

2020 – Continue	Andritz Oy Spain	Site Manager, Recovery Boiler Upgrade project.
2019 - Con- tinue	Valmet Technologies Oy Chile	Civil and steel structure advisor MAPA pulp mill project Chile.
2019 - Con- tinue	Valmet Technologies Oy Indonesia	mechanical supervisor for welding, mechanical installation and piping in Indonesia
2019 - Con- tinue	AF Consults Oy Indonesia	Contract Engineer for 2*1000 MW coal fired Power Plant project.
2018-2019	Valmet Technologies Oy Japan	Chief Erection advisor for boiler construction in Japan Ofunato
2019	Valmet Technologies Oy Russia	Mechanical supervisor for boiler retrofit in Bratsk, Russia
2018 – 2019	Sumitomo SHI FW En- ergia Oy Finland / UK	Preparation of commissioning and start up documentation for waste to energy plant
2018 – 2019	Valmet Technologies Oy Japan	Erection Supervisor for boiler construction in Ofunato
2018 – 2019	Valmet Technologies Oy Portugal	Chief Erection Supervisor for boiler construction in Leroisa, Fiquera Da Foz
2018 – 2019	Valmet Technologies Oy Portugal	Site Engineer boiler construction in Leroisa, Fiquera Da Foz
2018 – Continue	Sarens Ltd. Finland	Manager services for TCO Kazakhstan refinery component lo- gistic project in Hamina
05 -10 2018	Fortum Oyj, Loviisa Finland	Site and QC Manager for Emergency Water Supply pump motor renewal. Site Management and time scheduling of renewal of motors for Emergency Water Pumps
2018 – 2019	Valmet Technologies Oy Japan	Chief Erection Supervisor for boiler construction in Ofunato
01-12.2018	HQ-Power-YUMN Rwanda	Project Director services for plant owner. 2*40 MW peat power plants in Gisagara district
2018 - 2019	Valmet Technologies Oy Russia	Quality/Mechanical Advisor for boiler construction in Syktyvar
2017 – 2018	Valmet Technologies Oy China	Quality control and expediting for 4 boiler steel structure

2017	Sweco Industry Oy China, India	EPC-Contractor's Sub-contractor audits and workshop quality inspections for HQ Power Rwanda 2*40 MW peat fired Power Plant project
2017 – 2018	Valmet Technologies Oy Russia	Site Manager services for new power boiler construction in Segezha
2016-2018	Sarens / MWaves Ltd Finland	Site observation services for port upgrade construction project in Hamina, Finland
2016-2017	ÅF Consults Oy Indonesia	PT Prima Layanan Nasional Enjiniring Mechanical Design Review services and Quality Control services at the site
2016-2018	Wärtsilä Oyj Finland	Design review of documentation for Emergency Diesel Generators, mechanical component construction plan review and preparation according to technical specifications and validation if they fulfil the Finnish regulatory requirements (STUK, YVL guides).
2016-Continue	ÅF Consults Oy Philippines	Sarangani, Southern Mindanao Phase 2, Philippines Owner Engineer Site Manager services
2016-2017	DEKRA Oy Finland	Quality Control services for Olkiluoto 3 NPP project commissioning
2016-2017	Valmet Technologies Oy Finland and Russia	Document management and translations for power boiler project in North Russia
2016-Continue	Teollisuuden Voima Oy Finland	System Commissioning Engineer for Olkiluoto 3 NPP project
2016-2018	Valmet Technologies Oy Denmark, Finland	Project engineer for power boiler plant steel structure in Denmark and Finland.
2016-2017	Valmet Technologies Oy Czech Republic	Controller of workshop manufacturing of boiler house frame in Vitkovice, Ostrava, Czech. The scope included 2500 tons steel structures to site in Naantali, Finland.
2014-2015	Fennovoima Oy Finland	Consultant services for Hanhikivi 1 Nuclear Power plant project <ul style="list-style-type: none"> • Nuclear Engineering • Design review of documentation for Reactor area. • Construction license application for Hanhikivi-1. Main responsibilities within component documentation requirements. • Preparing documentation for construction license application. Coordinating and scheduling of document preparation for PSAR (Probabilistic Safety Assessment Report) and communication between supplier, owner and authorities.
2014-2016	ÅF-Consults Oy Indonesia	Tajun Jati B 2 x 660 MW Power Plant, Jepara, Indonesia. Commissioning, operation and maintenance management
2014-2015	Valmet Technologies Oy Sweden	Södra Pulp mill extension at Varberg, Sweden. Workshop control in Lithuania and structural supervision at site.
2014-Continue	PT Bekasi Power Indonesia	Plant Management and energy technologies and engineering services for Jababeka Project Jakarta, Indonesia

