

# China Steel Chemical Corp.

---

**April, 2015**



# Table of Content

---

- 1.The Brief Introduction to CSCC
- 2.The Introduction of Coal Chemical Industries
- 3.The Industrial Use for CSCC
- 4.The New Products Development



# 1、 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.



# 1、 The Brief Introduction to CSCC

---

## The structure of shareholder

unit : per thousand stocks

<b>Major shareholder</b>	<b>Shares</b>	<b>Percentage</b>
<b>China Steel Corporation</b>	<b>68,787</b>	<b>29.04 %</b>
<b>China Synthetic Rubber Corp</b>	<b>11,759</b>	<b>4.96 %</b>
<b>CTCI Corporation</b>	<b>2,426</b>	<b>1.02 %</b>

As of: March, 2015

# 1. The Brief Introduction to CSCC

---

✚ Table of academic degree in CSCC's employees

Academic Degree	Number	Percentage
Doctor Degree	6	3%
Master Degree	50	27%
Bachelor Degree	93	49%
Junior college and Senior high school	39	21%
Total	188	100%

As of : Dec 31, 2014



# The Brief Introduction to CSCC

---

unit : metric tons

Period Input	2011	2012	2013	2014	2015/1~3
Coal Tar	213,284	203,920	264,578	266,814	69,809
Light Oil	80,921	77,971	93,609	100,930	27,020



