

CURRICULUM VITAE

- NAME** : **Triharyo Indrawan Soesilo**
- DATE OF BIRTH** : June 11, 1958
- EDUCATION** : - Graduated with Engineering degree from Chemical Engineering Department, Institute of Technology Bandung (ITB) in 1981. Year entered 1977.
- Graduated with Master of Chemical engineering degree from Chemical Engineering Department, University of Arizona, USA in 1984. Year entered Fall 1982. Specializing in computer aided Plant Design System aided
- SPOKEN LANGUAGE** : English / Indonesia/Japanese (partial)
- WRITTEN LANGUAGE** : English / Indonesia
- WORK EXPERIENCES** :
- 2004 – Present : President director of PT Rekayasa industri
- 2001 - 2004 : Operation Director of PT Rekayasa Industri which coordinate and handles US \$ 110 million revenue per year with profits of at least 10 % from several projects simultaneously, such as:
- Kaltim-4 Ammonia-Urea US \$ 356 million
 - PIM-2 Ammonia-Urea US \$ 330 million
 - Blue sky Balongan US \$ 153 million
 - PGN gas compression US \$ 21 million
 - CO2 removal processing plants US \$ 30 million
 - NPK Fertilizer project in Malaysia US \$ 33 million
- Develop & implement a corporate wide electronic procurement system (e-pro) and an Integrated 3-Dimension automated Plant design system.
- Implement the Balance score card system with integrated ISO 9001:2000 application. In the process of implementing Six-sigma quality system.
- 2000 - 2002 : Project Directors (sponsor) for large EPC turn-key lump sum projects as follows :
- Kaltim-4 Ammonia-Urea fertilizer project in East Kalimantan for PT Pupuk Kalimantan Timur. Project value at US \$ 322 million.

- PIM-2 Ammonia-Urea fertilizer project in Lhokseumawe, Aceh for PT Pupuk Iskandar muda. Project value at US \$ 291 million.
 - for Semen-Kupang-2 project to build a 330.000 ton/year Portland Semen plant at Tenao, Kupang for PT Semen Kupang. Project value at US \$ 41 million.
- 1999 - 2001 : Manager of Project Management division responsible for coordinating all projects in PT Rekayasa Industri with total revenue per year at around US \$ 51 million which also includes among others :
- NPK Compound Fertilizer project
 - CPO Palm oil mill project
 - Indokodeco Cement mill modification project
 - ABB Lummus additional air compressor project
 - Wayang windu Geothermal power plant project
- 1999 - 2000 : Project Directors (sponsor) of the following projects :
- Popka conveyor project a Build-Lease-Transfer (BLT) project valued at US \$ 4.4 million to construct a 1.1 km of belt conveyor in Bontang, East Kalimantan for PT Pupuk Kalimantan timur
 - Vacuum column Refinery revamp at Balikpapan, East Kalimantan for Pertamina oil company. Project value at US \$ 2.3 million.
 - Gulf Gas Pretreatment Project at Grissik, South Sumatra for Gulf Resources Indonesia. Project value US \$ 1.9 million.
 - Steam piping integration project at Bontang, East Kalimantan for PT Pupuk Kalimantan timur. Project value US \$ 1.3 million.
- 1996 - 1999 : Project Manager of 1725 MTPD Urea granulation plant project in Bontang East Kalimantan for PT Pupuk Kalimantan Timur involved in managing the overall activities since Project concept, Price estimation, Contract preparation, Basic engineering, Detail engineering, Construction and up to Plant start-up/Commissioning. Project value US \$ 104 million.
- 1997 - 1999 : Project Manager of Ammonia Joint Operation Scheme project owned by Mitsui Japan. The scope consisted of Sea water intake facilities, Chlorination unit, Sea water distribution, and Sea water outfall. Project value US \$ 12 million.
- 1994 - 1996 : Engineering Manager for Engineering division of PT Rekayasa Industri involved in coordinating engineering activities of various projects such as :
- Tuban Portland Cement plants
 - Kupang Portland Cement Optimization project
 - Arco Compressor refrigeration plant

- ICI waterborne paint factory
- CSR Plasterboard project
- DKM Melamine plant
- Vico tanks project
- Kaltim-1 optimization project

1989 - 1994

: Project Engineer for Urea Fertilizer unit in Pusri-IB project with capacity of 1725 ton/day. The plant is located in Palembang, Indonesia. The responsibility covered the following activities :

- Responsible for development of Urea unit technical proposal and the split of work between Owner, Process Licensor and Contractor.
- Responsible for development of final contract between Contractor and owner. Also responsible for finalization of the three-parties contract between Process Licensor, Owner and Contractor for the Urea unit.
- Management of Urea Process Licensor package development in Toyo Engineering Corporation, Japan. The development team consisted of Owner's engineers, Licensor's engineers and Contractor's engineer.
- Responsible for coordinating the development of Basic engineering design and Detailed engineering design based on Licensor's package by Contractor's and owner team in Rekayasa Jakarta office.
- Coordinate the procurement activities from process performance and schedule completion consideration, such as vendor print review, inspection at shops and solving fabrication problems.
- Manage the construction of the Urea unit from the stage of equipment installation, piping erection, instrumentation works, electrical installation and rotating machines erections until completion.
- Organize the pre-commissioning activities of the Urea unit, which includes rotating machines test, equipment internal inspections, piping system cleaning, instrumentation tests, and electrical tests.
- Manage the start-up of the Urea unit by coordinating Owner's operators, Process licensor's supervisors and other supporting team such as maintainace, inspection, laboratory and safety.

