



Maintenance



Engineering Procurement Construction Mai

"We believe that careful preparation is the best guarantee for successful project implementation"

COMPANY INTRODUCTION

PT.GRAHA S USAHA TEKI GUT

PT. Graha Usaha Teknik

Jl. Asem Baris Raya No.100A Kebon Baru Tebet Jakarta 12830 Indonesia Tel: +62-21-8378 7333 Fax: +62-21-8378 7222 Website: www.ptgut.co.id Email: info@ptgut.co.id

> Revision : 04 Date : 12 April 2016

PT GRAHA USAHA TEKNIK is an Indonesian private equity firm, provides professional project management and implementation services in Engineering, Procurement, Construction and Maintenance for :

- Electrical
- Instrumentation
- Telecommunication
- Civil for Electrical Project
- Mechanical

Customer satisfaction is our foremost objective in every undertaking. We take full responsibility for everything that we do. Our operations are based on the principle of continuous improvement.

We believe that careful preparation is the best guarantee for successful project implementation. Our staff of highly motivated professionals serves our clients, adding value to the project and improving the efficiency and economy of the projects implementation.

PT GRAHA USAHA TEKNIK is controlled by an extensively experienced management team with minimum 10 years experience handling electrical, instrumentation, telecommunication, and mechanical project, both of engineering & construction phase.

The quality of our services stems from our ability to fulfill and exceed our client's expectations, with high regard for health, safety, and the environment.





Management

The idea to set up this company was to provide jobs for young Indonesians and a chance to develop and improve their skill besides making benefit to the company.

Four (4) years working in Government Institution and thirty two (32) years working in an International Company, PT Siemens Indonesia, encouraged me to set up **PT GRAHA USAHA TEKNIK**, the place for young professionals to express their capabilities and pride. "QUALITY IN EVERY ASPECT" is our motto in developing this company. Experience tell us that with smart and hard work, loyalty and mutual



understanding together with the full support from experienced share holders will help us step by step to reach the goal.

PT Siemens Indonesia, as a worldwide company has given us trusted to execute electrical, instrumentation and telecommunication project in many numerous industries with high quality standard and commitment.

Learning from our valuable experience, we strongly believe we can cooperate with you to deliver best performance to your satisfaction and our mutual benefit.

Jakarta, March 2005 Director, **Hidayatullah**

Occupational Health, Safety & Environment Policy

PT Graha Usaha Teknik is committed to being an engineering & construction company leader in conducting our business responsibly so that we protect our employees, customers, supplier, sub- contractors, and other interested parties. Our Occupational Health, Safety & Environment (OHSE) commitment is a core value of the corporation and an integral part of our business activities.

Our goal is the elimination of work-related injury, illness and adverse environmental impact. Major accident risks are minimized through the efforts of major hazard identification, assessment and control plan.

We are committed to continuous improvement, and to eliminate the potential environmental impacts of the entire field job we are assigned – those being energy usage and waste. Individual OHSE objectives and targets are set and reviewed annually.

Employees and sub-contractors take ownership of safety by not accepting unsafebehavior from anyone. In our decisions and actions, we will not jeopardize safety, ortheprotectionoftheenvironment.





ISO 9001:2008 Certificate no: 422970 QM08

OHSAS 18001:2007

Certificate no: 422970 BSOH





Certified Management System

ISO 9001:2008

To achieve our goal delivering the best quality to our customer, PT Graha Usaha Teknik follows the most widely and internationally recognized ISO 9001:2008 as a Quality Management System Standard.

We proudly announce that PT Graha Usaha Teknik has ISO 9001:2008 certified on June 2013 with registration no: 422970 QM08



CERTIFICATE



This is to certify that

PT. Graha Usaha Teknik JI. Asem Baris Raya No. 100A, Kebon Baru Tebet, Jakarta 12830, Indonesia.

has implemented and maintains a Quality Management System.

Scope: Project Management for Engineering, Procurement and Construction for Electrical, Instrumentation and Telecommunication

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

 Certificate registration
 422970 QM08

 Valid from
 2016-06-09

 Valid until
 2018-09-14

 Date of certification
 2016-06-09



DQS GmbH

Faul Gil Frank Graichen Managing Directo

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main Administrative Office: DQS Malaysia, Suite 43-4 Setia Avenue, Jalan Setia Prima S U 13/S, Setia Alam Seksyen U 13, 40/170 Shah Alam, Selangor - Malaysia

BS OHSAS 18001:2007

To create the safe and healthy working environment, eliminate or minimize risk to employees and other interested parties.

PT Graha Usaha Teknik has passed the OHSAS 18001:2007 certification on August 2011 with registration no: **422970 BSOH**

CERTIFICATE





PT. Graha Usaha Teknik JI. Asem Baris Raya No.100A Kebon Baru Tebet Jakarta - 12830

has implemented and maintains an Occupational Health and Safety Management System

Scope: Project Management for Engineering, Procurement and Construction for Electrical, Instrumentation and Telecommunication

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

BS OHSAS 18001 : 2007

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 F Administrative Office: DQS Malaysia, Suite 43-4 Setia Avenue, Jai Setia Alam Seksyen U 13, 40170 Shah Alam, Selangor - Malaysia

 Certificate registration on.
 422970 BSOH

 Valid from
 2014-07-29

 Valid until
 2017-07-28

 Date of certification
 2014-07-29



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DQS GmbH

G. Blechschundt Götz Blechschmidt Managing Director

- IONet















Capabilities

Engineering, Procurement, Construction and Commissioning

- 1. Engineering, Procurement, and Construction of Electrical System.
- 2. Commissioning of Electrical System for Low Voltage, Medium Voltage and High Voltage.
- 3. Design Calculation and Self Support Antenna Tower (Green Field, Mini Tower, and Roof top).

Maintenance Services

We provide regular maintenance of electrical & instrument equipments during minor and major maintenance / inspection for several power plant in Indonesia:

- 1. Muara Tawar Power Plant, unit 3.1; 3.2; 3.3; 4.1; 4.2; 4.3
- 2. PLTGU Belawan Power Plant 400MW
- 3. PAITON Power Plant East Java, Unit 5 & 6 (@ 600 MW)
- 4. Newmont Batu Hijau Unit #51
- 5. TJB Unit #3 Planned Maintenance Outage

Project Construction

- 1. Construction and Commissioning
 - Switchyar d Steel Structure Erection
 - Low and Medium Voltage Switchgear
 - Power transformers (casting resin + oil insulated)
 - High Voltage Switchgear:
 - Circuit breakers,
 - Disconnectors,
 - Combined Instrument Converter,
 - Overhead Wire Construction,
 - Tubular Busbar Installations
 - Gas Insulated Switchgear (GIS)
- 2. Construction or supervision for all Electrical and Instrumentation Installation.
- 3. Individual Instruments Calibration (bench and field)
- 4. Pre Commissioning for instrumentation.
- 5. Installation & Commissioning of GSM BTS, 3G, and Microwave, indoor & outdoor include integration and drive test.
- 6. Providing Technical and Non Technical Personnel.

