

Submerged Arc Furnaces Reference List

Location / Works	Current Owner	Furnace	SAF Product	Power (MVA)	UCAR® Refractory Products
AUSTRALIA					
Bell Bay	Tasmania Electro-Metallurgical Co Pty Ltd (TEMCO)	1	FeMn	27	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bell Bay	Tasmania Electro-Metallurgical Co Pty Ltd (TEMCO)	2	FeMn	29	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bell Bay	Tasmania Electro-Metallurgical Co Pty Ltd (TEMCO)	3	FeMn	54	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bell Bay	Tasmania Electro-Metallurgical Co Pty Ltd (TEMCO)	5	SiMn	45	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
East Rockingham, WA	Doral Fused Materials Pty Ltd	2	Fused Al2O3		NMD™ HotPressed™ Semigraphite Brick Graphite
East Rockingham, WA	Doral Fused Materials Pty Ltd	1	Fused Al2O3		NMD™ HotPressed™ Semigraphite Brick Graphite
BRAZIL					
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	8	FeCr	5	NMA™ HotPressed™ Carbon Brick
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	1	FeCr	18.5	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	3	FeCr	18.5	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	Universal 2 & 5	FeCr		NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite

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BRAZIL (continued)					
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	5	FeCr	15	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Bahia	Cia de Ferro Ligas da Bahia – FERBASA	6	FeCr	15	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
CANADA					
Chicoutimi	Elkem Métal Canada Inc	1	FeSi		GradeD™ Carbon
CHINA					
Jianshui	CYMCO		FeMn	67.5	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Jiaocheng	Jiaocheng Yiwang Ferroalloy Co., Ltd		FeMn	9	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Jiaocheng	Jiaocheng Yiwang Ferroalloy Co., Ltd		FeMn	18	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Jiaocheng	Jiaocheng Yiwang Ferroalloy Co., Ltd		FeMn	30	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
FRANCE					
Glencore Manganese	Glencore Manganese	1	FeMn	102	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
INDIA					
Choudwar	Indian Metals & Ferro Alloys Ltd	2	FeCr	27	NMA™ HotPressed™ Carbon Brick Graphite
Orissa	JSL Limited (formerly Jindal Stainless Ltd)	1	FeCr	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Orissa	JSL Limited (formerly Jindal Stainless Ltd)	2	FeCr	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite

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MEXICO					
Tampico	Compañía Minera Autlan, S.A.B. de C.V.	9	FeMn	35	NMA™ HotPressed™ Carbon Brick Graphite Shapes
Tampico	Compañía Minera Autlan, S.A.B. de C.V.	10	FeMn	35	NMA™ HotPressed™ Carbon Brick GradeD™ Carbon Graphite Shapes
NORWAY					
Sauda	Eramet Norway As	12	FeMn	40 MW	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon
Porsgrunn	Eramet Norway As	11	FeMn	30 MW	NMA™ HotPressed™ Carbon Brick
SOUTH AFRICA					
Polokwane	Anglo Platinum	8	Pt	37	Graphite
Mortimer	Anglo Platinum	6	Pt	19.5	Graphite
Waterval	Anglo Platinum	6	Pt	19.5	Graphite
Rustenburg	Lonmin	1	Pt	60	Graphite
Dilokong	ASA Metals (Pty) Ltd	A1	FeCr	45	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick CBY™ Graphite GradeD™ Carbon
Dilokong	ASA Metals (Pty) Ltd	New No. A2	FeCr	45	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Dilokong	ASA Metals (Pty) Ltd	New No. A3	FeCr	66	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Dilokong	ASA Metals (Pty) Ltd	New No. A4	FeCr	66	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Machadodorp	Assmang Chrome	5	FeMn	30	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Cato Ridge	Assmang Manganese	Spare Lining	N/A	N/A	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Cato Ridge	Assmang Manganese	1	FeMn	22	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite

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SOUTH AFRICA <i>(continued)</i>					
Cato Ridge	Assmang Manganese	6	FeMn	20	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Cato Ridge	Assmang Manganese	2	FeMn	22	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Cato Ridge	Assmang Manganese	3	FeMn	16	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Cato Ridge	Assmang Manganese	5	FeMn	32	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Empangeni	Exxaro Sands	N/A	TiO2		NMA™ HotPressed™ Carbon Brick
Brits	Hernic Ferrochrome	4	FeCr	75	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Brits	Hernic Ferrochrome	2	FeCr	32	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Brits	Hernic Ferrochrome	New No. 3 2013	FeCr	54	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Brits	Hernic Ferrochrome	1	FeCr	32	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Meyerton	Metalloys Meyerton	New No. M10 2015	FeMn	75	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Meyerton	Metalloys Meyerton	M11	FeMn	75	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Meyerton	Metalloys Meyerton	M12	FeMn	75	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite

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SOUTH AFRICA <i>(continued)</i>					
Meyerton	Metalloys Meyerton	New No. M14 2012	FeMn	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Emalahleni	Samancor Chrome Ferrometals	6	FeCr	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Emalahleni	Samancor Chrome Ferrometals	4	FeCr	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Emalahleni (formerly Witbank)	Samancor Chrome Ferrometals	5	FeCr	63	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Middelburg	Samancor Chrome Middelburg Ferrochrome	M1	FeCr	48	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Middelburg	Samancor Chrome Middelburg Ferrochrome	M2	FeCr	48	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Mpumalanga	Transalloys (Pty) Ltd	5	SiMn	48	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Mpumalanga	Transalloys (Pty) Ltd	6	SiMn	22	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Mpumalanga	Transalloys (Pty) Ltd	3	SiMn	18	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Steelpoort	Samancor Chrome Tubatse	2	FeCr	37	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Steelpoort	Samancor Chrome Tubatse	3	FeCr	37	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite

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SOUTH AFRICA <i>(continued)</i>					
Steelport	Samancor Chrome Tubatse	New No. 4 2013	FeCr	45	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Steelport	Samancor Chrome Tubatse	1	FeCr	37	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick
Steelport	Samancor Chrome Tubatse	5	FeCr	45	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Steelport	Samancor Chrome Tubatse	New No. 6 2013	FeCr	37	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Richards Bay	Tata Steel Ltd	1	FeCr	38	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick Graphite
Richards Bay	Tata Steel Ltd	2	FeCr	38	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick Graphite
Steelport	Xstrata Lion	3	FeCr	63	Graphite
Steelport	Xstrata Lion	4	FeCr	63	Graphite
Boshoek	Glencore Xstrata	3	FeCr	48	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Boshoek	Glencore Xstrata	2	FeCr	48	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
SOUTH KOREA					
Pohang	POS HiMETAL	1	SiMn	40	NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
UNITED STATES					
Alloy, WV	West Virginia Alloy Mfg.	7	Si		NMD™ HotPressed™ Semigraphite Brick
Alloy, WV	West Virginia Alloy Mfg.	6	Si		GradeD™ Carbon
Alloy, WV	West Virginia Alloy Mfg.	3	Si		NMA™ HotPressed™ Carbon Brick
Alloy, WV	West Virginia Alloy Mfg.	14	Si		GradeD™ Carbon
Alloy, WV	West Virginia Alloy Mfg.	15	Si		GradeD™ Carbon

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UNITED STATES <i>(continued)</i>					
Millwood, WV	Armstrong	1	Mineral Wool		NMA™ HotPressed™ Carbon Brick NMD™ HotPressed™ Semigraphite Brick GradeD™ Carbon Graphite
Beverly, OH	Globe Metallurgical	1	Si		GradeD™ Carbon
Beverly, OH	Globe Metallurgical	2	Si		GradeD™ Carbon
Beverly, OH	Globe Metallurgical	3	Si		GradeD™ Carbon
Beverly, OH	Globe Metallurgical	7	Si		GradeD™ Carbon
Freeport, TX	Gulf Chemical & Metallurgical	1	NiCo		NMD™ HotPressed™ Semigraphite Brick Graphite Shapes
Marietta, OH	Marietta Eramet Inc.	18	FeMn		GradeD™ Carbon
Soda Springs, ID	Monsanto Company	7	P4		GradeD™ Carbon Graphite
Soda Springs, ID	Monsanto Company	8	P4		GradeD™ Carbon Graphite
Soda Springs, ID	Monsanto Company	9	P4		GradeD™ Carbon Graphite
Bridgeport, AL	Core Metals Group LLC.	1	Si		GradeD™ Carbon
Selma, AL	Globe Metallurgical	DMAG	Si		GradeD™ Carbon
Selma, AL	Globe Metallurgical	Electromelt	Si		GradeD™ Carbon
Mt. Meigs, AL	Simcala	1	Si	20	GradeD™ Carbon
Mt. Meigs, AL	Simcala	2	Si	20	GradeD™ Carbon
Mt. Meigs, AL	Simcala	3	Si	20	GradeD™ Carbon
Niagra Falls, NY	Globe Metallurgical	9	Si		GradeD™ Carbon
Niagra Falls, NY	Globe Metallurgical	11	Si		GradeD™ Carbon