# 1、 The Brief Introduction to CSCC

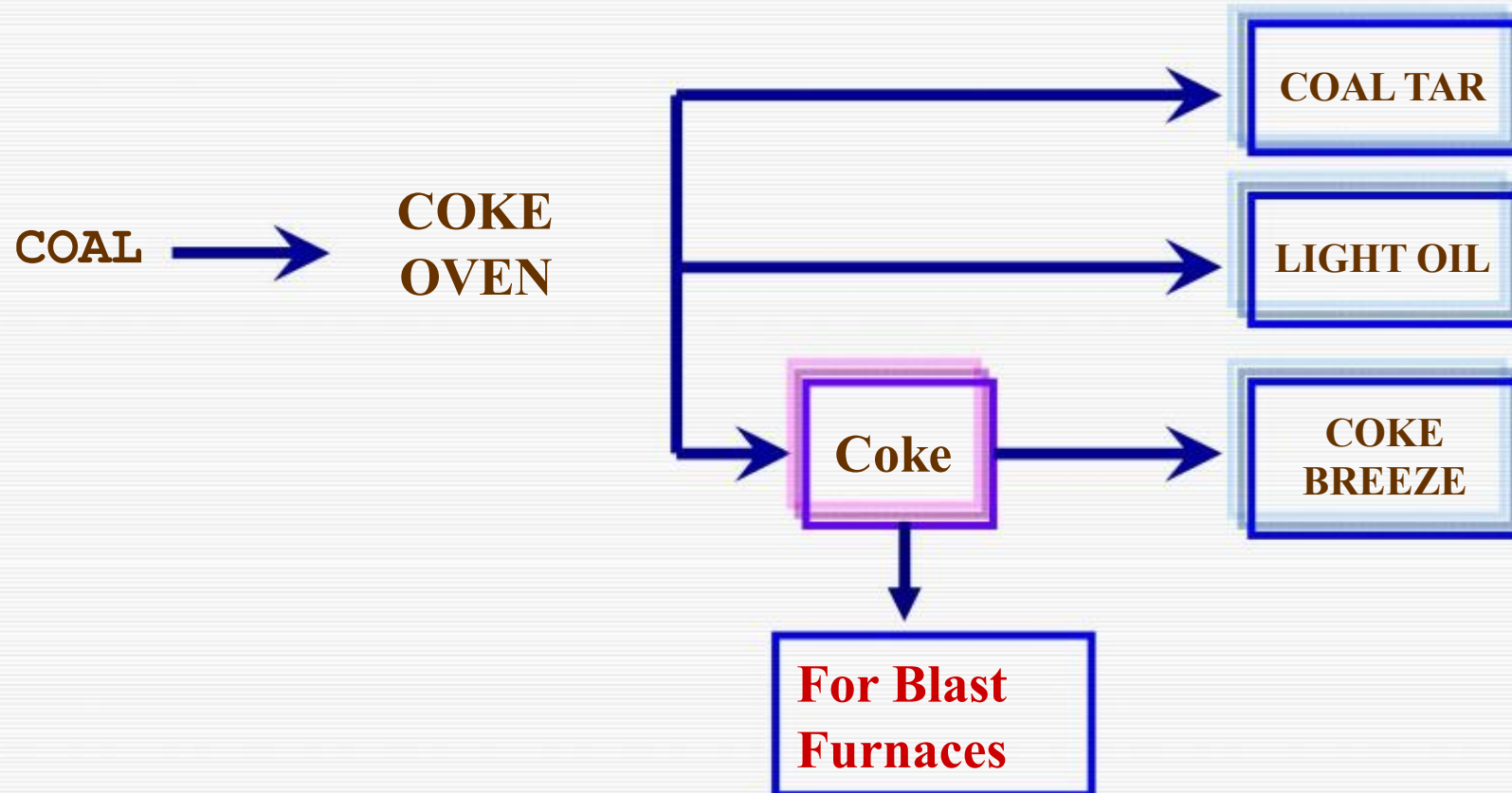
Unit: NT\$ millions

	2011	2012	2013	2014	2015 1~3
Revenue	8,915	8,257	8,820	8,904	1,587*
Net income after tax	2,247	1,974	2,221	2,189	449*
