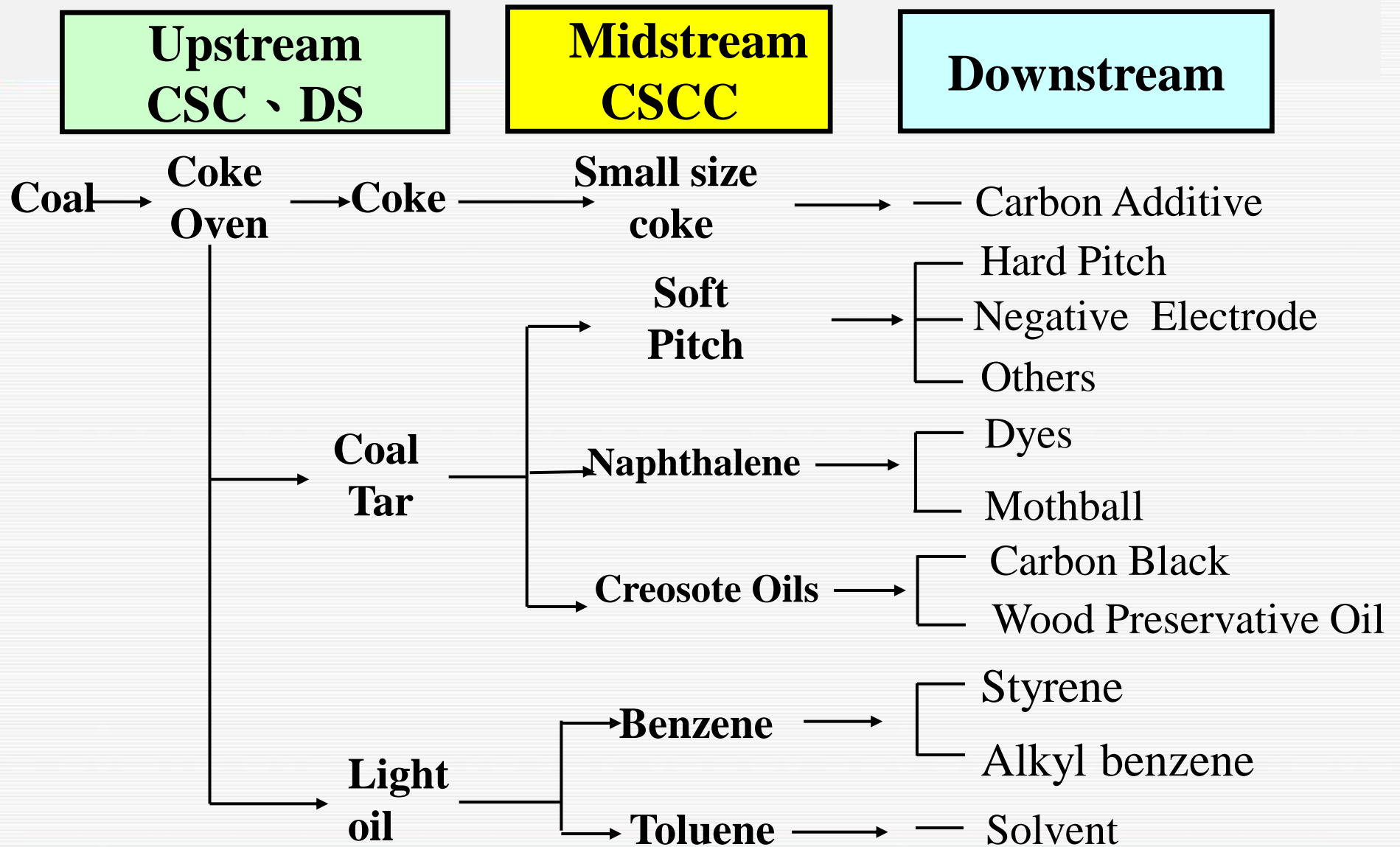


Sales Revenue breakdown by products

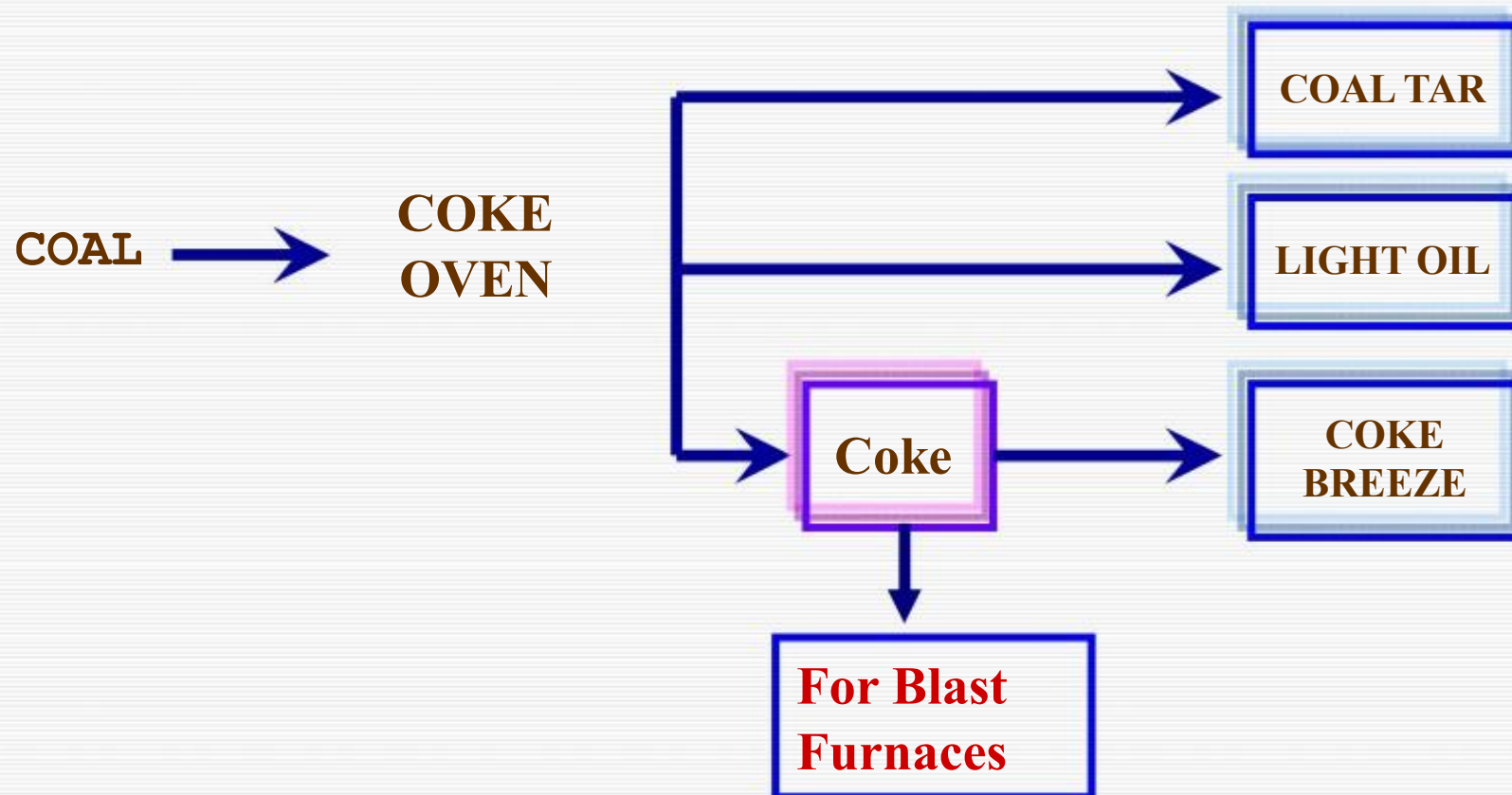
	2014	2015	2016	2017/1
Light Oil	35%	33%	33%	37%
Benzene	29%	27%	28%	32%
Coal Tar	47%	44%	44%	50%
Creosote Oils	30%	23%	24%	27%
Soft Pitch	7%	10%	9%	14%
Naphthalene	8%	9%	9%	8%
Mesophase	5%	9%	9%	2%
Coke Breeze	9%	10%	11%	8%



