



VOD - VACUUM OXYGEN DECARBURISATION UNIT

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SMS group

NO	CUSTOMER	YEAR	TYPE OF UNIT	HEAT SIZE T	MELTING UNIT	PRODUCTS	REMARKS
099	ThyssenKrupp Acciai Speciali Terni Terni Italian	2006	Single tank In-line bag filter W/cyclone	150	EAF/AOD	Stainless steel Super-ferritic steel Forging steel	Via SMS Demag Innse
098	Abu Zabaal Egypt	2006	Revamping	20	EAF	Carbon steel Low alloyed grades Stainless steel	Built by Concast
097	Sidenor Basauri Spain	2005	Twin tank car	110			Via SMS Demag revamping of VD No. 132 Extension
096	SZ ACRONI Unit No. 2 Jesenice Slovenia	2002	Twin tank In-line bag filter	90	EAF	Structural steel Stainless steel	
095	SZ Acroni Unit No. 1 Jesenice Slovenia	2002	Single tank In-line bag filter	90	EAF	Structural steel Stainless steel	Revamping of existing VOD station
094	Baoshan Iron & Steel Corp. Shanghai No. 1 Shanghai P.R. of China	2001	Twin tank In-line bag filter	120	EAF/AOD	Stainless steel Super-ferritic steel	
093	Lucchini S.p.A. Lovere Italy	2000	Single tank	50	EAF	Stainless steel Train wheel steel Forging steel	Via SMS Demag Innse
092	Fabrique de Fer de Charleroi Charleroi Belgium	1999	Twin tank	140/180	EAF	Stainless steel	Extension of No. 68
091	ZDAS Zdas a.S. Czech Republic	1998	Single tank In-line bag filter	6-20	EAF	Stainless steel Forging steel	



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090	CLI Creusot Loire Industrie Le Creusot France	1997	Single tank	90	EAF	Stainless steel	
089	Metal Ravne Store Slovenia	1996	Single tank	50	EAF	Stainless steel Structural steel	Revamping of No. 32
088	Nippon Metal Industries Nikkinko/Kinuura Japan	1995	Single tank	80	EAF	Stainless steel	Via Matsubo
087	Zlatoust Iron & Steel Zlatoust Russia	1995	Twin tank	12	EAF	Austenitic steel Ferritic steel	
086	ALZ Unit No. 3 Genk Belgium	1995	Vacuum sealed ladle In-line bag filter	120	EAF/MRP	Stainless steel	
085	ALZ Unit No. 2 Genk Belgium	1995	Vacuum sealed ladle In-line bag filter	120	EAF/MRP	Stainless steel	
084	Gloria Heavy Tainan Taiwan, R.O.C.	1995	Single tank	25	EAF	Stainless steel Forging steel	Revamping of VD plant
083	Yieh United Steel Corp. Phase 2 Kaohsiung Taiwan, R.O.C.	1994	Twin tank In-line bag filter	100	EAF/MRP	Austenitic steel Ferritic steel Structural steel	
082	Kia Kohema Steel Phase 3 Kunsan Rep. of Korea	1994	Single tank	40	EAF	Stainless steel Tool steel	



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081	POSCO Pohang Rep. of Korea	1994	Twin tank In-line bag filter	90	EAF	Stainless steel Super-ferritic steel	
080	Remi Metals Gujarat India	1994	Single tank	25	EAF	Stainless steel Electrical steel Deep drawing qualities Pipe steel	Via INDOMAG
079	Gröditz Stahlwerke Gröditz Germany	1994	Single tank	50	EAF	Stainless steel Bearing steel Pipe steel Forging steel	
078	Sammi Atlas Tracy Canada	1994	In-line bag filter	90	EAF	Austenitic steel Ferritic steel	Revamping of existing VOD plant
077	ACESITA Belo Horizonte Brazil	1993	Single tank In-line bag filter	70	EAF/MRP	Stainless steel Electrical steel	Via MDL (now SMS Demag Ltda.)
076	Aços Finos Piratini (Gerdau S.A.) Porto Allegre Brazil	1993	Single tank In-line bag filter	50	EAF	Stainless steel Bearing steel Tool steel Free-cutting steel	
075	Forjas y Aceros de Reinosa S.A. Reinosa Spain	1993	Single tank	30/65	EAF	Stainless steel	Extension of VD started up in 1987
074	China Steel Corp. Kaohsiung Taiwan, R.O.C.	1993	Twin tank In-line bag filter	120	BOF	Austenitic steel Ferritic steel Super-ferritic steel	
073	Lukens Steel Co. Coatesville, Pennsylvania USA	1993	Single tank	130-150	EAF	Stainless steel	



