

PROJECT LIST

Capital and Strategy Deployment Projects

Project Title: Dry Mixing Tower
Value in US \$: 2.5 mil.
Location: Jurong, Singapore
Country of Origin: Germany
Brief Description: Basic raw material is sand, cement, gypsum, lime, additives and optional colour pigments. The outputs are homogenous, made-to-recipe dry mixes for various construction applications such as masonry mortar, rendering plaster, flooring screed, grout, fillers and waterproofing plugs. The process starts with a sand dryer positioned at the side of the main tower. The dried sand is transported, through a vertical bucket elevator to the top of the tower and poured into a sieving machine for screening into fractions. The other raw materials are transferred through dense-phase pumps or other pneumatic means of bulk material handling. Smaller volumes are hoisted up. The tower is arranged in several levels and platforms to accommodate the Sieving machine, storage Silos, weight and volume Metering devices, a batch Mixer, a Bagging machine, a Bulk Loading Outlet, a maintenance platform and the control room. The project successfully combined imported equipment with locally made components and structural elements, observing Singapore's stringent engineering and safety codes.
<p>Role: Project Manager</p> <p>Contribution:</p> <ul style="list-style-type: none"> • Project initiation, conceptual presentation, technical clarification and definition of parameters • Schedule and budget preparation, fine tuning and control • Creation of administration and communication procedures • Support of short-listing and selection of sub-contractors and professional service providers • Assisted in tendering process and procurement • Contract negotiation and subsequent administration • Chairing regular review meeting, issue status report and maintain communication with all parties involved • Monitor production of drawing and ensure compatibility of structural design with the equipment to be housed • Coordinate submission and clarification to authorities through to issue of permits • Monitor progress at construction site and troubleshooting • Attend to change orders and render expert opinion on cost efficiencies/impacts of alternative design options • Provide recommendation on quality and safety issues • Evaluate progressive payments • Carry out and/or coordinate consultant inspection of WIP • Ensure completion of as-built drawings, documentation, as well as operating and maintenance manuals • Supervise commissioning & start-up.
Project Title: Wood Chipping & Sizing Facility
Value in US\$: 270,000
Location: Sabah, Malaysia
Country of Origin: USA
Brief Description: The process has been implemented by a forestry/pulp & paper conglomerate, for the purpose of converting wood remnants into usable material. The randomly shaped remnants are loaded onto a vibratory conveyor then fed into a slant chipper. The chips drop onto an inclined conveyor and elevated to drop onto a parallel arrangement of diamond roll screens for sizing into fine and coarse, then streamlining onto two flat-bed conveyors. The two fractions are then transported to the pulp mill and to the boiler room (for use as fuel). Here again, the local content was optimally determined, and defined by way of drawing up clear specifications and drawings, to ensure interfacing with the main equipment.
<p>Role: Project Manager</p> <p>Contribution:</p> <ul style="list-style-type: none"> • Project initiation and definition of parameters • Schedule and budget preparation • Support of short-listing and cost estimation of local components and installation • Contract re-phrasing, negotiation and subsequent administration • Regular site inspections, troubleshooting and status reporting • Ensure compatibility of equipment with structure and other components provided by subcontractors • Attend to change orders and render expert opinion on cost efficiencies/impacts of alternative design options • Provide recommendation on quality and safety issues • Evaluate progressive payments • Coordinate consultant inspection of WIP • Ensure completion of as-built drawings, documentation, as well as operating and maintenance manuals • Organize commissioning & start-up.