The Relating Product Map of Coal Chemical Industries

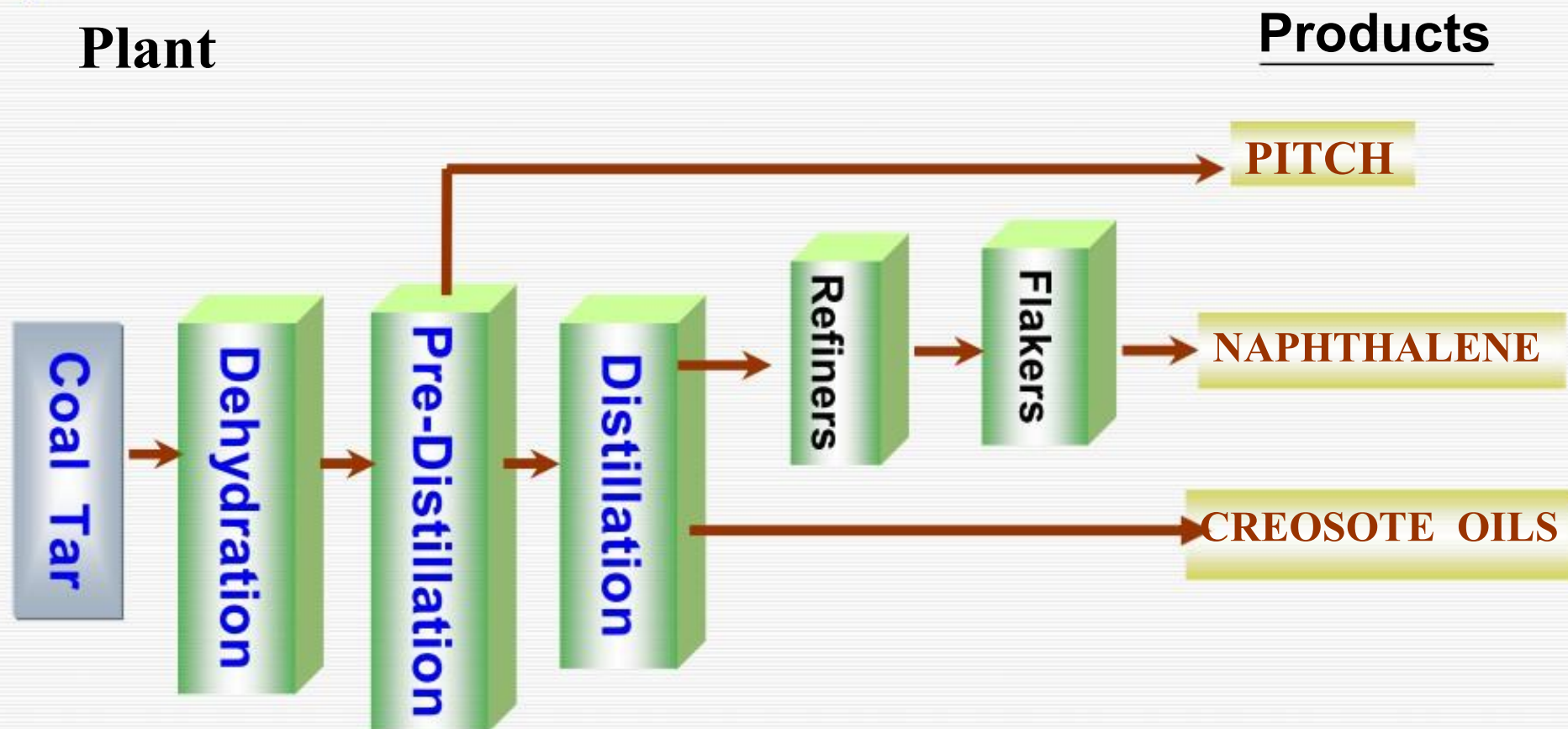


The Relating Product Map of