Port Kembla Steelworks & Springhill Analyst Site Visit

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September 2009

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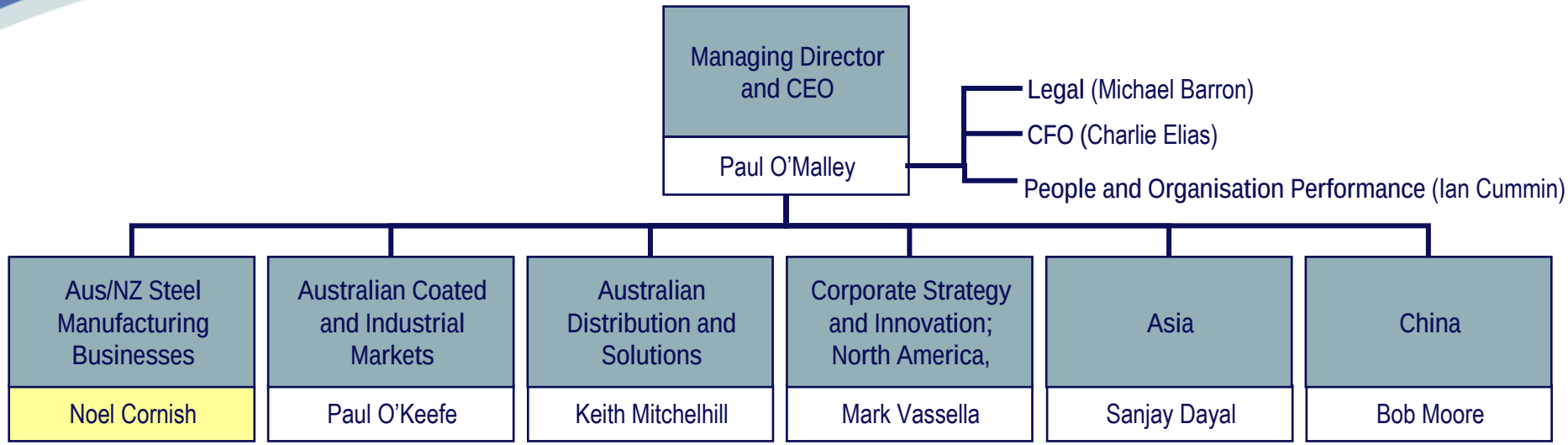
Introduction

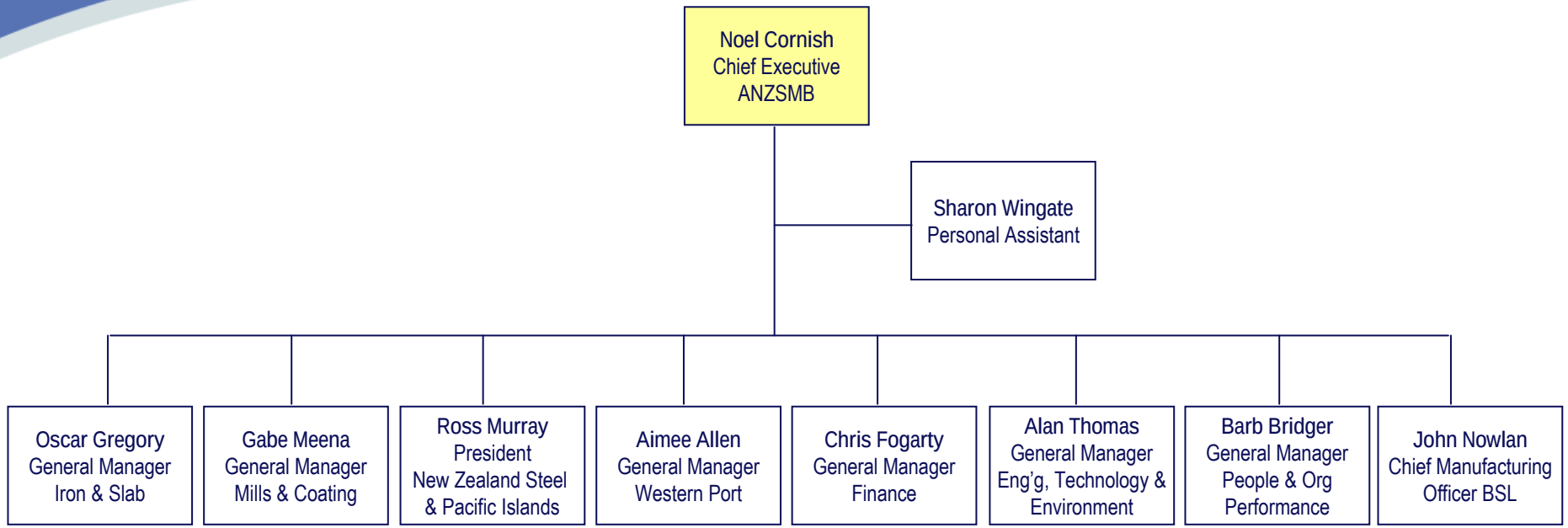
Single point of focus for Australian & New Zealand Steel Manufacturing Businesses



Oversees all manufacturing facilities in Aus/NZ; responsible for driving safety, process excellence and meeting production schedule at lowest cost

- PKSW
- Springhill
- Western Port
- Western Sydney
- Acacia Ridge
- Glenbrook NZ

Australian & New Zealand Steel Manufacturing Businesses



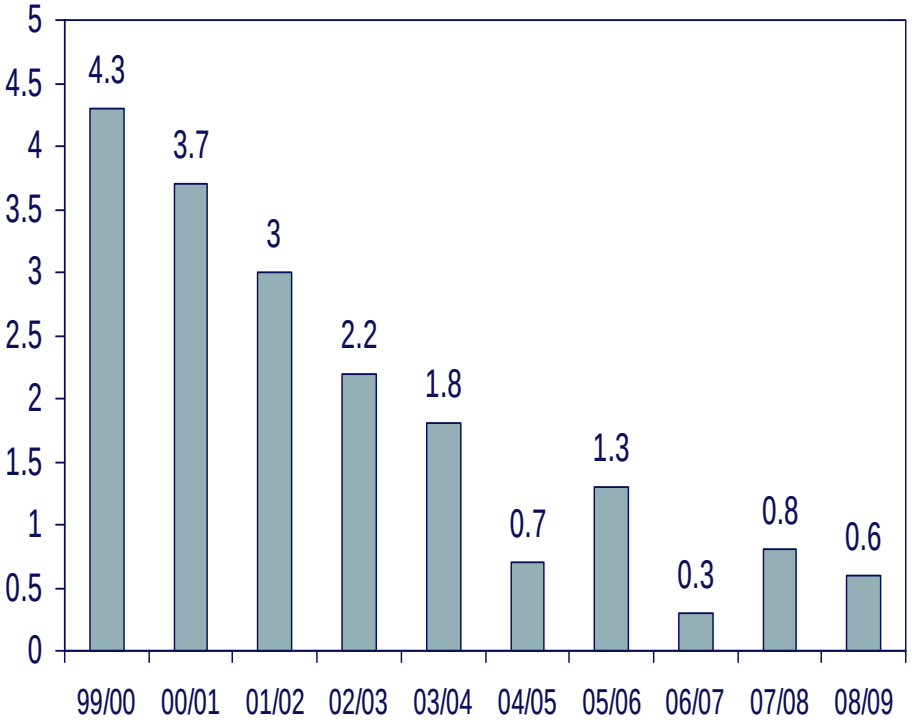
Agenda

- Safety
- Water conservation
- Community
- Port Kembla Steelworks
  - Process and Production
  - Costs and Raw materials
  - Capital
  - No. 5 Blast Furnace reline
  - Sinter Plant upgrade
- Coated Businesses
  - Process and production
- Summary

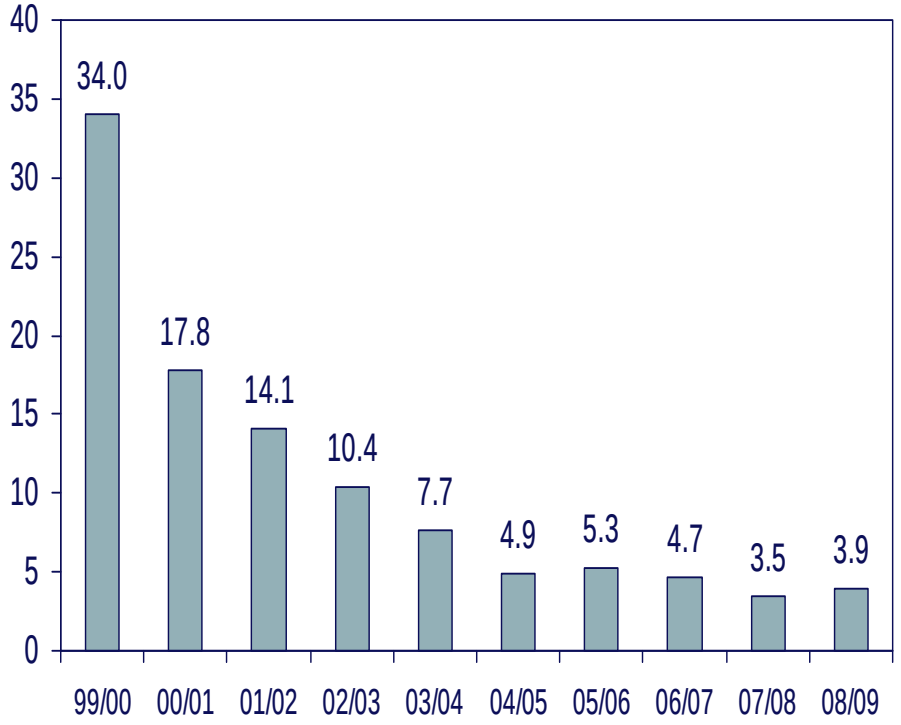
Safety, Water Conservation, Community & Markets

Safety – Australian & New Zealand Steel Manufacturing Businesses

Lost Time Injury Frequency Rate



Medically Treated Injury Frequency Rate



Environment – Continued Improvement in Water Conservation

Port Kembla Steelworks

- World class water efficiency for an integrated steelworks.
- 14,700 ML of recycled water used since Oct 2006.
- Options being investigated for further reductions.