Construction Management

Construction Management Services ability and operability are designed into each of PT GRAHA USAHA TEKNIK contracts consistent with the scope, size, and complexity of the particular project.

Human Resources

The company offers to provide personnel to clients in the following ways:

- 1. Daily or Monthly Rate Basis.
- 2. Lump Sum for execution of particular scope of work.
- 3. Management fee for technical and non-technical personnel utilization.



Legal Certification

- 1 Notary Decree
- 2 Notary Deed No.
- 3 Tax No (NPWP)
- 4 Trade License (SIUP)
- 5 Company Registration (TDP)
- 6 Ministry of Law & Human Right
- 7 Electrical & Mechanical Contractor Association (AKLI)

Titiek Irawati S, SH 39 02.388.911.6-062.000 776/24.1.0/31.74.00.0000/1.824.271 /2015 09.03.1.46.47160 C-18681 HT.01.01.TH.2005 0980/01/M/2016 Scope: Low, Medium and High Voltage Electrical Installation; Distribution and up to 500kV Substation; Transmission Line; Power Plant for all capacity

Business Organization

- : ⊙ Operation Director : Θ Finance Director : Θ Technical Manager : ⊙ Sr Electrical Engineer • Θ Engineering • Θ Estimator • Θ QHSE Head : Θ Finance Θ Business Administration ⊙ Telecom Engineer :
 - Field Personnel
- Θ Valve Repair
- Θ Civil Engineer

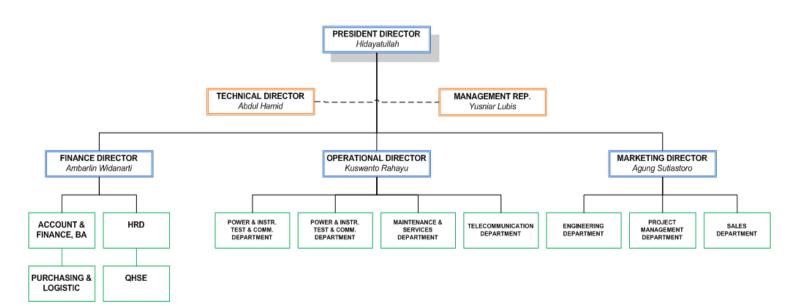
- Hidayatullah
- : Kuswanto Rahayu
- : Ambarlin Widanarti
- : Agung Sutiastoro
- : Abdul Hamid
- : Adhi Rahayu
- : Destragus Syahdan
- : Sawalludin M
- : Gatot Tri
- : Hermayadi
- : Ipin Bustanul Arifin
- : Erlina Ilyas
- : Jaka Hermawan
- : Arnie / Rupadi
- : Misno
 - : Abu Bakar & Iswendi
 - : Agus Suparto & Hendri Y.

PT. GRAHA USAHA TEKNIK





Business Organization Chart









Primary Injector Omicron CPC-100



Three Phase Injector Omicron CMC 256



Omicron CT Analyzer



Hipotronics PFT-503CM 50 kVAC



Programma CB Analyzer EGIL



Single Phase Injector Programma Sverker 760



Mobile Oil Station GLobeCore CMM-4,0

Tools & Equipments ELECTRICAL TOOLS & EQUIPMENTS

No	Description	Brand / Type	Serial No	
1	Primary Injector, 2 units	OMICRON CPC-100 Enhance incld. BOOSTER 2000A	AG164A, NJ643U and MF180T	
2	Tan Delta / Power Factor	OMICRON – CP TD1	FB565P	
3	Three Phase Secondary Injector, 2 units	OMICRON CMC 256-6 basic & OMICRON 356	JA048S, HD418Q, GD 841M, and 16/3560901	
4	Single Phase Injector	PROGRAMMA Sverker 760	70602283	
5	Circuit Breaker Analyzer	PROGRAMMA EGIL	3630923	
6	CT Analyzer	OMICRON VE000652	AI154T	
7	Contact Resistance	MEGGER DLRO 200-EN	070607/1341	
8	DC HIPOT / Dielectric Strength Test	Hipotronic DC 80kV and Hagenux / SebaKMT 80 kV	9403152 0175/97	
9	AC HIPOT 2 unit	50 kVac and 60 kVac 250 mA	1	
10	AC/DC Power Supply	In 220 vAC: Out 110/220vDC & 24/48vDC		
11	Insulation Test 5kV	Various Model MEGGER BM11D; MIT 520; etc		
12	Residual Current Detector	Megger RCDT 310 S/N 080708/1987 ; Kyoritsu 5406A S/N W0185587		
13	Clamp Ampere	Various Brand and Model		
14	Digital Earth Tester 4 unit	Fluke 1625; Megger DET 5/4R; Kyoritsu 4105A	S1116049488 4; 4849; W8048878;	
15	Phase Sequence	Hioki 3126-01	808061	
16	AC/DC Digital Clamp Meter	Kyoritsu 2003A; 2004; 2006; 2009A	W8017658	
17	Sound Level Detector	Tenmars TM-103	50401919	
18	Load Bank	For Battery / DC System 3 x 1,5 [·] Ω 680vDC	1	
19	Standard Isolated Tool Set	Digital AVO Meter Fluke 87, Screw, Megger & Etc		
20	Torque Wrench	Various Brand and Model (max.225 Nm)		
21	Engineering Software	ETAP Version 7.0.0	PTGUTINDO	
22	CAD Software	AutoCad 2010; Inventor 2010	•	
23	Digsi & Simatic Software	Siemens for Siprotec		
24	Mili Ohm Meter	Lutron MO - 2001	F.76442	
25	MegOhm Meter	Fluke 1520; Hioki 3453	101018833; 101116685	
26	Temp. Humidity Meter	Fluke 971	11521516	
27	Secondary Inject., 3 phase	OMICRON CMC 256-6	HD418Q	
28	Secondary Inject., 3 phase	OMICRON CMC 256-6	JA048S	
29	Secondary Inject., 3 phase	OMICRON CMC 356	GD841M	
30	Mobile Oil Station, 4000 litre/hour	GlobeCore CMM-4,0	0588	
31	Insullation Tester 5 Kv	Megger MIT 515		