Coal Chemical Industries



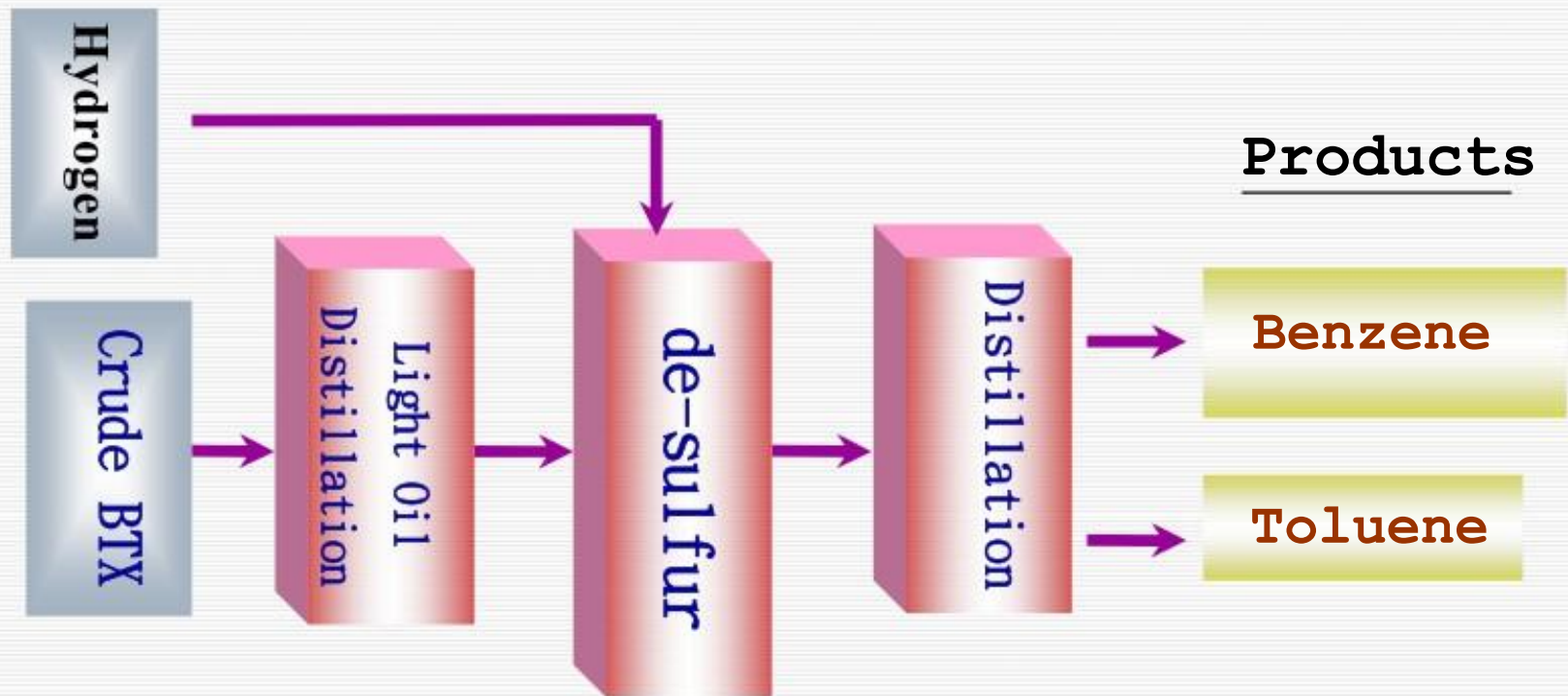
The Relating Product Map of Coal Chemical Industries

