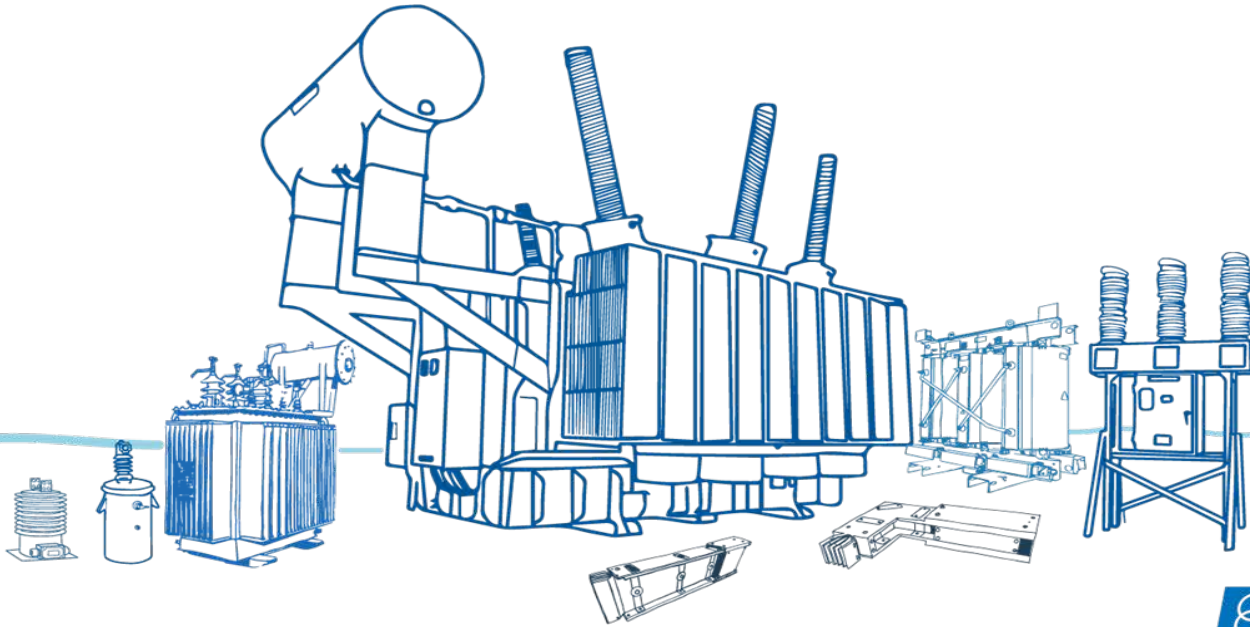


Corporate Profile



 **Energypac**[®]
Engineering



Proud recipient of the
Gold Medal, National Export Trophy



Corporate Headquarter

Energy Centre,
25, Tejgaon I/A,
Dhaka, Bangladesh



Factory Address

Dhaka, Bangladesh.
Kolkata, India.
Brescia, Italy.



Order Bookings

(FY 2018-2019)
USD 235 Million
BDT 20 Billion



Revenue

(FY 2018-2019)
USD 150 Million
BDT 12.00 Billion



Manpower

Engineers: 245
Officers: 544
Technicians: 3634

Energypac Seafood

Energypac Wires & Cables

Energypac Agro

Energypac Power Generation

Techadvantage

Energypac Fashions

Energypac Confidence Power Venture

Energypac Electronics



Introduction

- Energypac Engineering is the country leader in providing end-to-end power solutions for over three decades.

- It is a member of Energypac Group, a Bangladeshi multinational conglomerate comprised of 10 companies.

- With years of expertise, state-of-the-art manufacturing technology and testing facilities, Energypac produces a wide range of power products for power generation, transmission, distribution systems, infrastructure, industry unit & commercial building.

Introduction



Expert solution providers

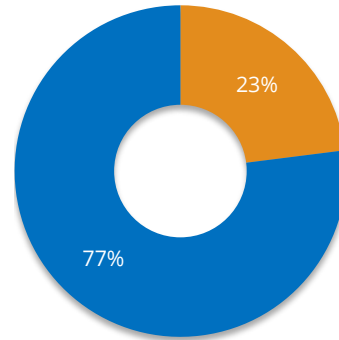
Power generation
Power transmission
Heavy industrial applications



Eco-friendly manufacturing practices

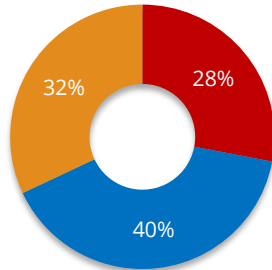
Use electrical power efficiently
Increase industrial productivity
Lower environmental impact

