

Formulae for Success in Aluminum Rolling

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Formula for Success

FOCUSED BUSINESS MODEL

Innovation + Agility + Precision

=

Success

Putting the Novelis Model in Context

- LME contract for primary aluminum – 1978



- Separate conversion pricing from metal pricing – 1996



- Focus on adding value with conversion

Putting the Novelis Model in Context

Alcan

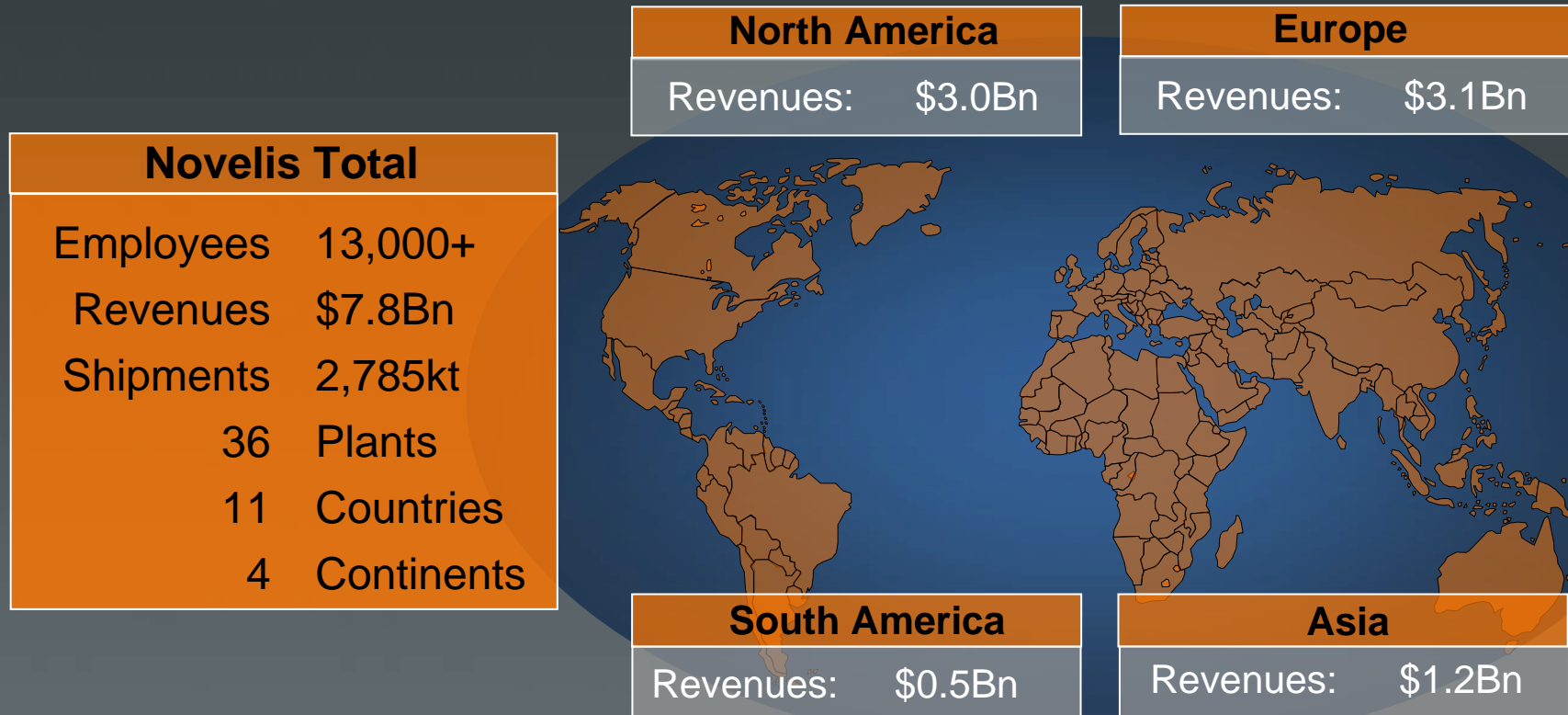
Algroup

Pechiney

Novelis Inc.

Jan 6, 2005

Novelis Worldwide Footprint



Note: Rolled products shipments only.
 Financial and shipment figures based upon 2004.

How the Business Models Stack Up

Integrated Model

- Fabrication considered a means of selling more aluminum.
- Focus on the primary business.

Exposure to LME price volatility

Production and conversion

High *volume* markets most attractive

Segmented Model

- Fabrication considered a profit-generating activity.
- Focus on the customer.

