

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.	7,910	3.34%
Ever Wealthy International Corp.	5,827	2.46%

As of: July, 2015



The Brief Introduction to CSCC

Table of academic degree in CSCC's employees

Academic Degree	Number	Percentage
Doctor Degree	6	3%
Master Degree	59	29%
Bachelor Degree	76	37%
Junior college and Senior high school	64	31%
Total	205	100%

As of : Jan, 2016



The Brief Introduction to CSCC

Unit: NT\$ thousands

	2014/1	2014/2	2014/3	2014/10	2014/11	2014/12	YTD
Revenue	863,026	741,066	786,704	717,381	553,649	539,091	8,903,971
Operating Income	259,635	215,325	227,866	187,511	114,598	65,958	2,380,954
Net income before tax	268,295	222,259	251,402	193,038	125,325	100,894	2,567,847
Oil Price	102	105	104	86	77	61	96
	2015/1	2015/2	2015/3	2015/10	2015/11	2015/12	YTD
Revenue	522,952	483,543	580,212	472,108	313,467	379,087	5,737,199
Operating Income	119,655	99,624	136,281	100,534	37,230	58,628	1,199,918
Net income before tax	122,152	170,883	156,163	100,394	50,927	79,659	1,441,863
Oil Price	48	55	53	47	44	37	51
	2016/1	2016/2	2016/3	2016/10	2016/11	2016/12	YTD
Revenue	412,419	394,262	419,290				1,225,971
Operating Income	59,721	85,753	113,773				259,247
Net income before tax	78,000	87,832	112,981				278,813
Oil Price	30	31	37				33



The Brief Introduction to CSCC

Unit: NT\$ millions

	2011	2012	2013	2014	2015	2016/ 1~3
Revenue	8,915	8,257	8,820	8,904	5,737	*1,225
Net income after tax	2,247	1,974	2,221	2,189	1,239	*278
EPS(NT\$)	9.76	8.58	9.60	9.50	5.37	—

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

	2015/1Q	2015/2Q	2015/3Q	2015/4Q
EPS	1.70	1.53	1.30	0.84



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	2011	2012	2013	2014	2015	2016/1~3
Coal Tar	213,284	203,920	264,578	266,814	257,506	66,075
Light Oil	80,921	77,971	93,609	100,930	100,220	26,247

