



MARINE CONSULTANCY AND SERVICES

TTE Marine Consultancy Division provides comprehensive and cost effective consulting and technical services to oil companies, marketing and refining concerns, vessel charterers and other marine related organizations.

TTE Adopts 'Best Industry Practice' in all that we undertake. More importantly, our marine and technical team are all innovative and solutions orientated in their approach to assignments, coupled with our trademark promptness, reliability and safety awareness, our clients are assured of professionally accurate and detailed reports delivered with the highest standards of customer service.

TTE Conduct suitability and operational condition surveys/ inspections on behalf of oil and Gas companies, drilling contractors, offshore construction contractors etc, worldwide, to establish whether a vessel is suitable for the proposed usage and operation, such as towing, anchor handling, platform supply, ro-v, pipelay, offshore lifting and installation. Safety Audits are conducted in conjunction with suitability and operational condition Inspections.



PROJECT PRINCIPALS' EXPERIENCE			
No.	Description	Client (s)	Year (s)
1	Bulk Port Operations management in Canada, Papua New Guinea, Australia dan Indonesia	BHP Vancouver Wharvs	1982 - 1994
2	Project Management of the Red Dog Lead/Zinc transshipment facility in Alaska and Vancouver Canada	Vancouver Wharvs	1987 - 1989
3	Project and Construction management of Bulk Terminals in Indonesia, Peru and Venezuela	Sandwell Engineering	1989 - 2001
4	Coal Chain Studies in Indonesia and Venezuela	Sandwell Engineering	2001 - 2002
5	Coal Terminal Location Studies in Indonesia (barge and deep sea)	Sandwell Engineering	2002 - 2005
6	Offshore and Marine Construction, Dredging and Land Reclamation	Total Indonesia, PT. KPC; BP Indonesia, PT. KPI, PT. Indominco Mandiri, PT. Arutmin; PT. Jorong	2002 - 2006

Over thirty five years of experience in the Engineering and Design of material handling facilities for Coal, Lime, Phosphate, Platinum, Potassium, Gold, Diamonds, Uranium, Bauxite, etc.

Significant Experience			
No.	Description	Client (s)	Year (s)
7	Potassium Compacting Plant; Dead Sea Works Lead mechanical engineer responsible for handling design of interconnection areas	E.L. Bateman	1982 - 1984
8	Oil Shale Combustion Demonstration Plant; Pama Responsible for the conceptual and mechanical design of the oil shale combustion demonstration plant (Material Handled-Oil Shale)	E.L. Bateman	1986 - 1988
9	New Coal Conveying Screening and Piling System for NCSC; Port Ashdod Project Engineer and Mechanical Leader (material handled - coal)	E.L. Bateman	1988 - 1989
10	Fly Ash Handling Project; Lethabo Power Station Galteng In charge for supervision and commissioning of the handling system (material handled - fly ash)	E.L. Bateman	1989 - 1990
11	JCI Waterval Project; Platinum Mining In charge for supervision and commissioning of mechanical equipment and materials handling system (pipe conveyors for platinum ore)	E.L. Bateman	1989 - 1990
12	Crushing and Screening Plant; Vansa Vanadium Mine - S.A. Western Territories Feasibility Study for crushing and screening plant, including conveyor-handling system (vanadium ore)	E.L. Bateman	1990 - 1991
13	Overland Conveyor; Majuba Colliery - Northern Transvaal In charge for modifications and commissioning of the overland conveyor 6 km length and 4 km radius of horizontal curve (material handled - coal)	E.L. Bateman	1991 - 1993
14	Sandwich Conveyors Project; Mossgas - Mossal Bay - George Area Design of modifications and commissioning of the sandwich conveyors system (material handled - pellets of magnetite)	E.L. Bateman	1991 - 1993
15	Reversible Belt Feeder and Pipe Conveyor Project; Ribeeck West - Cape Town Area Commissioning of the conveying system including a pipe conveyor for cement plant in Ribeeck West Area (material handled - coal)	E.L. Bateman	1991 - 1993
16	Pipe Conveyors; Jwaneng Botswana Diamond Mine In charge for training of the maintenance team for Pipe Conveyors	E.L. Bateman	1991 - 1993
17	Highly Powerful Reversible Train Pusher; Bateman's new development Inventor and mechanical leader in charge for development of the new suspension system for the train pusher-robot (1600KN draw force at both directions)	E.L. Bateman	1991 - 1993
18	Rapid Load Out Station for Buxton Lime (UK) Mechanical Leader for the design of the Rapid Load Out Station System at Buxton Lime	E.L. Bateman	1995 - 1996
19	Programming of the computer simulation for analysis of the Belt Conveyors Discharge Trajectories based on the bulk materials dynamic characteristics	Fluor Daniel Wright Ltd.	1997 - 1998

