

# When less is more – how do trends in key raw materials enable thinner, more discreet diapers?

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# Davenport International

## *Strategy & Marketing in Chemicals & Hygiene*

The global acrylic acid & SAP experts

- *feasibility studies*
- *competitive evaluation*
- *business & marketing strategy*
- *technology evaluation & sourcing*



# What will we discuss today?

- Trends in hygiene markets
- Features of absorbent products
- Focus on China & Asia
- Implications for raw materials

# Brief Diaper History

40's – Pauliström – Sweden – creped cellulose core (cotton shortage)/ gauze top sheet

50's Robinson (UK) Paddi Pants

Chicopee (US) Chux 1-piece diaper

60's/70's (US) Pampers/ Luvs/ Kimbies

80's (Japan) Moony/ MamyPoko

# 1980's birth of 'THIN' diapers

Unicharm/ Kao leading in Japan

P&G follow quickly with Pampers

# **SAP Enables Thinner Diapers**

**1980's - SAP high capacity**

**1990's - 'core shell' enables AUL  
improved skin dryness low wetback**

**2005+ - high permeability SAP enables  
use of entire core**

# Diaper Innovation

## FIT, FORM & FUNCTION

# Thinner Diapers

## Better performance

- **Comfort, discretion, absorption & leak resistant**

## Reduced environmental profile

- **Reduced landfill and raw material**

## Lower cost to ship & store

- **Smaller packs & reduced shelf space**



# Globally Consumers want:

- Improved skin dryness
- No diaper rash
- Good fit
- No leakage (especially at night)
- High capacity
- Good aesthetics (fashion!)
- Pant like appearance
- Discretion

# Short Survey in China

- **Personal recommendation from other mothers is important**
- **Imported brands are trusted most**  
**MamyPoko, Merries, Pampers, Huggies**
- **Boy/ Girl diapers**
- **Thin**
- **Breathable**
- **No diaper rash**
- **No leakage**



# This advert illustrates:

- **Fit**
- **Mobility**
- **Dryness**
- **Style!**

**But not discretion, though we can see that the diaper is thin**



好奇  
HUGGIES®

# Diaper Innovation

- **SAP still replacing fluff**
- **Cloth like back sheet**
- **ADL layer development**

# **New diapers 80-100% SAP core**

**Three possible structures:**

**A) Pulp free – Polymer Gel & Adhesive**

**B) Pulp free – no adhesive**

**C) Preformed (airlaid) core**



# Major International Brands are Investing in China & the whole Asia region





# Investments in China

| <b>City</b>                     | <b>Company</b>        | <b>Brands</b>          |
|---------------------------------|-----------------------|------------------------|
| <b>Guangzhou &amp; Tianjin</b>  | <b>P&amp;G</b>        | <b>Pampers</b>         |
| <b>Nanjing</b>                  | <b>Kimberly-Clark</b> | <b>Huggies</b>         |
| <b>Hefei (Anhui)</b>            | <b>Kao</b>            | <b>Merries</b>         |
| <b>Shanghai &amp; Tianjin</b>   | <b>Unicharm</b>       | <b>MamyPoko, Moony</b> |
| <b>Nantong</b>                  | <b>Diao</b>           | <b>Goo</b>             |
| <b>Shanghai &amp; Changzhou</b> | <b>Pigeon</b>         | <b>Pigeon</b>          |
| <b>Yangzhou</b>                 | <b>Ontex</b>          |                        |

# Other Investments

| <b>Country</b>   | <b>Company</b>  | <b>Activity</b>                   |
|------------------|-----------------|-----------------------------------|
| <b>Vietnam</b>   | <b>Unicharm</b> | <b>Diana</b>                      |
| <b>Vietnam</b>   | <b>P&amp;G</b>  | <b>BinhDuong</b>                  |
| <b>Indonesia</b> | <b>Unicharm</b> | <b>Surabaya &amp;<br/>Jakarta</b> |
| <b>Indonesia</b> | <b>P&amp;G</b>  | <b>Karawang</b>                   |
| <b>India</b>     | <b>K-C</b>      | <b>Pune</b>                       |
| <b>India</b>     | <b>P&amp;G</b>  | <b>Hyderabad</b>                  |

# Overview Of Danson

- ▶ One of the first PRC-based companies to undertake large-scale production of Superabsorbent Polymer in single location
- ▶ Manufacturing facilities located in Yixing Economic Development Zone in Jiangsu Province, PRC
- ▶ A large scale Integrated plant using Most advanced technology
- ▶ R&D team with over 50 persons
- ▶ Modern laboratory for both Application and R&D purpose.
- ▶ An ISO certified company (ISO9001 and ISO14001)
- ▶ Investment capital: USD 300MM