Organizational structure



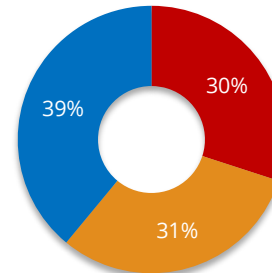
Human Resource

- Corporate Employee
- Production Employee



Corporate Team

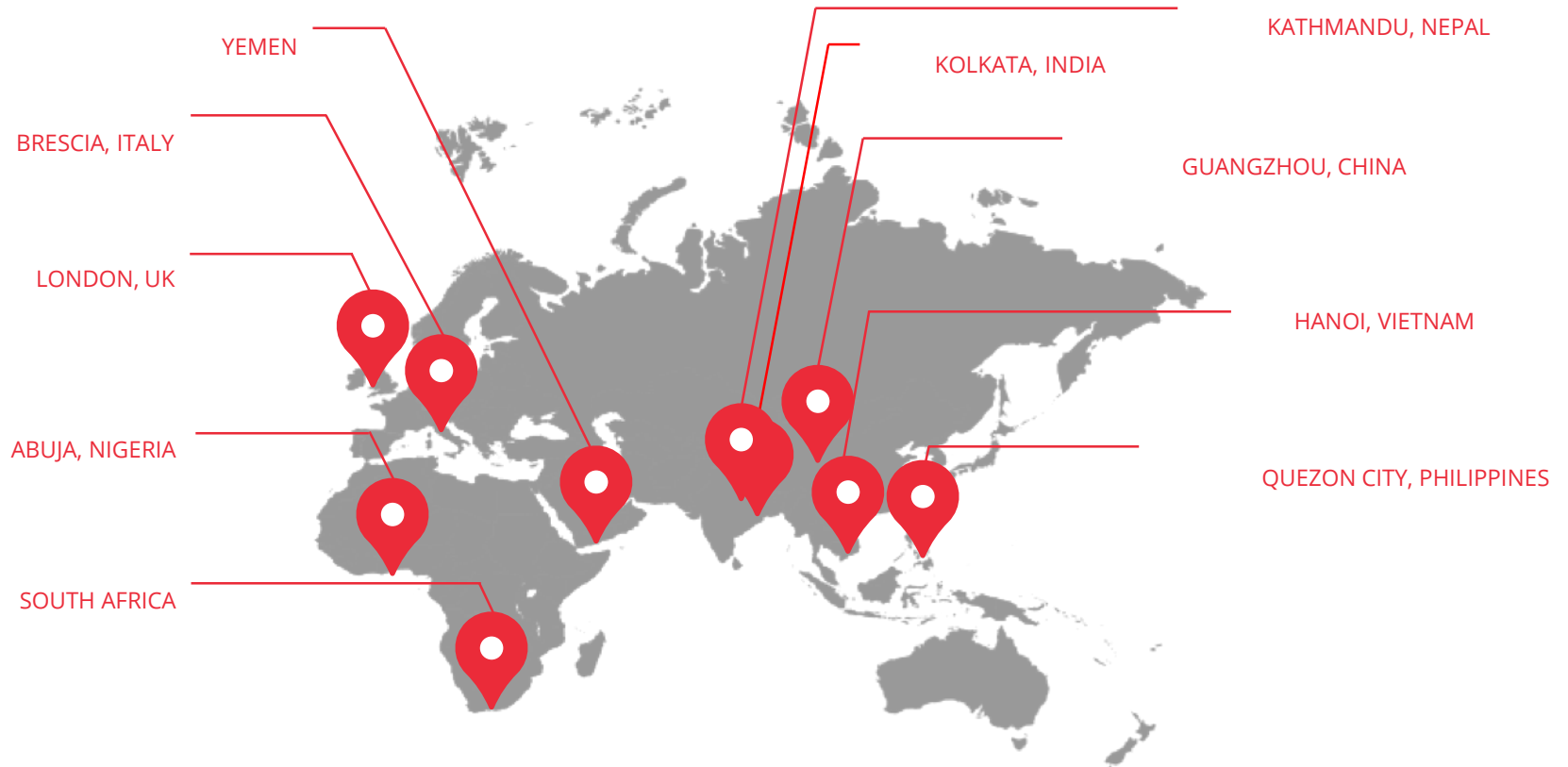
- Executives
- Diploma Engineers
- Graduate Engineers