EPS(NT\$)	9.76	8.58	9.60	9.50	-

\* The announcement is based on Net income before tax.



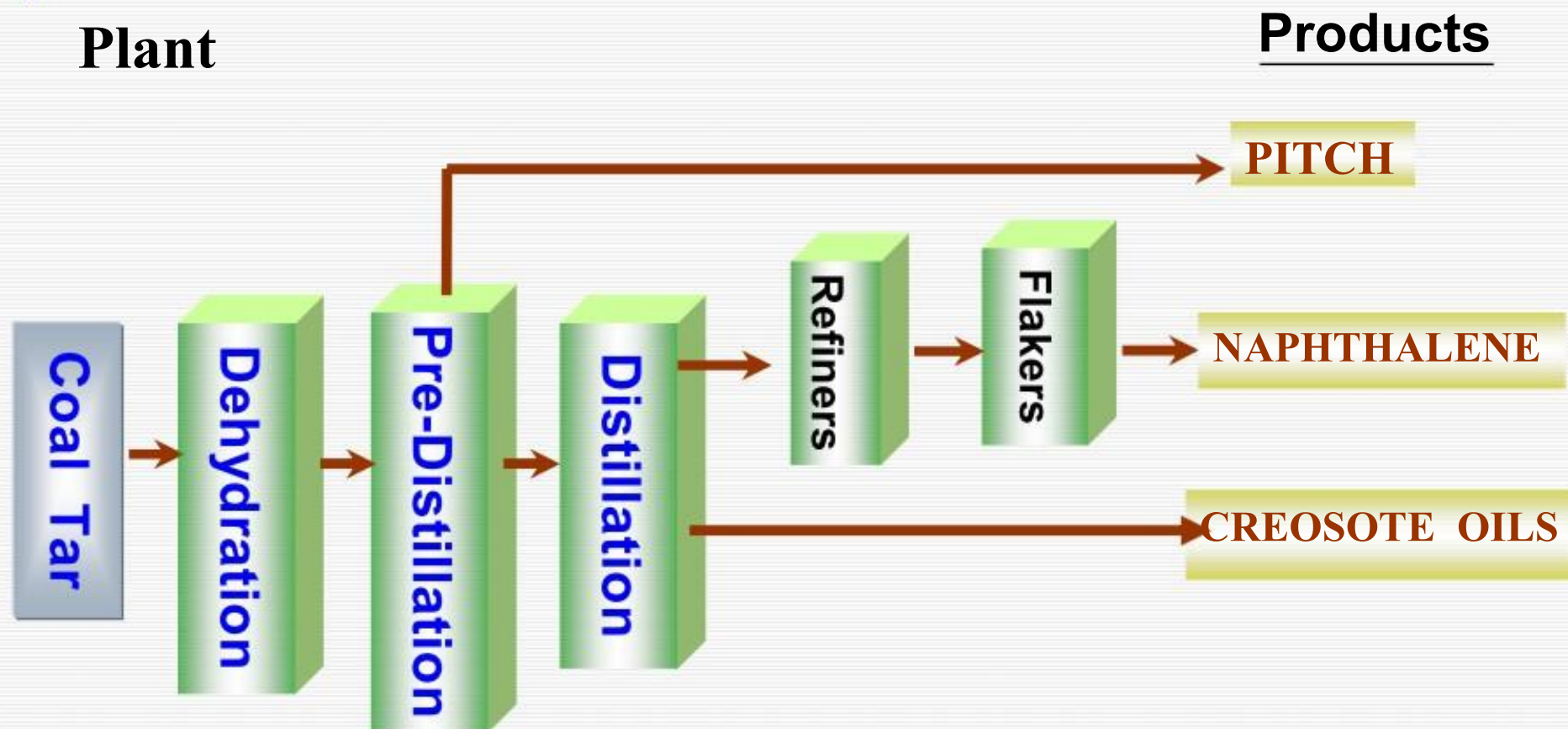
## 2. The Relating Product Map of Coal Chemical Industries





