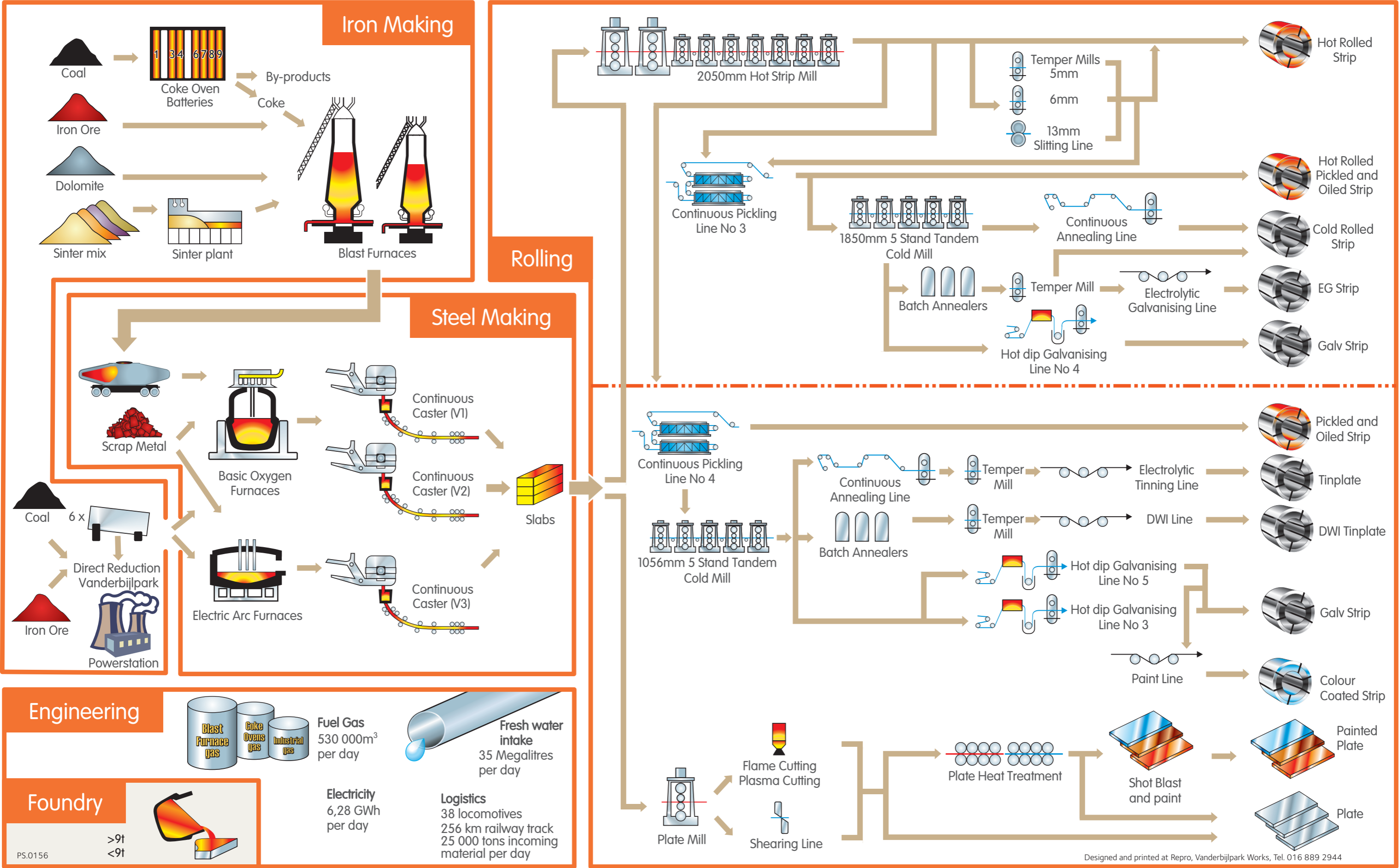




Vanderbijlpark Works: Process Configuration



Plant Capacities

Iron Making

Description and number of plants	Commissioning Date	Monthly Capacity	Product	Plant Specifications
Coke Oven Batteries 1 3, 6, 7 4, 8, 9	Oct 1951 – May 2009 Sep 1958 – Dec 1965 Oct 1975 – May 1986	19 550t 66 100t 63 650t	Market coke Metallurgical coke Metallurgical coke	Battery length 12,44m (Decommissioned 2009) Battery height 3,962m Oven width 406mm
Sinter Plant A B	Sep 1964 Nov 1971	122 200t 137 800t	Sintered iron ore Sintered iron ore	Strand area 120m ² Strand area 132m ²
Blast Furnaces C D	Nov 1964 – Nov 1996 Sept 1973 – Jul 2007	110 000t 150 000t	Liquid iron Liquid iron	Hearth diam/WV 9,2m – 1626m ³ Hearth diam/wv 10,24m – 2162m ³
Direct Reduction Plant (Four Kilns) (Two Kilns)	May 1984 – Sep 1984 March 2009 – Jul 2009	87 500t 29200t	DRI	Kiln length 80m Kiln diameter 4,8m Steam generator Power generator