1991 - 1992

: Project Manager for 2(two) CO₂ Pretreatment Unit in Asean Aceh Fertilizer and PT Pupuk Iskandar Muda. This unit processed the Natural gas from Pertamina which contains 17 % CO₂ to become 3 % CO₂. The responsibility includes :

- Development of proposal and contracts between contractor and owner also between contractor and Process Licensor (UOP, USA).
 - Manage the basic and detail engineering execution of the unit by coordinating contractor's team and owner's engineers.
 - Assist owner in problem solving the construction & start-up of the unit.
- 1992 : Manage the development of technical and commercial proposal for 660 ton/day Urea granulation process for Asean Aceh Fertilizer plant in Lhokseumawe using Kaltenbach-Thurring Process.
- 1987 - 1988 : Process engineer for Ammonia Optimization project phase I in Asean Aceh Fertilizer project to increase the plant capacity by 15 %. The responsibility includes :
- Recalculate the mass and energy balance for 115 % capacity.
 - Re-check all equipment design for 115 % capacity.
 - Re-calculate all instrumentation design for 115 % capacity.
 - Provide process back-up to other discipline during basic & detail engineering execution in Rekayasa Jakarta office.
- 1987 : Project engineer for designing Natural gas metering station unit for PT Kertas Kraft Aceh in Lhokseumawe. The responsibility includes :
- Process design of the pipeline from LhokSukon to Plant site.
 - Process design of the metering station unit.
 - Coordinate other discipline such as piping, equipment and instrumentation for the metering station.
- 1984 - 1988 : Process engineer for Urea unit Kaltim-3 fertilizer project in Bontang, Indonesia. The responsibility includes :
- Participate in the development of Basic engineering package with Chiyoda Corporation's Process engineers in Japan.
 - Provide process back-up to other discipline during execution of detailed engineering in Rekayasa Office.
 - Manage the execution of Pre-commissioning activities of the Urea unit by coordinating contractor's workers, Owner's operators and Process Licensor's supervisors from Stammi-Carbon, Holland.

- Participate in the start-up of the Urea unit conducted by Process Licensor's engineers and owner's operators.
- 1982 - 1984 : Teaching assistant for Chemical Plant Design course and Equipment design course in the Chemical Engineering Department of University of Arizona, USA.
- 1981 - 1982 : Process engineer assigned for efficiency and productivity study of Indonesian fertilizer companies, such as PT Pupuk Kujang and PT. Pusri.
- 1980 - 1981 : Perform energy efficiency study on the dryer and kiln of Nickel plant at Soroako, Sulawesi.

OTHER RELATED EXPERIENCES :

- 1982 - 1984 : Develop Chemical Plant Equipment Design computer programs for the Chemical Engineering Department of University of Arizona. These computer programs includes heat exchanger design, pump design, piping design, vessel design, and compressor design.

- 1984 - present : Develop Rekayasa Engineering computer system by designing the optimum hardware configuration which includes mini-computer and a network of Personal computers located at various discipline.

Selecting and testing the required software for engineering execution in Rekayasa Office, such as :

- Civil structural calculation program.
- Electrical relay coordination and fault analysis program.
- Heat exchanger design program.
- Piping stress analysis program.
- Mechanical (vessel) design program.
- Instrumentation (control valve, safety valve, flow element) design program.
- Process design programs, such as mass and energy balance simulations, cooling water pressure balance, piping system sizing, and equipment sizing using the simulator package.

Design and develop computer applications for Project management application, specific for Chemical plant construction, such as :

- Measurement of engineering progress calculation system
- Piping material take-off and control system.
- Scheduling and control programs.

Design and develop the hardware configuration for Computer Aided Drafting (CAD) applications in Rekayasa Engineering Office. The activities include

training engineers and drafters for the following applications, Piping & Instrumentation Diagrams, Plot plans, civil structural drawings, 3-dimensional study of small units.

1987 : Develop computer software for management of production information at PT Iglas, Surabaya. This software includes Accounting software which covers production cost, selling price, raw material cost calculations and other daily expenditures, such as logistics and spare parts.

RELATED PUBLICATIONS :

- Presented paper on plant equipment design software in, Norway, Oslo.
- Presented various papers to Indonesian Fertilizer Producers Association at various fertilizer plant locations.
- Presented paper on engineering management to Indonesian Institute of Engineers, in Jakarta

SPECIAL AWARD :

- Receives "Adhicipta Rekayasa" an outstanding engineering award for the design works on 5(five) fertilizer plants in Indonesia. This award is given by Indonesian institute of engineers on May 1994.
- Receives "Adhikara Rekayasa" an outstanding award for the EPC project execution of NPK Project
- Receives ASEAN Engineering award an outstanding award for the EPC project execution of NPK Project in Kedah, Malaysia
- Receives Technology innovation award from President Susilo Bambang Yudhoyono for the EPC Project execution of Blue sky Balongan project.