Serial No

0312-1135M

1376094

2083071

1922154

1376093

1776200

587279-01483

603307-00617

46838

4503

9358067

4986B12

Brand / Type

AMETEK RK2-20B-SS

AMETEK / JOFRA

0020ABCITBHX

AMETEK / JOFRA

AMETEK / JOFRA

AMETEK / JOFRA

350GGBCITDWX

JOFRA ASC-301

JOFRA ASC-301

CTC-650B

CTC-1200A

RTC-250B

ALTEK 311A

SWAN

SWAN

BURSTER PT100

SWAN SDE-11HI

AMETEK / JOFRA

AMETEK / JOFRA

AMETEK / JOFRA

DRUCK-UNOMAT UPS11

TIME ELECTRONIC 1051

SWAN SD-415 OIL LESS

RANGE:

RANGE:

HPC502070G

HPC500 007C

HPC500 020C

HPC502001C

AMETEK TSQ-400B-1A/C

Emerson 475

INSTRUMENTATION TOOLS & EQUIPMENTS

Description

PNEUMATIC DEAD WEIGHT TESTER, Range:

HYDRAULIC DEAD WEIGHT TESTER (Type-T),

PRESSURE CALIBRATOR with T975 Hand pump -

PRESSURE CALIBRATOR with T975 Hand pump -

PRESSURE CALIBRATOR with T975 Hand pump -

PRESSURE CALIBRATOR with Handpump-system

PORT-2: Gauge Range - 0 to 350 bar /

PORT-1: Gauge Range - 0 to 70 bar / 1.000

PORT-1: Range - Vacuum to 2 bar / 30 psi.

PORT-2: Absolute Range - 0 to 20 bar / 290

HART / FIELD COMMUNICATOR

Single Piston, Range: 10 to 400 Bar.

system B. Range : 0 to 7 bar.

system B. Range : 0 to 20 bar.

0.01 to 20 Bar.

system B.

psi.

D Screw pump.

5.000 psi.

33°C to 650°C

150°C to 1200°C

Calibrator

Compressor

Advance Signal Generator

Advance Signal Generator

TEMPERATURE CALIBRATOR

TEMPERATURE CALIBRATOR

RANGE: 150°C to 1200°C

Vertical Air Receiver Tank

Refrigerated Air Dryer

REFERENCE TEMPERATURE CALIBRATOR

RTD (Resistance Temperature Detector)

Decade Resistance Box: 0.01 Ω - 900 k Ω

Oil removal Filter (removal oil vapor)

0 ~ 20 mA, Current Injector (Loop Calibrator)

nsi.

1.

2.

1.

2.



No

1

2

3

4

5

6

7

8 9

10

11

12

13

14

15

16

17

18 19

HART Communicator Emerson 475



Pressure Calibrator HPC500



Advanced Signal Generator ASC301





METEK - JOFRA CTC650 CTC1200 A







Dry Air Compressor Unit







TELECOMMUNICATION TOOLS & EQUIPMENTS



Anritsu Sitemaster S331E



SunLite GigE SLGE



BER Test Sunlite E1



Grinding-Lapping Machine for Gate Valves, Gates, Flanges. EFCO-SL-15.02



Insulation Tester



Installation Tools for Separabel Connector



EFCO Adjustable arms are used on various seat diameters

No	Description	Brand / Type	Serial No	
1	Cable and Antenna Analyzer 20 Units	Anritsu SiteMaster S251C; S331C; S331E; S331D		
2	2 ea Digital Power Meter	Bird 5000-EX 5010		
3	3 units BER Test Sunlite E1	SLE10634104951; SLE108171077171; SLE10833107424; SLE11205109157; SLE11205109167; SLE11205109159		
4	Digital Communication Analyzer	Acterna EDT-135	CG-0047	
5	Halca / Interface Com. Mobile System 25 set	et Halca S32010-U0404-X		
6	2 ea Handheld Test Solution	SunLite GigE SLGE verify end-to-end transport of Gigabit Ethernet/IP traffic, perform BER tests, determine throughput, link utilization, latency, packet jitter, and IP connectivity		
7	GPS & Compass	Garmin & Suunto		

MECHANICAL TOOLS & EQUIPMENTS

No	Description	Brand / Type	Serial No
1	Grinding-Lapping Machine Portable machine for grinding and lapping of sealing faces in gate valves, gates and flanges,	EFCO-SL-15.02 SL-Series, SL-15 EFCO Germany	02.154.0272
2	Valve Test Bench (max press 8000 psi)	Customized	-
3	Supporting Workshop Lathe Machine 800 x 2000 Drilling-Milling Machine Surface Grinding Machine Welding Machine Cutting Torch Measurement Tools	Guang zhou Kawakami - Weldtech - Mitutoyo	- - - - -
4	Installation Tools for separabel Connector	PFISTERER	305-758-004

SPECIAL CONSTRUCTION EQUIPMENTS

No	Description	Brand / Type	Serial No
1	Heavy Duty Hydraulic Winch Cable Puller		
	Spindlewinde (winch) cable puller	BAGELA RKW 5010, Year 1995	W09W05202 SKB13502
	 Cable Drum Transport and Laying Trailer 	BAGELA BTT-8020, Year 1998	W09T80109 WBB13105
2	Theodolite	PENTAX ETH-335	501114
3	Scafolding Pipe 6mtr & Accesories	Halysafe	1000 btg
4	Scafolding Frame & Accesories	Multisarana	200 set
5	Automatic Level	Nikon AS-2C	679265
6	Cable Roller Straight	Modification by PT.GUT	150 pcs





SPECIAL TOOLS & EQUIPMENTS SF6 Gas Handling & Treatment Machine Set

No	Description	Brand / Type	Capabilities
1	Service Chart (SF 6 - Gas Handling Devices and Units)	DILO Type L057R01, Economy Series	 a. Handling SF6 Gas with safety as per International regulation. b. Recovery (final vacuum of < 1 mbar) and putting into storage of SF6-gas from gas compartments. c. The gas compartment can be flooded with air, evacuated and filled with SF6 – gas. d. SF6 Gas purifying (during recovery & filling), effectively adsorb decomposition products and moisture.
2	SF 6 - Gas Storage Tank / Liquid	DILO Type B044R12, Capacity 600 Liter	a. The pressure vessels are produced and approved in accordance with the corresponding regulations. (e.g. 97/23 EC).b. The capacity up to 600 liter with 71 bar max. pressure.c. Can store the SF6-gas in gaseous form or at higher pressure in liquid form.
3	SF6 Multi Analyser (with gas return system)	DILO Type 3-038R- R302	 a. The SF6 Multi Analyser allows to determine the three most important parameters for reuse of SF6-gas with only one measurement: SF6 concentration [%] Moisture concentration (dew point) in degree Celsius. iii. SO2 concentration [ppmV] b. Automatically pumping the analyzed gas into the compartment (no need external storage).
4	Filter unit	DILO Type B071R11	a. Portable separating filter unit (pe 25 bar)b. For adsorption of oil-aerosols, moisture and gaseous or dusty decomposition products.
5	Leak Detector	DILO 3-033-R002	200000971
6	Leak Pointer	DILO 3-033-R002	2000001074



Service Chart (SF 6 - Gas Handling Devices and Units)



SF6 Multi Analyser (with gas return system)



SF 6 - Gas Storage Tank / Liquid



Filter Unit



DILO Leak Detector



Circuit Breaker Analyzer ISA













Civil Capabilities

In line with PT Graha Usaha Teknik progress and experience in doing electrical projects, mainly Substation and Transmission Line, the capability of handling civil work is a must as in the build a control building, concrete foundations, cable duct, and many other civil works. Therefore, the management of PT Graha Usaha Teknik believes that it is necessary to include civil works as a company capabilities improvement program.