Springhill Works

- Water input is >50% recycled water

Hot Strip Mill run out table uses recycled water

Federal Government's proposed Carbon Pollution Reduction Scheme (CPRS) will be reviewed after this presentation

Community Engagement

- Policy of supporting education, youth, arts and culture
- Active participation in a variety of community initiatives e.g. Youth Unemployment Committee
- Support 30+ Illawarra organisations
- $500,000 in sponsorships
- $80,000 in donations towards charities, schools, sport, employees and their families

Markets and Supply Chain

Western Port

Illawarra

Domestic

Export

Direct

Distribution & Solutions Australia

Distributors

Building & Construction

Manufacturing

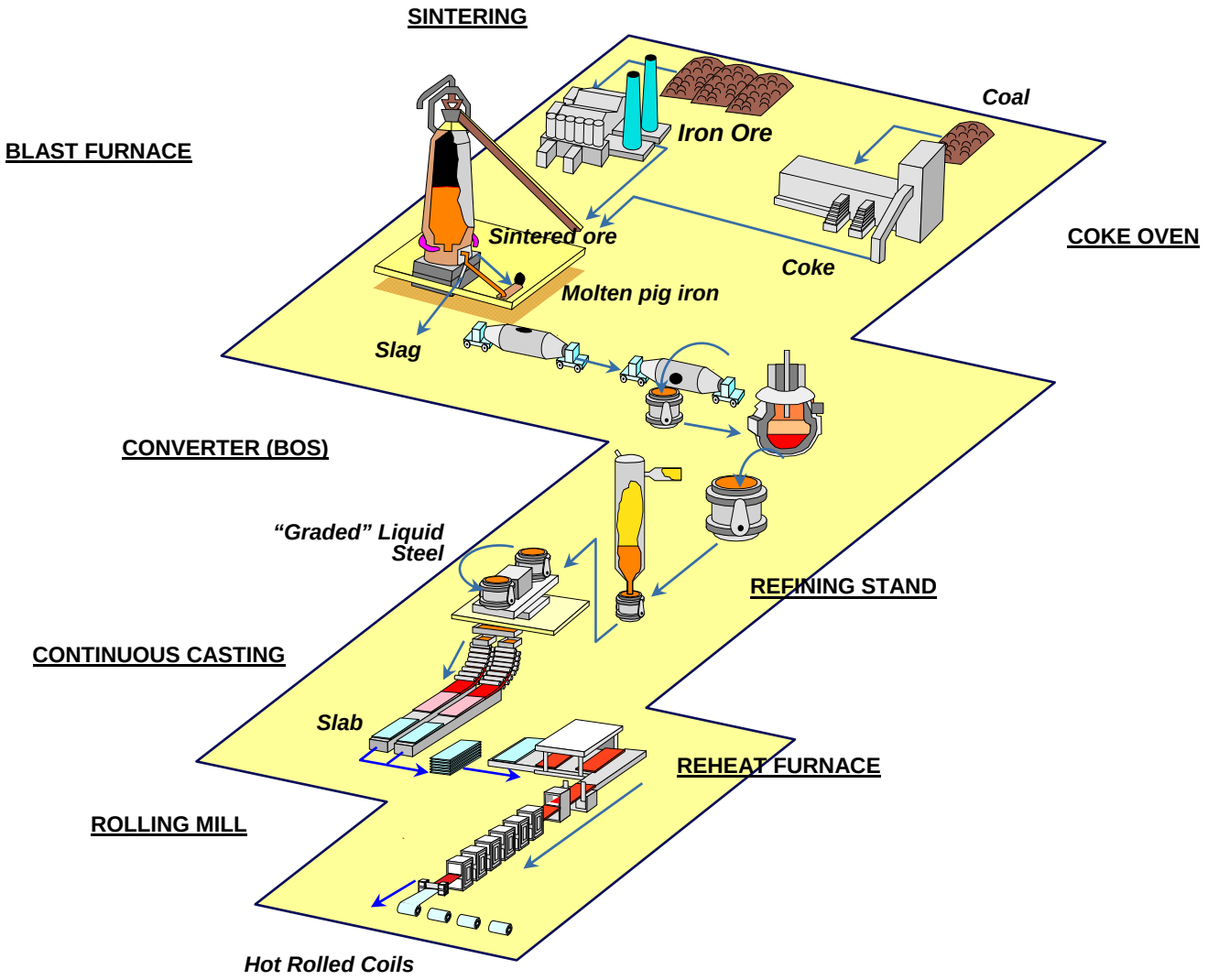
Pipe & Tube

Port Kembla Steelworks

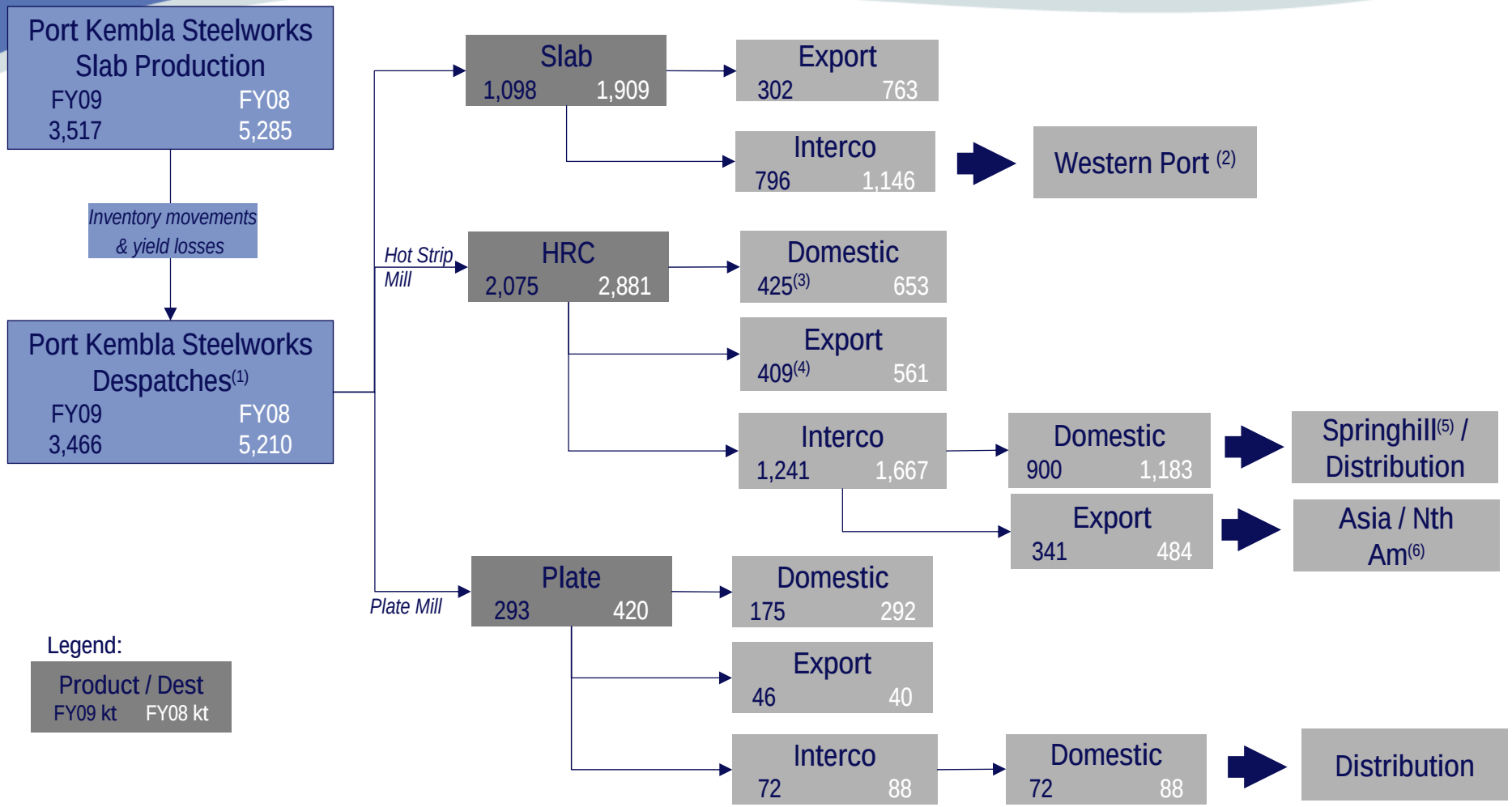
Port Kembla Steelworks overview

- Fully integrated plant with steel making capacity of 5.3Mtpa. Optimal unit size.
- Situated on 760 hectares and employing 3,400 permanent employees (plus 1,500 - 2,500 contractors on any given day).
- Amongst world's most technically advanced producers of quality carbon steel products.
- Excellent technical and operational skills and experience.
- Focus on:
  - Safety
  - Customers
  - Environment
  - Community
  - Productivity
  - Quality
  - Costs
  - Flexibility

Overview of Steel Production Process – Port Kembla Steelworks



PKSW – Production & Despatch Flow, FY2008 & FY2009



Notes:

(1) Slab, HRC and plate.

(2) See Coated Australia Annual Capacities slide for Western Port Works capacities

(3) Domestic HRC ex Port Kembla Steelworks only; ie excludes export HRC despatches from Western Port when reconciling from the ASX Release, Attachment 1

(4) Export HRC ex Port Kembla Steelworks only; ie excludes export HRC despatches from Western Port when reconciling from the ASX Release, Attachment 1

(5) See Coated Australia Annual Capacities slide for Springhill Works capacities

(6) See ASX Release, Attachment 1 for detail

Port Kembla Steelworks – No.5 Blast Furnace Reline

No.5 Blast Furnace Reline

- History – No. 5 BF
  - Built in 1972, relined in 1978, 1991 and now 2009
  - Nameplate capacity approximately 2.6 Mtpa of hot metal
- No.5 reline undertaken from 18 January to 19 August 2009
- Total capital cost in line with budget of A$372M
- Restarted on 19 August 2009 and has operated continuously since blow-in
- No safety or environmental incidents

No.5 Blast Furnace Reline (cont'd)

Reline activities have entailed the following stages:

Shut-down & tap salamander	• Copy book run-down; • 580 t salamander tapped; no blasting in hearth required
Demolition Construction	• Site manpower peaked at just under 1,200 people / day • Excellent safety performance - LTIFR =1.0 and MTIFR=12.5 on 2 million man-hrs
Cold commissioning Hot commissioning	• Extensive equipment testing prior to start-up • Furnace has operated continuously for 40 days with no significant equipment issues • Operations stable ; Quality in Specification