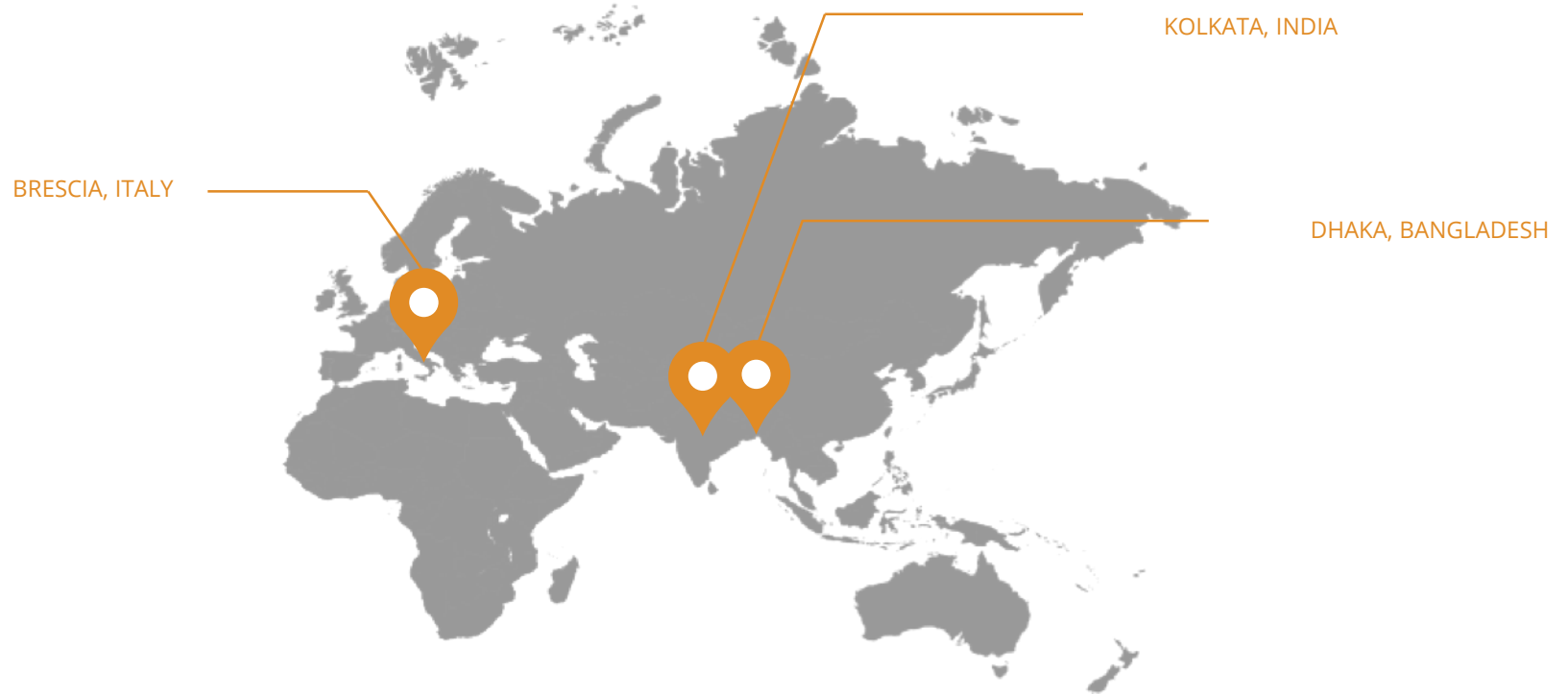
Production Team

- Executives
- Diploma Engineers
- Graduate Engineers

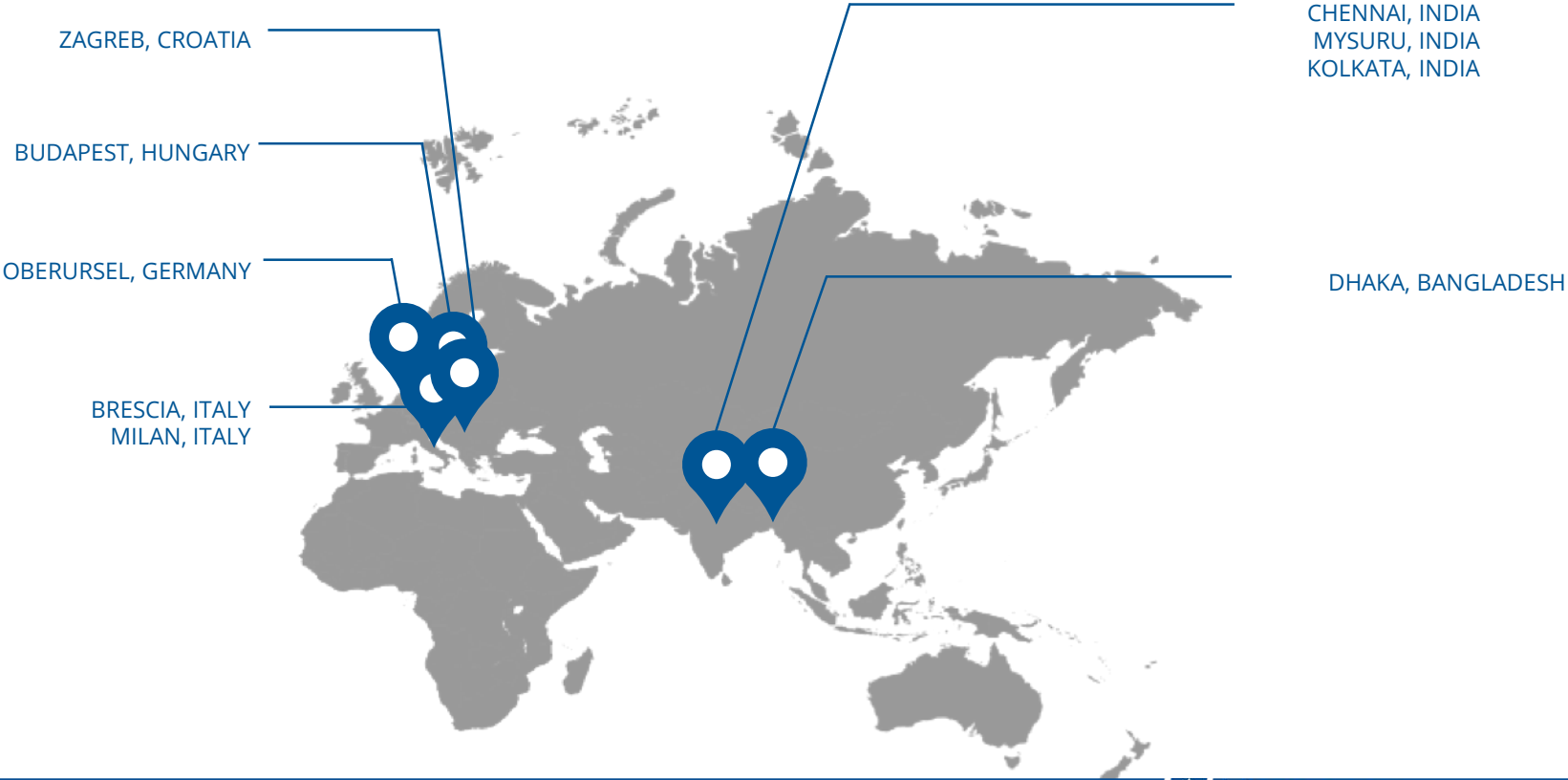
International trade operations



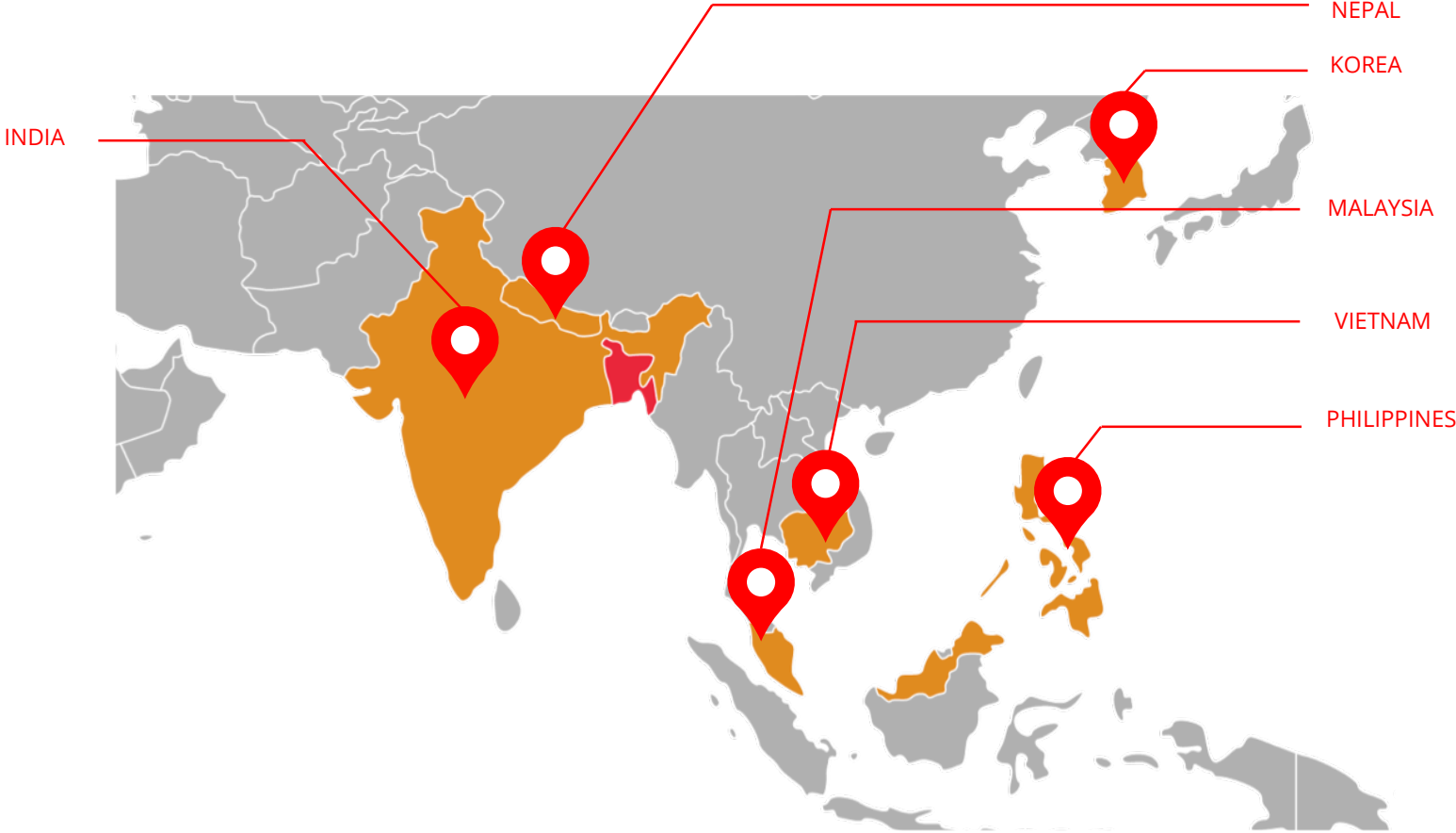
Production sites



Design operations



South-Asian market



Middle-east market



Europe market



Clients



Our milestones- over 37 years

2019

First time in Bangladesh, manufacturing 300MVA power transformer.

2018

Successful short circuit type testing of 120MVA, 132/33kV power transformer from CPRI.

2015

Established production unit in Kolkata, India.

2014

Founded new production unit in Brescia, Italy.

2013

Manufactured Cast Resin Transformer, Busbar Trunking (BBT) system and 230kV high voltage instrument transformer for the first time in Bangladesh.

2012

First time in Bangladesh, manufactured Foil type Distribution Transformer.

2010

Manufactured 50MVA Power Transformer with on load tap changer for the first time in Bangladesh.

2007

First time in Bangladesh, manufactured 132kV high voltage power transformer.

2005

Manufactured 50MVA Power Transformer with on load tap changer for the first time in Bangladesh.

1997

Production of 10MVA, 33kV Class Power Transformer.

1986

Production of Distribution Transformer.

1982

Inception of Energypac.