Significant Inventions

- "Drive Means" (Intermediate booster-drive for very long or overloaded conveyors)
- "Truck Loading Means" (Super fast load out system for a railway tracks/wagon)
- "Method of Continuous Discharge of the Railway Train" (non-stop tippler)

PROJECT EXPERIENCES			
No.	Description	Client (s)	Year (s)
1	Project Management BcCT 3000 tph Upgrade	PT. Indostrats	Nov-06
2	Engineering Procurement Construction of Mechanical Installation BcCT 3000 tph upgrade	PT. Indostrats	Nov-06
3	Marine Consultancy Services FSO Inspection	CNOOC	Dec-06
4	Owners Representative	Banpu PLC	Jan-07
5	Jorong Dredging	PT Jorong	Jul-07
6	Marine Consultancy Services 2 Service Barges Inspection	CNOOC	Feb-07
7	Marine Consultancy Services 3 Drilling Barges Inspection	CNOOC	Feb-07
8	Marine Consultancy Services 4 Drilling Barges Inspection	CNOOC	Feb-07
9	Bontang 2 X 7 MW Coal Fired Power Plant	PT. Indominco Mandiri	Feb 2007 - June 2008
10	Marine Consultancy Services 5 Drilling Barges Inspection (Toba 2 nd Inspection)	CNOOC	Mar-07
11	Technical Assistant to investigate the Palmindo Perkasa Crane Incident	CNOOC	May-07
12	Marine Consultancy Services 8 Drilling Barges Inspection (Pelangi Bravo)	CNOOC	May-07
13	Marine Consultancy Services 6 Drilling Barges Inspection	CNOOC	Jul-07
14	Gravity Dolphin Removal & Installation of Protection Beam	PT. Jorong	Jul-07
15	Marine Consultancy Services 9 Drilling Barges Inspection (3 rd Pelangi Bravo Inspection)	CNOOC	2007
16	Marine Consultancy Services 10 Drilling Barges Inspection (4 th Pelangi Bravo Inspection)	CNOOC	2007
17	Marine Consultancy Services/Representative	SMI	2007
18	Marine Consultancy Services 11 Drilling Barges Inspection (5 th Pelangi Bravo Inspection)	CNOOC	2007
19	Marine Consultancy Services 12 Drilling Barges Inspection (4 th Palmindo Perkasa Inspection)	CNOOC	2007
20	Marine Consultancy Services 13 Drilling Barges Inspection (5 th Palmindo Perkasa Inspection)	CNOOC	2007
21	Assembly and Commission of LHM 500 crane	Liebherr	Aug-07
22	Engineering Procurement Construction of a flat top barge conversion into accommodation work over crane barge	PT. Indominco Mandiri	Aug-07
23	Bontang Coal Terminal Upgrade Project Construction of Conveyor C31	PT. Indominco Mandiri	2006 - Dec 2007
24	General Scoping Study on the EKCP (East Kutai Coal Project)	Churchill Mining PLC	Mar - May 2008
25	Marine Consultancy Services for MV. Golden Jaguar Salvage	CNOOC	Sep-09
26	Preliminary Engineering Design for Marangkayu Coal Terminal Project	PT. Getra Kaltim Sejahtera	Jul - Nov 2008