No.5 Blast Furnace Reline

…major capital investments in our future

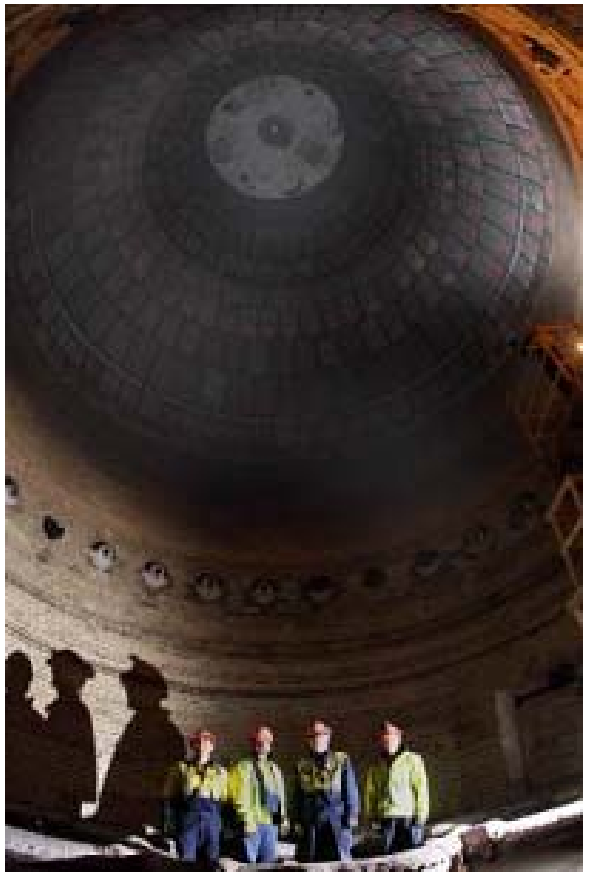
Photo courtesy Illawarra Mercury

No.5 Blast Furnace Reline

…major capital investments in our future

Photos courtesy Illawarra Mercury

No.5 Blast Furnace Reline



Photos courtesy Illawarra Mercury

- The carbon hearth, refractories and staves (furnace shell cooling elements) were completely stripped out of the blast furnace and replaced with new ones. Internal platforms enabled work at multiple levels.

Port Kembla Steel Production

- No. 6 Blast Furnace has been operating at capacity.
- No. 5 Blast Furnace is going through the final stages of its ramp up process following completion of the reline.
- Average combined capacity utilisation for 1Q is expected to be approx 70%
- Stronger domestic and export demand in first quarter supporting 100% capacity utilisation.
- If current levels of demand continue we would expect to run at 100% utilisation in Q2 FY 2010.
- The continued strengthening of A$ vs US$ remains a concern.
- A market update will be provided at the Annual General Meeting in November.

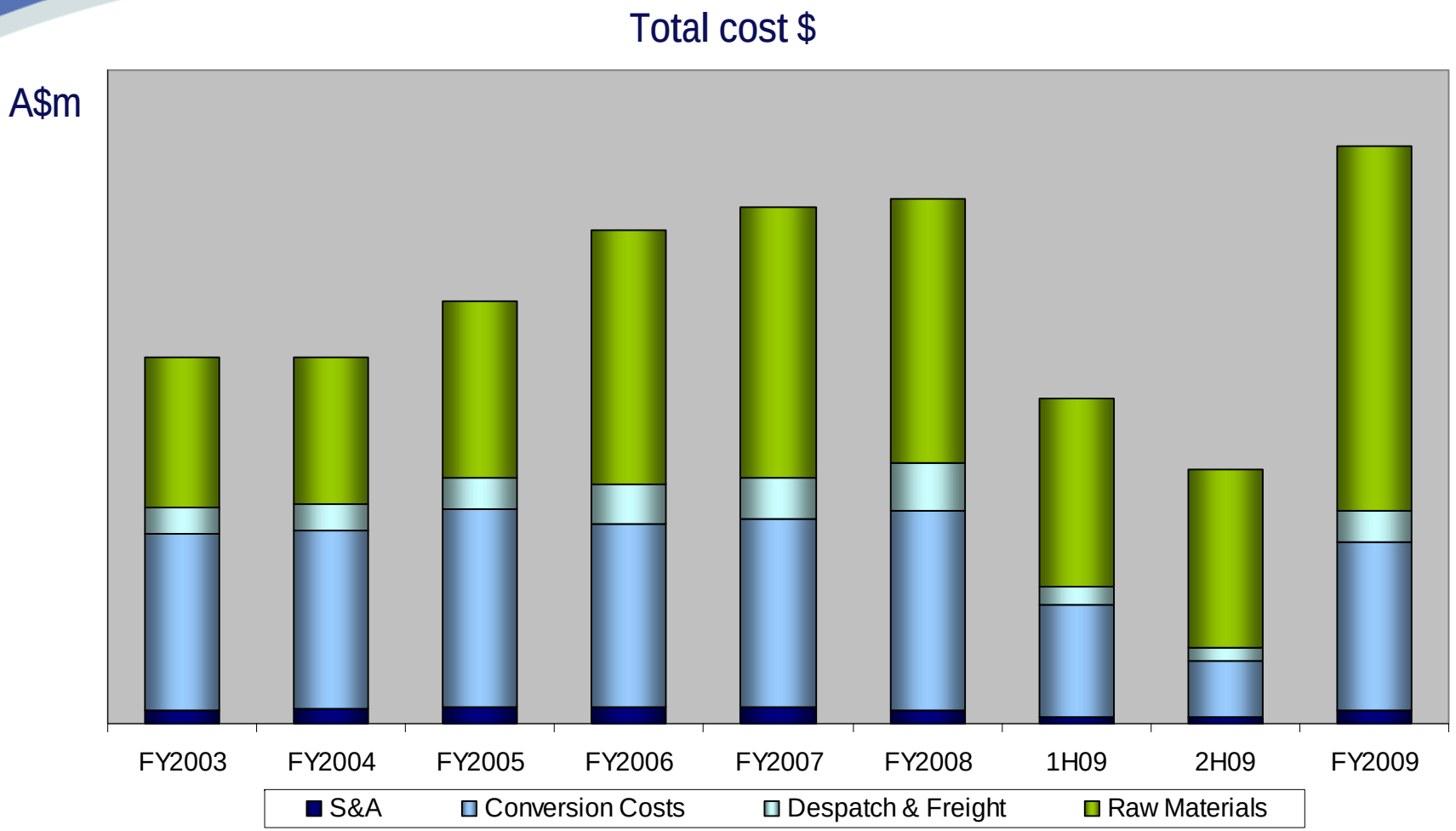
Sinter Plant Upgrade

- Sinter plant re-commissioned 29 June 2009
- Total capital cost approximately A$140m
- No.3 Sinter machine at PKSW (prior to upgrade)
  - was single source of 5.3 Mtpa of sinter for No. 5 & No. 6 Blast Furnaces
  - the typical blast furnace burden mix prior to the upgrade was 57% sinter (fines based); 25% pellets; 18% lump
- Outcome post upgrade and from FY2010 onwards (and after No. 5&6 operating at full capacity)
  - increased sinter production capacity by 1.1 Mtpa to 6.6 Mtpa (nameplate was 5.5 Mtpa)
  - this will require + 1.1 Mtpa of fines BUT would displace 1.0 Mtpa of pellets
  - after the upgrade typical blast furnace burden mix will be approx 70% sinter (fines based); 16% pellets; 14% lump
  - increased Pulverized Coal injection rates (cost saving as use more thermal and less coking coal) due to blast furnace permeability being improved by higher quality sinter

The Sinter Plant underwent a major upgrade and 20% increase in capacity

Photos courtesy Illawarra Mercury

Port Kembla Steelworks – cost profile



- Chart shows cost of despatches
- Conversion costs include depreciation
- Raw material includes iron ore, coal, scrap and alloys but not scrap purchased on behalf of OneSteel

Global iron ore fines, coking coal and semi soft coal benchmark prices

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Iron Ore Fines US$/dmt	$17.97	$17.54	$19.12	$22.68	$38.88	$46.27	$50.66	$91.14	$61.06[1]
% change	4.3%	-2.4%	9.0%	18.6%	71.5%	19.0%	9.5%	79.9%	-33%
Hard Coking Coal US$/wmt	$42.75	$48.10	$46.20	$57.20	$101.00	$116.00	$98.00	$300.00	$129.00[2]
% change	7.5%	12.5%	-4.0%	23.8%	76.6%	14.9%	-15.5%	206%	-57%
Semi-soft Coal US$/wmt	$35.15	$32.80	$30.80	$40.00	$80.00	$59.00	$65.00	$240.00	$85.00[3]
% change		-6.7%	-6.1%	29.9%	100%	-26.2%	10.2%	269%	-64.6%

Notes:

1. Based on Australian iron ore fines settlement with Japan at 62.5% Fe Brazilian fines settlement was -28% at 66% Fe. Pricing under the new iron ore contract with BHP Billiton (effective from 1/7/2009) will be reviewed quarterly and linked to movements in iron ore prices paid by BHP Billiton's other customers in Asia.
2. Benchmark price settlement. Does not reflect BlueScope price averaging arrangement for April 2009 through to June 2010.
3. Benchmark price settlement.