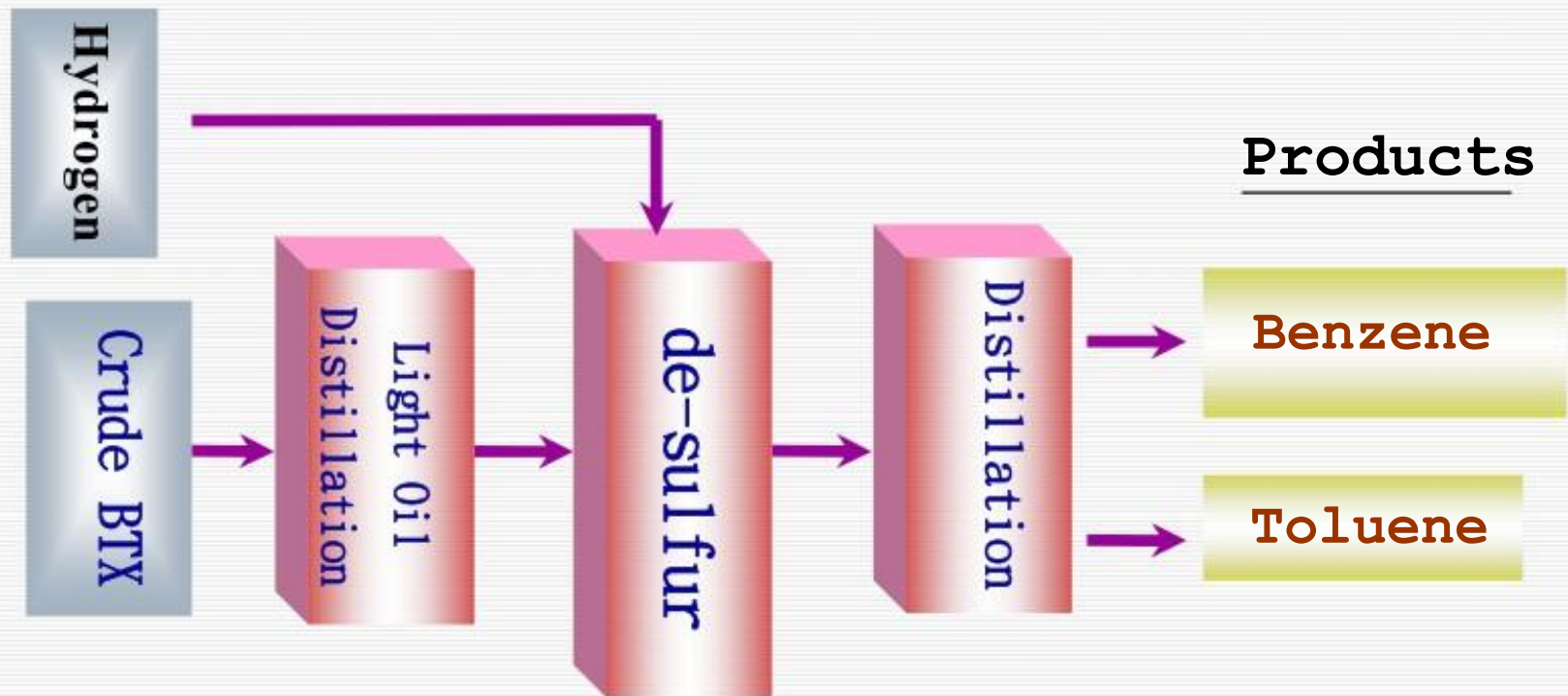
## 2. The Relating Product Map of Coal Chemical Industries