CURRENT PROJECTS

No.	Description	Client (s)	Year (s)
1	Maintenance Service for LHM 500	PT. Indominco Mandiri	Oct 2007 - Sept 2009
2	Preliminary Engineering Design for Kalimantan Jaya Bara Coal	PT. Indo Batubara	Jan - Mar 2009
3	ICD Detailed Engineering for South Haul Road & Barging Facility for Churchill Mining	PT. Indonesia Coal Development	Nov 2008 - Apr 2009
4	ICD Detailed Engineering East Haul Road & Barging facility for Churchill Mining	PT. Indonesia Coal Development	Mar - Sept 2009
5	Miang Besar Coal Terminal Development Project	PT. Emas Hitam Jaya Rahayu	2009 - 2011
6	Owner's Engineering for Power Plant Project	PT. Emas Hitam Jaya Rahayu	2009 - 2011
7	Mining Development for East Kutai	PT. Emas Hitam Jaya Rahayu	2009 - 2014



PT. Trans Tek Engineering

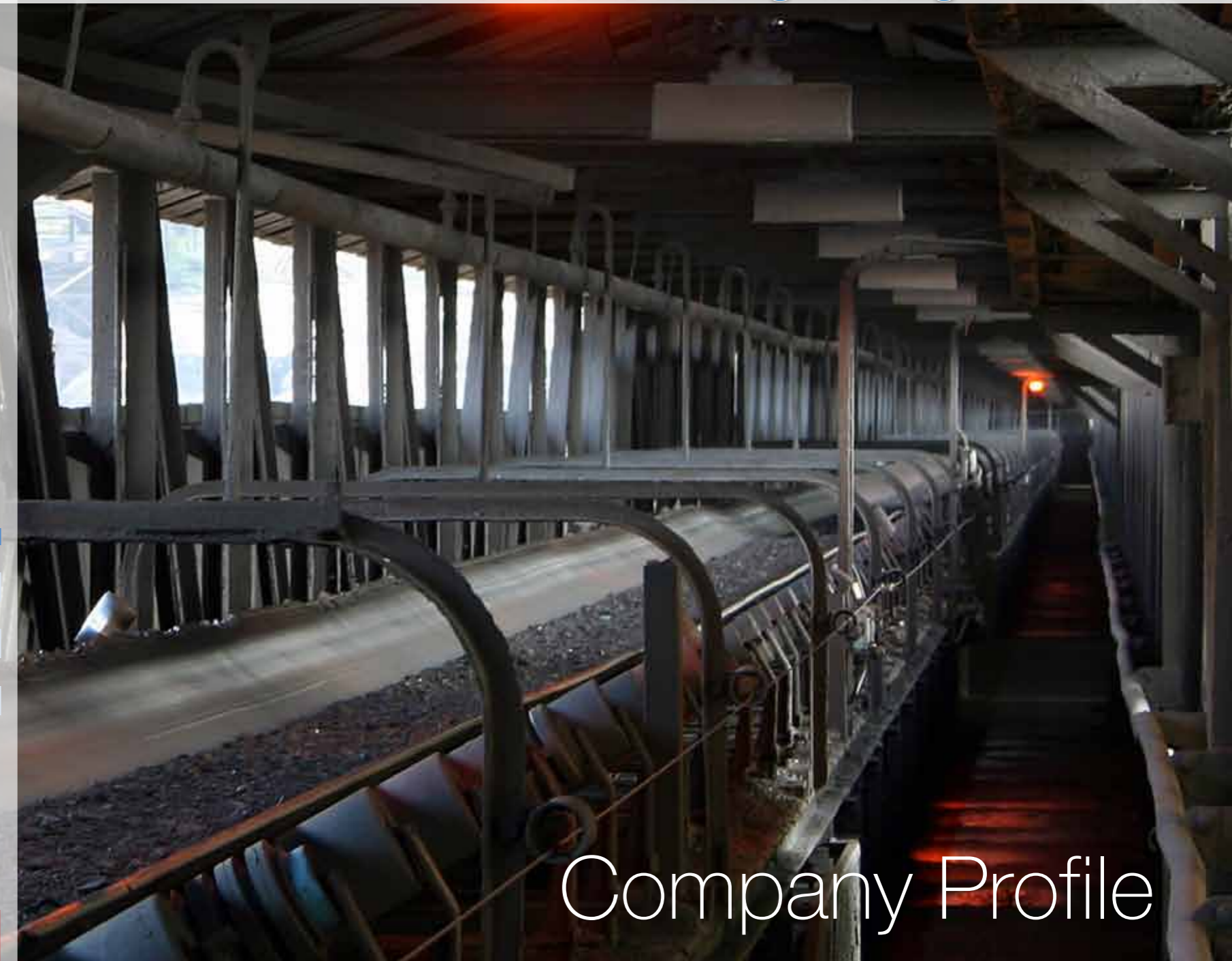
Ventura Building 5th Flr Suite 503
Jl. R.A. Kartini No. 26 Cilandak Barat
Jakarta Selatan 12430, Indonesia

