



Commercialisation Strategies IP Management at BlueScope Steel

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Please ask me about anything you would like to know about IP at BlueScope steel at any time.

I am happy to have you, the audience lead the presentation so you get to hear about what you are interested in.

What we plan to cover

- BlueScope Steel Global Businesses and structure – very briefly
- The source and driver for innovation
- 3 large scale IP case studies
- Ingredients of IP management at BSL

IP at BSL entails many activities:

- IP policy development
- IP education
- Integration of IP in R&D, stage-gate, and marketing strategy
- Identifying the key IP needs of BSL from a commercial perspective
- IP management systems including databases and IP registers
- IP cost management system
- IP infringement monitoring and processing procedures
- Capturing our IP – patents, designs, trade secrets, trademarks, copyright
- Ensuring the quality of our patents and patent valuation
- Patent reviews with key stakeholders
- Watching third party IP – patents and trademarks
- Licensing, oppositions, technology acquisitions and divestments
- Due diligence in acquisitions
- Managing joint IP activities including university research, joint developments, supplier and customer related projects

Structure at BlueScope Steel – Vertical Integration Integrated Steel Business thru to Steel Solutions Provider

- We are not rocket scientists or in a traditional high tech industry such as IBM so how much IP would you expect from a steel producer
- We run up to four businesses through the supply chain:
 - Integrated steel plant
 - High volume industrial continuous coating business
 - Roll forming and manufacture of building components
 - Provider of complete solutions – Butler, PEBs, automotive
 - Technology licensing business

| Business Type: | Integrated Steel | Coated Steel | Building Products (Lysaght) | Technology Licencing |
|-----------------|------------------|--------------|-----------------------------|----------------------|
| Australia | ✓ | ✓ | ✓ | |
| New Zealand | ✓ | ✓ | | |
| China | | | ✓ | |
| South East Asia | | | | |
| • Indonesia | | ✓ | ✓ | |
| • Thailand | | ✓ | ✓ | |
| • Malaysia | | ✓ | ✓ | |
| • Vietnam | | ✓ | ✓ | |
| • Singapore | | | ✓ | |
| • USA | ✓ | | | ✓ |

- R&D and Intellectual Property Infrastructure is located in Australia and supports all of the above businesses.
- BHP Steel Lysaght have separate resources.

Intellectual Property Integration Throughout BSL Businesses

- IP is built into the product development process – stage/gate R&D process
- R&D and IP driven by Marketing
- Product innovation underpins product differentiation, superior performance, product profitability and pricing, competitive performance in highly competitive markets
- High value of key brands and trademarks – COLORBOND® and ZINCALUME®