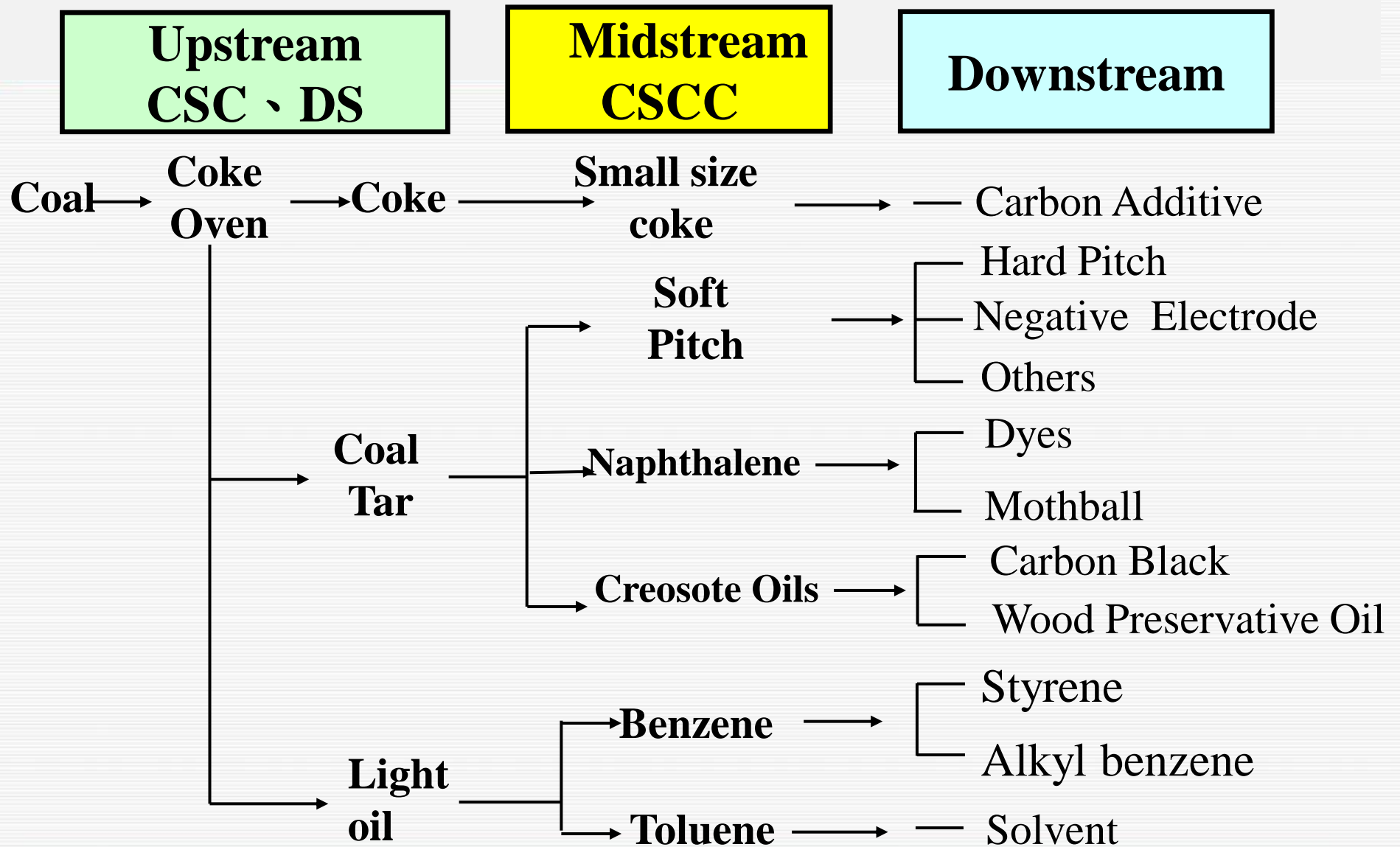


Sales Revenue breakdown by products

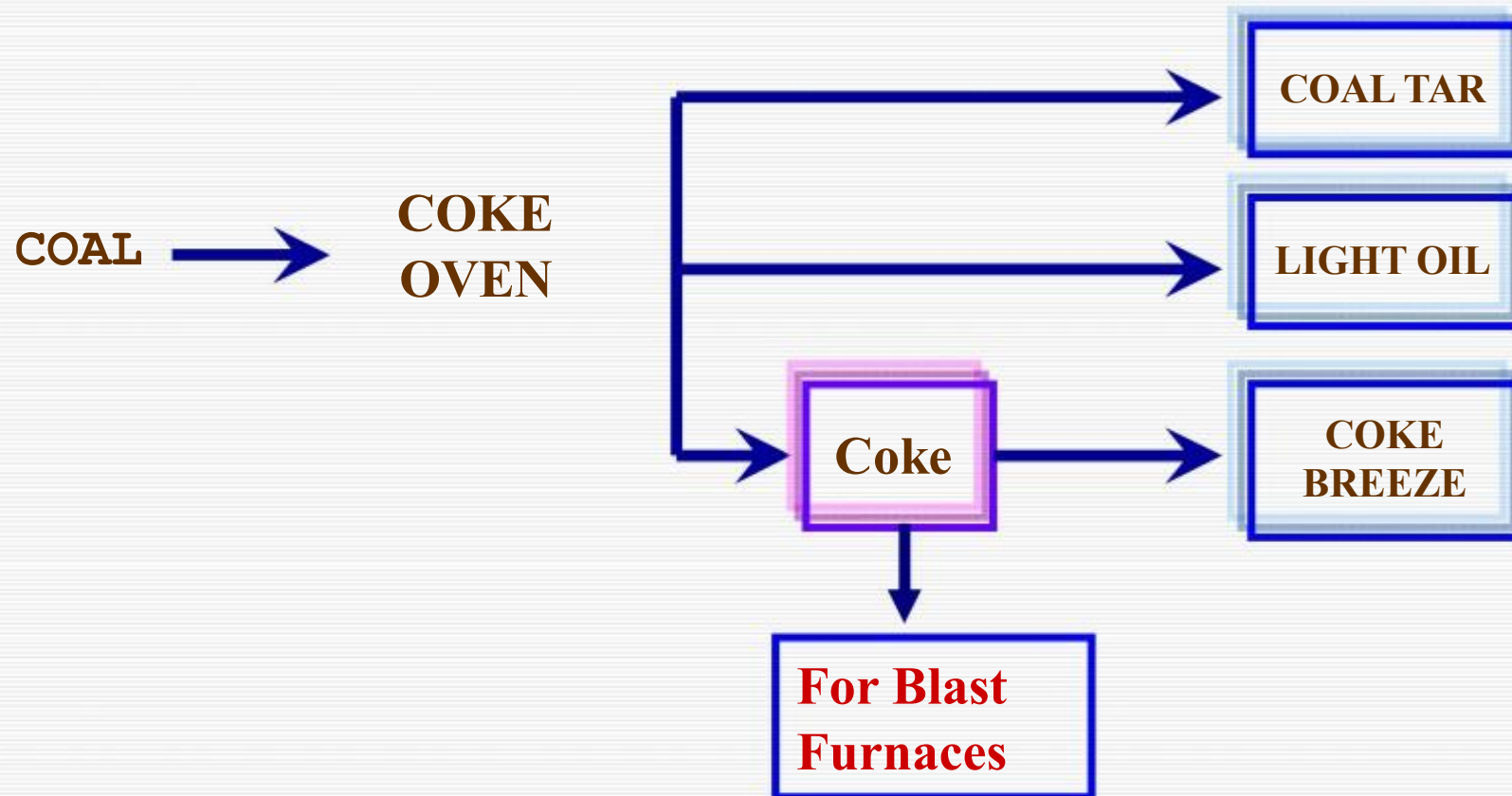
	2014	2015	2016/1Q
Light Oil	35%	33%	35%
Benzene	29%	27%	29%
Coal Tar	47%	44%	41%
Creosote Oils	30%	23%	21%
Soft Pitch	7%	10%	9%
Naphthalene	8%	9%	9%
Mesophase	5%	9%	10%
Coke Breeze	9%	10%	10%