### The Process of the Coal Tar Distillation Plant



## 2. The Relating Product Map of Coal Chemical Industries

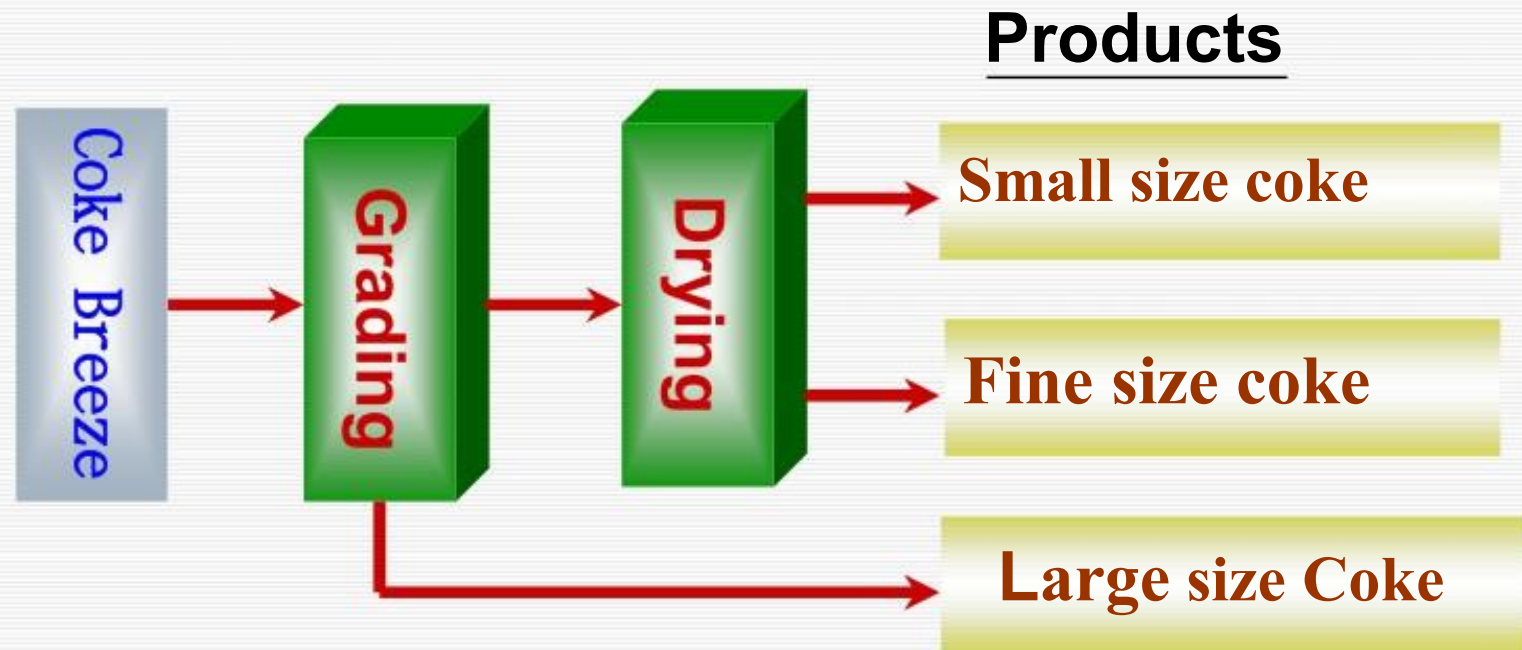
### The Process of the Light Oil Distillation Plant