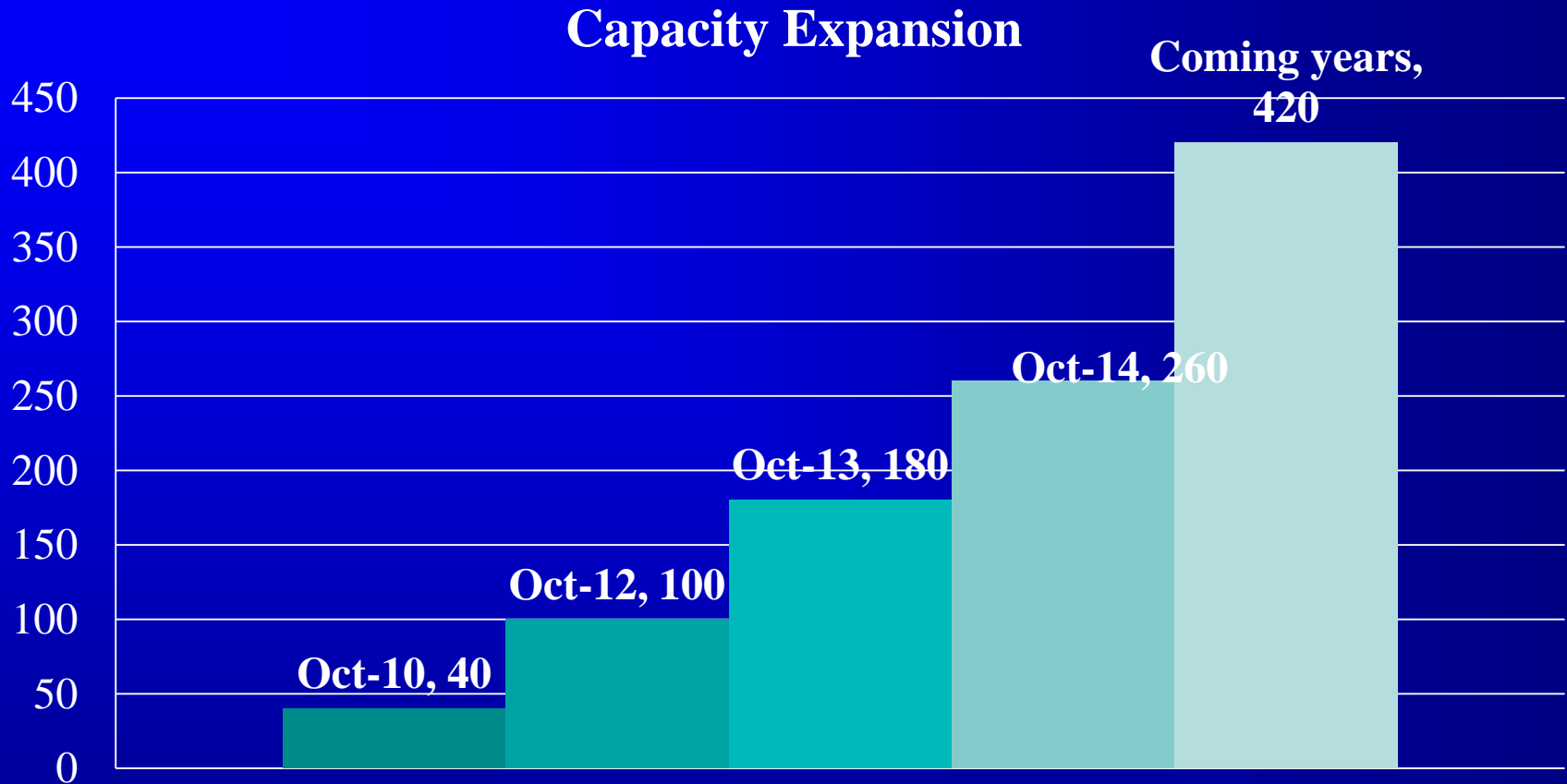
# CHINA







# A global leader in SAP manufacturing



► **Rapid capacity expansion takes advantage of favorable market conditions - current production capacity of 180,000 Kta. is half of proven capacity in China in 2013**

SVCH. \$I

Sunvic Chemical Holdings Pte  
Ltd

Jurong Chemical YanCheng  
AA 205 KMT  
GAA 80KMT

Jurong Chemical TaiXing  
GAA 360KMT





# Multiple Growth Initiatives

Production capacity increase

Superabsorbent Polymer production capacities expected to increase up to 420Kmt -Timely with Global continued growth in demand for SAPs, 6% roughly

Establish new App lab in R&D center

To develop intensive partnership with downstream end users

Upstream-new Acrylic acid expansion

To provide us an alternative source of feedstock and reduce our reliance on external sources reap significant savings in raw material costs

Downstream-Hygiene and Industrial App.

To Increase downstream industry coverage to include diaper and nonwoven producers, major consumers of SAP by entry into long-terms supply contracts

Increase overseas market share

To raise brand awareness in overseas markets and reduce our reliance on any single market and economy





# New hygiene products need:

- **Highly permeable SAP such as Danson 2289x5 to reduce or eliminate fluff pulp**
- **Sophisticated acquisition/ distribution layers (ADL) (Weyerhaeuser, PGI, other)**
- **High performance hot melt in certain constructions (Bostik, HB Fuller, other)**

# Conclusions:

- **Thinner more discreet products require improved performance from all raw materials**
- **Emerging markets are demanding the latest innovations and top tier hygiene disposables**
- **Hot melt, Nonwoven & SAP producers are meeting the challenge of the markets**

# THANK YOU

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