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072	Yieh United Steel Corp. Phase 1 Kaohsiung Taiwan, R.O.C.	1992	Twin tank In-line bag filter	100	EAF/MRP	Austenitic steel Ferritic steel Structural steel	
071	Kawasaki Steel Corp. Chiba Japan	1992	Twin tank In-line bag filter	60-200	BOF	Austenitic steel Ferritic steel Super-ferritic steel	Via Matsubo
070	Nisshin Steel Corp. Shunan Japan	1992	Twin tank In-line bag filter	80	EAF BOF	Stainless steel Super-ferritic steel	Via Matsubo
069	Walsin Lihwa Yen Shiu Town Taiwan, R.O.C.	1991	Single tank In-line bag filter	50	EAF/MRP	Stainless steel Bearing steel Tool steel Free-cutting steel	
068	Fabrique de Fer de Charleroi Charleroi Belgium	1991	In-line bag filter	140/180	EAF	Stainless steel	Revamping of No. 42
067	Krupp Stahl AG Siegen-Geisweid Germany	1991	Single tank	110	EAF	Stainless steel	
066	Krupp Stahl AG Siegen-Geisweid Germany	1991	Single tank	110	EAF	Stainless steel	
065	Jindal Strips Hissar India	1989	Single tank	40	EAF	Stainless steel	
064	Nippon Steel Corp. Wakayama Japan	1989	Single tank In-line bag filter	80	EAF	Stainless steel	Via Matsubo



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063	ACINDAR Industria Argentina de Aceros S.A. Tablada Argentina	1989	Single tank	35	EAF	Stainless steel	
062	Sammi Steel Kangwon Rep. of Korea	1988	Single tank	75-100	EAF	Stainless steel	
061	VTZ Voljski Russia	1986	Single tank	150	EAF	Stainless steel Pipe steel Tube steel	Via Italimpianti (now SMS Demag S.p.A.)
060	ALZ Plant No. 1 Genk Belgium	1986	Vacuum sealed ladle	100	EAF/MRP	Stainless steel	
059	Stocksbridge Eng. Steels Stocksbridge Great Britain	1986	Single tank	80	EAF	Stainless steel	
058	Ilva SpA Stab di Terni Italy	1986	Vacuum sealed ladle	180	EAF	Stainless steel	Built by Concast (ABB)
057	Duferdofin S.p.A. Italy	1986	Single tank	80	EAF	Low alloyed and stainless grad	Built by Concast
056	Zelezarna Jesenice Plant No. 2 Jesenice Slovenia	1985	Single tank	90	EAF	Stainless steel Structural steel	
055	Steel Authority of India Ltd. Durgapur India	1985	Single tank	60	EAF	Stainless steel Bearing steel Spring steel	



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054	APARECIDA Sao Paulo Brazil	1985	Single tank	25	EAF	Stainless steel Forging steel	
053	National Forge Co. Erie/Pennsylvania USA	1985	Single tank	30-115	EAF		Built by MAN GHH (now SMS Demag)
052	Vereinigte Edelstahlwerke AG Kapfenberg Austria	1985	Twin tank	30	EAF	Stainless steel	Built by MAN GHH (now SMS Demag)
051	VEB MAW Magdeburg/Rothensee Germany	1985	Converter	10	EAF	Stainless steel	Built by MAN GHH (now SMS Demag)
050	Bihar Alloy Steels Ltd. Bihar India	1985	Single tank	32	EAF	Stainless steel	
049	Ellwood Quality Steel Co. USA	1985	Vacuum sealed ladle	32	EAF	Forging grades	Built by Concast (ABB)
048	Thyssen Industrie AG Friedrich Wilhelm Works Mülheim Germany	1984	Converter	10	EAF	Stainless steel	Built by MAN GHH (now SMS Demag)
047	Kalyani Steels Ltd. Poona India	1984	Single tank	30	EAF	Stainless steel	Built by MAN GHH (now SMS Demag)
046	Commonwealth Steel Co. Ltd. Waratah, NSW Australia	1984	Single tank	30	EAF	Stainless steel	



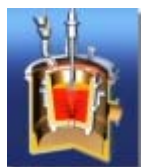
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045	Hindustan Steel Ltd. Rourkela India	1984	Single tank	60	BOF	Electrical steel	
044	Sheffield Forgemasters Ltd. River Don Works Sheffield Great Britain	1984	Single tank	50	EAF	Stainless steel	
043	Radomir Sofia Bulgaria	1983	Twin tank VOD/VAD	30/60	EAF	Stainless steel	Via Machinoexport
042	Fabrique de Fer de Charleroi Charleroi Belgium	1983	Twin tank VOD/VAD	140/180	EAF	Stainless steel Heavy plates	
041	Saarstahl AG Röchling-Burbach GmbH Völklingen Germany	1983	Single tank	125	EAF	Stainless steel	
040	Cogne Acciai Speciali Srl Italy	1983	Vacuum sealed ladle	20	EAF	Low-, high alloyed and stainles	Built by Concast (ABB)
039	Acciaierie di Bolzao SpA Italy	1983	Vacuum sealed ladle	50	EAF	Stainless steel Ball bearing Low alloyed grades	Built by Concast (ABB)
038	US Steel Group Fairfield Works USA	1983	Vacuum sealed ladle	192	BOF	Carbon steel Low alloyed grades	Built by Concast (ABB)
037	Rathi Alloys & Steel Ltd. New Delhi India	1982	Single tank	25	EAF	Stainless steel	