In 2011, we started our very first civil work project of 70kV & 150kV Remote Substation Construction in Turn Key Basis - EPCC (Engineering, Procurement, Construction and Commissioning) scheme; a project entrusted by PT. Makmur Sejahtera Wisesa (Adaro Group).

In this project, the civil work is EPC scheme. The engineering phase started from topography survey, soil investigation, design, until foundation calculation and so on, while in the construction phase, we do all the work ourselves; from land clearing and earth moving work around 25,000 cubic meters, digging, form work designing until concreting foundations as well as construct the cable duct, drainage, and build supporting buildings and warehouse.

Based on the success of the above EPC Civil project, we continue our work in several projects. To date, we have been working in several civil works namely the civil engineering projects for 150kV Kota Agung Substation in Lampung – Sumatera in associate with Semangka Hydro Power Plant; Coal Shed & Ground Hopper Shed (EPC) construction project for the 2x35MW power plant of Adaro Group in South Kalimantan. We also awarded by Hyundai Engineering Co Ltd for the civil works in KALSEL1 2x100MW Coal Fire Power Plant project, owned by PT Tanjung Power Indonesia (Adaro Group and EWP Korea) for 150kV Double Circuit Transmission Line of 5 km length, as well as 150kV substation consisting of 7 bays with Turn Key project.

Our civil works capabilities are listed as below:

- 1. Preliminary Engineering
 - 1.1. Topography Survey
 - 1.2. Soil Investigation (CPT, SPT, Plate Load Test)
- 2. Engineering
 - 2.1. Loading Data
 - 2.2. Foundation Calculation
 - 2.3. Design Foundation
 - 2.4. Anchoring Calculation
 - 2.5. Design Control Building
 - 2.6. Warehouse
- 3. Construction
 - 3.1. Power Transformer Foundation and Fire Wall
 - 3.2. 150kV HV Equipment Foundation
 - 3.3. 150kV Gantry Tower Foundation
 - 3.4. 150kV Cable Duct Substation
 - 3.5. 150kV Transmission Tower Foundation
 - 3.6. Land Clearing of ROW (Right of Way) for Transmission Line
 - 3.7. Access Road as per PLN (owner) Standard
 - 3.8. Fence, Drainage and Landscaping
 - 3.9. Control building





- 4. Methode Statement
 - 4.1.
 - Clearing and Grubbing Excavation and Back filling 4.2.
 - Steel Reinforcement 4.3.
 - 4.4. Job Mix Design for Civil
 - Foundation Work 4.5.
 - 4.6. Anchor Bolt Installation













Mechanical Capabilities

In mid 2009, with a growing our business and capabilities, and for more focus on demand and customer satisfaction, the mechanical division was formed, which is integrated with the other divisions.

Mechanical Division is supported by experts who have minimum 10 years experience, dedicated and committed to achieving customer satisfaction. Currently this division specializes in Maintenance and Repair Valves (Hand, Control, and Safety) and Diesel Engine Generators.



Diesel Generator Engine Recondition

We specialized in the reconditioning of diesel engine generators. We also make the components of diesel generator engines, such as: cylinder liner, cylinder head, exhoust manifolds, heat exchangers, and other components at competitive prices.

In our experience, diesel generator engines which we have repair and reconditioning, including:

- MAK 8M 453
- DEUTZ MWM TBD 232 V12 •
- DEUTZ F 10L
- MIRRLESS
- COCKERILL
- · Provide components, such as: Flexible for Exhaust, liner, exhaust manifolds and other components for all types of diesel engine generators.



Valve Repair

Repair all brand and common size of valves (1" up to 24") with International Standard (API, ANSI, JIS)

- Hand Valve : Gate valve, Check valve, Ball valve, Globe valve, Plug • valve, Butterfly valve
- Safety Valve : Vacuum valve, Pressure Safety valve, Pressure Relief valve, Pilot valve
- Control Valve : Actuator, Controller, Positioner (Pneumatic, Hydraulic, and Electric)
- Online Repair
- In-situ Repair
- **Online Leak Sealing**







Valve Repair Scope of Work

- 1. Visualization check
- 2. Documentation
- 3. Pretest
- 4. Overhoule and Cleaning
- 5. Check Spindle/Stem
- 6. Check Seat and Disc
- 7. Check Flanges

- 8. Welding
- 9. Machining
- 10. Lapping
- 11. Assembling
- 12. Testing with: API 598, ANSI B16.34 or B.16.104
- 13. Painting.
- 14. Certification





