The Relating Product Map of Coal Chemical Industries

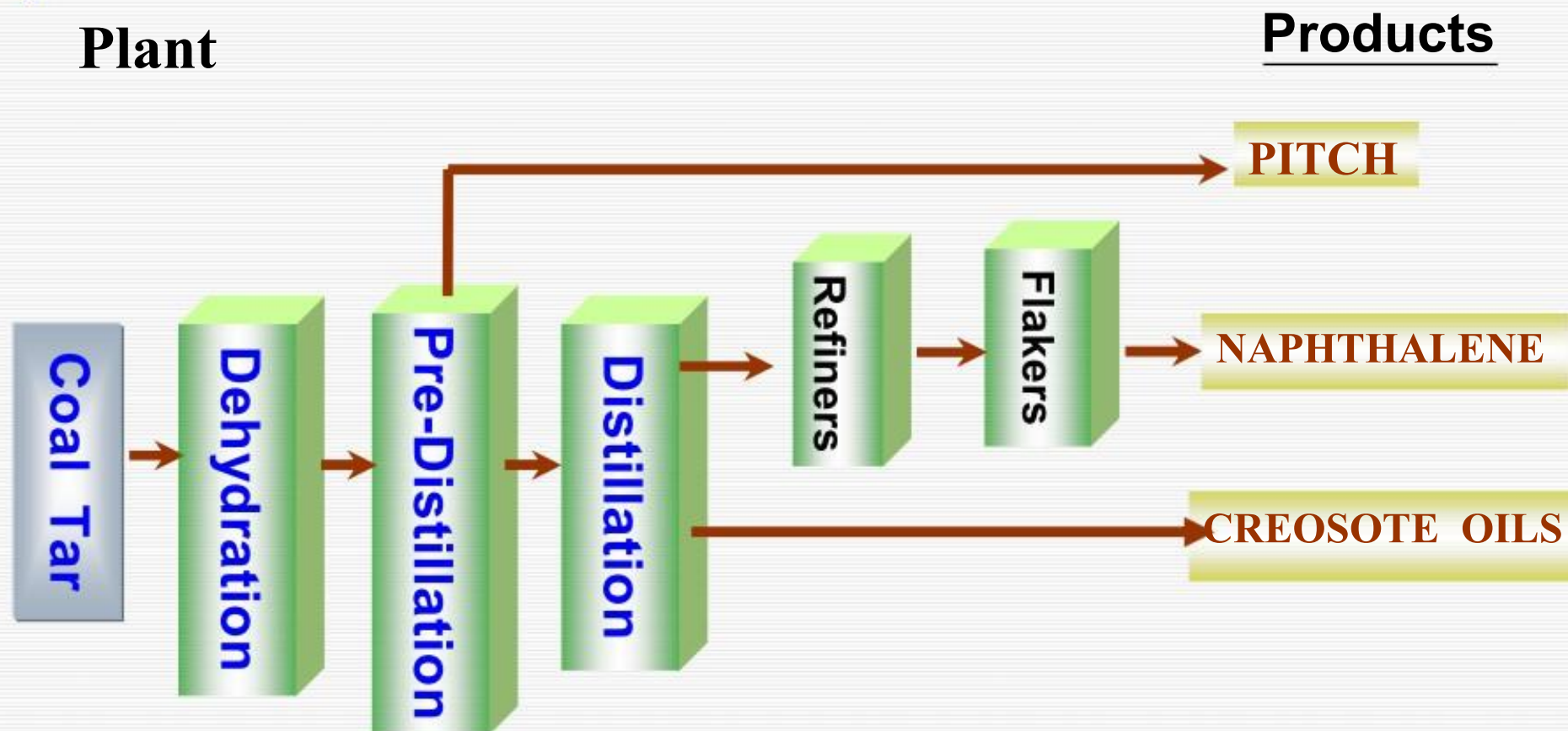


The Relating Product Map of Coal Chemical Industries



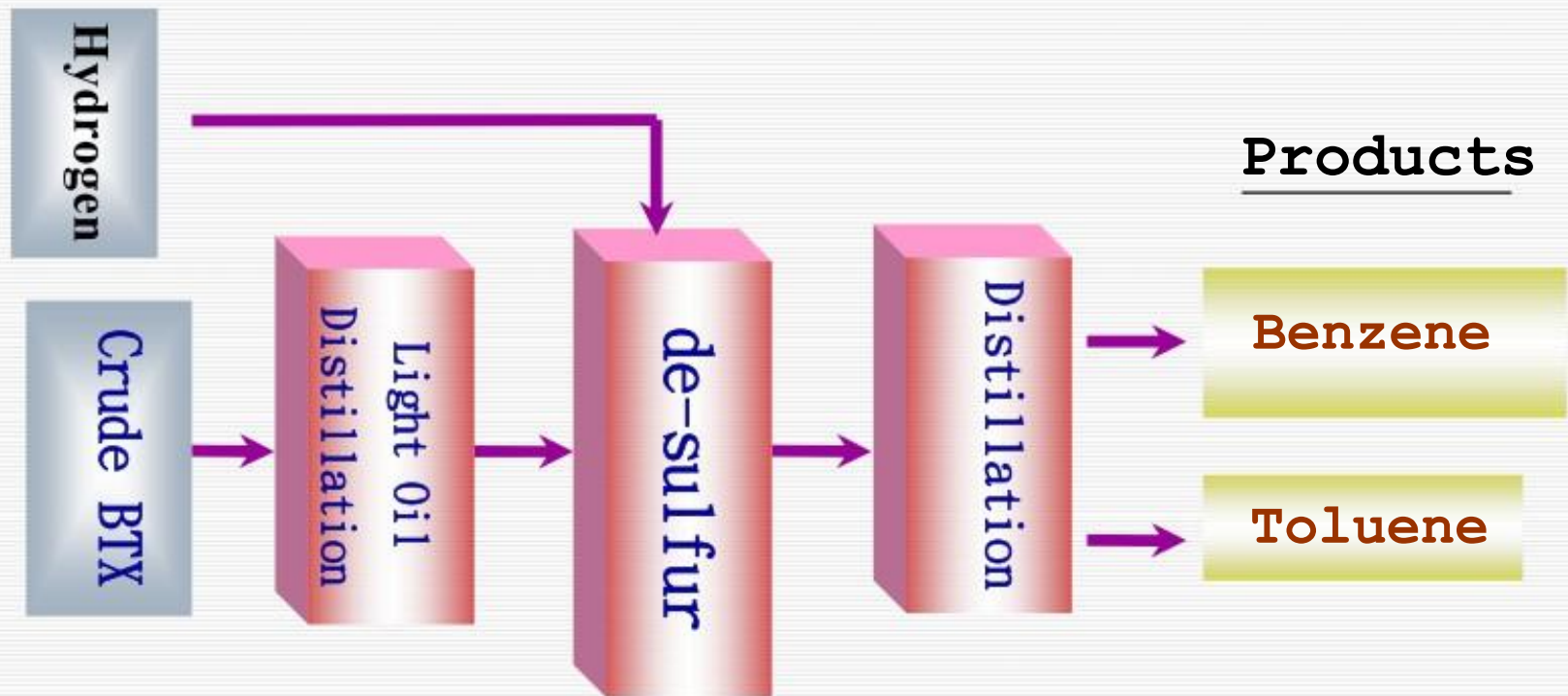
The Relating Product Map of Coal Chemical Industries