PKSW – Consumption of primary raw materials

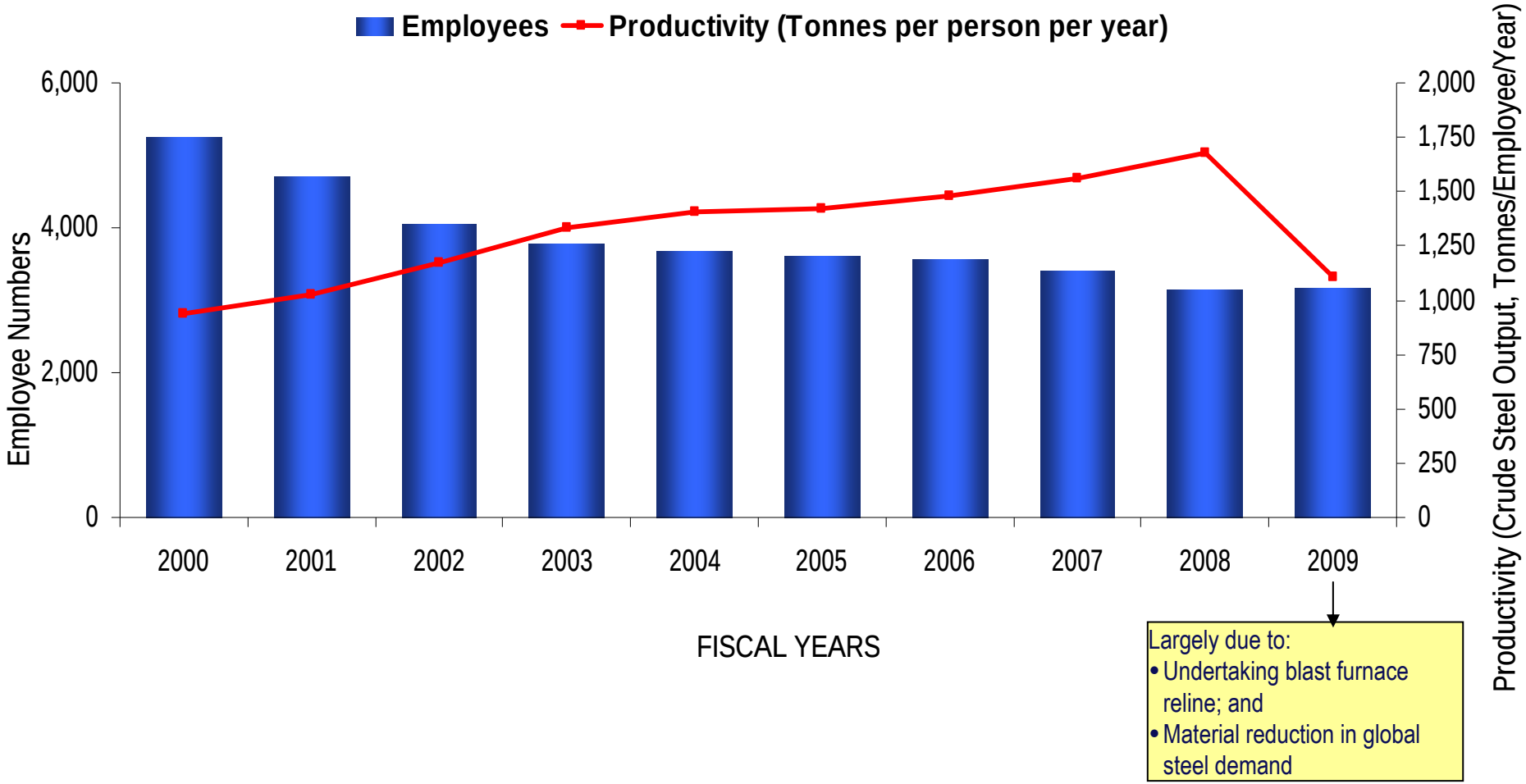
	Volume consumed in production (dry Mt)		
	FY2007	FY2008	FY2009
Coal			
Coking	2.9	3.0	2.2
PCI	0.7	0.6	0.4
Anthracite	0.1	0.1	0.0
Total	3.7	3.7	2.6
Iron Ore			
Fines	3.9	4.0	2.9
Lump	1.7	1.6	1.0
Pellets	2.2	2.3	1.6
Total	7.8	7.9	5.5
Scrap (1)	1.0	1.0	0.7
Raw Steel Production	5.3	5.3	3.5
Export Coke despatches	248kt	264kt	282kt

- Coking coal principally sourced from local BHP Billiton Illawarra mines (30 year contract from July 2002)
- PCI coal sourced from a range of suppliers, not currently under long term contract

- Contracts in place with BHP Billiton (5.0mtpa; 10 year contract from July 2009) and Savage River (Grange Resources 0.6mtpa; 3 year contract from 1 July 2009)
- Also supplied by IOC (Rio), OneSteel and Vale, not currently under long term contract

Note: (1) 40-50% of scrap feed is sourced externally; balance, internally sourced scrap

Port Kembla Steelworks productivity

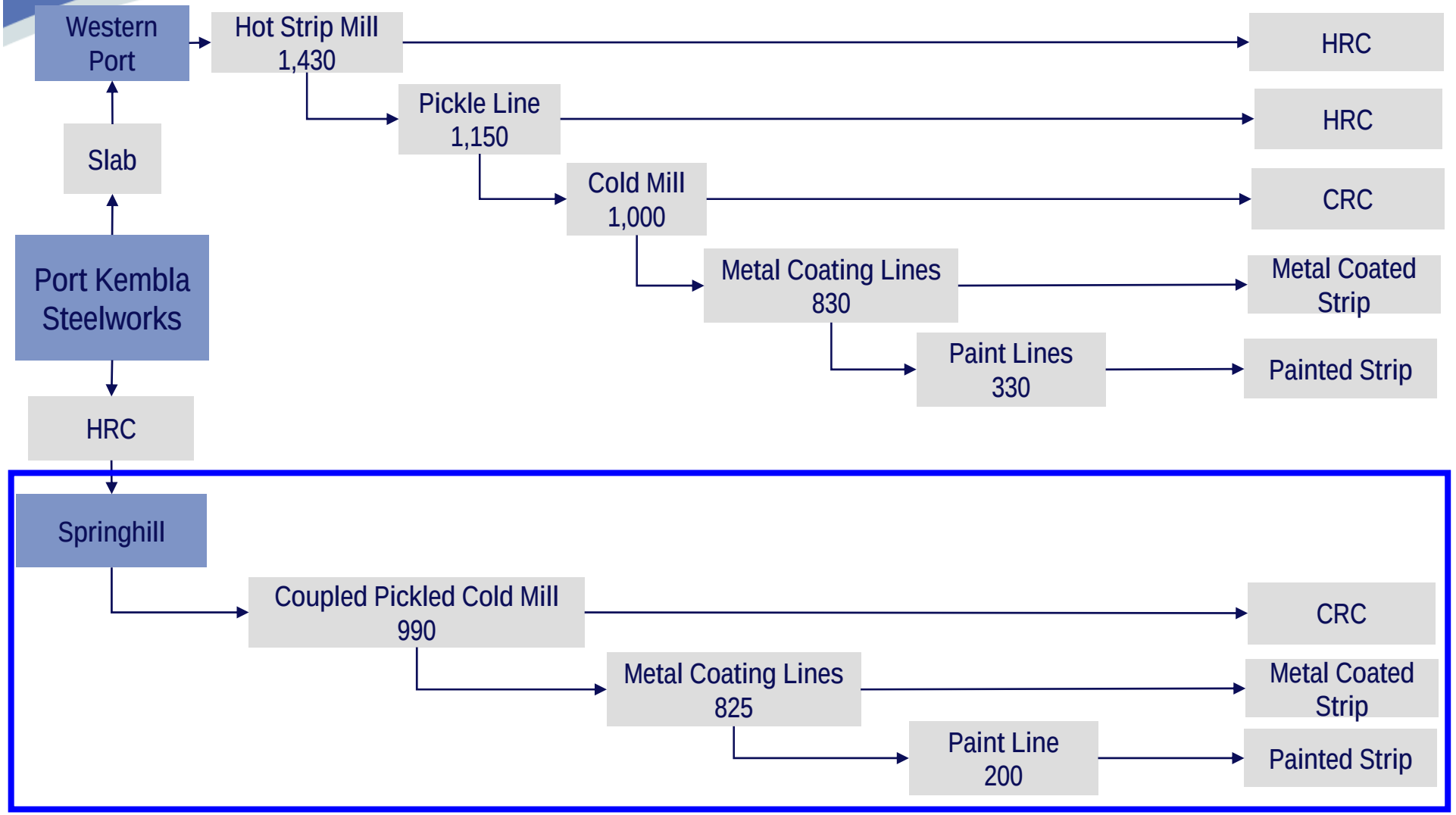


Springhill – Coated Products

Springhill – Coated Products

- Springhill's Coupled Pickle Cold Mill 990kt
- Metal Coating Lines (3 lines) 825kt
- Springhill Paint Line 200kt

Coated Australia – Annual Capacities



Notes:

(1) Numbers reflect capacities in kt.

Summary

Summary

- Continued focus on safety, community and environment
- Successful ramp up of upgraded facilities
- Continued focus on cost reduction initiatives
- Responding to meet market demands

Q & A's

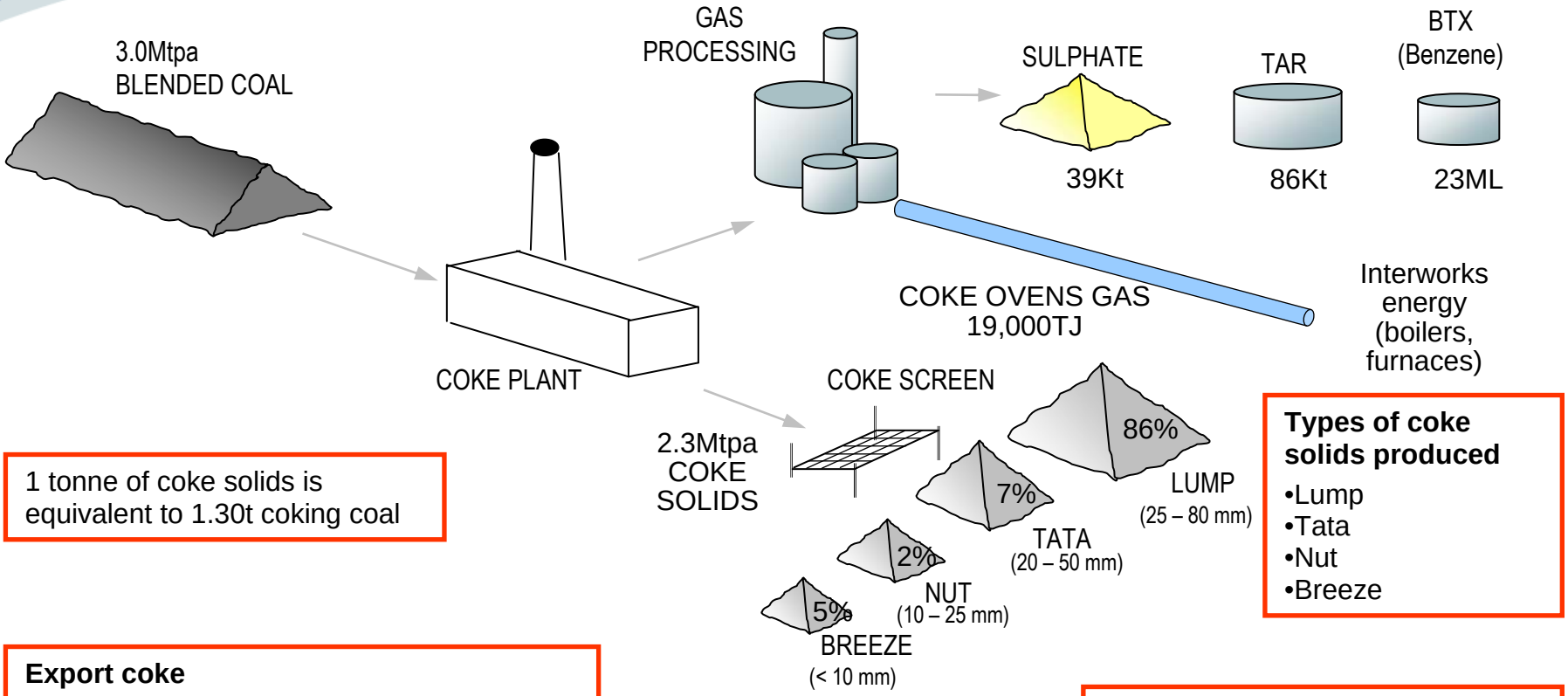
Supporting Information

Cokemaking

Coke Oven Batteries

4 Batteries	4,5,6 & 7A
Oldest	1966
Youngest	1987
Capacity	2.2 – 2.4 Mtpa

Cokemaking process overview



1 tonne of coke solids is equivalent to 1.30t coking coal

Types of coke solids produced

- Lump
- Tata
- Nut
- Breeze

Export coke

BlueScope approach is to sell excess production on a spot basis. Generally offered in 30-45kt cargo sizes.