EXPERIENCE LIST			
POWER PLANT PROJECT	END USER	ORDER	YEAR
PT Krakatau Daya Listrik, Cilegon 80 MVA Oil Immersed Transformer Construction & Pre- commissioning	PT Krakatau Daya Listrik,	PT Siemens Indonesia	2005
HUNTLY POWER STATION, Genesis Energy, NEW ZEALAND Commissioning 11Kv Switchboard	Huntly Power New Zealand	PT Siemens Indonesia PTD	2006
DI LINH & Ca Mau I, II & III Power Plant VIETNAM Construction Supervision and Commissioning 500 kV ; 220 kV Substation	Vietnam Electricity (EVN)	PT Siemens Indonesia PTD Division	2006 ~ 2007
PT PLN BATAM Commissioning 150kV Substation (Baloi & Panaran Substation)	PT PLN BATAM	PT Siemens Indonesia PTD	2007
PT PLN Sumatera Utara EPC Power System for SCADA System	PT PLN Kitlur SUMUT	PT Siemens Indonesia PTDEA	2008
Sondu Miriu Hydropower Plant, Kenya Africa Electrical Commissioning, 5 line bay 135kV Switchyard	Kenya Hydro Power Plant	PT Siemens Indonesia PTD	2008
PT Riau Andalan Pulp & Paper, Riau Electrical, Instrument & Control Construction & Commissioning Supervision Work for New Steam Turbine Generator 112 MW	PT Riau Andalan Pulp & Paper	PT Siemens Indonesia Power Generation	2008
PLTU TANJUNG JATI B EXTENSION SITE Commissioning 150kV CT and CVT, 500kV / 150kV Substation	P.T. CENTRAL JAVA POWER	PT Siemens Indonesia PTD	2010
2 x 660 MW Tanjung Jati B Expansion Project Unit 3 & 4 Modification MV Panel, Testing of Transformers, Busduct and MV Switchgear.	Sumitomo Corporation	Black & Veatch Mitsubishi Toshiba;	2010
Tanjung Jati-B Expansion Project Unit 3 & 4 2 x 660MW Coal Fired Power Plant Test and Commissioning: 150kV Switchyard, MV / LV Power Distribution System, Isolated Phase Busduct	P.T. CENTRAL JAVA POWER	TOSHIBA CORPORATION	2011
PT Dian Swastika Sentosa Power Plant Serang Erection and Commissioning 20kV GIS and 150kV GIS	DSS Indah Kiat	PT ABB Sakti Industri	2011
Paiton-3 Expansion Project 815MW East Java Test and Commissioning: 500kV Switchyard (2 bays), MV / LV Power Distribution System (Transformer, Busduct, MV Switchgear, LV Switchboard), Substation Automation System.	PT Paiton Energy	Mitsui & Co Ltd	2011 ~ 2012
PLTU ASAM-ASAM 2 x 60 MW South Kalimantan Test and Commissioning: MV / LV Power Distribution System (Transformer, Busduct, MV Switchgear, LV Switchboard), Substation Automation System.	PLTU Asam- Asam	PT Wijaya Karya	2011 ~ 2012
ULUBELU GeoThermal Power Plant Construction & Commissioning 15kV Isolated Phase Busduct	PLN	PT SCHNEIDER Indonesia	2011 ~ 2012





YEAR

2011 ~

2012

2012

2012

2015 ~

2016

2016

2012

May 2015

 \sim

2016

EXPERIENCE LIST POWER PLANT PROJECT END USER ORDER PLTU BORANG 2 x 60MW PLN PT Wijaya Karya Construction and Commissioning: MV / LV Power Distribution System (Transformer, MV Switchgear, LV Switchboard). **Tanjung Power Plant 2x30MW - Kalsel** ADARO ENERGY, PT Punj Llovd Electrical and Instrumentaation Construction and Commissioning Tbk. Indonesia work **Isolated Phase Busduct (IPB)** Merak Energy PT ABB Sakti Banten Industri MV & LV Construction & Testing **Coal Fired Power Plant Babelan Project** PT. Cikarang PT ABB Sakti Listrindo Installation & Commissioning of GCB, IPB, 6.3kV Switchgear, LV Industri MCC IPMOMI **PAITON UNIT-8** HITACHI Replacing DS & VT forr 500 kV GIS **STG18 & GTG 22** PT ABB Sakti Sengkang Energy Construction & Commissioning 2 Trafo Bay 150kV Switchyard & Industri IPB (Isolated Phase Busduct) & Power Transformer Design, Supply, Installation, & Commissioning of 20kV **Distribution System Mining Electrification Batch-1 Office** PT. Makmur PT. Makmur 73 & Wara Crossing Plant Sejahtera Wisesa Sejahtera Wisesa Engineering, Procurement, Construction, Commissioning Design, Supply, Installation, & Commissioning of 20kV **Distribution System Mining Electrification Batch-2** PT. Makmur

Package 2 (Additional PAMA PUMPS) Aug 2015 PT. Makmur Sejahtera Wisesa Sejahtera Wisesa Feb 2017 Engineering, Procurement, Construction, Commissioning KALSEL 2x100 MW, Coal Fired Power Plant, Tanjung PT Tanjung Power Hvundai 2016 ~ Tabalong, South Kalimantan Indonesia Engineering Present Electrical and C&I Work





EXPERIENCE LIST				
SUBSTATION PROJECT	END USER	ORDER	YEAR	
PT Cikarang Listrindo Extension Phase IVB Installation of additional MV Panels & Commissioning 150kV Switchyard Phase IVB, Transformer, Relay, Safety & Control	PT Cikarang Listrindo	PT Siemens Indonesia	2007 ~ 2008	
PT Cikarang Listrindo Extension Phase VB Construction & Commissioning 150kV Switchyard, MV / LV Power Distribution System (Transformer, Busduct, MV Switchgear, LV Switchboard), Substation Automation System.	PT Cikarang Listrindo	PT Siemens Indonesia	2009 ~ 2010	
PT Cikarang Listrindo Extension Phase VC Construction & Commissioning 150kV Switchyard, MV / LV Power Distribution System (Transformer, Busduct, MV Switchgear, LV Switchboard), Substation Automation System.	PT Cikarang Listrindo	PT Siemens Indonesia	2010 ~ 2011	
Simangkuk 150kV / 275kV Substation Test and Commissioning 150kV (2 Line bay; 1 Trafo bay; 1 Bus coupler bay) 175kV (5 Line bay; 1 Trafo bay)	PLN	PT Siemens Indonesia	2011	
70kV GIS (Hybrid) Semen Tonasa V Test and Commissioning (3 Trafo, 3 Line Bay, 1 Bus Coupler)	PT Semen Tonasa	PT Siemens	2011	
UluBelu Geothermal Power Plant Test and Commissioning 150 kV 6 bays	PLN	PT Siemens	2011	
SCADA point to point test & commissioning 117 substations in East Java & Bali	PLN	PT Siemens	2011	
SCADA point to point test & commissioning Substations in Madura	PLN	PT Arlisco	2011	
150kV Substation Semen Tuban Construction, Test and Commissioning 150 kV Substation	PT Semen Tuban	PT Siemens	2011	
EPCC Contract 66kV Remote Substation Interconnecting with 150kV PLN Maburai Tanjung South Kalimantan Engineering, Procurement, Construction and Commissioning 66kV SwitchYard (2 Trafo bays, 2 line bays, 2 line bays spare)	PT Makmur Sejahtera Wisesa (Adaro Group)	PT Makmur Sejahtera Wisesa (Adaro Group)	2011 ~ 2012	
PLTU Biringkasi Semen Tonasa Construction, Test and Commissioning 70 kV Substation	PT Semen Tonasa	PT Siemens	2011 ~ 2012	
PT Cikarang Listrindo Extension Phase VI Construction & Commissioning 150kV Switchyard, MV / LV Power Distribution System (Transformer, Busduct, MV Switchgear, LV Switchboard), Substation Automation System.	PT Cikarang Listrindo	PT Siemens Indonesia	2012	
70kV Substation PLTU Tanjung / Adaro Test and Commissioning 70kV Substation	PT Adaro Tbk	PT ABB Sakti Industr	2012	
115kV GIS Siemens type 8DN8-2 6 Bays at Amole Site and 5 Bays at Power Plant C Construction and Testing	Freeport Indonesia	PT. Siemens Indonesia	2013	
3 Bay 70kV Substation Construction and Testing	PT. Indorama	PT ABB Sakti	2013	





