

### OneSteel Whyalla Investor Site Tour Presentation 24 November 2009

Mark Parry – Chief Executive Whyalla



These presentations contain certain forward-looking statements with respect to the financial condition. results of operations and business of OneSteel and certain plans and objectives of the management of OneSteel. Forward-looking statements can generally be identified by the use of words such as 'project'. 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. All such forward looking statements involve known and unknown risks, significant uncertainties, assumptions, contingencies and other factors, many of which are outside the control of OneSteel, which may cause the actual results or performance of OneSteel to be materially different from any future results or performance expressed or implied by such forward looking statements. Such forward-looking statements speak only as of the date of this presentation. Factors that could cause actual results or performance to differ materially include without limitation the following: risks and uncertainties associated with the Australian and global economic environment and capital market conditions, the cyclical nature of the steel industry, the level of activity in the Australian construction, manufacturing, mining, agricultural and automotive industries and, to a lesser extent, the same industries in Asia and New Zealand, commodity price fluctuations, fluctuations in foreign currency exchange and interest rates, competition, OneSteel's relationships with, and the financial condition of, its suppliers and customers, legislative changes, regulatory changes or other changes in the laws which affect OneSteel's business, including environmental laws and the Carbon Pollution Reduction Scheme, and operational risk. The foregoing list of important factors is not exhaustive. There can be no assurance that actual outcomes will not differ materially from these statements.



#### Mr Mark Parry, Chief Executive Whyalla

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## **OneSteel operations**

Materials	Manufacturing	Australian Distribution	New Zealand Distribution
Iron ore mines Iron ore lump Iron ore fines Pellets Ore by-products Dolomite mines Australian Recycling International Recyclin	Whyalla Steelworks Structural Rolling Mills Rail Products Facilities Slabs & Billets (feed to East Coast mills) Steelmaking by-products (e.g. coke) Laverton Steel Mill Electric Arc Furnace Laverton Rolling Mills Sydney Steel Mill Electric Arc Furnace Sydney Bar Mill Waratah Steel Mill Electric Arc Furnace Bar Mill Rail and Forge Grinding Media Newcastle Rod & Bar Mills Newcastle Wire Mill Geelong Wire Mill Geelong Wire Mill Wire Ropery	Merchandising Metaland Piping Systems Sheet, Coil & Aluminium Midalia Steel Steel and Tube Fagersta Coil Coaters Pipe & Tube Mills Oil & Gas Pipe Mill Precision Tube Mills Structural Tube Mills LiteSteel <sup>TM</sup> Technologies ARC – Australian Reinforcing Company	Steel & Tube Holdings (NZ) (50.3% shareholding) Merchandising Steel Distribution & Processing Roofing Products & Reinforcing Piping Systems Fastening Systems Chain & Rigging Stainless Steel Hurricane Wire Products



- Mining operation mining in excess of 15 mbcm\* pa of Magnetite and Hematite ore.
- Expect to sell 6.0 mt of hematite iron ore to external customers in FY10.
- Key Objectives:
  - Safety maintain and accelerate progress towards Goal Zero by developing sustainable leadership capability, behaviors, systems and processes (particular emphasis on risk identification and management)
  - Ramp up and sustain iron ore mining to:
    - Enable external sales of 6mt in FY10
    - Provide feed for Blast Furnace (lump and magnetite)
  - Schedule and complete mine developments to enable sustainable volumes and grade for export customers
  - Match infrastructure requirements to planned volume and mine area sites





#### Key objectives

- Cost effective processing and transport of hematite ore and magnetite slurry to meet export and steelworks feed requirements within defined specifications
- Continue exploration program to identify and prove up increases to reserve to maximise and optimise life of mine



#### **Project Magnet recap**

- Project Magnet is the commercialisation of OneSteel's magnetite ore reserves for producing steel and the sale of hematite ore reserves to global markets that adds significant value to OneSteel
- Total capital expenditure of \$402 million
- Hematite
  - Iron Ore Sales
    - FY2006 ~ 1.700kt iron ore lump and fines (1.5mt originally targeted)
      - ~ 300kt ore by-products
      - FY 2007 ~ 2.8m tonnes ore (2.5mt originally targeted)
        - ~ 266k tonnes ore by-products
    - FY2008
- ~ 4.4m tonnes lump and fines (4.0mt originally targeted)
  - ~ 500k tonnes ore by-products
    - FY2009 ~ 5.1m tonnes lump and fines
      - ~ 275k tonnes ore by-products
      - ~ 140k tonnes pellets



- During last year's visit we stated we were working on two priorities:
  - Address / action concentrator performance with respect to quality and rate
  - Pursue options and selective investment to mine and ship increased levels of iron ore