Project Title: Aerated Concrete Production Plant
Value in US\$: 12 mil.
Location: Johor, Malaysia
Country of Origin: Germany
Brief Description: Primary input items are sand, lime, cement, water and an expansion agent. The output is extra light concrete elements in the form of blocks or panels. It's a modern building article that supports innovative architecture and cost efficiency in construction projects. The material has been successfully used in low cost housing projects in Europe, the Americas and Asia. Main components of the process are Sand Grinding Mill, Dosing Scales and Metering Devices, Moulds, Wire Cutting Equipment, Steam Curing Autoclaves and an optional Wire Mesh Welding Shop.
<p>Role: Project Manager</p> <p>Contribution:</p> <ul style="list-style-type: none"> • Project initiation, conceptual presentation, technical clarification and definition of parameters • Administer market research and identify optimum production plant location • Support of selection of plant type and investment feasibility • Coordinated use of end-product in a proto-type building project • Provide liaison and coordination to form investing joint venture to own the project • Facilitated board presentation and supported project approval process • Schedule and budget preparation and fine tuning • Creation of administration and communication procedures • Support of qualification, short-listing and selection of sub-contractors and professional service providers • Assisted in formulation of a standard tendering package • Contract negotiation • Chairing regular review meeting, issue status report and maintain communication with all parties involved • Monitor production of preliminary design drawings and specifications • Attend to change orders and render expert opinion on cost implications of alternative design options • Provide recommendation on quality and safety issues
Project Title: Traffic Management & Control Systems, Product Launch in SE Asia
Value in US\$: 400,000
Location: Singapore, as regional centre
Country of Origin: Germany
Brief Description: The program comprised of three distinct focus areas, namely (a) Linear traffic control (highways); (b) Area traffic management (cities) and (c) Parking guidance systems. Geographical coverage included Singapore, Malaysia, Indonesia, Viet Nam, The Philippines and Thailand.
<p>Role: Regional Program Manager</p> <p>Contribution:</p> <ul style="list-style-type: none"> • Propose time table, establish administration procedures and obtain owner's approval • Appoint country representatives and maintain communication • Conduct technical market survey, in five country-markets, on prevailing traffic engineering standards • Develop detailed budget and schedule • Take part in regular review and strategy meetings with owner in Germany and in SE Asia • Identify, qualify and support short listing of subcontractors • Support contract negotiations • Monitor production of conceptual design drawings • Participate in system engineering and design detailing • Coordinate submission to authorities, presentation and clarifications to facilitate permit endorsement • Render advice on cost-benefit implications of adopting alternative design options • Management of schedule, cost and progressive payments • Provide recommendations on choosing optimum project representation in individual country-markets • Research and render advice on safety and environmental issues • Coordinate tendering process • Coordinate consultant inspection of job sites • Supervise preparation of technical documentation

Project Title: Rolling Stock Maintenance Plant (Project Definition)
Value in US\$: 1.7 mil.
Location: Serendah, Malaysia
Country of Origin: Germany
<p>Brief Description: The scope of work for project definition involved understanding of current situation, assessment of the operational needs in the foreseeable future, defining the project and formulating an action plan for dismantling the existing central maintenance facility (adjacent to the main station in downtown Kuala Lumpur) and building a state-of-the-art new facility to take over maintenance, repair and overhauling needs. The technical work included drawing up architectural design for the new facility that would be capable of carrying out periodical overhauling and scheduled/unscheduled maintenance work on locomotives, and other rail-going vehicles (passenger, service, freight, etc.) The project covered the whole scope of a plant engineering package that included access/auxiliary tracks, soil analysis and civil structural considerations, berth stations, personnel, shop/layout arrangement, power, ventilation, water supply and water treatment, compressed air supply, safety, lighting, equipment, weighbridge, quality assurance, communication and management. The underlying feature of the proposed design is the application of "air cushion" transport system for handling of large pieces, including cabins, within the facility. Unlike the traditional rectilinear arrangement of rails and turntables, free movement is made possible. Due to this new handling method, substantial space saving was made possible.</p>
<p>Role: Resident Project Director Contribution:</p> <ul style="list-style-type: none"> • Establish communication and administration procedures • Liaise on legal/tax implications of setting up an off-shore site office for project execution • Prepare cost budget and schedule forecasts • Field survey and collection of data on current situation as well as future needs • Provide liaison and coordination among project team and in communication with owner • Support design of proposed access track, from main line to site, based on local standards and traffic rules • Coordinate work with cost estimators for assessment of local components of work • Monitor production of preliminary design drawings • Ensure design process accommodates all different makes and types of work-piece components • Participate in throughput calculation, conceptual engineering and design issues • Take part in drafting specifications and putting together a typical tendering package • Attend to modification orders and render advice on cost-benefit implications of alternative options • Monitor progress of work and organize periodical review meetings • Research and provide recommendations on local regulatory issues, construction codes and safety requirements • Look after short-listing and pre-qualification of local contractors and professional service providers • Supervise cost control and approve progressive payments • Coordinate composition of final report and documentation
Project Title: On-track Long Rail Welding System (x4)
Value in US\$: 3.6 mil.
Location: Repeated in four different sites in Iran
Country of Origin: Austria
<p>Brief Description: High performance, mobile (flash-butt) welding plant that carried out work cycles while on the track. The cycle includes; Unfastening-Cutting-Clamping-Alignment-Upsetting-Welding-Deburring-Quenching-Unclamping-Profile Grinding. Sequencing of the work cycle was studied and optimized to boost up efficiency to the European performance levels under comparable working conditions.</p>
<p>Role: Project Manager Contribution:</p> <ul style="list-style-type: none"> • Same as Track Laying & Relaying Train (see above) plus; • Evaluation and comparison of electrical welding technology with Aluminio-Thermic (quality, capital expenditure and operating cost). • Proposal for use of mobile joint welding system as a stationary plant to feed continuous track laying operations.