The Process of the Coal Tar Distillation Plant



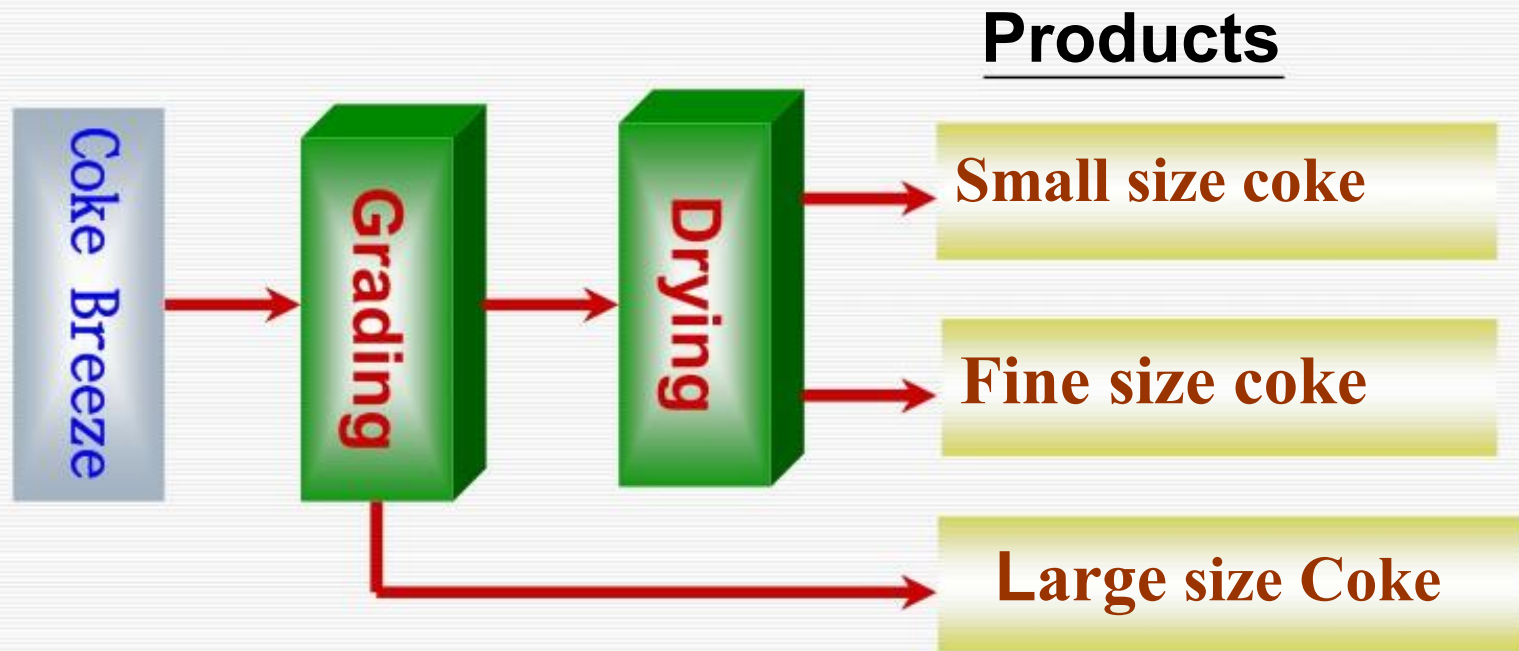
The Relating Product Map of Coal Chemical Industries