## 2. The Relating Product Map of Coal Chemical Industries

---

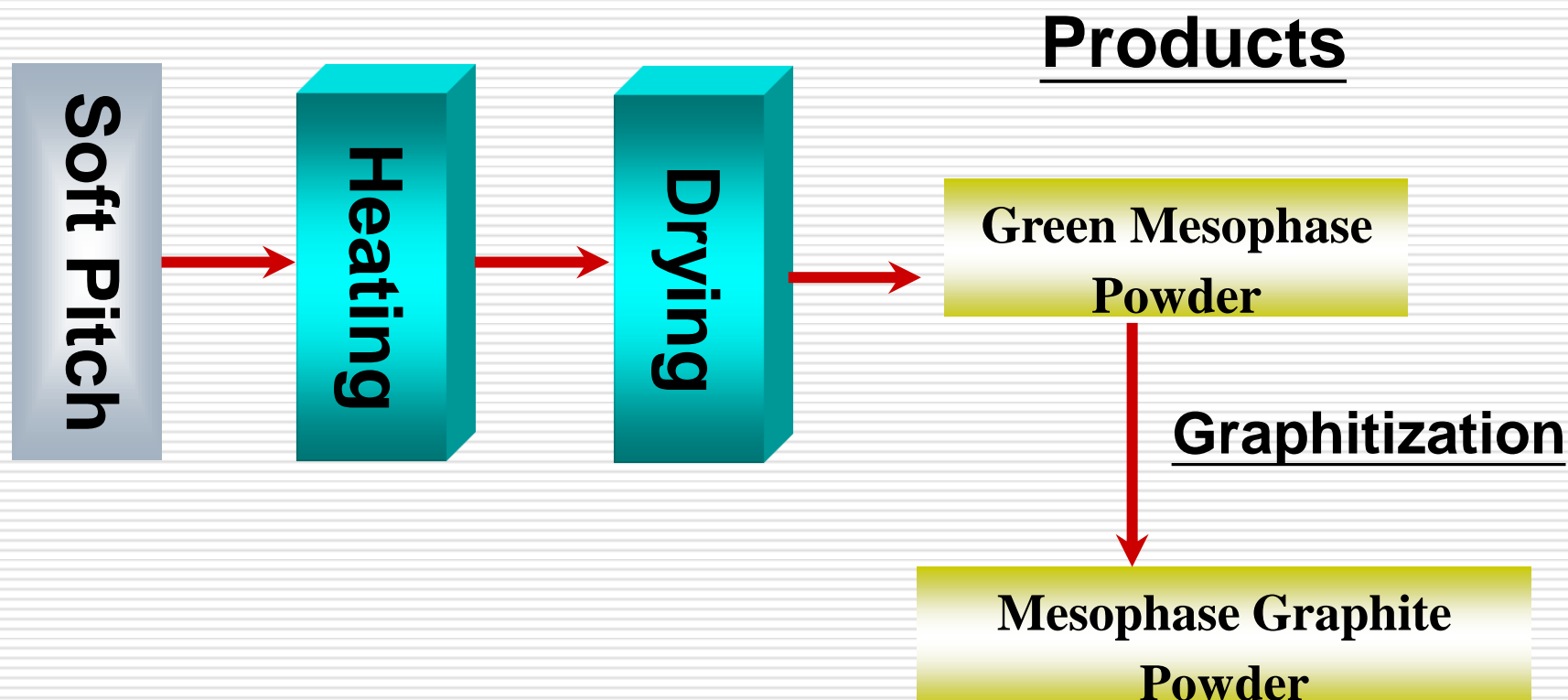
### The Process of the Coke Breeze Plant