Project Title: Bagging & Palletizing Lines
Value in US\$: 4.3 mil.
Location: TPC Singapore
Country of Origin: Germany
Brief Description: The mechanical scope involved delivery of complete lines from the process outlet of the product through to storage. The system components are bagging, hot sealing, weighing, metal detection, printing, palletizing, shrink-wrapping and marking.
Role: Executive Representation Contribution: <ul style="list-style-type: none"> • Appoint project manager and provide close supervision • Initiate cost estimation and schedule preparation • Support short listing and selection of subcontractors • Facilitate definition of parameters and fine tuning technical scope of project • Contract negotiations and administration • Participate in review meetings • Monitor cost and schedule progress reports • Evaluate progressive payments • Assist during tendering process • Provide recommendation on quality, safety and environmental issues • Support submission to authorities and permit processing • Coordinate completion of as-built drawings as well as operations and maintenance documentation • Supervise commissioning and start up

Project Title: High Performance Rail Panel Assembly & Laying
Value in US\$: 2.8 mil.
Location: Karaj, Iran
Country of Origin: Austria & Germany
Brief Description: The process was implemented in two phases, namely assembly and laying. At the assembly site, there is an arrangement of two auxiliary stretches of rail tracks, laid in parallel to, and on one side, of the main line. The material (18 meter long rail branches, sleepers, rubber pads, rail fastener sets) are stored on one flat cars parked on the outer auxiliary track. The assembly tools would be located where the assembly works were to be carried out, that is in the longitudinal area between the main line and the inner auxiliary track. On the latter, a rail-going train would be situated, rolling forth and back to distribute material and load assembled panels onto another set of flat cars, waiting on the main line to carry the stacks of ready panels to the track-end under construction. As the work progresses, the assembly site would be moved forward, to a new location, nearer to the construction end of the main track. On the panel laying fronts, two mechanized methods were applied. The first method involved a rail-going crane with a mechanical boom that would pick-up panels from the flat cars coupled behind, lay them a rough bed of ballast ahead, move onto the newly laid panel and repeat the cycle. A more efficient method was introduced and implemented at a later stage that utilized a gantry-type panel laying system instead of the rail going crane.
Role: Project Manager Contribution: <ul style="list-style-type: none"> • Same as Track Laying & Relaying Train (see above)