282kt of coke sales in FY2009

Typical yearly Coke usage (reflective of FY 2008)

Blast furnaces	1.9Mtpa
Sinter plant	0.2Mtpa
Export	0.2Mtpa
	2.3Mtpa

Ore Preparation – sinter and raw materials handling

No.3 Sinter Machine

Built **Revamped**	1975 2009
Grate Area	480 m^2
Production	6.6 Mtpa
Productivity	38-40 $t/m^2/d$
BF Burden	~60 - 70%

Raw Materials Handling

What is sinter?

FINE ORES

Blended and Fluxed in Sinter Machine to Produce Sinter

PELLETS

LUMP ORES

PREPARED BURDENS

BLAST FURNACE

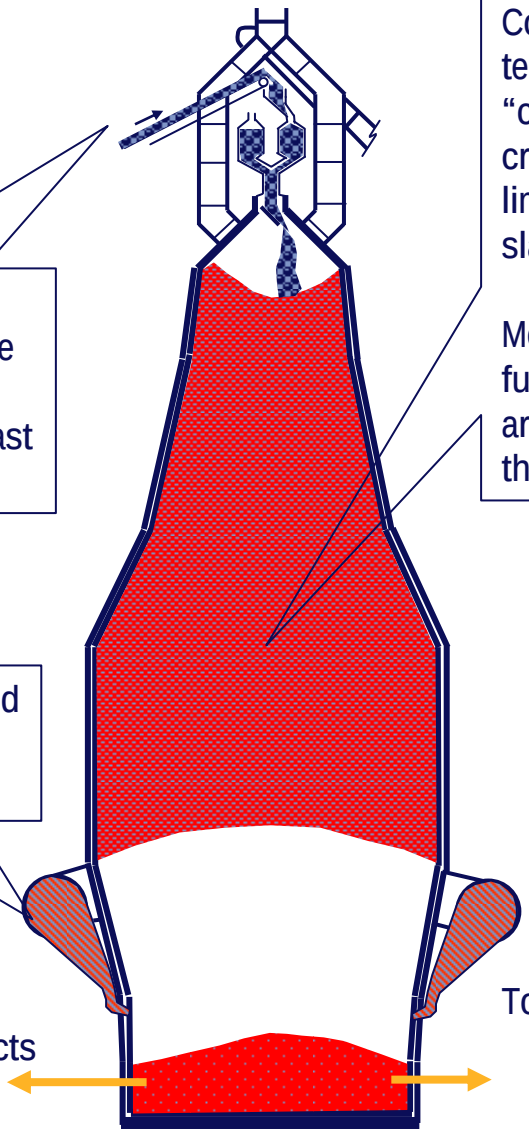
Blast furnace – ironmaking process

Raw materials- iron ore lump, sinter, pellets, coke (coal) and limestone are fed into the top of the blast furnace

Coke and gases burn to create temperatures up to 2200ºC; "chemical reduction" process creates molten iron and CO2 while limestone (flux) melts and forms slag.

Molten iron and slag fall to the furnace bottom (hearth) where they are drained out through one of three tapholes into a torpedo ladle.

Hot air, gas and PCI is fed into the blast furnace through the tuyeres



- 2 Blast Furnaces (No.5 & No.6)

Molten slag to by-products processing

Torpedo car – iron to BOS

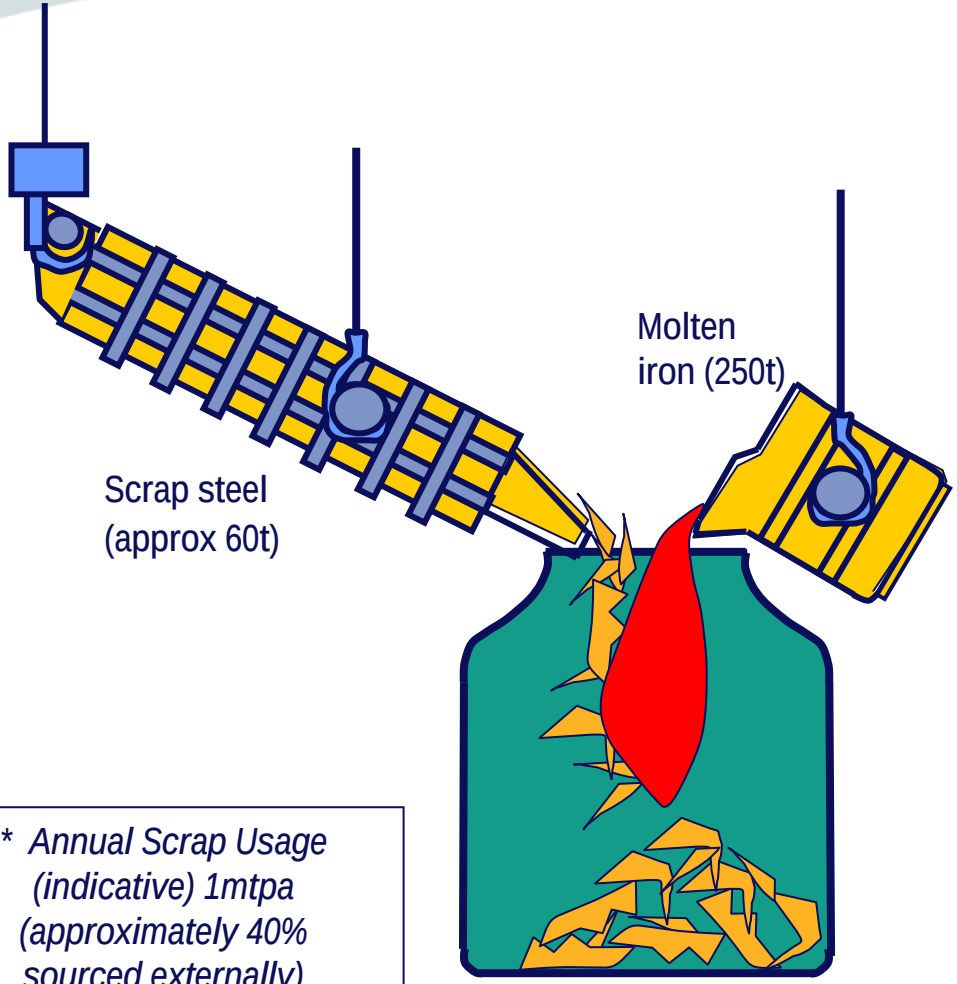
Ironmaking – Blast Furnaces

No.5 Blast Furnace

No.6 Blast Furnace

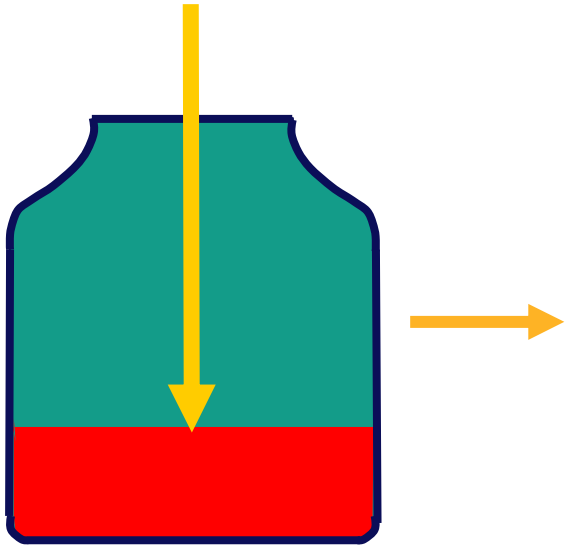
	No.5BF	No.6BF
Built	1972	1996
Relined	1978, 1991, 2009	-
Campaign Life	15 - 20 yrs	>20yrs
Output	2.6 Mtpa	2.6 Mtpa

Steelmaking process



Basic Oxygen Steelmaking (BOS)