Reduced exposure to LME price

Conversion

High *value* markets most attractive

Leading Recycling Position

It takes less than 60 days to

Produce → sell → consume → recover → recycle → reproduce
an aluminum can



Metal Supply Management

- Strategic use of recycled metal / scrap market
- In-house production of sheet ingot



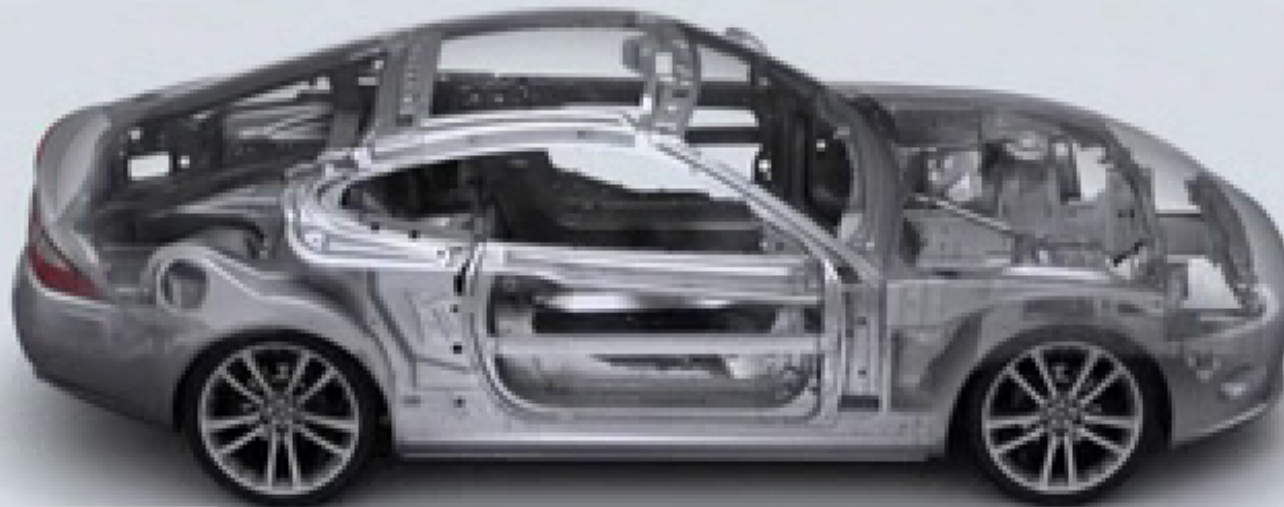
Provides added agility & flexibility to meet customer demands



Formula for Success: Innovation

Innovation





Lightweight Architecture

The 2007 XK's aluminum body has made the largest single contribution to its weight efficiency and road performance.

Using techniques developed by the aerospace industry, the XK's body is made from extruded, pressed, and cast aluminum components that are riveted and epoxy-bonded. Aluminum is up to two times stronger than conventional steel resulting in a body that is 40% lighter and 60% stiffer.

The 2007 XK will be available in early 2006.

[Return To Video](#)

Jaguar XK web site

Innovation



Mercedes Benz S-Class – Frankfurt Auto Show 2005

Innovation

The Effect of SUV Weight Reduction or Size on SUV Crashworthiness and Compatibility

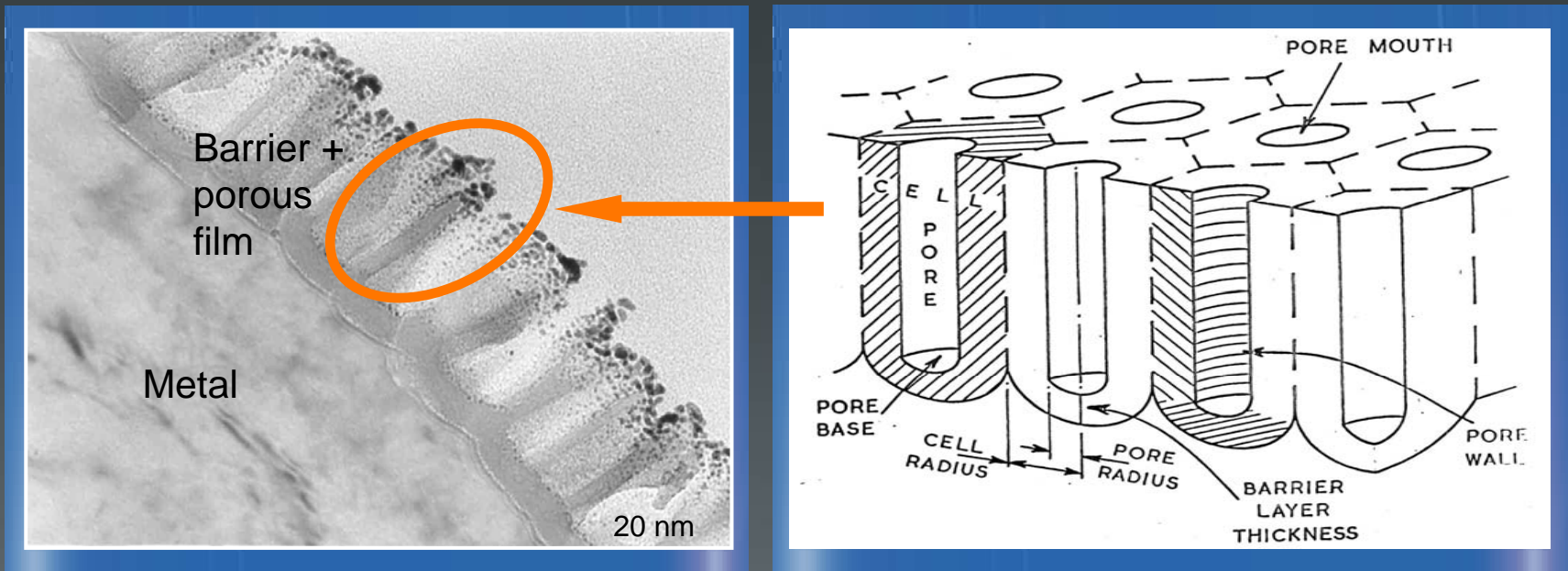
Weight reduction
without size reduction
=
Improved safety

Study conducted by Dynamic Research, Inc
for The Aluminum Association



Innovation

Thin Anodized Film (TAF) Technology



Cross section of TAF on aluminum sheet

“Low tonnes. High value.”