Project Title: Continuous Track Laying & Relaying System
Value in US\$: 8 mil.
Location: Karaj, Iran
Technology Origin: Austria & Germany
<p>Brief Description: A contentious process that applies a high degree of automation to facilitate work efficiency, precision and consistency of track laying operations. The main components of the train are; Modified flat cars for material; Portal crane for sleeper handling; Sleeper feeding conveyor; Egg laying elevator; Rail positioning clamps; Grip sensor and other controls. A great deal of careful planning had to be carried out to ensure timely completion of the local works, in accordance with pre-specified quality standards. Furthermore, comprehensive classroom and site training were conducted on subjects pertaining to job organization. The scope of work covered the entire cycle of track laying. It included training (operations, scheduling, maintenance), procurement, supervision of local work, system assembly, commissioning and troubleshooting.</p>
<p>Role: Project Manager</p> <p>Contribution:</p> <ul style="list-style-type: none"> • Project initiation, conceptual presentation, technical clarification and definition of parameters • Facilitated board presentation and supported project approval process • Schedule and budget preparation, fine tuning and control • Creation of administration and communication procedures • Support of short-listing and selection of sub-contractors, trades and professional service providers • Assisted in tendering process • Contract negotiation and subsequent administration • Participate in design, engineering and drawing up specifications • Attend regular review meeting, issue status report and maintain communication with all parties involved • Monitor production of drawing and ensure interfacing system components from various sources • Coordinate delivery schedule for main equipment and articles provided by the railroad company • Monitor progress at construction/assembly site to ensure compliance with quality standard • Attend to change orders and render advice on cost implications of alternative design options • Provide recommendation on quality and safety issues • Evaluate progressive payments • Carry out and/or coordinate consultant inspection of WIP • Ensure completion of as-built drawings, documentation, as well as operating and maintenance manuals • Supervise commissioning & start-up. • Conduct training on scheduling and sequencing, time study to optimize performance rate • Coordinate project inauguration and VIP briefing

Project Title: Sanitary Valve Production (a program of 6 projects)
Value in US\$: 6.2 mil.
Location: Four different cities in Iran
Country of Origin: Italy & Germany
Brief Description: Main equipment included multi-spindle automatic lathes, transfer lines, die casting and polishing machines, assembly, testing, quality assurance stations as well as electroplating plants with a water treatment facilities.
Role: Program Manager Contribution: <ul style="list-style-type: none"> • Project initiation, conceptual presentation, technical clarification and definition of parameters • Schedule and budget preparation, fine tuning and control • Creation of administration and communication procedures • Support of short-listing and selection of sub-contractors • Assist in tendering process • Contract negotiation and subsequent administration • Advice on project accounting and cost/schedule control issues • Chairing regular review meeting, issue status report and maintain communication with all parties involved • Monitor production of drawing and ensure compatibility of site conditions with the equipment to be housed • Coordinate submission and clarification to authorities through to issue of permits • Monitor progress at job site and troubleshooting • Attend to change orders and render expert opinion on cost implications of alternative design options • Provide recommendation on quality and safety issues • Evaluate progressive payments • Carry out and/or coordinate consultant inspection of WIP • Coordinate completion of as-built drawings, documentation, as well as operating and maintenance manuals • Supervise commissioning & start-up followed by process optimization.

Project Title: Engine Valve Production Line
Value in US\$: 2.8
Location: Mazandaran, Iran
Country of Origin: Germany
Brief Description: The heart of the process is based on the centre-less grinding principle. Other stations are hot forging, induction hardening, electroplating, marking and packing. The process also included a specially designed blank handling system comprising of transfer conveyors, magazines and feeders. Special attention was given to the quality control instrumentation to ensure OEM qualification and export worthiness.
Role: Project Manager Contribution: <ul style="list-style-type: none"> • Same as Sanitary Valve Production (see above)

Project Title: Shock Absorber Production equipment (8 projects)
Value in US\$: 11 mil.
Location: Guilan, Iran
Country of Origin: Switzerland & Germany
Brief Description: High speed stamping press shop, induction hardening machine, precision brazing & soldering equipment, super-finishers, electroplating plant and testing instruments.
Role: Project Manager Contributed Tasks: <ul style="list-style-type: none"> • Same as Sanitary Valve Production (see above)