Production facilities



Production facilities



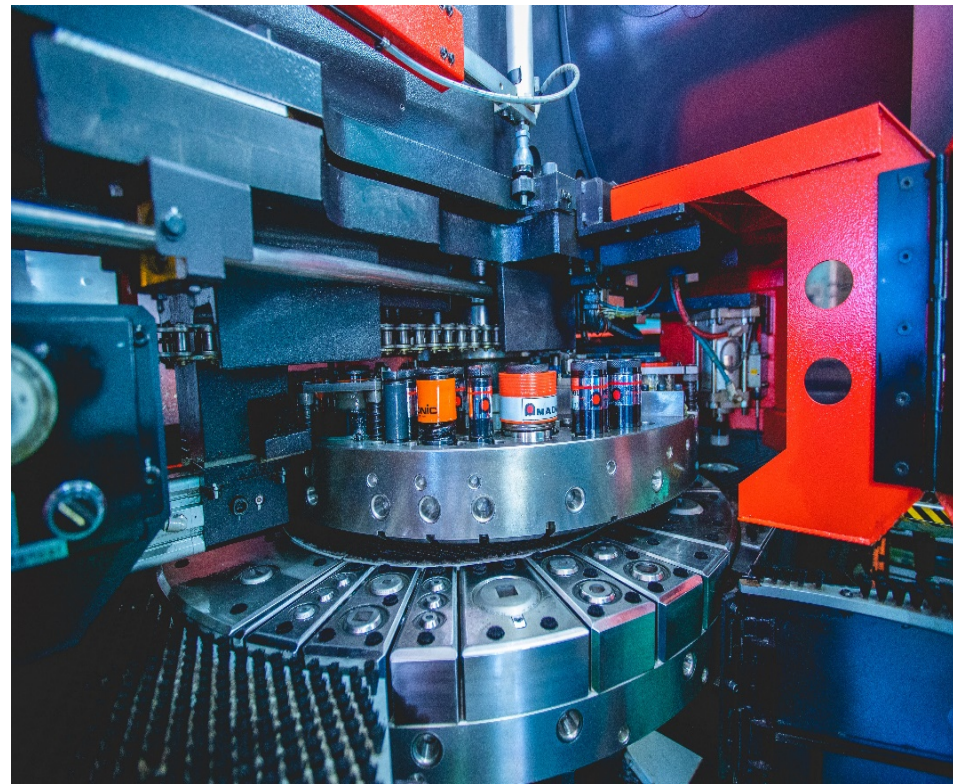
Manufacturing facilities



Manufacturing facilities



Manufacturing facilities



Testing facilities



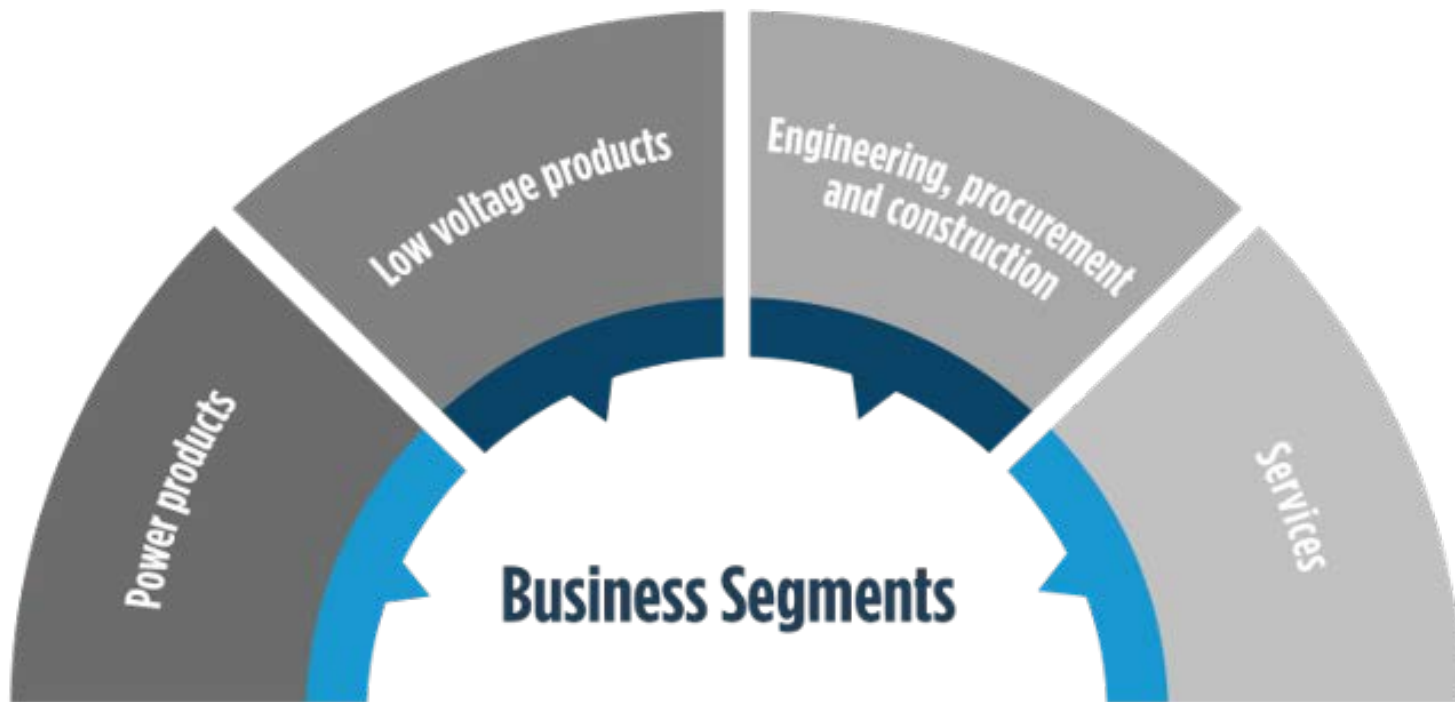
Testing facilities



ISO/IEC
17025:2005

NABL Accredited High Voltage Testing & Calibration Laboratories.

