

Overview of realized projects

#	Key competence	Goal of the project	Role in the project	Milestones	Country	Company	Department	Timing	CAPEX	Status
1	Relocation production line Malaysia	Relocation of the childseat production from Germany to Malaysia	Manufacturing engineer and project leader	Documentation of the production documents	Deutschland - Malaysia	Recaro (permanently employed)	Production planing and production	10/1998-06/1999	2,4 Mio. EUR	Sucessfully realized
				Description of the process input and process limits						
				Training and qualification of Malaysia employees in Germany						
				Restart the production equipment in Malaysia and considering the cost / and timing targets						
				Training of the employees in Malaysia and release of the production						
				Payback <1 year, reduction manufacturing costs - 30 %						
2	Process development	Develop and realization new production processes for the new AGR product	Manufacturing engineer and project leader	Define technical targets of the product design	Deutschland-Neuenkirchen	Modine Europe (permanently employed)	F&E, process development	08/2001-04/2002	0,8 Mio. EUR	Sucessfully realized
				Verify the feasibility and producibility of the product design						
				Develop and validation of the production processes						
				Transfer the production process into series production						
				Define the influences of the processes and guidelines of the process specifications						
3	Industrialization	Industrialization of the AGR production line and increase the automationlevel of the production (Te reduzieren)	Manufacturing engineer and project leader	Define single manufacturing process steps with technical specifications and transfer the input for the requirements	Deutschland-NeuenKirchen	Modine Europe (permanently employed)	Production	05/2002-06/2006	6,5 Mio. EUR	Sucessfully realized
				Source the customized equipment for the process steps. Monitor the project, realease (supplier side) and final release (shop floor) of the equipment						
				Increase the production capacity and increase the automatisatoin level (reduction manufacturing costs, cycle time 40 -> 6 minutes, competitor advantage 2 years)						
4	Process development and apply for a patent	International patent for design and production process	Manufacturing engineer and project leader	Define the technical specifications	Deutschland-Bonlanden	Modine Europe (permanently employed)	Production and patent department	02/2004-08/2004		Sucessfully realized
				Develop and validate of the manufacturing steps						
				Describe of the technical details and USP. Define an international patent for the design and the manufacturing processt together with industrial property agent						
				Reduce the manuaufacturing costs -20%, increasing the quality about 7%						
5	Manufacturing / production layout planning	Changeable and scaleable production system (green field)	Project leader for the external simulation issue, part of the project team for all of the planing and realizations issues	Define general conditions and project targets together with the institute for factory planing in Hannover (IFA)	Deutschland-Wackersdorf	Modine Europe (permanently employed)	Production	02/2006-11/2008		Sucessfully realized
				Describe of the today situation of the plant, realize the the potentials and define improvement steps						
				Display targets and influencing factors for the simulation model and evaluation of the results						
				Define the needs for the production and evaluate the technical requirements						
6	Process development and realization	Responsible for the process development and realization of the revolutionist product generation (Origami) for the heat exchanger	Overall responsibility for the process development and realization. Develop and build up the production equipment, realization of the series equipment	Support and advise the development department regarding the producibility of the product design	Deutschland-Bonlanden und Tübingen	Modine Europe (permanently employed)	F&E, process development, production	01/2014-11/2015	15 Mio. EUR	Sucessfully realized
				Release the producibility and feasibility						
				Develop of the single process steps for a tube mill and core assembly						
				Define process input and requirements, validation of the process						
				Engineering, assembly, startup and optimization of the tube mill						
				Production of the origami design products (automotive condensor and heavy duty radiators)						
				Optimization production process regarding the requirements of the series production (burst pressure, leakage,etc.)						
				Define of the process steps and technical requirements/specifications						
				Assignment external suppliers for the series equipment. Responsible until series production in the production plant						
				Automotive: 100% series supplier Mercedes Banz A until S-class, Heavy duty increase the market share in Europe about 30 %						