Project Title: Mechanization of Track Maintenance Operations
Value in US\$: 9.3 mil.
Location: Three different regions in Iran
Country of Origin: Austria, Germany & Ireland
<p>Process Summary: Ballast cleaning is a heavy-duty and contentious track operation that involves (1) Chain-scraping old ballast from under the track. (2) Transporting the old ballast into the screening compartment for sizing. (3) Disposing of the over-and-undersize gravel/dust, by means of an adjustable conveyor shoot to the track-side or alternatively to an auxiliary open top wagon. (4) Returning of the accepts to under the track. (5) Measuring deficit volume of ballast. (6) Ballast replenishment. (7) Tamping. (8) Track stabilizing.</p> <p>Others systems included Self Propelled Conveyors; Rail-road towing cars; Service Cars; Ballast Regulators/ Distributors; Tamping-lining-levelling Machines; Dynamic Track Stabilizers; Ultrasonic Crack Detectors; Synchronized Lifting Jacks; Re-railing and Accident Cranes.</p>
<p>Role: Resident Co-ordinator Contribution:</p> <ul style="list-style-type: none"> • Project initiation and support of feasibility study, including ROI analysis • Work out forecast for capital expenditure and project execution schedule • Participate in design, engineering and drafting of specifications • Administer tendering process • Render advice and opinion to facilitate optimal selection of equipment and optional accessories • Contract negotiations followed by order processing and contract administration • Monitor production of preliminary design drawings and typical operating cycles • Provide coordination and liaison on delivery schedule through to commissioning and acceptance • Monitor progressive payments • Regular site inspections to ensure preparation and interfacing • Organize tailored training courses on operations, work organization and maintenance • Ensure completion of as-built drawings, documentation, as well as operating and maintenance manuals • Supervise commissioning & start-up. • Troubleshooting and monitoring field operation to optimize performance rates
Project Title: Upgrading of Manual Track Maintenance Operations
Value in US\$: 1.4 mil.
Location: Tehran, Iran
Country of Origin: Austria & Germany
<p>Brief Description: Project involved evaluation of current work methods, procedures and efficiencies followed by expert opinion on requirements, approval and project execution. Scope of delivery included technical evaluation/selection of the following equipment, procurement, commissioning and training of operating and maintenance personnel. Rail-going Service Vehicles (Gang Cars) Rail Cutters Single Tyne Tampers Torque Control Wrenches Panel Replacing Equipment Rail Profile Grinders (head, web and base)</p>
<p>Role: Resident Coordinator Contribution:</p> <ul style="list-style-type: none"> • Same as Mechanization of Track Maintenance operations (see above)

Project Title: Wheel-set Maintenance Plant
Value in US\$: 3.7 mil.
Location: Tabriz, Iran
Country of Origin: Germany
Brief Description: Cabins of the railway vehicles are lifted up to release the undercarriage, due for service. The brakes, bearings and wheel-sets are disassembled from the bogie frame. Through a rectilinear arrangement of rails and turntables, the wheel-sets are guided to a Portal Wheel Lathe. The machine clamps each set from the axle area and put it in position for an onward process of pre-measurement followed by re-profiling, marking and dynamic balancing. The other undercarriage components (i.e. brakes, bearings, frames, coil and parabolic springs) are guided to designated service areas for washing, inspection, repair and oiling before they join the re-profiled wheel-sets for assembly and checking out.
Role: Project Representative Contribution: <ul style="list-style-type: none"> • Cycle-time and work sequence analysis to support feasibility examination, approval and project initiation • Cost and schedule forecast • Administer tendering process • Support of contract negotiation and optimum selection of optional accessories • Contract supervision and administration • Attending to traffic engineering and access issues • Fine-tuning of plant engineering issues (capacities, material handling, layout, utilities) • Ensure interfacing with building works, regular site inspections and participate in review meetings • Coordination of delivery through to installation, commissioning, start up and optimization • Coordinating training courses and availability of operation and maintenance manuals
Project Title: Drive-in Under-floor Wheel Lathe Shop
Value in US\$: 2.6 mil.
Location: Tehran, Iran
Country of Origin: Germany
Brief Description: An in-ground installation, the re-profiling shop is laid out in a roll-through arrangement. By taking advantage of gravity force, considerable time and efforts are saved. With this system, there is no need to dismantle and re-assemble the wheel sets, for profile turning, corrections and balancing.
Role: Project Representative Contribution: Same as Wheel-set Maintenance Plant (see above)