Business segments



Portfolio of electricity transmission & distribution

Products



Power Transformers



Distribution Transformers



Cast Resin Transformer



Single Phase Transformers



Instrument Transformers



Variac



Disconnectors & by-pass switches



Vacuum Circuit Breakers



Automatic Circuit Reclosers



CRP Panels



RTCC Panels



Gas Insulated Switchgears



Ring Main Units



Load Break Switches



Low Voltage Switchgears



Busbar Trunking Systems



Automatic Voltage Regulators



Step Voltage Regulators

Systems



Substations



Distributed Energy



Power Distribution

Automation



Automation Systems



Automation Support

Service



Maintenance & Repair



Erection & Commissioning



Retrofit



Spare Parts



Total Asset Care



Training & Network Consulting

Engineering, procurement and construction



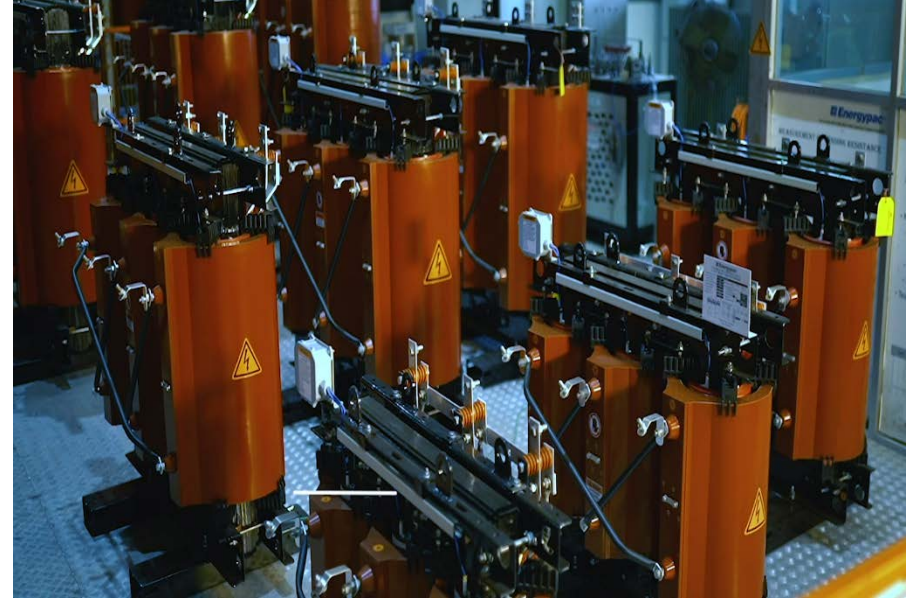
Turnkey solutions for-

- Power generation plants.
- Transmission grids.
- Distribution networks.
- Substation for infrastructure & Utilities.
- Substation for industrial unit/ plants.
- Substation for commercial building.

Service

- Installation and commissioning
- Onsite repairs
- Repairing, retrofitting and remanufacturing at factory
- On and offsite testing
- Spare parts and consumables

Products in focus



Designed, manufactured and tested in international standards (IEC, ANSI, BS, IS)

Power transformers

- Type Tested up to 120MVA, 132/33kV.
- Product range: Three phase up to 500MVA, 400kV
- Robust design features and low life-cycle costs.
- Energy efficient.
- IEC, IS and ANSI standard.
- Yearly production capacity 7000MVA.

2019

Energypac
Engineering

300 MVA

First 300 MVA
Power Transformer
manufacturer in
Bangladesh

Distribution transformers

- Type tested-

Single Phase Transformer	
5KVA	6350/240V
10KVA	6350/240V
15KVA	6350/240V
25KVA	6350/240V
37.5KVA	6350/240V
50KVA	6350/240V
75KVA	6350/240V

- Product range: Single phase oil immersed up to 100KVA, 11kV.
- Product range: Three phase oil immersed up to 35MVA, 36kV.
- Hermetically sealed and energy efficient.
- Yearly production capacity-
 - Single phase distribution transformer 70000 units.
 - Three phase distribution transformer 5000 units.

Three Phase Transformer	
100KVA	11/.415kV
100KVA	33/.415kV
200KVA	11/.415kV
200KVA	33/.415kV
250KVA	11/.415kV
1000KVA	11/.415kV
2500KVA	11/.415kV
5000KVA	33/11kV
10/14 MVA	33/11kV
20/28 MVA	33/11kV

Fireproof transformers

- Type Tested up to 2000KVA, 11/.415kV
- Product range up to 10MVA, 36kV.
- Windings encapsulated in epoxy resin reinforced fiber mesh under vacuum.
- Fire Resistant & Self-Extinguishing.
- High resistance to fire ignition.
- Reduces smoke, flame speed, heat release and fire emission.
- Yearly production capacity 1200 units.

Instrument transformers

Oil immersed:

- Type Tested up to 132kV.
- Product range up to 400kV.
- Using H class (Temperature sustainable capacity up to 200°C) super enameled copper wires.
- IEC, IS and ANSI standard.
- Yearly production capacity 4700 units.

Dry Type:

- Type Tested up to 36kV.
- Product range up to 36kV.
- Indoor and outdoor type.
- IEC, IS and ANSI standard.
- World best Hedrich, Germany APG casting line.
- Yearly production capacity 23000 units.

Disconnecter & by-pass switches

- Type Tested up to 145kV
- Product range: up to 245kV, 50kA, 3000Amp.
- HC Copper contact parts.
- Turn and twist mechanism for easy operation.
- Contacts silver plated for higher conductivity (Ag-Ag)
- Yearly production capacity 10000 units.