Progress has been made on both



#### Concentrator





#### Concentrator performance issues

#### Issue

- The concentrator, as designed, did not provide silica in product at the level predicted (3.2%) Actual silica of > 4.2% compromised the Project Magnet VIU
- Resolution
  - Extensive plant trials and fundamental research on mineralogy was undertaken to identify a cause
  - Standard screening technology identified as effective means to reduce silica content
- Implementation
  - Screening of final product to remove large silica / magnetite particles and retain for regrinding provides a robust solution



#### **Concentrator performance**

- Target Commissioning Date (post GFC review)
- Actual Commissioning Date (post GFC review)
- Target Handover to Operations
- Actual Handover to Operations
- Operability and silica reduction targets met (see graph)
  - Silica reduction between 0.8 and 1.0%
- Variability reduction target exceeded
  - Variability halved

Sept 09 (early)

Sept 09 (late)

Oct 09 (mid)

Oct 09 (late)







#### Hematite ore status

Reserves at announcement of Project Magnet (Reserve statement June 2004)	33.9 mt
Used/sold ore (end of June 2009)	24.0 mt
Added to reserves and LGO processed	22.6 mt
Reserves at June 2009 (plus LGO 20.5 x 0.5)	42.8mt
June 2007 (Project Magnet Phase 2 ) Reserves (per annual report)	27.9mt
low grade ore (LGO) 21.4 x 0.5 (yield at 50%)	10.7mt
Total	38.6mt
June 2008 Reserves (includes 13.5mt from mine optimisation and Iron Chieftain)	37.3mt
LGO 20.8x 0.5	10.4 mt
Total	47.7mt
June 2009 Reserves	32.5mt
LGO 20.5 x 0.5	10.3 mt
Total	42.8mt

Ore is continually added to LGO stocks, hence small changes in LGO numbers. Typically 800kt to 1mtpa is produced via beneficiating LGO. Sonic drilling techniques could allow stockpiles to be upgraded to reserve standard.



- Expected usage of hematite ore:
  - 6mt external sales in FY10
  - 0.4mtpa for internal use in Whyalla blast furnace
- As at June 2009
  - Hematite ore 42.8mt (based on Reserves an Resources statement)
  - Sufficient supply for 6.7 years (assumes usage of 6.4mtpa)
- We add at least 1mtpa to beneficial stockpiles each year, yielding 0.5mtpa when processed



#### Project Magnet Phase 2 – optimisation and extension work

- Optimisation and mine extension drilling to increase reserves and resources
  - Optimise all existing mines and the new Iron Chieftain mine 13mt added in FY08, life extended to 2016 at 6.0mtpa external sales
  - Extension drilling work in FY09/FY10
    - Reassess previously mined areas at Iron Baron and Iron Knob Extend current SMR sites
  - Limited success in Iron Baron area
  - Significant success in Iron Knob, Iron Monarch and Iron Princess
  - Optimistic for Iron Duchess North resource estimation in progress



#### Project Magnet Phase 2 – optimisation and extension work

New reserves following extension drilling to date (brownfields)

• At 30 June 2009	42.8mt
<ul> <li>Iron Monarch (to Jorc)</li> </ul>	7.1mt
<ul> <li>Iron Princess* (to Jorc)</li> </ul>	6.4mt
Current total	<u>56.3mt</u>

- Plus ongoing LGO additions
  - From Reserves and Resources statement at June 09
  - Ongoing additions expected to be similar to previous years i.e. 0.5mtpa
- Some further extension drilling work substantially complete and promising
- Expected spend on extension and exploration work in FY09/FY10 \$20m

Sufficient ore to maintain external sales at 6mtpa for at least 10 years based on reserves and ongoing beneficiation of LGO

\* Aboriginal Heritage clearance being sought



#### Project Magnet Phase 2 – optimisation and extension work

- Fe content will vary slightly year on year, however averages are expected to remain consistent with recent history
- Final investments (cutback, infrastructure etc) to be determined progressively and dependent on finalising mine plans and further exploration work
  - However, current view is cash investment to be in order of \$300-\$350m incurred predominately over first 5-7 years with lower levels in later years, subject to further ongoing exploration etc
- Mining costs (loaded onto ship)
  - Key objective is ensuring we remain a cost competitive producer
  - We believe we will remain cost competitive, albeit moving to around top end of A\$25 to A\$40 range per tonne



## Exploration



Project Magnet Phase 2 – optimisation and extension work

- True exploration now commencing program was delayed due to success of the optimisation and extension work
- We have six initial targets
  - Initial focus on drilling to assess potential (FY10)
  - Determine priorities then complete (from FY11)
- Magnetic and gravity surveys, and history, indicate attractive sites