The Process of the Light Oil Distillation Plant



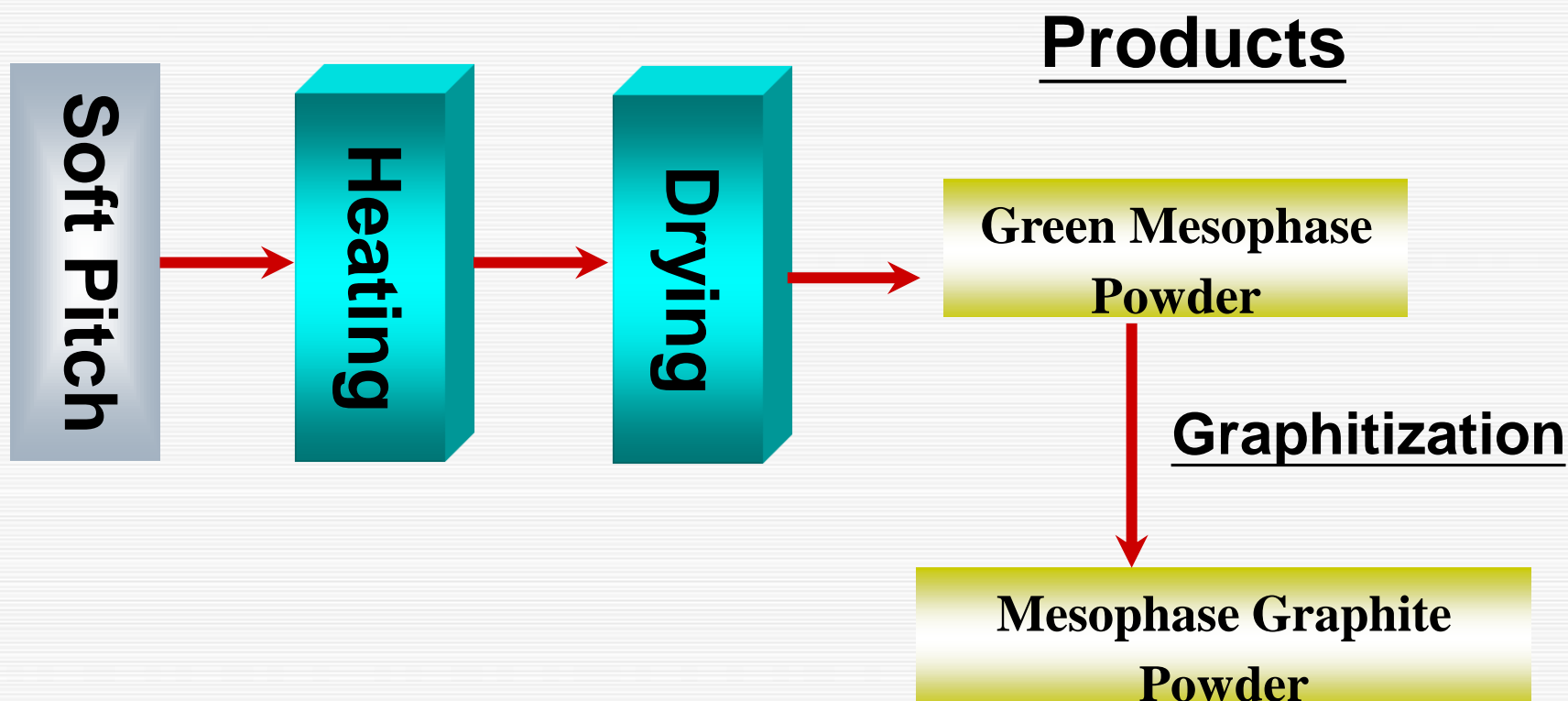
The Relating Product Map of Coal Chemical Industries

