

Chemical plants, process engineering and simulation

Year	Customer	Subject	Service
2015 –	Kemira Chemicals Oy	Sodium chlorate crystallization plant, Joutseno, Finland	Debottlenecking study
2015 –	Oy Forcit Ab	NG Plant, Hanko, Finland Acid recovery unit, NO _x removal	Process specialist services
2015	Confidential	Market and feasibility studies for the production of a speciality chemical	Preparation
2015	Andritz Oy	Recovery and Power Division Purification of methanol. sulphur and ammonia removal	Feasibility study
2015 –	PCC MCAA Sp. z o. o.	Chemical plant, Brzeg Dolny, Poland Monochloroacetic acid plant	Process specialist services Commissioning
2014 –	Kemira / Oy Japrotek Ab	Sodium chlorate crystallisation plant, Klabin, Parana State, Brazil	Simulation, design and engineering
2014	Oy Forcit Ab	NG Plant, Hanko, Finland Acid recovery unit	Commissioning
2013	PCC P4 SA	Chemical plant, Brzeg Dolny, Poland Monochloroacetic acid plant	Process specialist services, HazOp
2013	CP Kelco Oy	CMC Mill, Äänekoski, Finland Solvent regeneration plant	Process specialist services
2012 – 2014	Oy Forcit Ab	NG Plant, Hanko, Finland Acid recovery unit	Process design and engineering, automation
2012 – 2013	Nextrom Oy	CICS Optical systems Gas scrubber and effluent treatment	Process specialist services

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2012	Oy Woikoski Ab	Hydrogen purification unit	Basic Engineering
2012	Nakkila Boilers Oy	Flue gas treatment unit	Basic engineering, balance calculation and process development
2011	CP Kelco China	CMC Mill, Wulian, China Ethanol distillation unit	Process specialist services
2011	CP Kelco China	CMC Mill, Taixing, China Ethanol distillation unit	Process specialist services
2011	Platom Oy	UF ₆ simulation	Process specialist services
2011	CP Kelco Oy	CMC Mill, Äänekoski, Finland Solvent regeneration plant	Process specialist services
2011	PCC Rokita SA	Chemical plant, Brzeg Dolny, Poland Monochloroacetic acid plant Follow up project	Process specialist services
2011	Oy Forcit Ab	NG Plant, Hanko, Finland Acid recovery unit	Process development and engineering, basic design
2010	Ecolution Oy	TEKES project Aerobic biowaste treatment technology Mechanical pilot	Design, engineering and process development
2009– 2012	Smart Salt Oy	Reduced sodium salt Production plant	Process development and engineering
2009– 2010	PCC Rokita SA	Chemical plant, Brzeg Dolny, Poland Monochloroacetic acid plant	Process development/design
2009– 2010	CP Kelco China	CMC Mill, Taixing, China Ethanol distillation unit	Process specialist services

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2008	Platom Oy	UF ₆ sampling	Process specialist services
2008	CP Kelco Oy	CMC Mill, Äänekoski, Finland Solvent regeneration plant	Process specialist services
2007– 2008	PCC Rokita SA	Chemical plant, Brzeg Dolny, Poland Monochloroacetic acid plant	Process development/design
2007– 2008	CP Kelco China	CMC Mill, Taixing, China Ethanol distillation unit	Process specialist services and training
2007	Norbiox Oy	Solvent regeneration plant, Finland Distillation Unit	Basic design
2007	Kemira S.A. / Oy Japrotek Ab	Chlorate crystallisation plant, Fray Bentos, Uruguay	Commissioning
2007	CP Kelco S.A.	Pectine plant, Limeira, Brasil Commissioning of ethanol distillation unit	Process specialist services and trouble shooting
2007	St1 Biofuels Oy	Ethanol dehydration unit	Basic design
2007	St1 Biofuels Oy	Fermentation and separation of ethanol	Basic design
2006	CP Kelco B.V.	CMC Mill, Nijmegen, Netherlands Modification and extension of distillation unit	Process specialist services
2006	AS ETP Group Alexela Terminal	Chemical terminal, Paldiski, Estonia	Design and engineering Risk analysis
2005– 2007	Kemira S.A. / Oy Japrotek Ab	Chlorate crystallisation plant, Fray Bentos, Uruguay	Simulation, design and engineering