There is reason to be optimistic that Hematite ore reserves will extend beyond 2020



## Non ferrous exploration

#### Why explore for non ferrous?

- Reasonable prospects for copper-gold
- Eastern Gawler Craton world class Iron Oxide Copper Gold (IOCG) terrain (Olympic Dam, Prominent Hill, Carrapateena, Moonta)
- OST tenements highly prospective for copper and gold
- Grossly under-explored for non ferrous minerals
- Geologically favourable lack of deep cover
- Excellent infrastructure



#### Non ferrous exploration

Olympic Cu-Au province



## Non ferrous exploration

#### Program

- IOCG Targets identified for preliminary work
- New Tenement secured
- Includes 3,500m RC and Diamond drilling
- Collaborative research with CMXUC/PIRSA
- Aim to generate targets for significant resource definition drilling FY2010-2011



# "These ironstone outcrops may, in some cases, harbour copper ore at a depth"

# Sir Douglas Mawson (1907) BHP Report No. GEO 001

# Manufacturing





# **OneSteel operations**

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## Whyalla manufacturing overview

- OneSteel's manufacturing segment comprises:
  - Whyalla Manufacturing
  - Market Mills
- Whyalla Manufacturing includes the following operations:
  - Pellet Plant
  - Ironmaking (including coke ovens, blast furnace and power & services)
  - Steelmaking (including BOS, ladle treatment, billet caster and combi caster)
  - Steel Products (including Rolling Mills and Trak-lok)



## Whyalla manufacturing overview

- Products produced:
  - Pellet
  - Coke and coke by-products
  - Flat iron
  - Slabs
  - Billet (feed for Market Mills)
  - Hot Rolled Structurals
  - Rail
  - Sleepers and sleeper systems



Operating Unit	H1	H2	FY10 Forecast Output
Pellet Plant	770 kt	830 kt	1.6 mt
Ironmaking	580 kt	600 kt	1.18 mt
Steelmaking	560 kt	570 kt	1.13 mt
Billet Caster	320 kt	330 kt	650 kt
Rolling Mill	190 kt	180 kt	370 kt



Focus:

 Delivering superior and sustainable returns to OST shareholders by holding leading market positions in construction, resources, rural and industrial markets predominantly in Australasia through our manufacturing, value chain and people capabilities



- Deliverables:
- Safety maintain and accelerate progress towards Goal Zero by developing sustainable leadership capability, behaviours, systems and processes (particular emphasis on risk identification and management)
- Customers sustainable competitive advantage through superior value propositions and effective operational and supply chain performance (Meeting our Promise to Customers)
- Value chain strategies driving our business plan and financial outcomes in alignment with MM, OSD and Recycling
- Total delivered cost deliver a sustainable step change improvement in delivered cost through operational excellence and supply chain capability
- People attraction and retention of a skilled and capable workforce through workforce planning performance management and employee development



## Whyalla manufacturing – market conditions

- We are seeing a small but steady increase in domestic demand for hot rolled structurals (but off a low base) as distributors demand increases. Commercial and Non Residential Construction continues to be sluggish
  - BER demand is expected to partially compensate for softness in this market segment.
- Demand for rail products is varying by customer, but demand in line with management expectations overall
  - Do not expect any significant rail demand flowing through from Government stimulus initiatives until FY11.
- High exchange rate is improving the competitiveness of imported product prices, resulting in price pressure across the product range



### Whyalla – response to GFC

#### "Back to Basics" initiatives

- Implemented aggressive cost reduction programs
- Increased focus on meeting our promise to customers and the delivery of superior value propositions
- Aligned output with demand (facilities on maximum turn down and planned shuts to control <u>and</u> reduce inventory and maximise annual leave)
- Maximised billet make to allow EAFs to reduce output and operating hours



## Whyalla – response to GFC

"Back to Basics" initiatives

- Aggressive cost reductions, including:
  - Reduced overtime and shift patterns
  - Moved some shift workers to dayshift
  - Reduced use of contractors
  - Reduced discretionary expenditure
  - Improved sourcing/procurement management, e.g. alloys, refractories, contractor rates
  - Deferred coal purchases
  - R & M reduced in line with lower demand
  - Labour reduction of 183 in direct employee numbers through natural attrition, performance management and voluntary redundancies