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PLN	PT Wijaya Karya	2013
PLN	PT ABB Sakti Industr	2014
PLN	PT. Rekadaya Elektrika	2014
Siemens Philipine	Siemens Philipine	Apr 2015 ~ Oct 2015
PT. Rekadaya Elektrika	PT. Rekadaya Elektrika	May 2015 ~ 2016
PT. Adaro	PT. Makmur Sejahtera Wisesa	May 2015 ~ 2016
PT. Adaro	PT. Makmur Sejahtera Wisesa	May 2015 ~ 2016
HYUNDAI	HYOSUNG	2015
PLN	PT. Multifab	2015 ~ present
PLN	SIEMENS	2015
PT. Mulia Glass	PT. ABB Sakti Industri	2015
PT. Siantar	PT. ABB Sakti Industri	2015
Powerchina Huadong Engineering Corporation Limited	Powerchina Huadong Engineering Corporation Limited	2017 ~ Present
NR	PLN	Jun 2017 ~ Present
PT Tanjung Power Indonesia	Hyundai Engineering	2016 ~ Present
	PLN PLN Siemens Philipine PT. Rekadaya Elektrika PT. Adaro PT. Adaro PT. Adaro PLN PLN PLN PLN PLN PLN PLN PLN PLN PLN	PLNPT ABB Sakti IndustrPLNPT. Rekadaya ElektrikaSiemens PhilipinePT. Rekadaya ElektrikaPT. Rekadaya ElektrikaPT. Rekadaya ElektrikaPT. Rekadaya ElektrikaPT. Rekadaya ElektrikaPT. AdaroPT. Makmur Sejahtera WisesaPT. AdaroPT. Makmur Sejahtera WisesaPT. AdaroPT. Makmur Sejahtera WisesaPT. AdaroPT. Makmur Sejahtera WisesaPT. AdaroPT. Makmur Sejahtera WisesaPLNPT. MultifabPLNSIEMENSPLNSIEMENSPT. Mulia GlassPT. ABB Sakti IndustriPT. SiantarPT. ABB Sakti IndustriPowerchina Huadong Engineering Corporation LimitedPOWerchina Huadong Engineering Corporation LimitedPT Tanjung PowerHyundai





EXPERIENCE LIST OIL & GAS PROJECT YEAR END USER ORDER **TUNU FIELD DEVELOPMENT PROJECT PHASE 11 / EPSC-8** 2007 ~ TOTAL PT Adhi Karya INDONESIE, 2009 EPC Electrical System, SOUTH PROCESSING UNIT (SPU) CAMP Tbk **MODEC Cidade de Niteroi FPSO MV18 E-House Project** Siemens Pte Ltd Installation and Pre-commissioning MV Panel at Bohai Oil Marine Bohai Oil Marine 2008 Singapore Engineering & Supply Co., Ltd Tianjin, China PTT Exploration Arthit Field Off Shore, Siemens Pte Ltd and Production, 2008 Singapore Commissioning LV MCC, Thailand PT Siemens Adriatic LNG Project, Singapore & Cadiv Spain Adriatic LNG Indonesia PTD 2008 Spain MV Panel Installation & Commissioning Division Siemens Pte Ltd **Odfjell-DSME Korea** ODFJELL 2008 Singapore Generator Package Field Commissioning **Prosafe Azurite FDPSO Project** Siemens Pte Ltd Prosafe 2008 Singapore **Electrical Commissioning HELIOS HELIOS Singapore** Siemens Pte Ltd 2008 ~ Singapore Modification MV Switchgear in Jurong Island Singapore Singapore 2009 B281 & B288 GSF KFELS Norway Project Siemens Pte Ltd 2008 ~ Maersk 2009 Installation and Commissioning MV System Singapore **NOV Labroy Jack up Drilling Rig** Siemens Pte Ltd National Oil Well 2009 Singapore Pre Commissioning and Commissioning MV System Central Processing Platform (CPP) and Auxiliary & Utility Platform (AUP) Ujung Pangkah Field PT Gunanusa Electrical, Instrumentation and Telecommunication Construction and Utama HESS 2010 Commissioning Work at PT Gunanusa Utama Fabricators' Cilegon Fabricators Shipyard and at field site, Ujung Pangkah, Gresik East Java during Hook Up stage Betara Development Complex (BCD) Project Jambi PT. Meindo Elang MEDCO 2011 Indah Installation and Pre-commissioning MV System **CPP and AUP Ujung Pangkah Field** PT ABB Sakti HESS 2011 Industri Modification, Installation and Commissioning Busbar Service **PNG LNG Project** Papua New Siemens Pte Ltd 2011 ~ Installation Supervision and Commissioning, E-House, MV & LV Guinea LNG Singapore 2012 System Pertamina EP Cirebon X-Ray Alpha Flow Station Offshore Pertamina Audy 2012 Retrofit and calibration turbine monitoring system.





