

Carbon Bake Furnace Reference & Projects List of CFT:

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Century Aluminum Vlissingen Operations	The Netherlands	CBF #C	Maintenance Project	2021	RFQ-documentation
Aluminerie Alouette Inc. [AAI]	Canada	CBF 100 → 400	Audit Refractory Condition	2021	Inspections, Recommendations
TOKAI ErftCarbon	Germany	CBF #G	Rebuild Project	2020 2021	Refractory Engineering & Project Consultancy
Trimet Hamburg	Germany	CBF #F23	X-Over Renewal Project	2020	Total Engineering, Project Management & Supervision
Trimet Hamburg	Germany	CBF #F23	Rebuild Project	2020	Material Inspections, Project Management & Supervision
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #5	Inspection	2020	Civil Inspection and Advice
Trimet Hamburg	Germany	CBF #F23	Rebuild Project	2019	Total Engineering & Project Management Support
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Rebuild Project	2019	Project Management & Supervision
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Rebuild Project	2018	Refractory Inspections
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Rebuild Project	2018	Procurement & Project Management Support
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Rebuild Project	2018	Detail Engineering

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Boyne Smelters Limited [BSL]	Australia	CBF #3	Furnace Height Increase	2018	Basic Feasibility Study
KAP Kombinat Aluminijuma Podgorica	Montenegro	CBF	Total Rebuild Project	2017	Fact Finding and Technical Proposal
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Rebuild Project	2017	Pre-Engineering
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Maintenance System	2017	X-Over Rebuild (partly)
NZAS	New Zealand	CBF #4	Update to ProBake Firing System	2016	Project Support
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Maintenance	2016	Inspections, New X-Over
AVR	The Netherlands	Waste Incinerator	Maintenance Contract	2016	Consultancy
Century Aluminum Vlissingen Operations	The Netherlands	CBF #E	CBF Project	2016	Study for a new CBF
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #2 & 7	Update to ProBake Firing	2016	Project Support
Century Aluminum Vlissingen Operations	The Netherlands	CBF #C	Rebuild Project	2015 2014	Engineering, Procurement & Project Management Ass. Supervision
Project Carte Blanche Westvoorne	The Netherlands	None	Project Execution	2014	Consultancy & Supervision
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #1→7	Civil Condition CBFs	2014	Inspections & Update Report

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Modification of CBF	2014	Study
INNOVATHERM for Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #4	Process Control & Firing System Manual	2013	Translation into Dutch
Century Aluminum Vlissingen Operations	The Netherlands	CBF #D	Refractory Maintenance	2013	PCM
Billiton Aluminium SA Limited	Bayside Aluminium South Africa	CBF #102	End Wall Deformation Operation and Refractory	2012	Specialist Support, Inspection of Installed Propping Practical & Technical Advises Inspections
Century Aluminum Vlissingen Operations	The Netherlands	CBF #C & #D & Paste Plant	Acquisition of former ZALCO plant	2012	Specialist Support, General Assistance, Practical & Technical Advises Inspections for due diligence
PCO Polska Ceramika Ogniotrwala & Aluminium & Chemie Rotterdam B.V.	Poland The Netherlands	CBF #2, 4 & 7	Refractory Project	2012	Coordination between PCO & Aluchemie
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #4	New ProBake Firing System	2012	Project Support
Billiton Aluminium SA Limited	Bayside Aluminium South Africa	CBF #102	End Wall Deformation Operation and Refractory	2012	Specialist Support, Audit & General Assistance, Practical & Technical Advises Inspections
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #4	New ProBake Firing System	2011	Project Support

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
PCO Polska Ceramika Ogniotrwała	Poland	PCO Plant	Plant Development	2011	Tunnel Kiln#2 Project Technical Report
VOERDAL	Germany	CBF	Partly Rebuild of CBF	2011	Side Wall Engineering
Billiton Aluminium SA Limited	Bayside Aluminium South Africa	CBF #102	End Wall Deformation	2011	Solution & Engineering
PCO Polska Ceramika Ogniotrwała & Aluminium & Chemie Rotterdam B.V.	Poland		Top Blocks Project	2010	Coordination between
INNOVATHERM	The Netherlands	ZALCO	Process Control & Firing System Manual	2010	Specialist Support
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #8 new	Greenfield, Gate 2 support	2010	Specialist PM Support
PCO Polska Ceramika Ogniotrwała	Poland	PCO Plant	Plant Development	2009	Specialist Support, Audit & General Assistance, Practical & Technical Advises
ALCOA Mosjøen	Norway	Mosjøen CBF Fjardaal #1 Fjardaal #2	Maintenance Program	2009	Specialist Support, Autopsy of a Flue Wall, Inspection of the CBF's
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #6	Civil Maintenance Program	2009	Specialist PM Support Preparation of RFT, EHS, Budget Project Management Plan, Project Execution Plan,
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #1→ 4	Maintenance Program	2009	Specialist PM Support Site Coordination, Schedules,