The Process of the Coke Breeze Plant



The Relating Product Map of Coal Chemical Industries

✚ The Process of the Green Mesophase Powder plant



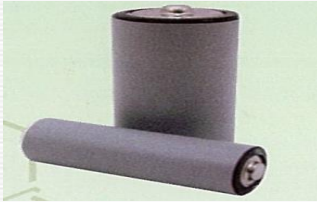
The Industrial Use for CSCC



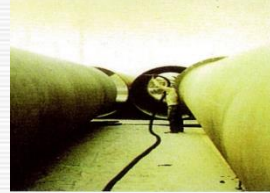
The Appliance of Soft Pitch

Soft Pitch

Primary
electrode rod



Water and rust
proofing materials



Green Mesophase
Powder

Mesophase
Graphite Powder

Lithium Ion
Battery

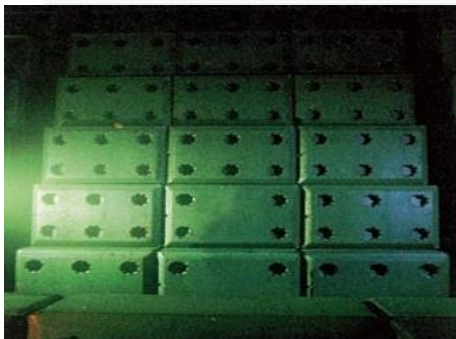


Active Carbon for
Supercapacitor



Hard Pitch

Electrode binder



Roofing Pitch



The Appliance of Naphthalene

Naphthalene

Sulfonated naphthalene formaldehyde condensates

B-naphthol, Tobias acid, J-acid

Mothballs

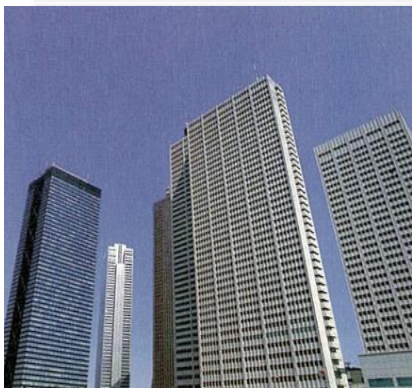
Phthalic anhydride (PA)

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

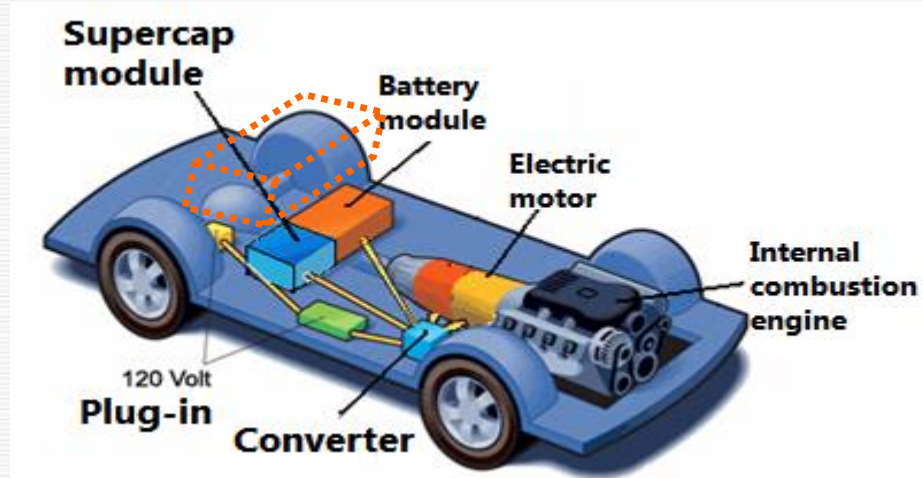
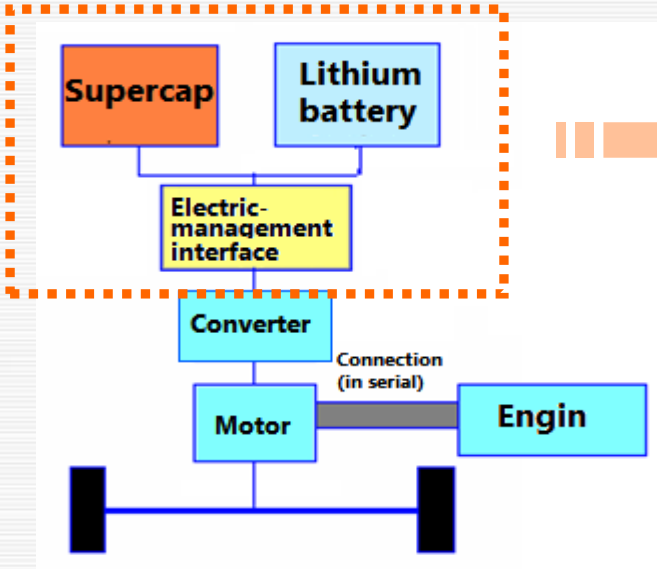
- ✦ The quality of AC is great as Japan leading brand. The AC has already been sold worldwide.
- ✦ Due to the expansion of Li-ion batteries anode material, establishing graphitizing factory is planning. Studying abroad techniques of graphitization, evaluation of inductive graphitizing furnace and mass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



Applications of Supercapacitors

PHEV

(Plug in hybrid electric vehicles)



Also in..



E-Bus



Light Rail Transit



Wind turbine





Thank You