## 2. The Relating Product Map of Coal Chemical Industries

---

✚ The Process of the Green Mesophase Powder plant



---

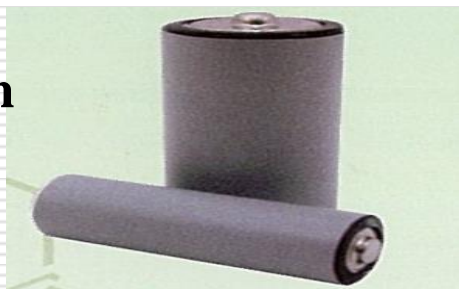
# The Industrial Use for CSCC



# The Appliance of Soft Pitch

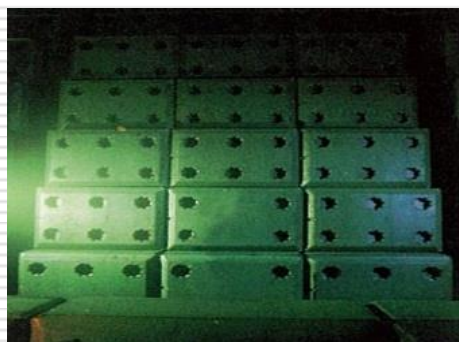
## Soft Pitch

Primary  
electrode rod

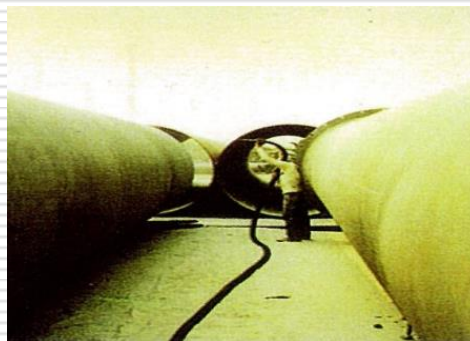


Hard Pitch

Electrode binder



Water and rust  
proofing materials



Roofing Pitch



Special  
pitch



Mesophase Pitch  
Powder



# 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

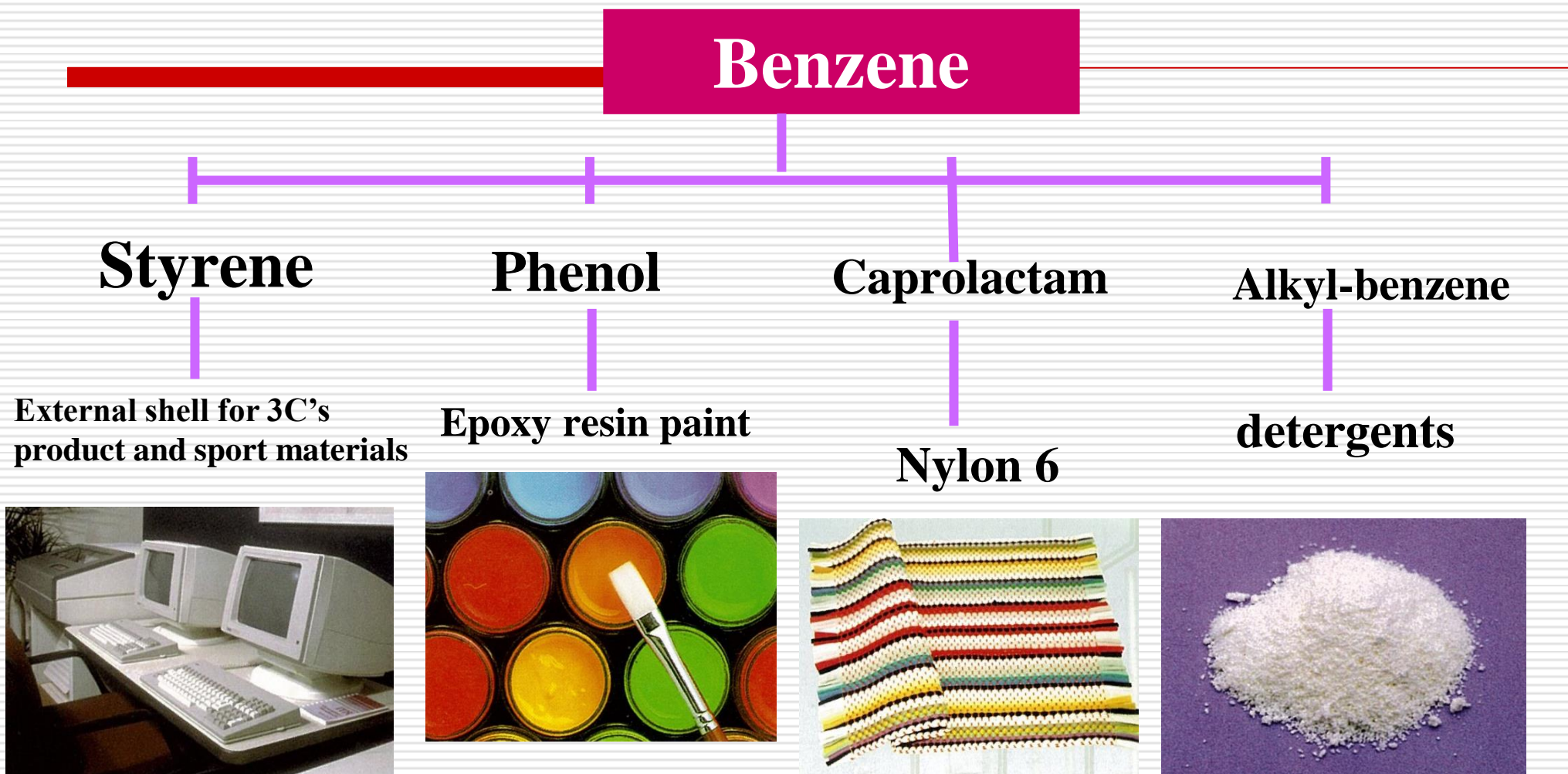


Wash oil





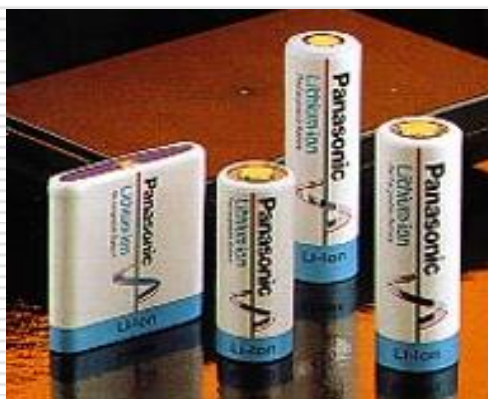
# The Appliance of Benzene



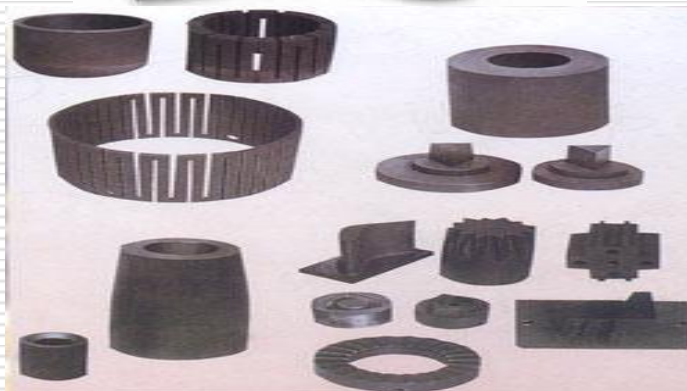
# The Appliance of Coal Tar Pitch

## Coal Tar Pitch

Lithium Ion Battery



Graphite Block



Active Carbon for Supercapacitor



## 4. 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.



## 4. 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.



---

**Thank You**