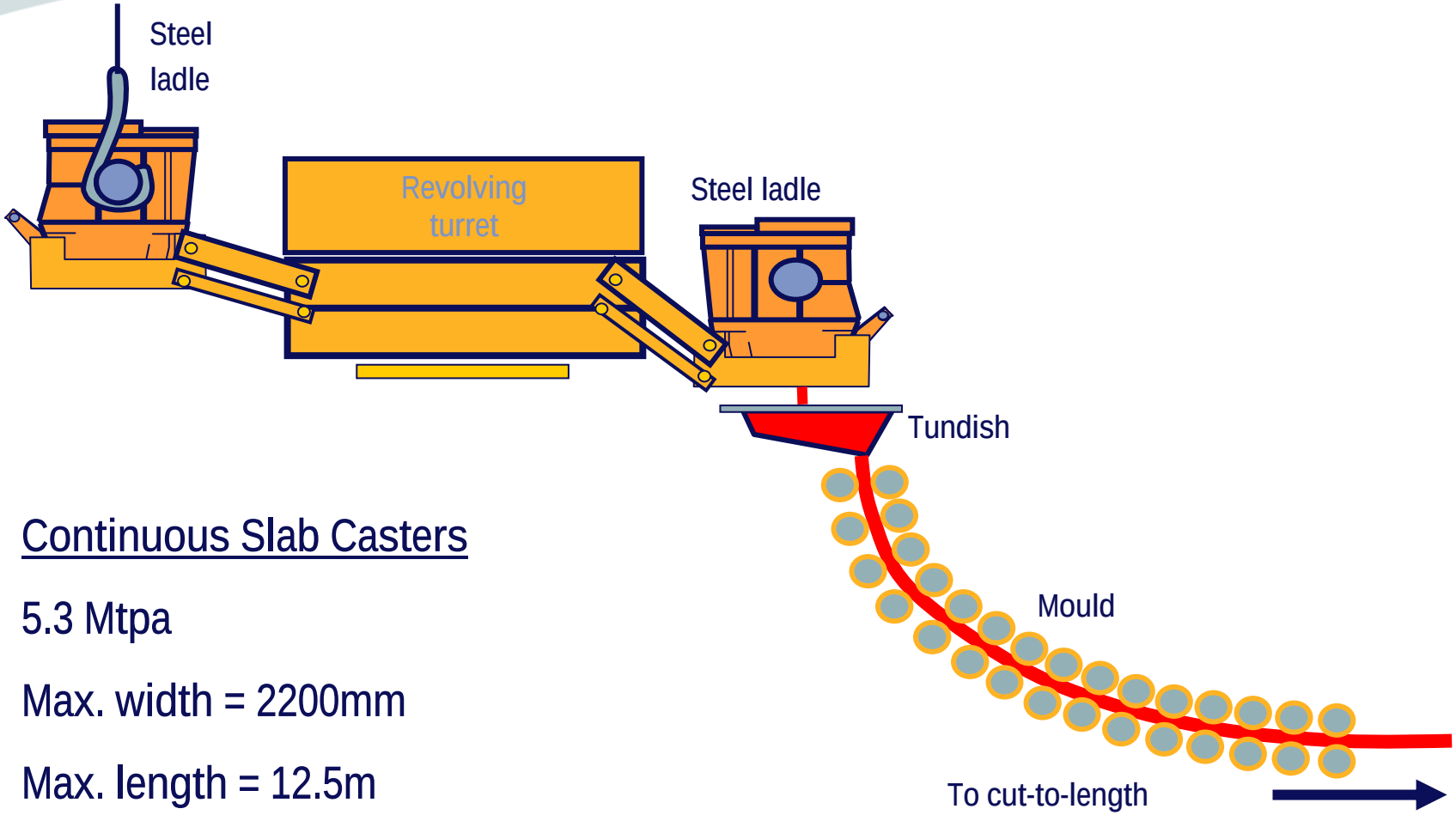
Oxygen blowing



Refractory lined
BOS furnaces
3 x 280t

* *Annual Scrap Usage (indicative) 1mtpa (approximately 40% sourced externally)*

Slabmaking process



<u>Continuous Slab Casters</u>

5.3 Mtpa

Max. width = 2200mm

Max. length = 12.5m

Max. thickness = 300mm

Slabmaking

	No.1	No.2	No.3
BOS	1972	1972	1983
Caster	1978	1986	1986

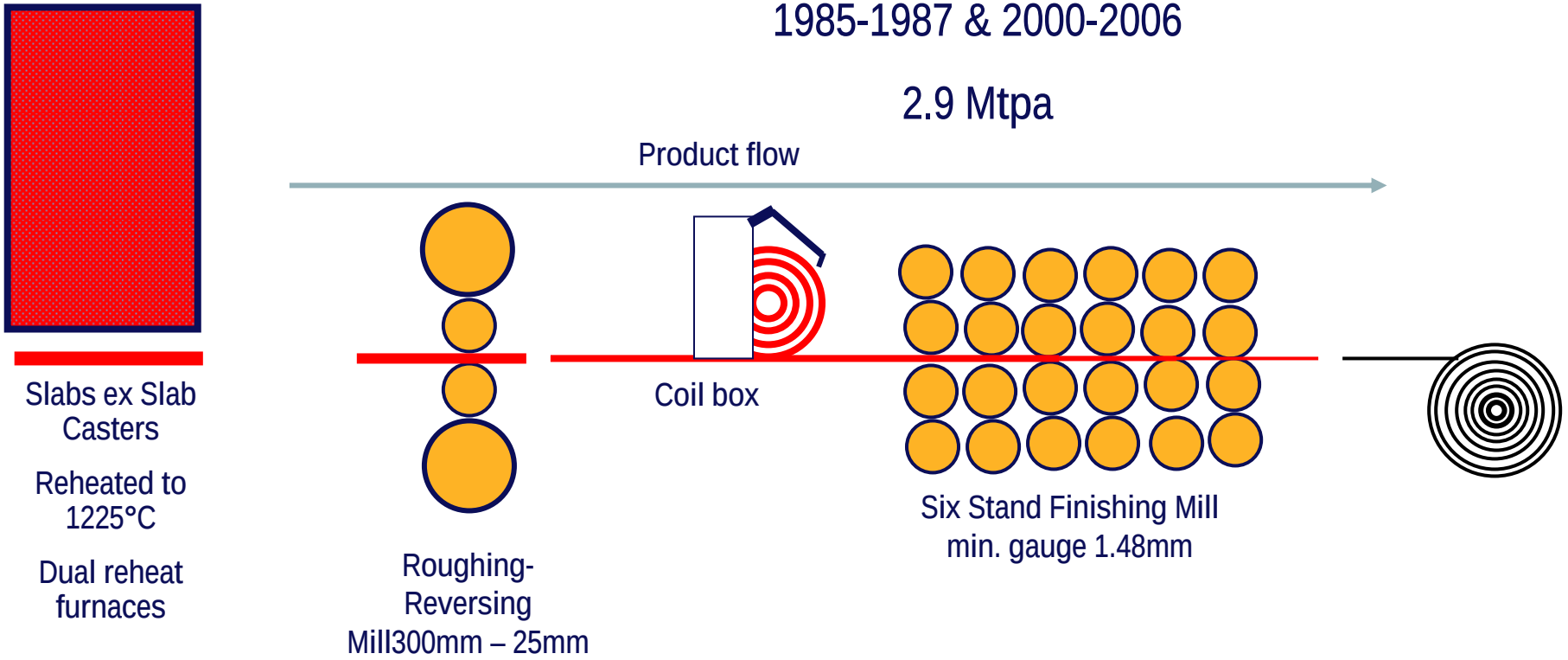
5.3Mtpa total output

HRC process

Hot Strip Mill

Commissioned 1955, upgrades 1972, 1985-1987 & 2000-2006

2.9 Mtpa



Hot Strip Mill

Built	1955
Major upgrades	1972, 1980, 1987, 1993, 2000-2009
2nd Walking Beam Furnace	2006
Capacity	2.9Mtpa