EXPERIENCE LIST

INDUSTRIAL PROJECT	END USER	ORDER	YEAR
PT Freeport Indonesia, Papua 10MVA Transformer (Commissioning) at Low Land Power Plant Medium Voltage Switchgear Maintenance Mil74	PT Freeport Indonesia	PT Pimurho & PT SAS International	2005 & 2007
 PT Siemens Indonesia PTD Division (QA/CS Dept) Wiring & connection various MV Siemens panels Pre-commissioning of 500KV, 220KV, 110KV, 22KV control panel for Di Linh, Dai Ning, Phan Ri Vietnam substation for Hydropower plant project Pre-commissioning of 150KV, 22KV control panel for Petrobrass Dubai Substation 	PT Siemens Indonesia PTD Division	PT Siemens Indonesia PTD Division	2005 up to 2008
Lindeteves Trade Center, Jakarta Construction & Commissioning 4XGEAFOL Cast Resin Trafo 2 & 2.5MVA/400 V	Lindeteves Trade Center	PT Siemens Indonesia PTD Division	2006
TRACTION PROJECT (Railway) Construction & Commissioning Traction Substation: HSCB 1500 VDC, 3000A, VCP, Transformer for KARET, LIMO, SERPONG, JURANG MANGU, MAJA, CIATER Traction System.	PT KAI (Kereta Api Indonesia)	PT Siemens Indonesia Mobility	2006 ~ 2009
PT Grand Indonesia (Hotel Indonesia) & Pacific Place, Jakarta Construction & Commissioning Drytype Transformer (1000 ~ 2400 KVA) 44 unit for Grand Indonesia & 35 unit for Pacific Place	PT Grand Indonesia and Pacific Place	PT Siemens Indonesia PTD Division	2007 ~ 2008
Oil Additives Plant – Rohmax Singapore Commissioning Automation System, DCS – Siemens PCS 7	Rohmax Singapore	Siemens Pte Ltd Singapore	2007 ~ 2008
PT PERURI Repair, Testing & Commissioning of Protection & AVR	PT Perum Peruri	PT Dian Graha Elektrika	2008
Medium Voltage Retrofit Retrofitting 13 panels of MV Switchgear , (Replace breaker & interlocking system)	PT Angkasa Pura (Soekarno Hatta Airport)	PT SCHNEIDER Indonesia	2008
Medium Voltage Retrofit Retrofit 36 cubicles MV Switchgear for Power House Pulo Gadung, Kalimalang and Cakung	PT AETRA AIR Jakarta	PT AETRA AIR Jakarta	2008
PT PERURI Maintenance SwitchYard 150kV, OLTC Siemens & Union Transformer 150/20 kV incld Relay Trafo and Circuit Breaker 150 & 20kV	PT Perum Peruri	PT Perum Peruri	2010
Tonasa V Main Installator Electrical and Instrument Main Installator Package C3101 Services in Tonasa V – Sulawesi Selatan	PT. Semen Tonasa	PT. Semen Tonasa	2011
LV & MV Construction and Commissioning	PT. Indorama	PT Siemens Indonesia	2013
OKI Pulp & Paper Installing 33kV GIS (84 feeders) & 150kV GIS (10 Bays)	OKI Pulp & Paper	OKI Pulp & Paper	2015 ~ present





EXPERIENCE LIST

MAINTENANCE PROJECT	END USER	ORDER	YEAR
PT PLN (PLTGU Belawan / Power Plant), North Sumatera Electrical & Instrumentation Scope for Major Overhaul / Up grade Gas Turbine Generator Unit 1.1 (400MW)	PLN Belawan	PT Siemens Indonesia Power	2006
Paiton Power Generation Unit 5 & 6 Power, East Java Maintenance Circuit Breaker Analyzer & Inspection GIS 500 kV; Trafo 760MVA, Busduct 21kV & Generator Star Point	YTL JAVA POWER	PT Siemens Indonesia PTD Division	Routine: 2006 up to now.
Muara Tawar Power Plant (Indonesia Power), Bekasi Electrical & Instrument Maintenance (Routine Maintenance) Unit 3.1; 3.2; 3.3; 4.1; 4.2; 4.3 @143 MW Gas Turbine Generator.	PT Siemens PGOM	PT Siemens PGS & PGOM	Routine: 2006 up to now.
 North Duri Cogeneration Plant, Chevron, Riau 2012. Major Overhaul Gas Turbine Generator Unit 1, 2, 3 (@ 125MW) 2. Electrical & Instrument Combustion Inspection TG Unit 1, 2, 3 	MCTN Chevron	PT Siemens Indonesia	Routine: 2006 ~ 2010 up to now.
PT Newmont Batu Hijau Electrical & Instrumentation scope for Limited Outage Turbine Generator Unit #51	PT Newmont Batu Hijau	PT Siemens Indonesia PGS	2007 ~ 2008
Tanjung Enim Lestari Pulp & Paper Maintenance Turbine Generator, Electrical maintenance	Tanjung Enim Lestari Pulp & Paper	PT Siemens Indonesia Power Generation	2008
PLTU TANJUNG JATI 2 Maintenance HV Equipment, 150kV and 500kV GIS Switchyard	PLTU TANJUNG JATI 2	PT Siemens Indonesia PTD	2008 ~ 2009
North Duri Cogeneration Plant, Chevron, Riau Major and Minor Overhaul Gas Turbine Generator Unit 1, 2, 3 (@ 125MW)	MCTN Chevron	PT Torishima Guna	2012 ~ 2014
Paiton Unit 3 – 800MW Electrical Maintenance	Mitsui	PT. IPMOMI	2013
PLTD Pesanggaran Bali Electrical Maintenance	PLN	PT ABB Sakti Industri	2013
TJB Unit #3 Planned Maintenance Outage Maintenance of electrical and C&I	РТ. КРЈВ	РТ. КРЈВ	Jul 2015 ~ Aug 2015
Major Maintenance Cirebon Project Maintenance of Electrical	PT Cirebon Electric Power	PT Cirebon Electric Power	2014 & 2016





EXPERIENCE LIST		
REPAIR SERVICE ELECTRONIC	S/N	YEAR
HART Communicator, Fisher Rosemount Model 275	03121135M	May 2010
Antenna Frequency Analyzer ANRITSU S251C	337029	May 2010
Digital Insulation Test 5kV	96099010350996	May 2010
DC Dielectric Strength Test; Hipotronic DC 80 kV	9403152	August 2010
Digital Multi Meter, Fluke Model 187	79100581	October 2010
Digital Multi Meter, Fluke Model 187	89310161	October 2010
RCD (Residual Current Detector) Kyoritsu 5406A	WO185587	October 2010
Wesfalia Separator Control Model PLC 100/2	000001808	October 2010
Temperature Indicator, Sika Model ES980109226006	9205012	October 2010





EXPERIENCE LIST			
MECHANICAL	END USER	ORDER	YEAR
Repair Engine Diesel Generator MAK M8 453 Reconditioning Seat Cylinder Liner MAK 8M 453	PLTD Bagan Besar	PLN - DUMAI	2010
Valve Repair Gate Valve 12" Class 300, Globe Valve 2" class 600	Pertamina Balongan	PT. Golden Pratama Engineering	2010
Valve Repair Gate Valve 12" Class 300, Gate Valve ¾" class 800	Pertamina Balongan	PT. Golden Pratama Engineering	2010
Engine Repair Personel Project	1	1	
COCKERILLManufacturing new exhoust manifold	PLN Bengkulu	PLN Bengkulu	2009
DEUTZ MWM TBD 232 V12Reconditioning exhoust manifolds	PLTD Batu Panjang		n/a
DEUTZ F 10LReconditioning cylinder head	PLN - DUMAI	PLN - DUMAI	n/a
 MIRRLESS Reconditioning cylinder head, valve seat ring, and spindle valve 	PLTD Bagan Besar	PLN - DUMAI	n/a
 Provide components, such as: Flexible for Exhoust, liner, exhoust manifolds and other components for all types of diesel engine generators. 	All User	All User	
VALVE REPAIR Personel Project	1	l	
 Hand Valve: Gate valve, Check valve, Ball valve, Globe valve, Plug valve, Butterfly valve Safety Valve: Vacuum valve, Pressure Relief valve, Pilot valve, Pressure safety valve Control Valve: Actuator, Controller, Positioner (pneumatic, Hydraulic, and Electric) Online Repair Insitu Repair Online Leak Sealing 	 PT. Bridgestone Tire Indonesia, Bekasi PT. Indonesia Power, Tg. Priok (PLTU) PT. Pupuk Sriwijaya, Palembang PT. Asahimas, Cilegon PT. Chandra Asri, Cilegon Shell Eastern Petroleum, Singapore Mobil Oil Singapore Singapore Refining. Co Ethylene Glycol Singapore The Polyolefin Co, Singapore Esso Singapore Pte. Ltd. Philips Petroleum Singapore Corp. Titan Petrochemical Company Malaysia Pertamina UP Dumai; Cilacap; Balongan; PT. Inco, Sulawesi PT RAPP, Pekanbaru PT. Pertamina, 		1995 ~ 2009