## Whyalla manufacturing – indicators of improvement



#### Whyalla manufacturing – focus looking forward

- Accelerate rate of improvement towards Goal Zero
- Continue to reduce and sustain cost reductions based on:
  - Yield and efficiency improvements (Six Sigma Lean and equipment reliability)
  - Retain tight control of costs (overtime, employment, DOA's)
  - Reducing and improving effectiveness of maintenance spend (OneCare and equipment reliability)
  - Contractor rates and usage
  - Procurement and supply initiatives
- Balance operating levels to demand (cost and inventory management)



### Whyalla manufacturing – focus looking forward

- Meet our Promise to Customers
  - Deliver to market offer
  - · Low cost billet to Market Mills
  - Opportune sales of flat iron, slab and pellets
- Clear expectations of our people
  - Clear objectives
  - Performance management
  - Development plans



	Scope 1 Scope 1 and 2	
	Mt	Mt
Iron and Steelmaking	2.16	2.20
Rolling Mill and Ancillaries	0.06	0.14
Mining / Concentrating	0.01	0.08
FY09 data	2.23	2.42

- Energy efficiency has always been a major cost driver with the business continuing to develop and implement initiatives to improve efficiency levels. The CPRS is not likely to materially change this focus but may result in the acceleration of some projects.
- A number of abatement projects focussed on efficiency, yield and waste reduction have been identified but decision to proceed with each project is subject to factors such as the cost of carbon
- These projects are not likely to materially reduce Whyalla's emissions
  - emissions are largely direct from Iron and Steelmaking, using coal as a reductant

 $Fe_2O_3 + C \rightarrow Fe + CO_2$ 

• There is no practical alternative to carbon as the reductant



# Appendix





#### Whyalla Pellet Plant

- Whyalla Pellet Plant currently produces approximately 1.6 million tonnes of pellets for use in Blast furnace
- Key Objectives
  - Priority to deliver low-cost efficient supply to the Blast furnace
  - Pellet consistency, so that there is minimal variation of pellet feed into the Blast Furnace
  - Ensure pellet is in specification and at rate required to meet Blast Furnace production requirements
  - Maximise throughput to facilitate export opportunities
  - Implementing initiatives focussed on maximising up-time and minimising cost
  - Additional production of export pellets to export market



### Whyalla Coke Ovens

- Whyalla coke ovens produce in excess of 560,000 tonnes of blast furnace quality coke from 108 battery ovens
- Key Objectives
  - Maximise productivity and yield to minimise cost and maintain self sufficiency in blast furnace coke feed in line with increased iron production associated with Project Magnet
  - Additional production of coke available to export market
  - Continue to identify markets for by-product sales



#### Whyalla Blast Furnace

- Historic average production of approximately 1.16 million tonnes of iron per annum
- Blast Furnace is operating stably at a running rate of 1.2 million tonnes
- Key Objectives
  - Supply low cost feed at required specification to BOS requirements
  - Extract productivity improvements from relined furnace and value in use from utilising magnetite feed
- Benchmarking operations against international Blast Furnace operators



## Whyalla Steelmaking

- Key Objectives
  - Reducing steelmaking cost and sustaining operational improvements
  - Utilise available hot metal and convert for billet, bloom and slab feed
  - Utilise existing technical partners to benchmark operational practices to identify opportunities to enhance productivity and reduce costs to make
  - Ensure steelmaking can utilise increasing blast furnace output
  - Optimise production mix to maximise returns based on scrap and slab price movement as opportunities arise



## Whyalla Structural Mill

- Operational objectives
  - A step change reduction in cost to serve through a combination of operational excellence and selected improvement projects
  - Maximise productivity and throughput of bottleneck assets to meet targeted customer demand
- Strategic objectives
  - Reduce cost structure through selected improvement projects based on benchmark activities
  - Improve value proposition and efficiency of supply chain



### **Community commitment**

- Community Support
  - Focus on youth and disadvantaged groups
  - Council contribution increasing annually
- Indigenous Support
  - Support new Company 'Walga Mining'
- Conservation
  - Land gift to Whyalla conservation park 1,000 ha
  - Proposed Iron Magnet reserve 4,000 to 20,000 ha
- Environment
  - \$60 million spent to reduce fugitive dust issue



#### Labour

- Whyalla OneSteel Employees
  - 1,707 (as at end Oct 09)
- Significant Contractor Base ~ 40% of hours
  - Mining HWE
  - Railways Genesee Wyoming
  - Materials Handling Brambles / Metserv
  - Oxygen BOC
  - IT Support CSC
  - Laboratories Amdel
  - Engineering Worley Parsons
  - Sea Transport CSL/ISM
- Focus on reducing number of contractors and service delivery cost Contractor focus on reducing service delivery cost