Project Title: Corporate Restructuring for Regional Operations
Value in US\$: N.A.
Location: Singapore
Country of Origin: Germany
Brief Description: This project involved the entire cycle from re-assessment of market opportunities, road-mapping a progressive re-positioning plan, evaluating existing inventory of people and working tools, organizing training, hiring new talents, design and implementation of control and incentive mechanisms, upgrading working tools (hardware/software), expansion of regional representation and re-instating corporate chains of command.
Role: Executive Director Contribution: <ul style="list-style-type: none"> • Initiate project and obtain approval from head office board of directors • Establish cost-schedule forecasts as well as control mechanisms • Set up administration procedures and target organization chart • Identify, shortlist, qualify and hire consultants (market research, recruiting, management, etc.) • Contract negotiation and administration • Monitor schedule and approve progressive payments to consultants • Examine market assessment reports and maintain constant liaison with head office • Take part in regular review and strategy meetings at head office • Prepare, present and modify proposals on strategic directions to facilitate approval by head office • Develop detailed budget and seek board approval • Organize supplementary training courses (AutoCAD, accounting, project & office software) to existing staff • Hire new staff and organize internal orientations and on-the-job training • Evaluate, select and purchase new working tools, hardware and software • Create a holding and corporate structure based on head offices approval to accommodate new activities • Issue monthly progress report • Design and install rigorous cost/schedule control procedures and project accounting • Monitor shift from old to new environment and attend to optimization issues.

Project Title: Corporate Downsizing
Value in US\$: N.A.
Location: Singapore
Country of Origin: Germany
Brief Description: This project involved completion and/or delegation of WIPs pertaining to the programs to be discontinued. Additionally, release of redundant staff, re-sale of assets, termination of contracts and relocation to smaller premises.
Role: Executive Director Contribution: <ul style="list-style-type: none"> • The entire work, based on Board approvals and guidelines.

Project Title: Construction of Affordable Housing, Phase II / Habitat for Humanity
Value in US\$: 200,000
Location: Burnaby, BC
Country of Origin: Canada
Brief Description: This is a work-in-progress that involves building a row of town homes. Resources comprise of volunteers, raised funds and in-kind donations of material/equipment/services.
Role: Member of Construction Committee/Project Management Contribution: <ul style="list-style-type: none"> • Contributed to the planning & budgeting phases and assignment of task leaders. • Did hands-on construction work onsite as a volunteer for building town homes in Burnaby.

Project Title: Rubber Recycling, for non-tire industrial scrap
Value in US\$: 180,000
Location: Durham Region, Ontario
Country of Origin: Canada
Brief Description: This project was carried out on the initiative of the North American Recycled Rubber Association (NARRA). It involved three phases, namely market survey, feasibility analysis and front-end engineering/project planning. Construction and implementation have been put on hold, pending clarifications among sponsors, technology provider and other interest groups.
Role: Manager & Co-sponsor Contribution: <ul style="list-style-type: none"> • Initiate project and formulate frame of reference • Conduct market study and field survey in southern Ontario focusing on Durham, Peel and York regions • Control schedule of project work across three phases • Organize and participate in weekly review meetings at NARRA's office in Whitby Ontario • Contract negotiation • Research various submission packages required to obtain permits from authorities • Write specification of equipment and peripherals • Develop detailed budget for capital expenditure, sales and operating cost • Conduct feasibility study and sensitivity analysis • Researched particular environment and safety considerations for rubber, as hazardous material to work with • Prepare, submit and present final report

Remarks:

- The above list represents a selection of projects with Brian's direct involvement in various leading capacities.
- Management and business development responsibilities, allowed Brian to acquire a wider range of experience in other industries and Project Management application areas, including;
 - ▶ *Pulp & Paper Production/Recycling*
 - ▶ *Machine Tools for Different Applications*
 - ▶ *Workshops for General Maintenance*
 - ▶ *Polymer Concrete & Building Material*
 - ▶ *Bitumen based Waterproofing Material*
 - ▶ *Organizational Restructuring & Development*
 - ▶ *Wood-wool Boards*
 - ▶ *Mineral-wool Sheets*
 - ▶ *Bagging & Palletizing Lines*
 - ▶ *Wood Yard Facilities*
 - ▶ *Rubber Recycling*
 - ▶ *Fundraising*
- Consulting, advisory and training projects are available through the website of [PLANTEK Productivity Consulting Inc.](#)

Brian Amouzegar