Three Case Histories

- THIN STRIP CASTING
- ZINCALUME[®] STEEL
- COLORBOND[®] STEEL

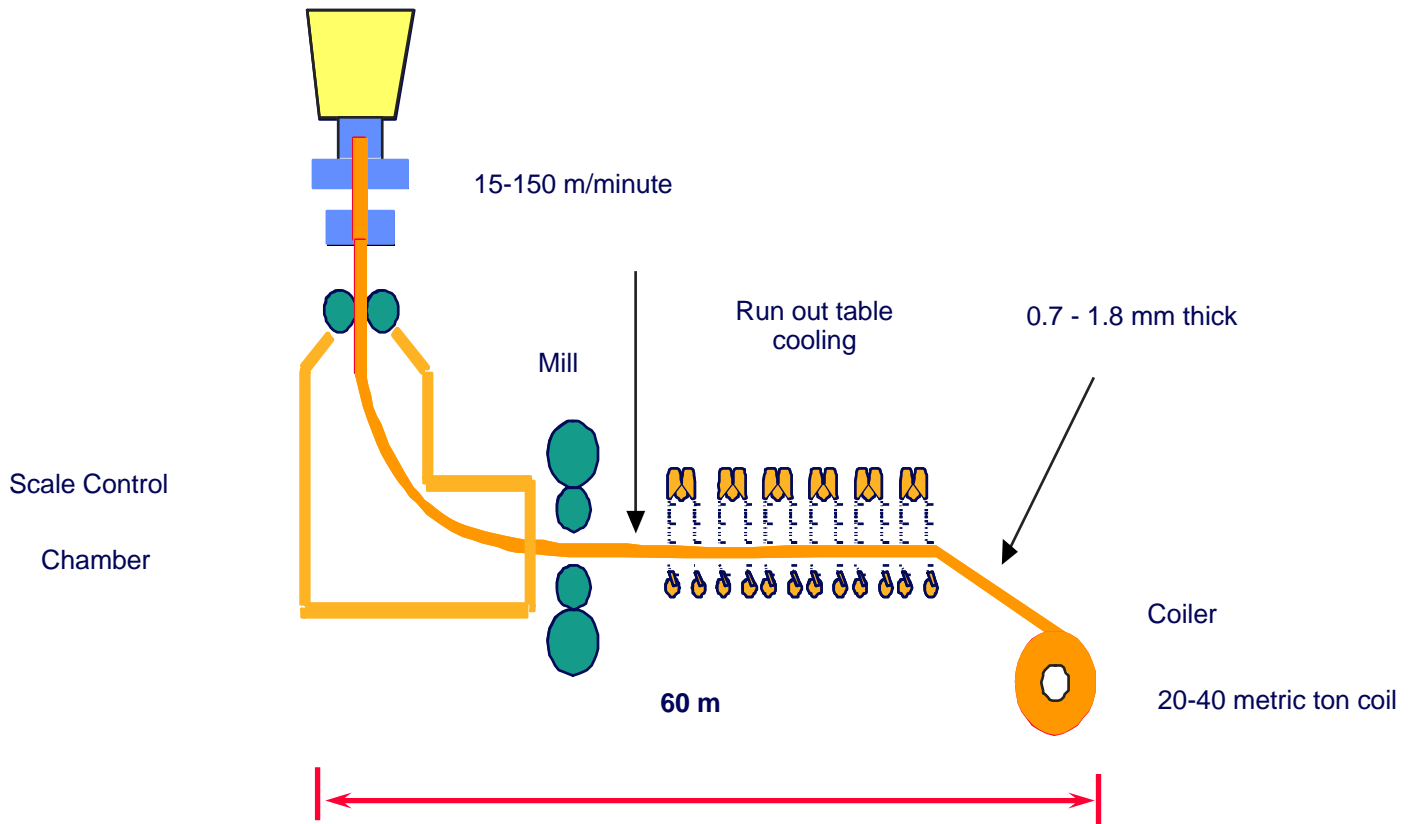
A NEW WAY TO MAKE SHEET STEEL

THIN STRIP CASTING

How Does it Compare

- Conventional Process
 - Coke Ovens
 - Blast Furnace
 - BOS Steel Plant
 - Slab Caster
 - Hot Strip Mill
 - Pickle Line – uses hydrochloric acid
 - Cold Reduction Mill
- Thin Strip Casting
 - Electric Arc Furnace uses scrap steel
 - Thin Strip Caster

Steel Strip



Conventional HSM

Scale Comparison



Project M Commercial Scale Plant – Port Kembla



Strip Casting – A Brief History

- This technology took 120 people about 15 years at a cost of some \$ 0.7 billion to develop
- Joint development with IHI – started 1988
- Industrial scale development plant started in February 1995 at a capital cost of \$ 120 m at Port Kembla, NSW.
- A joint venture between BHP, Nucor and IHI commenced on 1st April, 2000
- Nucor has built the world's first commercial scale plant in the mid west of the USA at a cost of some \$ 300 million – presently indicates promising commercial potential
- An international technology licensing company has been set up based in the USA
- The process is protected by approx 300 inventions patented in up to 50 countries via a total of some 1500 patents or patents pending

ZINCALUME[®] COATED STEEL

ZINCALUME® Coated Steel Technology

An IP Acquisition with

Subsequent Continuous Development

Initially Technology Push

Now Strong Market Pull

With Significant Market Value Proposition

- Early marketing success in Australia
- Contribution to the technology by JLA
 - specifically coil coating expertise
- Joint Licensing with Bethlehem Steel
- Formation of BIEC - Bethlehem's Licensing Organisation - 1979
- Bought by BHP - 1986

BIEC's Achievements

- 50+ licensees signed up, worldwide, to date
- 50+ million tonnes of Galvalume[®] coated steel produced to the end of 2002
- 5 million tonnes annual production
- formation of ZAC organizations for exchange of technology developments

- \$ 10+ billion profit to licensees worldwide
- In excess of \$ US 200 million license fees
- Has enhanced BHP Steel's market position via premium coated products for the domestic market in the form of ZINCALUME[®] and COLORBOND[®] coated steel products

COLORBOND[®] COATED STEEL

The competition



BLUESCOPE STEEL COLORBOND® Coated Steel









Behind the COLORBOND[®] Trademark

- Product integrity through market driven R&D and product innovation:
 - Clean COLORBOND[®] steel
 - Cool COLORBOND[®] steel
 - Anti-microbial
 - Consistency of processing performance
 - High durability

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IP Commercialisation at BlueScope Steel - Summary

- IP is essential
- Provides a license to operate
- Underpins margins and competitive advantage
- An insight into competitors activities/interests
- Should be integrated into everyday business across the board

Thank You