EXPERIENCE LIST			
TELECOMMUNICATION PROJECT	END USER	ORDER	YEAR
GSM BTS, BSC, MSC, 3G, Microwave antenna Installation, Commissioning, Optimization and Up grading (Jawa, Sumatera, Sulawesi & Kalimantan)	Indosat Telkomsel Excelcom Hutchison CP	PT Siemens Indonesia COM CS	2005 ~ 2006
Electrical, Network & PABX System Hutchison CP Office Jakarta, Semarang, Surabaya & Denpasar	Hutchison CP	PT Siemens Indonesia COM CS	2006 ~ 2007
GSM 3G Project Radio Frequency Site Survey JABOTABEK, BANDUNG & LOMBOK	PT Excelcomindo	PT Ericsson Indonesia	2007
GSM 3G Project CME Survey Design Package & Tower Analysis for Balikpapan Area	PT INDOSAT	PT Huawei Tech Investment	2007
Siemens - Hutchison CP (GSM 3G Project) PLN Connection, BODETABEK Area	Hutchison CP	PT Siemens Indonesia COM CS	2007
Siemens - Hutchison CP (GSM 3G Project) Engineering Power System of Mobile Switching Center & MGW (Jakarta, Surabaya, Bandung, Cirebon, Solo, Semarang, Batam & Pekanbaru)	Hutchison CP	PT Siemens Indonesia COM CS	2007 ~ 2008
PT Natrindo Telepon Seluler Survey Design Package & Tower Analysis for Central Java Area	PT Natrindo Telepon Seluler	PT Huawei Tech Investment	2008
GSM BTS, BSC, MSC, 3G, Microwave antenna Installation, Commissioning, Optimization and Up grading (Jawa, Sumatera, Sulawesi & Kalimantan)	Indosat Telkomsel Excelcom Hutchison CP	PT Nokia Siemens Network	2008 ~ 2009
Re-Deploy project NSN to Huawei for Hutchison CP (three)	Hutchison CP	PT Huawei Tech Investment	2010 ~ 2011
Indonesia HCPT NEPA & MEGA TK Project (MEGA 1) BTS & MW Installation and commissioning (new, swap, upgrade) Area: North Sumatra, Central Sumatra, South East Sumatra, Central Java & East Java	НСРТ	PT Huawei Tech Investment	2011 ~ 2012
Telkomsel wireless 2012 (south east sumatera)	Telkomsel	PT Huawei Tech Investment	2012
NSN project Esat Java, Bali & Lombok BTS & MW Installation and commissioning	НСРТ	PT Nokia Siemens Network	2012 ~ 2013
H3I MEGA TK Phase2 (MEGA 2) BTS & MW Installation and commissioning (new, swap, upgrade) Area: North Sumatra, Central Sumatra, South East Sumatra, Central Java.	НСРТ	PT Huawei Tech Investment	2014 ~ present
First Media Medan LTE Project 2014	First Media	PT Huawei Tech Investment	2014 ~ present
Area: North Sumatra			FICOCIN
Indosat Jaguar Project New,swap & modernization Area: West Java, Central Java, East Java	Indosat	PT Huawei Tech Investment	2015
Berca LTE Project 2015 Area: Pekanbaru	Berca	PT Huawei Tech Investment	2015 ~ present

EXPERIENCE LIST			
CIVIL	END USER	ORDER	YEAR
EPCC Contract 66kV Remote Substation Interconnecting with 150kV PLN Maburai Tanjung South Kalimantan Foundation Gantry tower, Foundation Transformer, Cable Duct, Fence, Road & Control Building	PT Makmur Sejahtera Wisesa (Adaro Group)	PT Makmur Sejahtera Wisesa (Adaro Group)	2011 ~ 2012
Switchyard 150kV Indoliberty & GI Maliby Karawang Barat Cable Duct, Fence, Road & Control Building	PT Indoliberty	PT Citra Mas	2014
Chemical & Oil Warehouse PLTU 2x30 MW Tanjung Tabalong, South Kalimantan Steel Structure, Foundation, Drainage	PT Makmur Sejahtera Wisesa (Adaro Group)	PT Makmur Sejahtera Wisesa (Adaro Group)	2012
Batch-1 & Batch-2 20kV Mining Electrification, Tanjung Tabalong, South Kalimantan Scope of Work: EPCC - 20 kV Transmission Line Pole Foundation (5 km +12 km) - 20 kV Compact Substation Foundation (8 sets)	PT Makmur Sejahtera Wisesa (Adaro Group)	PT Makmur Sejahtera Wisesa (Adaro Group)	2013 - 2014
 KALSEL 2x100 MW, Coal Fired Power Plant, Tanjung Tabalong, South Kalimantan Scope of Work: EPCC KALSEL Switchyard Foundation (5 bays) Tanjung Substation Extension Foundation (2 bays) 150 kV Transmission Line Tower Foundation (15 towers) 150 kV Transmission Line Crossing Gantry Foundation (2 sets) Substation Drainage 20 kV Transmission Line Pole Foundation (7 km) Water Pump House Foundation Raw Water Transfer Pipe Line Foundation (7 km) 	PT Tanjung Power Indonesia	Hyundai Engineering	2016 ~ Present
Construction for SMGP Transmission Line & Substation Project at Mandailing Natal, North Sumatra Substation and Transmission Lines execution and completion of construction, supply of raw material, site delivery, construction, installation, inspection and testing, pre-commissioning & commissioning.	Powerchina Huadong Engineering Corporation Limited	Powerchina Huadong Engineering Corporation Limited	2017 ~ Present