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7	Make or Buy	Eliminate bottleneck production capacity of the part cleaning process	Project leader and technical expert of the requirements of the part quality and cleaning process	Define the process requirements for the different products	Deutschland, Neidlingen	Festool (permanently employed)	Production	03/2015-10/2016	3,5 Mio. EUR	Successfully realized
				Description of the technical requirements of the product						
				Increase the capacity regarding process optimization						
				Define make or buy decisions. Consider investment, logistic concept, inventory and manufacturing costs						
8	Technology early detection process	Develop and realization of the technology early detection process for the advanced production	Project leader	Recommendation and realization of the make or buy strategy. Optimization of the production, optimization of the lot size and inventory, sourcing additional equipment and outsourcing additional production capacity	Deutschland, Wendlingen	Festool (permanently employed)	F&E	04/2015-12/2015		Successfully realized
				Define the structure of the technology early detection process for the advance development department. External support of external specialists						
				Identify the relevant technologies and application areas						
9	Product development	Realization of the developing project of the welding assembly (Integralträger)	Overall responsible of the technical engineering, technology and realization	Define advanced development projects and define structured procedure create solutions for the technology and application areas	Deutschland, Dettingen und Schmölln	Voestalpine AG (permanently employed)	Technical engineering and technology (product development)	02/2016-08/2018	4,2 Mio. EUR	Successfully realized
				Transfer the customer requirements in technical specifications						
				Evaluation of the producibility and feasibility						
10	Sourcing of global production equipment	Develop strategic production process, develop strategic production processes and production lines. Sourcing customized equipment	Overall responsible of the technical engineering, technology and realization	Highlight improvement potential (technical/economical)	China, Deutschland, Mexico und Rumänien	Voestalpine AG (permanently employed)	Technical engineering and technology (defining tooling, manufacturing engineering, estimation), global key account and global production plants	02/2016-07/2018	22 Mio. EUR	Successfully realized
				Transfer technical solutions in customized equipment (requirements until release in the plant)						
				Transfer customer specifications to production processes						
				Estimation of tooling, equipment investment and manufacturing cost for assemblies						
11	Sourcing of global production equipment	Develop strategic production concept, develop production process and production equipment, prepare placing orders	Overall responsible of the technical engineering, technology and realization	Define strategic concept for production equipment and sourcing strategy	China, Deutschland, Südafrika und China	Voestalpine AG (permanently employed)	Technical engineering and technology (defining tooling, manufacturing engineering, estimation), global key account and global production plants	08/2017-03/2019	64 Mio. EUR	Successfully realized
				Sourcing customized equipment from requirements until installation and released in the production plant						
				Setup of the customized equipment, optimization of the production processes and responsible for the pre-series production						
				Transfer customer specifications to production processes						
12	Global supplier development	Develop global suppliers for global plants	Overall responsible for the supplier development	Estimation of tooling, equipment investment and manufacturing cost for assemblies	China und Mexico	Voestalpine AG (permanently employed)	Manufacturing engineering	10/2017-06/2018	8,6 Mio. EUR	Successfully realized
				Define and discuss the technical specifications of the customized equipment with the local suppliers.						
				Evaluation and comparison of the local suppliers						
				Recommendation of the local suppliers						
13	Sourcing and release of production equipment	Release of production equipment and improvement process capability	Responsible of operation topics, release of the equipment	Develop the suppliers for placing customized equipment	Ungarn und Deutschland	WernerCo (Interim Manager / permanently employed)	Manufacturing engineering	02/2020 - 12/2021	5,4 Mio. EUR	Successfully realized
				Assignment local suppliers (Mexico) for customized production equipment (Robot garden)						
14	Strategic process development	Increase automatization level due to implementation of robots and cobots	Overall responsibility of technical concept and realization	Fully automation of ladder assembly equipment (trouble shooting, release of equipment, optimization and increasing output). Investment 3,2 Mio. EUR, cycle time reduction 30%	EMEA	WernerCo (Interim Manager / permanently employed)	Manufacturing engineering / Footprint	10/2019 - 10/2022	4,1 Mio. EUR	Successfully realized
				Develop customized solution of fully automation laser cutting equipment, inkl. robot handling and magazining of single parts						
				Replace of manual process with full automated robot solutions. (11 customized equipments, cost reduction 1,8 Mio. EUR p.a., increasing quality 20-25%)						
				Develop of pilot applications for handling and packaging with robots, welding and riveting with cobots						
				Rollout of pilot applications in further 3 plants (EMEA) as a standard application (lesson learned)						

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15	Relocation Production from Vietnam to Ungarn	Strategic Footprint project Relocation of Aluminium profile production to Ungarn plant, inhouse production for all EU plants	Director Advanced Manufacturing Technology, responsible for logistic, technical realization until handover equipmencz to Ungarn plant	Ramp down production in Vietnam, defining topics of relocation	Vietnam, Ungarn	WernerCo (Interim Manager / permanently employed)	Operations EMEA (production planning, production, quality, logistic, tooling)	02/2020 - 10/2022	9,4 Mio. EUR	Sucessfully realized
				Requirements for disassembly and assembly equipment, defining and order transportation topics						
				Disassembly equipment, transport of 42 container (40 feet) to Ungarn						
				Prepare infrastructue (gas, electricity,building, etc.) and assembly equipment in Ungarn						
				Qualification of worker and validation of 128 new extrusion toolings						
				Consider local requirements / laws (e.g. CE conformity)						
				Technical release of total equipment, handover to series production						
				Specification of equipment: total length 140 m, output 10.000 to p.a., total investment 18 Mio. EUR, saving 3,6 Mio. EUR p.a.						
16	Process Development and sourcing production equipment	Strategic Footprint project Develop and release new production processes, procure of production equipment	Project lead Global Industrial Engineering / NPI (New Product Introduction)	Production planning due to PEP process	Leonberg	GEZE (Interim Manager)	Global Industrial Enginerring / New Produkt Introduction	01/2023 - 10/2023	43 Mio. EUR	Sucessfully realized
				Value stream design for new and exsisting products						
				Planing of investment, technical requirements, timing for new product generation						
				Develop, planning and release of new production processes						
				Define standard requirements for sourcing production equipment, incl. Considering interfaces						
				Define production concept and requirements for a flexible and scalable production concept						