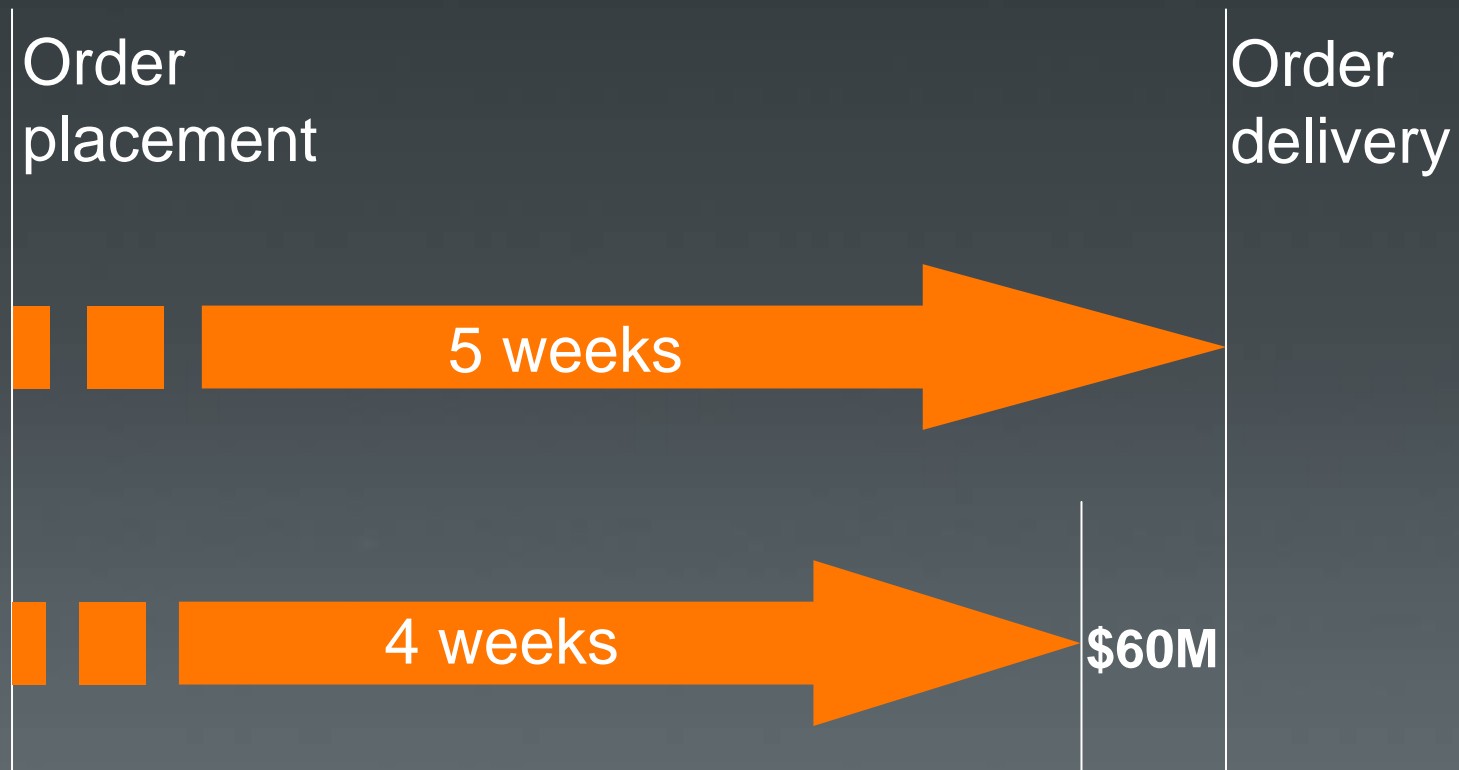
Formula for Success: Agility

Agility: Supply Chain

- Shorten lead and cycle times
- Eliminate delays
- Customer focused



Agility: Supply Chain



Formula for Success: Precision

Precision: Excellence in Operations

- Lean Six Sigma
- Sharing best practices
- Environmental, Health and Safety



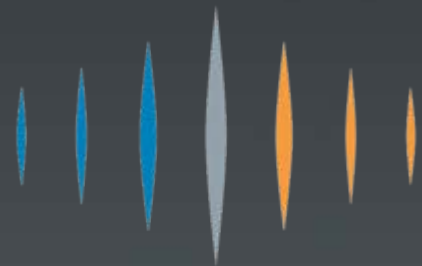
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