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2005	CP Kelco B.V. (Noviant B.V.)	CMC Mill, Nijmegen, Netherlands	Emission controlling – Feasibility study
2005	Oy Forcit Ab	NG-plant, Hanko	Process design Risk analysis
2005	Noviant Oy	CMC Mill, Äänekoski Finland	Process specialist services
2004	Finnish Chemicals Oy	Fine Chemical Plant, Äetsä Finland	Process specialist services
2004	Oy Forcit Ab	Dispersion plant, Hanko, Finland Revamping of dispersion plant	Design and engineering
2004	Noviant CMC Oy (Metsa Specialty Chemicals Oy)	CMC Mill, Äänekoski Finland	Total energy consumption survey
2003	Noviant B.V.	CMC Mill, Nijmegen, Netherlands Modification and extension of solvent regeneration plant	Simulation, design and engineering
2003	Nexplo Vihtavuori Oy	Vacuum drying unit	Basic design
2002– 2003	Finnish Chemicals Oy	Fine Chemical Plant, Äetsä Finland Distillation unit of extra pure TMB Process	Design and engineering
2002	Nexplo Vihtavuori Oy	Etherification process	Reaction engineering study
1999– 2002	Noviant CMC Oy (Metsa Specialty Chemicals Oy)	CMC Mill, Äänekoski Finland Modification and extension of solvent regeneration plant	Design and engineering, commissioning
1999– 2002	Finnish Chemicals Oy	Fine Chemical Plant, Äetsä Finland Modification and extension of sodium borohydride plant	Process design and engineering, commissioning

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1999–2001	Fortum Engineering Ltd	Angarsk Electrolysis and Chemical Complex, Angarsk Russia Conversion plant of depleted uranium hexafluoride	Process design and engineering
1997–1998	Metsa Specialty Chemicals Ab	CMC Mill, Karlstad Sweden Modification and extension of ethanol regeneration plant	Design and engineering, commissioning
1997	Metsa Specialty Chemicals Oy	Monochloroacetic acid plant	Design and basic engineering
1996–1999	Finnish Chemicals Oy	Fine Chemical Plant, Äetsä Finland Modification and extension of fine chemical plant	Process design and engineering
1996–1998	Patria Lapua Oy (Nexplo Oy)	Vihtavuori Plant, Laukaa Finland Production and recovery plant for ethanol and diethyl ether	Process design and engineering, automation, commissioning
1995–1997	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland Modification and extension of IPA and methanol recovery unit	Design and engineering, commissioning
1995	Neste Oy	Porvoo Refinery, Porvoo Finland Very High Viscosity Index (VHVI) Unit	Process engineering for OSBL
1994–1995	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland Methanol recovery unit	Process design
1994	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland	Modification of CMC production line, process design
1993–1994	Xyrofin Oy	Specialty Sugar Plant, Kotka Finland. Catalytic purification of hydrogen	Design and engineering
1991–1993	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland CMC-90 Project (New CMC Plant), Distillation Unit	Process specialist services
1991–1992	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland Monochloroacetic acid plant (existing batch)	Revamp design

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1991	Provivo Oy / Arctic Point Oy	Globin Plant, Kuopio Finland. Solvent recovery unit	Process design and engineering
1991	Metsä-Serla Chemicals Oy	CMC Mill, Äänekoski Finland Handling of waste liquor	Process design and engineering
1989– 1990	Metsä-Serla Oy	CMC Mill, Äänekoski Finland Monochloroacetic acid plant	Basic engineering
1989	Metsä-Serla Oy	CMC Mill, Äänekoski Finland Monochloroacetic acid plant	Process development/design
1987– 1988	Metsä-Serla Oy	CMC Mill, Äänekoski Finland Monochloroacetic acid Pilot-plant	Design and engineering