## OneSteel Whyalla – facility upgrades

Event	Year
Ore Products	
Pellet Plant	
PP starts as export facility	1968
Flux pellets for Whyalla	1981
Waste Gas Cleaning Plant	1998
Kiln and cooler upgrade	2002-2005
Roller Feeder replacement	2002
Grate Upgrade	2006
Filter Flux commissioned	2007
Rail	
Major track upgrade, (inc 40 to 60km/h)	Comp (2006)
New fleet (56) higher capacity wagons	Comp (2006)
Upgrade 75 RSK wagons	Comp (2006)
Ore Beneficiation Plant commissioned	2005
Crushing and Screening commissioned	2007
Concentrator commissioned	2007
Export Ore Facility Commissioned	2007
Coke Ovens	
Battery 1 (72 ovens)	1968
Battery 2 (36 ovens)	1980
Reed Beds	1996
Refractory Asset Life extension	Ongoing
Through wall repairs (8 ovens complete, 2 in progress)	2006-2008
Weak Ammonia Liquor Still	2008

#### **Continuous Maintenance and Capital Investment**

## OneSteel Whyalla – facility upgrades

#### **Blast Furnace History and Operations**



1) Better management of material quality and flow into the furnace



reserve at this level.

### OneSteel Whyalla – facility upgrades

#### **Basic Oxygen Steelmaking**

Event	Year
2 vessels @ 130t	1965
Hot Metal Desulphuriser	1991
IRUT/Sublance/Electric/Controls	1992
Ladle Met Furnace/Alloy System	1999
New Vessel Shells	1999/2000
BOC Oxygen Plant Commissioned	2001
Desulphurisation Plant Commissioned	2007

**Continuous Maintenance and Capital Investment** 



## **Integrated Steelworks facilities**

#### Caster

Event		Year
Combination slab/bloom/billet cas	ter	1992
Five-strand billet caster		1999
160 mm billets		2008
Route to Market – Sen	ni-Finished Products	
Product	Distribution Channel	End Use
Billets	Inter-divisional to Market Mills	Used to produce rod and bar

Direct to re-roller

Slabs

#### Semi-Finished Products





products

Used to produce various flat



## **Integrated Steelworks facilities**

## Rolling

Event	Year
Commenced rolling ingots	1964
Rail finishing end	1982
Revamp for slabs/blooms (new rolling stands, etc)	1992
Cooling beds/Capacity Upgrade	1996

#### Finished products route to market



 Structural products are distributed by domestic steel distribution companies, including OneSteel Distribution. They are used in structural frames for buildings, factories, bridges and other infrastructure



## Technology / Operational alliances

Ore Products

- BHPB (Export)
- Runge / HWE (Mine Planning / Scheduling)
- JK Tech, PDS (Crushing and Screening)
- Midland / Jim Wennan (Concentrator)
- Frank Salt (Pipeline)
- Coffey (Tailing Dam)
- Thompson Clark Shipping (Port)
- Ironmaking Danieli Corus

- Steelmaking Kobe (BOS)
- Steel Products Nippon Steel Corporation





#### Analyst Visit to OneSteel Whyalla

#### 24 November 2009

#### Itinerary

7.30 am - 10.30 am	Welcome Mines and Export. Reserves and Resources:	(Geoff Plummer)
	Manufacturing Iron Ore Marketing; Recycling Overview of Day's Itinerary	(Mark Parry) (Greg Waters) (Mark Parry)
10.30 am - 1.30 pm	Travel and Mine Tour	
1.30 pm - 2.00 pm	Lunch	
2.00 pm - 3.00 pm	Driving Tour of Steelworks (remain on board co	oach)
3.00 pm - 4.15 pm	Tour Steelmaking (Casters)	
4.20 pm	Coach travels to Whyalla airport	



#### Safety is a Core Value

#### Your Safety is Important to us!

- 1 Your safety whilst you are our guests is our highest priority.
- 2 Wearing Personal Protective Equipment (PPE) including safety helmets, safety glasses, reflective safety vests, dust coats and adequate footwear is MANDATORY.
- 3 Sign-in procedures apply at OneSteel Whyalla to ensure that visitors to Plant Departments can be accounted for at all times. You will be asked to sign Location Tags for the Plant areas you will be visiting.
- 4 When visiting Plant Departments, always stay within the designated walkways.
- 5 To ensure your visit remains on schedule and is conducted safely, please always remain with the group, your guide and our departmental hosts.
- 6 OneSteel Whyalla has a drug and alcohol policy which could require you to undertake a test based on a random selection process and/or testing for cause.

OneSteel Whyalla welcomes you and hopes that your visit is informative and enjoyable