The Process of the Coal Tar Distillation Plant



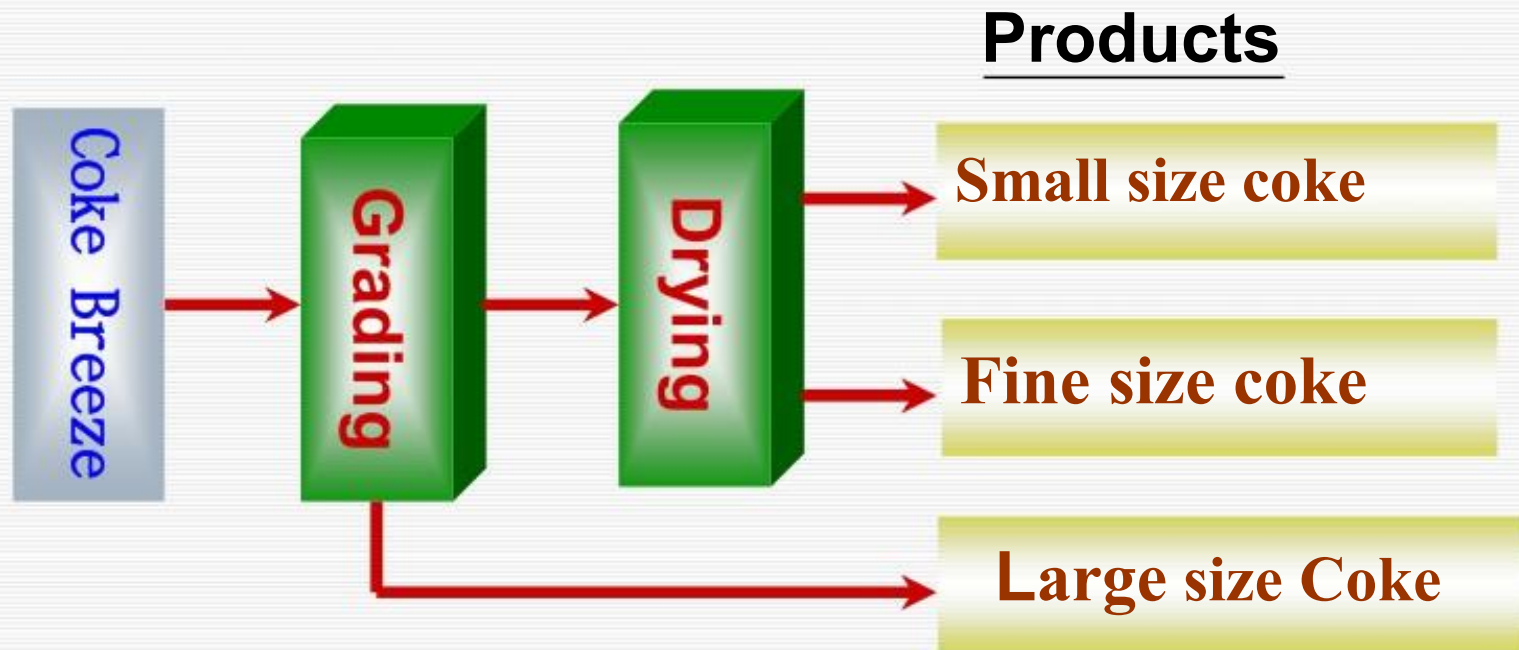
The Relating Product Map of Coal Chemical Industries