Telephone : +62-21-765 2544
Facsimile : +62-21-765 2627
Email : info@transtekeng.com

www.transtekeng.com



PT. Trans Tek Engineering



Company Profile

www.transtekeng.com



COMPANY OVERVIEW

PT Trans Tek Engineering (TTE) is an Indonesian based PMA Company Providing services in the following areas:

- Engineering Procurement and Construction; (EPC) of onshore bulk materials handling systems for the Mining, Power and Oil Industries
- EPC of bulk handling ports and equipment (barge and deep-sea)
- Feasibility studies for new and existing operations to improve clients bulk handling capabilities
- Barge, transshipment, offshore loading studies and projects
- EPC of Floating Transfer Stations (FTS) for offshore bulk materials handling
- Marine Classification Surveys (ABS etc.)
- Project Management and Owner's Representative services
- Representing selected manufacturers and designers in the bulk handling/port sector
- Fabrication of selected manufacturers equipment
- Fabrication of materials in Indonesia and China for projects overseas
- Operations and Maintenance contracts for bulk handling projects
- Establishment of a core Indonesian engineering team to provide in house and external engineering

One of our key strengths and strategies in Indonesia is our supply and design of:

- Shiploaders
- Cranes
- Floating Transfer Systems (Barges to Vessel, Vessel to Barges)
- Conveyor Systems
- Coal/Ore Drying Systems
- Coal Briquetting Systems
- Fabricated Structural Steel

TTE provides complete plants and systems on an EPC Turnkey basis, including commissioning, plant personnel training and warranty services.

The equipment supply is subject to rigorous factory acceptance testing to international standards and the designs are proven, generally based on successful operating plants.

TTE's Principals and Associated Partners have over 50 years experience in our areas of expertise and will apply this experience on behalf of our clients to provide a guaranteed successful outcome to their Project.

MELIS ENGINEERING LTD

TTE has established an alliance with a major metallurgical consulting firm in Canada to provide the following services in the Asia/Pacific Region.