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
EMAL Emirates Aluminium Company	Abu Dhabi-UAE	CBF #1 & #2	Greenfield	2009	Construction Site Support
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #5 →7	Maintenance Program	2008 2009	Specifications, Schedules, Tests
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #8	Greenfield	2008	Specialist Support, Review of Basic design
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #1→7	Maintenance Program	2008	Specialist PM Support (Review of Civil Condition, Action Plan)
PORTLAND Aluminium	Portland AL, Australia	CBF #262	Rebuild Project	2008	Specialist Project, Refractory and Civil Support (Eyes for Quality Control)
ALCOA WORLD ALUMINA AUSTRALIA	Point Henry Smelter	CBF #262	Rebuild Project	2008	Inspection of CBF after Start Up
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF's	Development of Master Plan (Study to double AC's production)	2007 2008	Report on Logistics, AC History & CBF Development
PORTLAND Aluminium	Portland AL, Australia	CBF #262	Rebuild Project	2007	Review of Refractory and Tub Design
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #4	Rebuild Project	2006 2008	Specialist Project, Refractory and Civil Support

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Billiton Aluminium SA Limited	Bayside Aluminium	CBF #102	Tub Wall Deformation	2006	Report and Action Plan
Tomago Aluminium Company Pty Limited	Australia	BO #1	Refurbishment Study	2006	Review of Phase Two Strategy
Alcoa Mosjøen Anode Plant Project	Elkem, Norway	Mosjøen CBF	Greenfield	2005	Review of Refractory
Alcoa Mosjøen Anode Plant Project	Elkem, Norway	Fjardaal #1	Greenfield	2005	and Tub Design,
Alcoa Mosjøen Anode Plant Project	Elkem, Norway	Fjardaal #2	Greenfield	2005	Refractory Modeling

Carbon Bake Furnace Reference List of Peter van Varik & Team:

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #4	Refurbishment	1985	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #5	Refurbishment	1986	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #6	Refurbishment	1987	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #3	Refurbishment	1990	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #1	Refurbishment	1995	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #6	Extension to 48 Sections	1999	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #2	Extension and Upgrade	2001	EPPCM
Aluminium & Chemie Rotterdam B.V.	The Netherlands	CBF #7	Greenfield	2003	EPPCM
Alcan Smelters and Chemicals Limited	ALMA, Canada	CBF #1	Greenfield	1999	TP, E, Site Support
Alcan Smelters and Chemicals Limited	ALMA, Canada	CBF #2	Greenfield	2000	TP, E, Site Support
Alcoa of Australia	Point Henry, Australia	CBF #262	Refurbishment and Expansion	1991	TP, E, Site Support

Abbreviations:

TP	Technology Package
E	Engineering
EPP	Engineering, Permits, Procurement
EPPCM	EPP and Construction Management

Company:	Location:	Furnace	Type of Project:	Year:	Involvement:
Bayside Aluminium Limited	Alusaf, South Africa	CBF #3	Rebuild of Closed Furnace into Open Type Furnace	1999	TP, E, Site Support
Boyne Smelters Limited	BSL, Australia	CBF #3	Greenfield	1997	TP, E, Site Support
Centro Aluminio S.p.A.	Alucentro, Italy	CBF #3	Refurbishment	1991	TP, E, Site Support
Comalco Aluminium Limited	Bell Bay, Australia	CBF #3	Greenfield	1989	TP, E, Site Support
Dubai Aluminium Company Limited	DUBAL, UAE	KILN #3	Greenfield	1996	TP, E, Site Support
Dubai Aluminium Company Limited	DUBAL, UAE	KILN #4	Greenfield	1998	TP, E, Site Support
Dubai Aluminium Company Limited	DUBAL, UAE	KILN #1	Rebuild of Closed Furnace into Open Type Furnace	1999	TP, E, Site Support
Dubai Aluminium Company Limited	DUBAL, UAE	KILN #2	Rebuild of Closed Furnace into Open Type Furnace	2003	TP, E
New Zealand Aluminium Smelters Limited	NZAS, New Zealand	CBF #4	Greenfield	1996	TP, E, Site Support

Abbreviations:

- TP Technology Package
- E Engineering
- EPP Engineering, Permits, Procurement
- EPPCM EPP and Construction Management