The Process of the Light Oil Distillation Plant



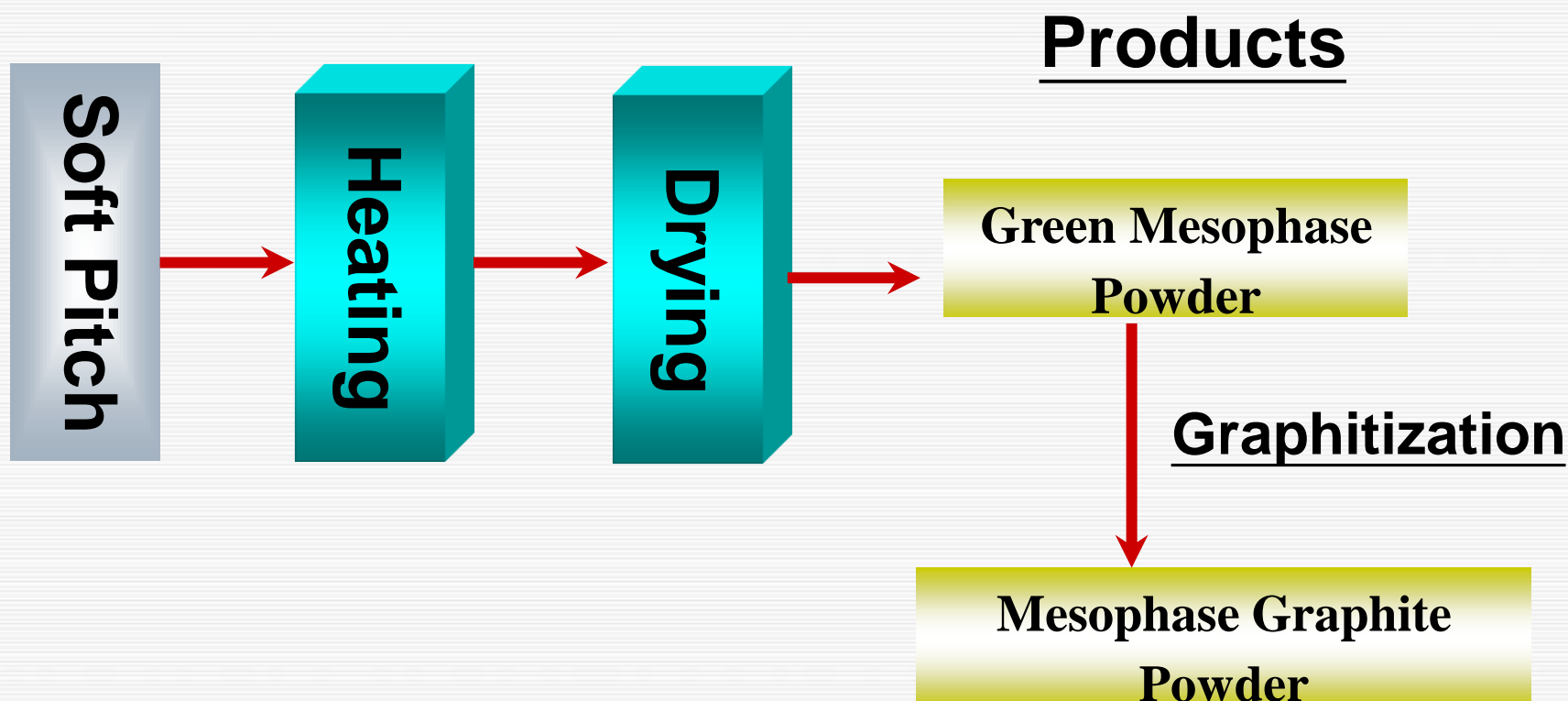
The Relating Product Map of Coal Chemical Industries