Plate process

450ktpa capacity

Commissioned 1963 5mm-180mm thick x 1200mm-3400mm wide

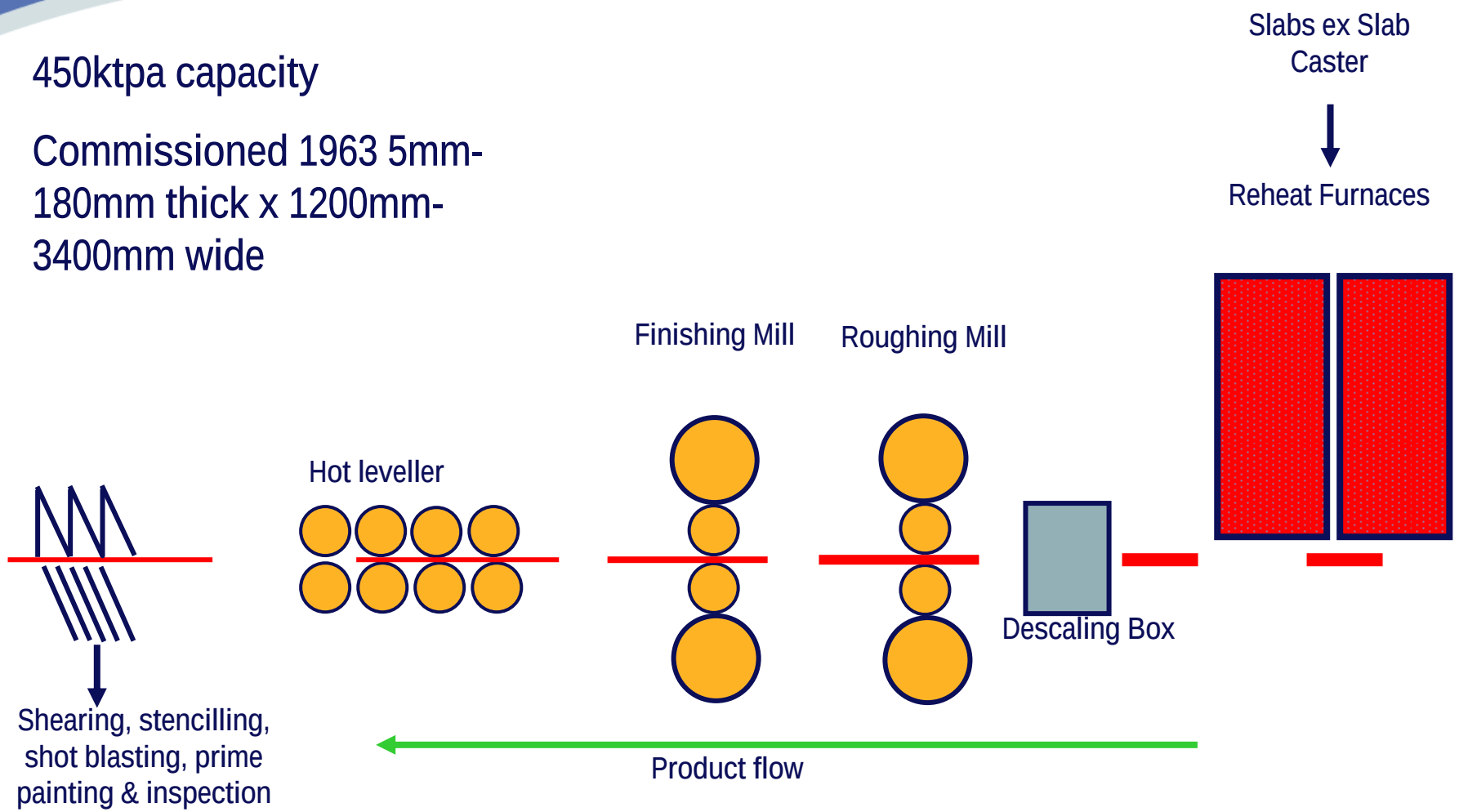
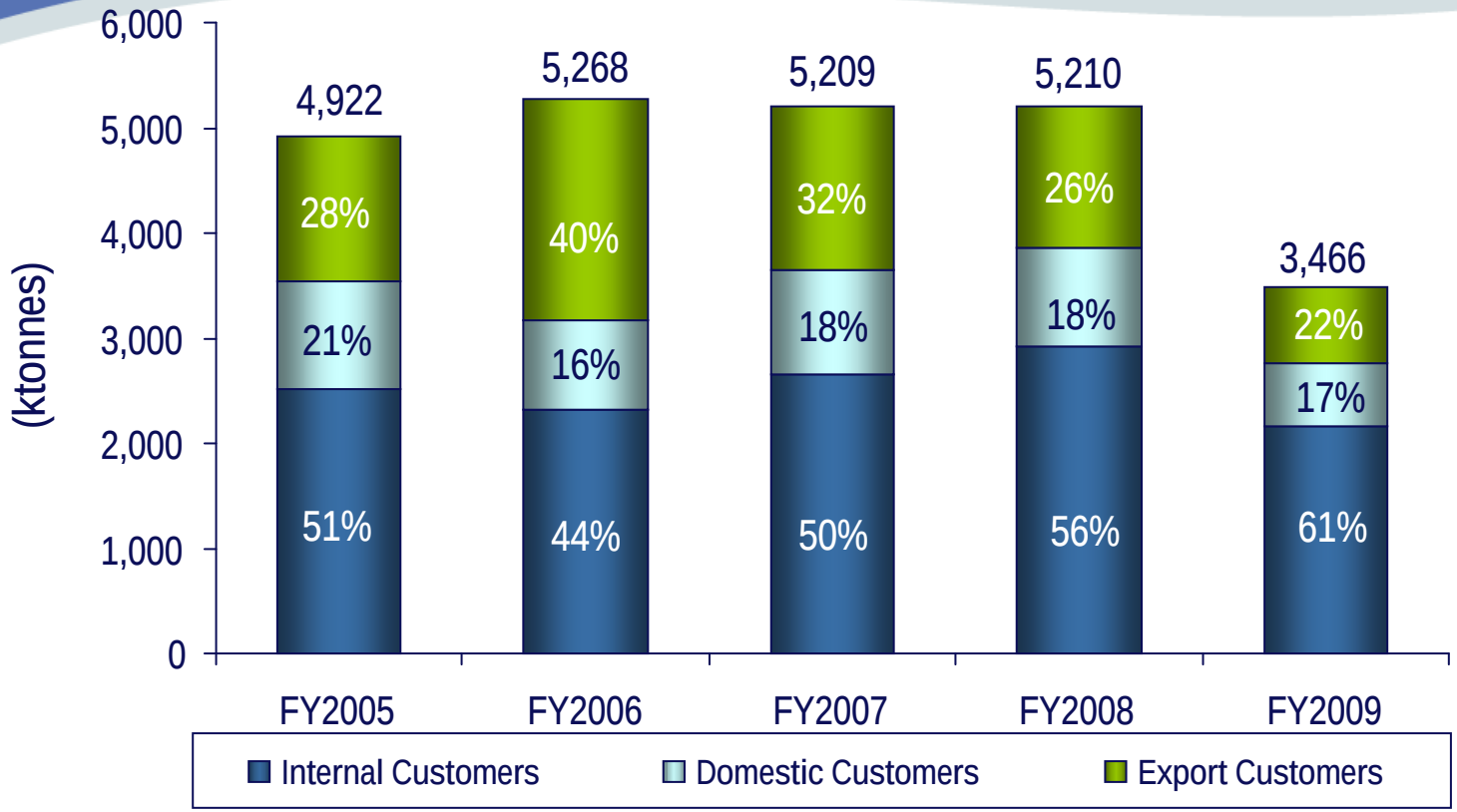


Plate Mill

No1 Furnace & Stand 1 Rolling Mill	1963
No2 Furnace & No2 Stand Rolling Mill	1971
Capacity	450,000t

Port Kembla Steelworks despatches



External Product Sales Mix					
Slab	44%	49%	31%	33%	22%
HRC	41%	39%	53%	53%	62%(1)
Plate/Oth	15%	12%	16%	14%	16%

100% exported, with geographic sales split:

Asia	98%
USA	2%
Other	0%

51% sold domestically and 49% exported, with geographic split being:

Asia	36%
USA	3%
Other	61%

(1) The difference between HRC external despatches reported here and Attachment 1 to ASX Release relates to HRC sales from Western Port (old Coated Products Australia).

Indicative steelmaking raw material mix

- Taking account of the benefit of the sinter plant upgrade the indicative raw material mix is as follows:

	Per slab tonne
➢ Coking coal (dry tonnes)	0.5t
➢ PCI	0.13t
➢ Iron ore	
– fines	1.0t
– lump	0.3t
– pellets	0.25t
➢ Scrap (ext purchased)	0.1t

Excludes Coal used for coke despatches

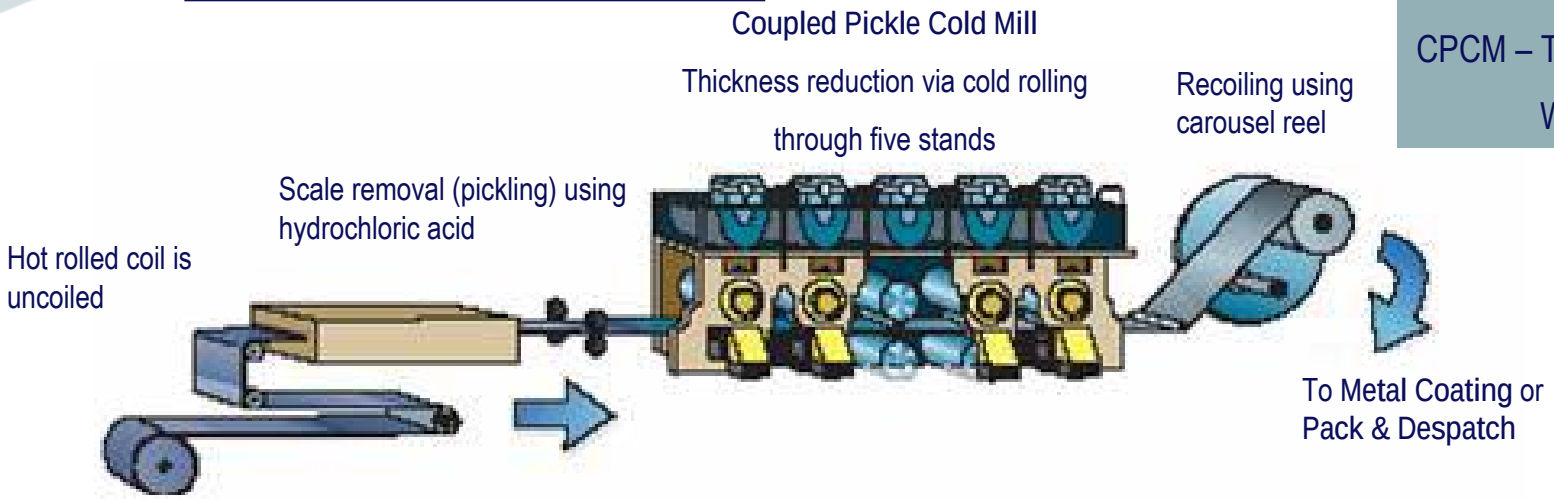
Benchmark price quoted in wet tonnes; 8% moisture content difference to dry tonnes

Port Kembla Steelworks Capital Expenditure

Commissioning	Project	Capex (A$m)
1996	No. 6 Blast Furnace	478
2000	5mtpa Project	90
2001	Coke Side Emission Control	91
2004	Sinter Plant Emission	94
2006	Hot Strip Mill Expansion	100
2009	No. 5 BF Reline	372
2009	Sinter Plant Upgrade Project	140

Springhill – cold rolling

COUPLED PICKLE COLD MILL



Technical Capabilities

CPCM – Thick 0.30 – 3.30 mm

Width 615 – 1320 mm

Process: Hot rolled coil is pickled in hydrochloric acid to remove iron oxide to prepare the strip for cold rolling. Cold rolling reduces steel thickness by passing the hot rolled pickled strip through a series of five rolling stands. High roll force and strip tension allows the strip to be progressively reduced at each stand without changing the width. The CPCM is a continuous pickling operation coupled to the cold reduction process.

Output: Sold as cold reduced uncoated steel, or sent to metal coating lines for further processing.

Capacity: 990 kt/a

Springhill – metal coating

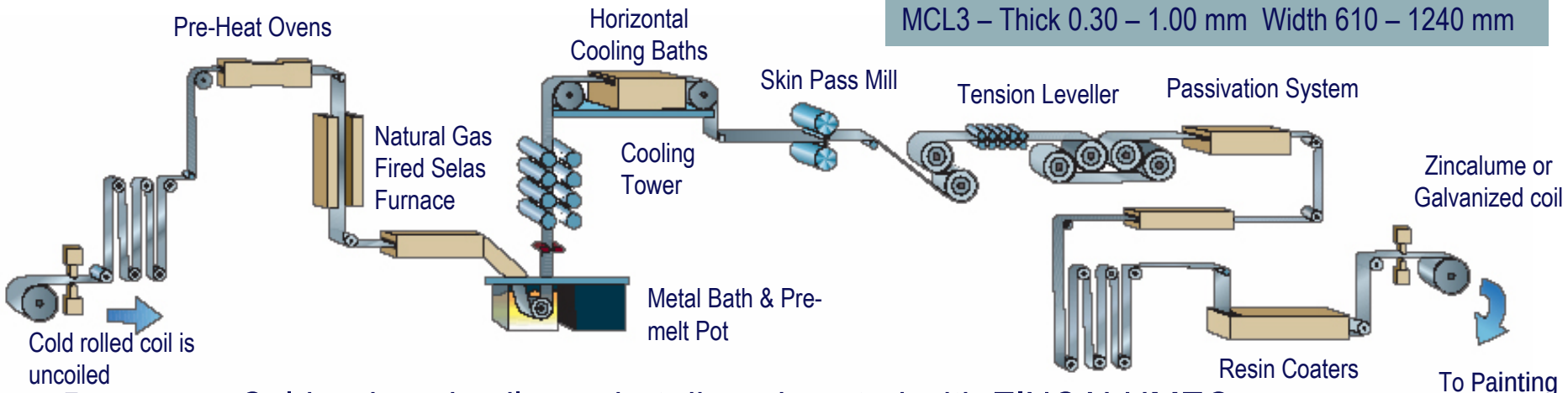
METAL COATING LINES

Technical Capabilities

MCL1 – Thick 0.03 – 3.30 mm Width 610 – 1240 mm

MCL2 – Thick 0.50 – 3.50 mm Width 610 – 1240 mm

MCL3 – Thick 0.30 – 1.00 mm Width 610 – 1240 mm



Process: Cold reduced coils are hot dipped coated with ZINCALUME® coating (Nos 1 & 3 Lines) or galvanised (zinc) coating (No 2 & 3 Lines) to provide corrosion protection

Output: Sold as ZINCALUME® coil or galvanised coil to building and manufacturing industries or processed further by our Paint Lines.