		<ul style="list-style-type: none"> • Conceptual design • Pre-engineering services • Design implementation services (like process. lay-out, civil, piping, electrification, automation, HVAC) • Efficiency improvements • QA/QC reviews • EPCM services • Different inspections • Troubleshooting • Training
2014	Valmet Energy Oy Hungary/Romania	<p>Dunauham Power Plant , Valmet Energy Oy project, Hungary.</p> <ul style="list-style-type: none"> • Control of boiler house frame workshop manufacturing in Energo Brasov, Romania. 1300 tons steel structures sent to site in Dnaujvaros, Hungary.
2014-2016	Agon Pacific CO. Ltd Philippines	<p>Sarangani, Southern Mindanao, Philippines</p> <ul style="list-style-type: none"> • Construction and commissioning management services in Maasim, Sarangani Energy Co coal fired power plant project
2013-2015	Fortum Oyj, Loviisa	<p>Technical studies of feed water-, main condenser and cooling water systems aiming to retrofit the pumping systems</p>
2015	Andriz Oy Portugal	<p>Portugal Cacia Power Plant Commissioning of deodorization plant.</p>
2014-2015	Valmet Power Oy Baltic countries	<p>Supervision of Manufacturing in Baltic countries. Major part in Lithuania but also supplier sub-contractors in Latvia. Scope includes Progress follow-up, Progress meetings, Quality monitoring, Design coordination (facades), Troubleshooting, Reporting, Claiming, Scheduling etc.</p>
2013-2014	PT Cikarang Listrindo Indonesia	<p>Lippo Cikarang, Bekasi, Indonesia</p> <p>Senior consultant services in the preparation of basic engineering design, capacity calculations, process flow diagrams, equipment layout, Tender documents preparation, evaluation of tenders and assist the management for the ordering process for</p> <ul style="list-style-type: none"> • 800 t/h barge unloaders, 800 t/h conveyors system, coal vibro screens, crushers, 800 t/h two stacker reclaimers etc. • 450t/h capacity limestone handling system comprising of conveyors, vibrating screens, crushers, drying system, storage and transport of treated limestone to the limestone silos at Boiler house. • Atmospheric tanks such as fuel oil storage tank, clarified water buffer tanks, clarified water tank, service water tank, fire water tanks and makeup water tank. • Water treatment plant consisting of river intake facilities, clarifiers, sludge disposal system, clarified water pre-treatment plant, multi-media filters, activated carbon filters, Demin plant.
2013	Agon Pacific Indonesia	<p>POSCO Engineering EPC project In Merak West Jawa, Indonesia</p> <ul style="list-style-type: none"> • Commissioning of 2x60 MW Coal fired circulating fluidised bed combustion boilers, turbines, water, waste water treatment plant and the auxiliaries. Preparation of procedures for the commissioning activities such as chemical cleaning, steam blow out etc. preparation of spares required for two years operation, and strategic spares requirement for the power plant.
2011-2012	Andritz Oy China	<p>Quality and expedition inspections in several factories in China e.g:</p> <ul style="list-style-type: none"> • pressure part inspection of black liquid boiler in Sichuan CRUN Co. Ltd. and Western Power Industrial Ltd. • hydro testing of the boiler drum in Sichuan CRUN Co. Ltd. • evaporator and condensate tank inspection in Jiangdu Junye Pro-

		<ul style="list-style-type: none"> • cess Equipment Co. Ltd. • pulp drying machine inspection in Andritz Technologies Ltd and Seaflower (Shanghai) Marine Co., Ltd. • chemical plant equipment inspections in Zhuo Qun Nickel Titanium Co., LTD. • flowmeter inspection in KROHNE measurement Technology (Shanghai) Co., Ltd.
2009-2010	Kuopion Energia Oy HPN3 CHP Plant Finland	<p>The Haapaniemi 3 (HPN3) Power Plant is a biomass fired combined heat and power plant producing 46 MW of electricity and 85 MW of district heat.</p> <p>Owner's engineering services supplied by Tapro included the following tasks:</p> <ul style="list-style-type: none"> • evaluation of design of the process systems • evaluation of equipment technical specifications • preparing purchasing proposals for mechanical equipment • making quality and delivery control of mechanical components • 3D implementation design
2007-2008	Siemens AG Energy Sector Erlangen	<p>The 1600 MW_e Olkiluoto 3 Nuclear Power Plant, which is under construction in Finland, includes the first Generation III+ reactor to be built in the world. The advisory services to Siemens Power Generation Division included matters concerning design and quality assurance of high, medium and low-pressure piping and associated equipment.</p>
2007-2008	The City of Tampere Electricity Works Finland	<p>2 x 60 MW_e peat, wood, fuel oil and natural gas fired Naistenlahti combined heat and power plant. The services included basic and detailed design as well as procurement of fuel handling equipment for increasing wood utilization at the power plant.</p>
2008	Stora-Enso Ostro- leka Poland	<p>36 MW_e biofuel fired power plant. Preliminary plant design of the power plant.</p>
2008	UPM Kymmene Caledonia Paper, UK	<p>26 MWe biofuel fired Combined Heat and Power plant. Implementation layout design.</p>
2007	Foster Wheeler Energy Sweden	<p>Process and equipment design as well as system descriptions for the 240 MW_t circulating fluidized-bed (CFB) boiler island to be located at the Igelsta combined heat and power plant in Södertälje, Sweden.</p>
2002-2004	Foster Wheeler Energy Ireland	<p>150 MW_e peat fired extraction condensing power plant owned by West Offaly Power in Shannonbridge, Ireland. Plant implementation engineering included: Coordination of architectural, HVAC, structural and piping design and of PDMS modeling.</p>
2002-2003	Foster Wheeler Energy Ireland	<p>100 MW_e peat-fired extraction condensing power plant owned by Lough Ree Power in Lanesborough, Ireland. Plant implementation engineering consisting of: Coordination of architectural, HVAC, structural and piping design and coordination of PDMS modeling.</p>
2001-2005	Foster Wheeler Energy/ Eesti Energia Estonia	<p>The Eesti Power Plant is the world's largest oil shale fired thermal power station consisting of eight power generating blocks 215 MW_e each. Two of the blocks, Eesti and Balti, were renovated and each of the blocks were equipped with two completely new fluidized bed boilers including Balance of Plant equipment.</p> <p>The work included preparation of power plant unit and boiler operation descriptions as well as system descriptions.</p>

1999 -2000	Wacker Chemie, Burghausen, Germany 120 MW CHP Plant	Gas fired 120 MWe combined heat and power (CHP) plant. The services included design, purchasing, installation and commissioning of all Balance of Plant (BoP) systems (gas supply, feed water, condensate, cooling water, steam accumulators, steam networks, make up water and air supply). (T)
------------	--	--