The Process of the Coke Breeze Plant



The Relating Product Map of Coal Chemical Industries

✚ The Process of the Green Mesophase Powder plant



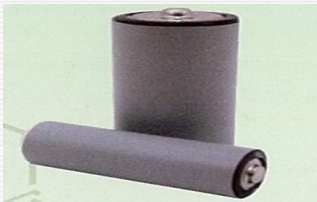
The Industrial Use for CSCC



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

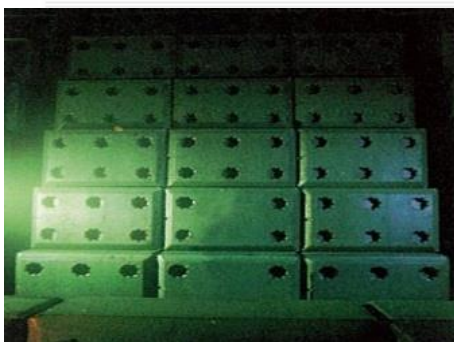


Lithium Ion
Battery



Hard Pitch

Electrode binder



Roofing Pitch



The Appliance of Naphthalene

Naphthalene

Sulfonated naphthalene formaldehyde condensates

B-naphthol, Tobias acid, J-acid

Mothballs

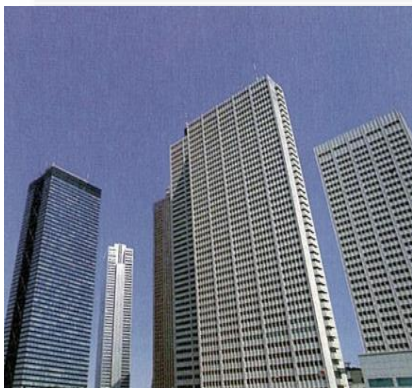
Phthalic anhydride (PA)

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

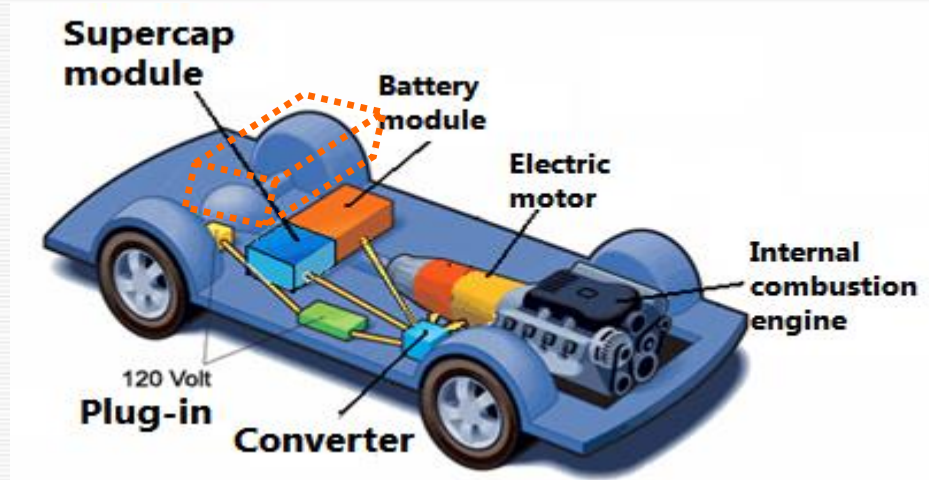
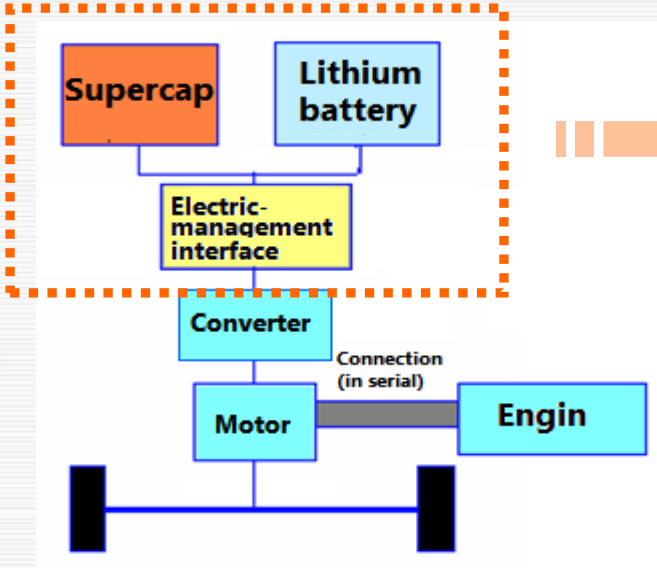
- ✦ The quality of AC is great as Japan leading brand. The AC has already been sold worldwide.
- ✦ Due to the expansion of Li-ion batteries anode material, establishing graphitizing factory is planning. Studying abroad techniques of graphitization, evaluation of inductive graphitizing furnace and mass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



Applications of Supercapacitors

PHEV

(Plug in hybrid electric vehicles)



Also in..



E-Bus



Light Rail Transit



Wind turbine





Thank You