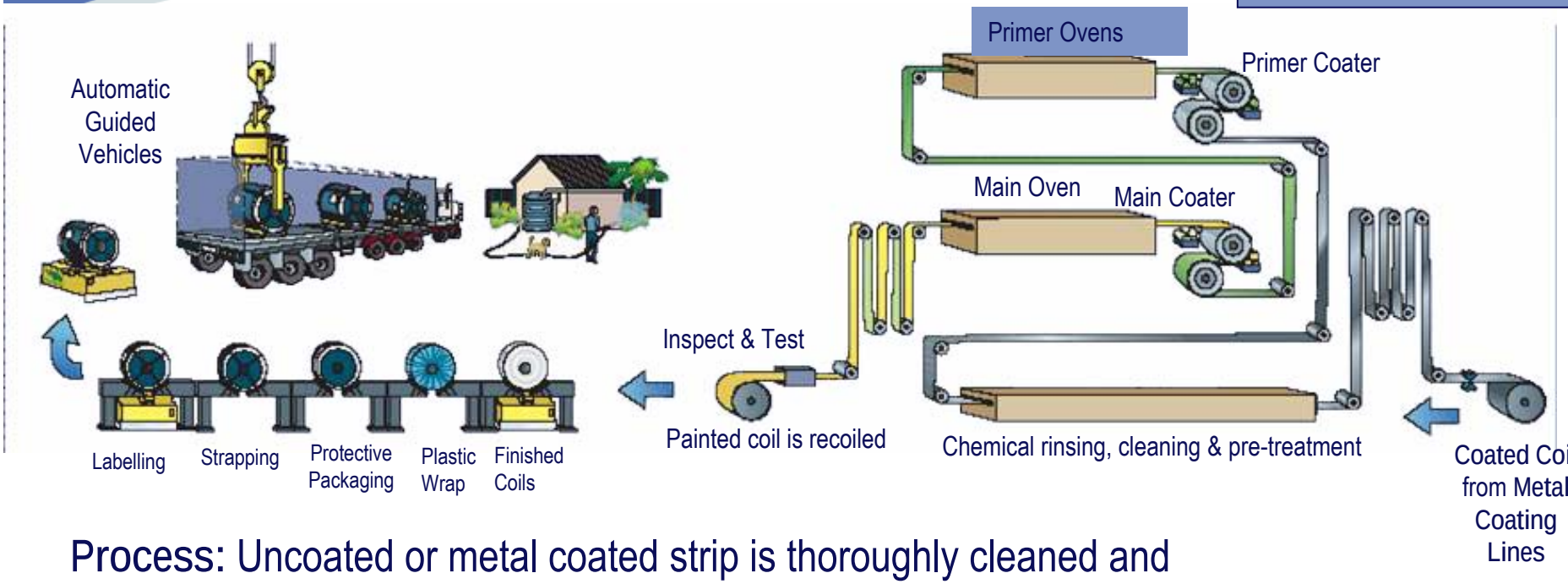
ZINCALUME®, ZINCSEAL®, ZINCANNEAL®, GALVASPAN®

Capacity: 825 kt/a

Springhill – painting and finishing

PACK & DESPATCH

PAINTING



Process: Uncoated or metal coated strip is thoroughly cleaned and chemically treated to provide best surface to apply a primer coat followed by a finish coat of paint, via roller application, which is then oven cured.

Output: Building, packaging and manufacturing markets

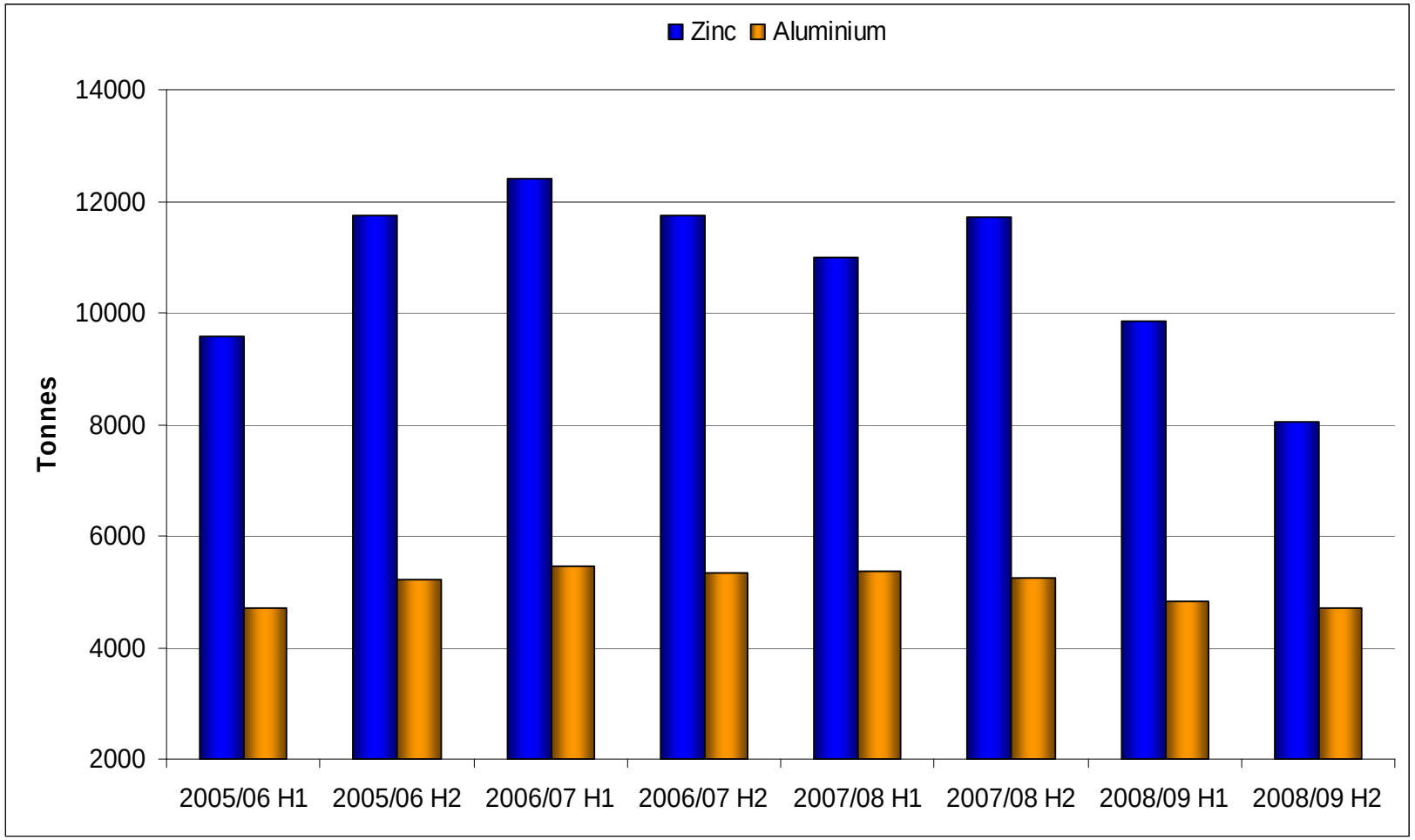
COLORBOND®, AQUAPLATE®

Capacity: 200 kt/a

Technical Capabilities

No.3 Paintline - Thick 0.20 – 1.5mm
Width 600-1320 mm

Springhill – zinc / aluminium consumption



Springhill Site History

1939	John Lysaght (Australia) Springhill Works begins full operation
1955	4 stand continuous Cold Rolling Mill commissioned
1968	Cold Rolling Mill upgraded to 5 stands
1961	First continuous galvanising line commissioned
1964	Second continuous galvanising line commissioned
1966	Third continuous galvanising line commissioned
1970	BHP acquires 50% of Lysaght's
1976	MCL1 converted to Zinc/Aluminium galvanising No.3 Paint Line commissioned
1979	BHP acquires 100% of Lysaght's
1989	New pickle line coupled to 5 stand Cold Rolling Mill (CPCM)
1994	Decommissioning of Electrolytic Cleaning and Galvanising Line facilities
1996	CPCM Carousel Recoiler and Entry Accumulator upgrade Integrated Coil Packaging and Handling Project
2000	Closure of Batch Coil Annealing and Temper Rolling facilities
2002	Transfer of the Slit Recoil Line to Acacia Ridge
2003-05	Brownfield capacity increases
2005	Packaging Products site integrated under Springhill management as Illawarra Coated Products
2007	Packaging Products Tinplate & Finishing department closed
2008	Closure of CRM
2009	Closure of Packaging Cold Mill

Springhill environment

- Springhill site is a zero process water discharge site
    - all process water is treated through waste water treatment and returned to Sydney Water for recycling.
    - only stormwater is received into the local environment.
- Recertified to ISO 14001 April 2008.
- Current DECCW site licenses.
- Reviewed environmental improvement plan (2007 – 2008)
- DECCW recognition for make safe activities tin plating and finishing, considered benchmark
- Greenhouse gas targets are being established via benchmarking exercise.
- Water and energy intensity targets established.
- Achieving better than target on electricity energy intensity.
- Water use and intensity continues to track at record lows.
- Promote BlueScope Water products with installation of several 2 thousand litre rain water tanks.
- Continue to recycle 100% of by-product steel, solvent, HCL, with rags, gloves and oil

Port Kembla Steelworks & Springhill Analyst Site Visit

Noel Cornish
Chief Executive Australian and NZ Steel Manufacturing Businesses
September 2009