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036	Kremikovtzi Corp. Bulgaria	1982	Vacuum sealed ladle	120	EAF	Stainless steel	Built by Concast (ABB)
035	Armco Steel Corp. Ashland Works USA	1982	Vacuum sealed ladle	162	BOF	Carbon steel	Built by Concast (ABB)
034	Nippon Metal Industries Sagamihara Japan	1981	Single tank In-line bag filter	15/50	EAF	Stainless steel Super-ferritic steel	Via Matsubo
033	Rauma Repola Oy Tampere Finland	1981	Converter	15	EAF	Stainless steel	Built by MAN GHH (now SMS Demag)
032	Zelezarna Jesenice Plant No. 1 Jesenice Slovenia	1980	Single tank	65	EAF	Stainless steel Spring steel Electrical steel	
031	British Steel plc Motherwell Great Britain	1980	Single tank	25	EAF	Stainless steel	
030	IMGB Bukarest Romania	1979	Twin tank VOD/VAD	70	EAF		Via Uzineexportimport
029	SIDERURGICA S.A. Hunedoara Romania	1979	Twin tank VOD/VAD	60	EAF	Stainless steel Heat resisting steel	Via Uzineexportimport
028	Nippon Kokan Ogishima Japan	1978	Single tank	60	EAF	Stainless steel	Via Matsubo



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027	Poldi United Steelworks Kladno Czech Republic	1977	Single tank	10/30	EAF	Stainless steel	Via Skodaexport
026	Huta Baildon Katovice Poland	1976	Twin tank VOD/VAD	15-18	EAF	Stainless steel	
025	Visvesvaraya Iron & Steel Ltd. Bhadravati India	1976	Single tank	25/15	EAF BOF	Stainless steel	
024	Astilleros Espanoles S.A. Reinosa Spain	1976	Single tank	30	EAF	Stainless steel	
023	Acciaieria di Rubiera SpA Italien	1976	Vacuum sealed ladle	60	EAF	Forging steel Tube steel	Built by Concast (ABB)
022	ACESITA Belo Horizonte Brazil	1975	Single tank	75/35	EAF BOF	Stainless steel Electrical steel	
021	Japan Steel Works Ltd. Muroran Japan	1975	Single tank	30	EAF	Stainless steel	Via Matsubo
020	Kobe Steel Ltd. Takasago Japan	1975	Single tank	18	EAF	Stainless steel	Via Matsubo
019	Forjas Alavesas S.A. Vitoria (Alava) Spain	1975	Vacuum sealed ladle	30	EAF	Stainless steel	



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018	Sidenor Ind. S.L. Basauri Spain	1973	Vacuum sealed ladle	40	EAF	Stainless grades	Built by Concast (ABB)
017	Nippon Steel Corp. Japan	1972	Single tank	30	EAF	Stainless steel	Via Matsubo
016	Vereinigte Deutsche Metallwerke Unna Germany	1970	Single tank	25	EAF	Stainless steel	
015	Sumitomo Metal Ind., Ltd. Amagasaki Japan	1970	Single tank	50	EAF	Stainless steel	Via Matsubo
014	Brown Bayley Steels Ltd. Attercliffe/Sheffield Great Britain	1970	Single tank	70	EAF	Stainless steel Bearing steel	Extension of VD started-up in 1966
013	Stahlwerke Südwestfalen AG Hüttental-Geisweid Germany	1970	Twin tank	30-80	EAF	Stainless steel	
012	Uddeholm Tooling Sweden	1970	Vacuum sealed ladle	30	EAF	Tool steel	Built by Concast (ABB)
011	ALZ NV Belgium	1970	Vacuum sealed ladle	50	EAF	Stainless steel	Built by Concast (ABB)
010	Schoeller-Bleckmann Stahlwerke Ternitz Austria	1969	Single tank	20-45	EAF	Stainless steel	



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009	Fagersta Bruks AB Fagersta Sweden	1969	Single tank	50	EAF	Stainless steel	
008	Nippon Yakin Kogyo Corp. Kawasaki Japan	1969	Single tank	50	EAF	Stainless steel	Via Matsubo
007	Firth Brown Ltd. Atlas/Sheffield Great Britain	1969	Single tank	40	EAF	Stainless steel	
006	Nippon Steel Corp. Yawata No. 5 Kitakyusho City Japan	1969	Single tank	70-150	BOF	Stainless steel	Via Matsubo
005	Friedr. Krupp Hüttenwerke AG Werk Bochum Bochum Germany	1969	Vacuum sealed ladle	80	EAF	Stainless steel	
004	Friedr. Krupp Hüttenwerke AG Werk Bochum Bochum Germany	1969	Vacuum sealed ladle	50	BOF	Stainless steel	
003	Kawasaki Steel Corp. Nishinomiya Japan	1968	Single tank	55	EAF	Stainless steel	Via Matsubo
002	Nisshin Steel Corp. Shunan/Tokuyama Japan	1966	Single tank	40	EAF BOF	Stainless steel	Via Matsubo
001	Edelstahlwerke Witten AG Witten Germany	1963	Single tank	20-45	EAF BOF	Stainless steel Bearing steel	