Process Engineers to the Mining and Chemical Industry Since 1982

HYDROMETALLURGICAL, MINERAL PROCESSING AND ENVIRONMENTAL SERVICES

Since 1982 Melis Engineering Ltd. has completed over 300 projects for the mining and chemical industry. Melis Engineering Ltd. services and expertise include:

SERVICES PROVIDED	EXPERTISE	IN
<ul style="list-style-type: none"> • Process Development • Feasibilities • Engineering • Pre-Operational Testing • Plant Start-Up • Operations • Trouble-Shooting • Plant Retrofit • Waste Water Treatment • Maintenance • Instrumentation • Training • Plant Audits • Decommissioning 	<ul style="list-style-type: none"> • Gold/Silver • Copper • Copper/Gold • Copper/Molybdenum • Gold/Antimony • Copper/Zinc • Copper/Nickel • Nickel/Cobalt • Lead/Zinc • Uranium • Tin • Vanadium 	<ul style="list-style-type: none"> • Diamonds • Industrial Minerals • Rare Earths • Oil Sands

PROJECT MANAGEMENT

TTE provides experienced National and Expatriate management staff on a contract basis to act as;

- Owner's Engineer
- Project Manager
- Owners Representative

TTE in-house staff includes Engineers and Project Management to manage our EPC turnkey projects.



EPC

90% of TTE projects are EPC in nature and include:

- Engineering
- Procurement
- Construction
- Commissioning
- Training
- Warranty

Provided at a fixed contract price.

We are also familiar with Alliance style Project Contracts and will be pleased to discuss this advantageous type of Project Development with interested clients.



MATERIALS HANDLING

TTE provides total EPC solutions for all bulk materials handling projects, including:

- Ports
- Mines
- Offshore Floating Transfer Systems (FTS)

Our systems include :

- Conveyors (including long overland systems)
- Reclaimers
- Shiploaders
- Barge Unloaders

OIL & GAS

PT. Trans Tek Engineering (T.T.E), is in the unique position of having access and availability of the largest and most modern offshore energy support fleets, supporting the entire spectrum of exploration and production activities. Combined with T.T.E's attitude to Health, Safety, Environmental and Security (HSES) commitment, being more than good business, it is a core value that will not be compromised. As an integral part of responsibility and accountability, our global HSE requirements meet and in many instances exceed the requirements of our operating locations. As an organization we constantly look for ways to improve our HSES performance.

MAJOR BUSINESS SEGMENTS

T.T.E operate in 4 Major Business Segments :

- Marine Support Services
- Construction and Production Services
- Energy Services
- Engineering and Fabrication

OUR INTEGRATED SERVICES

- The unique integration of the Marine Fleet, Engineering, Offshore Construction/Production and Well Services differentiates the T.T.E from its competitors.
- We are able to offer Synergies and Cost Savings throughout the Life of Field Development.
- T.T.E have identified this growing trend and has positioned itself for the future demands of the industry.

OUR FLEET

T.T.E can provide:

- A fleet of state of the art vessels that are designed and equipped to meet the highest demands of offshore operations.
 - With our ability to provide the youngest of such type of vessels in the world, allows us to reduce downtime, respond faster, be more efficient and increase reliability whilst simultaneously adhere to the strictest standards of offshore safety procedures and requirements.
 - All vessels are fitted with technologically advanced equipment.
- T.T.E provide Integrated offshore & marine services of the highest standards.

ENTIRE OFFSHORE SUPPORT SPECTRUM

Offshore Support Vessels :

- Anchor Handling Towing/Supply
- Bulk & Deck Cargo Transportation
- Crew & Supply Transportation
- Remotely Operated Vehicle Support
- Deep Sea Diving Support
- FPSO Towing & Mooring
- FPSO Mobilization/Demobilization
- Clamshell Dredgers
- Cutter Suction
- Hopper Barges

Construction & Production :

- Offshore Accommodation/Crane Barges
- Offshore Heavy Lift Operations
- Jacket Launching Operations
- Platform Maintenance & Servicing
- Subsea Pipelaying
- Floating Production Storage & Offloading
- Land and Marine Piling
- Dredging and Reclamation

Energy Services :

- Well Intervention
- Hydraulic Workover ESP/P&A
- Drilling
- Well Stimulation
- Coil Tubing
- Slick Line
- Cementing
- Well Testing
- N2 Services

Engineering & Fabrication :

- FPSO Turret Design & Engineering
- Jacket/Topside Fabrication
- Repair & maintenance Services