Steel Making

Description and number of plants	Commissioning Date	Monthly* Capacity	Product	Plant specifications
Electric Arc Furnaces (3)	Sep 1970 – Feb 1976	120 000t	Liquid steel	Heat size 150t
Basic Oxygen Furnaces (3)	Jun 1974 – Mar 1975	250 000t	Liquid steel	Heat size 167t
Continuous Casters (Twin strand) V1 V2	Sep 1976 Oct 1996	110 000t 160 000t	Steel slabs Steel slabs	Thickness 240mm Width 800–2 000mm Length 4–12m
Continuous Caster (Twin strand) V3	May 1987	120 000t	Steel slabs	Thickness 240mm Max width 900 – 1950mm Max length 10,2m

Rolling

Description and number of plants	Commissioning Date	Monthly* Capacity	Product	Thickness	Max Width	Max Coil or Plate Mass
3650mm Plate Mill	Mar 1961	40 000t	Hot rolled plate	5–100mm	3 220mm	7t
Plate Heat Treatment	Feb 1973 – Oct 1979	4 000t	Normalised and quenched and tempered plate	6,0–80mm	3 200mm	7t
2050mm Hot Strip Mill (7 stand)	May 1974	300 000t	Hot rolled strip (HRC)	1,5–25,0mm	1 950mm	34t
Hot Strip Finishing 5mm Temper Mill 6mm Temper Mill 13mm Slitting Line	Nov 1975 May 1991 Jan 1975	50 000t 70 000t 13 000t	Tempered (Hot rolled coil) Tempered (Hot rolled coil) Slit and side trimmed HRC	1,5–5mm 1,5–6mm 3,8–10,0mm	1 900mm 1 950mm 1 950mm	34t 36t 36t
Continuous Pickling Line No. 3 North 1850mm	May 1972	100 000t	Pickled and oiled HRC	1,6–5,0mm	1 850mm	27t
Tandem Cold Mill North (5 Stand)	Mar 1975	92 000t	Cold rolled sheet (CRN)	0,36–2mm	1 850mmm	27t
Continuous Annealing Line No. 2 (North)	May 1988	38 000t	Annealed CRN	0,40–2,0mm	1 450mm	27t
Batch Annealing	Mar 1975 – Dec 1994	28 000t	Annealed CRN	0,45– 2,5mm	1 850mm	27t
No 4 Temper Mill	Nov 1974	32 000t	Tempered CRN	0,45–2,5mm	1 850mm	27t
Electrolytic Galvanising Line	Apr 1992	11 700t	Electrogalvanised coil	0,45–2,0mm	1 600mm	27t

Description and number plants	Commissioning Date	Monthly* Capacity	Product	Thickness	Max Width	Max Coil Capacity
Continuous Pickling Line No. 4 South	May 1977	66 500t	Pickled and oiled HRC	1,6–4,0mm	1 225mm	27T
Tandem Cold Mill South (5 Stand)	Nov 1967	50 000t	CRS	0,19–0,67mm	1 050mm	27t
Continuous Annealing Line No. 1 South	Jun 72	15 000t	Annealed CRC	0,20–4,0mm	940mm	27t
Batch Annealing	May 1966 – Dec 1966	20 600t	Annealed CRC	0,19–0,6mm	1 200mm	27t
Electrolytic Tinning Line	Feb 1968	21 600t	Electrolytic tinplate	0,19–0,6mm	967mm	27t
DWI Line	Jun 1995	14 600t	Electrolytic tinplate	0,2–0,6mm	1 225mm	27t
Continuous Galvanising lines No. 3 South No. 4 North No. 5 South	Dec 1969 Jul 1976 Sep 2006	17 800t 25 000t 9 500t	Hot–dip galvanised coil Hot–dip galvanised coil Hot–dip galvanised coil	0,3–3,0mm 0,4–1,6mm 0,16–0,6mm	1 225mm 1 600mm 1 050mm	27t 27t 15t
Colour Coating Line	Aug 1976	9 000t	Colour coated sheet	0,25–2,0mm	1 600mm	10t

*Note: The capacities stated are for 24 hours, 7 days a week operation. Not all facilities are operated as such.