Busbar trunking system

- Type Tested up to 5000A.
- Product range up to 6300A.
- Replacement for cables and distribution boards at floor level buildings
- 10 times safer than PVC cable.
- 30 times safer than PE cable.
- Lower voltage drop.
- Compact structure and no maintenance.
- Yearly production capacity 12000 meters.

Outdoor vacuum circuit breaker

- Type tested: up to 36kV, 31.5kA, 2000Amp.
- Product range up to 36kV, 31.5kA, 2500Amp.
- Very Robust spring operated mechanism.
- Three pole operation system.
- Shunt close/ trip with anti pumping feature.
- Tested according to IEC 62271-100 standard.
- Mechanical life- 10,000 times of operation.
- Yearly production capacity - 600 sets.

Automatic circuit reclosers (ACR)

- Product range: 15kV and 38kV.
- Mechanical life- 10,000 times of operation.
- Solid insulation- environmentally friendly product.
- Magnetic Actuator Mechanism, Vacuum Interrupter.
- Maintenance free during its entire lifetime.
- Compact design.
- 58 TC curves (IEC, ANSI, Recloser-Innate, User defined curves).
- Yearly production capacity 1000 units.

15.5kV
800A



15.5kV
800A



12kV Ring main unit (RMU)

Panel: ERM-V (Breaker):

- Rated current 630A and rated short time withstand current 20kA for 3 second.
- Three position disconnector/ earthing switch downstream vacuum circuit breaker.
- Interlocking between vacuum circuit breaker & disconnector/ earthing switch.
- Protection relay with ring core CTs on cable bushings.
- SF6 pressure indicator.
- Yearly production capacity 100 units.

Panel: ERM-F (LBS with Fuse):

- Rated current 630A and rated short time withstand current 20kA for 3 second.
- Three position switch fuse disconnector with upstream earthing switch mechanically linked with downstream earthing switch.
- Motor operation for load break switch.
- Yearly production capacity 100 units.

Panel: ERM-C (LBS without Fuse):

- Rated current 630A and rated short time withstand current 20kA for 3 second.
- Three position load break switch with disconnector and earthing switch.
- SF6 pressure indicator.
- Motor operation for load break switch.
- Capacitive voltage indication system.
- Yearly production capacity 100 units.

Control and protection panel

- Product range up to 400kV.
- Distance protection.
- Transformer differential protection and line differential protection.
- Over voltage and under voltage protection.
- Over current and earth fault protection.
- Low and high impedance type busbar protection.
- IEC, IS and ANSI standard.
- Yearly production capacity 600 units.



Indoor VCB control panel:

- Type tested up to 12kV, 31.5kA, 2500Amp
- Product range: up to 36kV, 31.5kA, 3150Amp.
- Very Robust spring operated mechanism.
- Shunt close/trip with anti pumping feature.
- Tested according to IEC 62271-100 standard.
- Mechanical life- 10,000 times of operation.
- Non directional O/C & E/F protection.
- Yearly production capacity - 2200 sets.

Low tension switchgear

- PCC, SDB, DB, Consumer Units & etc.
- Up to 6300A
- IEC 61439-1 & -2 & IEC 60439-1 complied
- Licensed assembler on ABB type tested panel.
- Custom design for higher rating.
- Robust construction.
- Change & manual over switch.
- Yearly production capacity 2200 units.

Motor control centers

- All kind of motor starting including VFD.
- Intelligent ventilation
- IEC 61439-1 & -2 & IEC 60439-1 complied
- Type 2 or Type 1 coordination
- Large variety of control
- On demand configuration
- Long functional life
- Yearly production capacity 500 units.

Power factor improvement panel

- Product range: up to 2400kVAR
- Maintain high power factor consistency
- Intelligent ventilation.
- IEC 60831-1 & -2 complied.
- Tailor made design.
- High life expectancy.
- Harmonic management by filter or reactor.
- Wide range of advanced controller.
- Yearly production capacity 1500 units.

 Energypac®

Remote tap change cubical (RTCC) panel

- Programmable device to control the output of transformer by changing tap position.
- Tap position Indication.
- Visibility of voltage of different Tap Position.
- Tap position changing by both automatic and manually through Automatic voltage regulator.
- Yearly production capacity 300 units

 Energypac®

 Energypac®

12kV Load break switch (LBS)

Gas Insulated LBS (SF₆):

- Mechanical & Electrical Operation.
- Robust design with trouble free mechanism.
- Maintenance free mechanism.
- Separate HT / LT Compartments.
- Compact design with aesthetic look.
- Yearly production capacity 250 units.

Air Insulated LBS:

- Robust design with trouble free mechanism.
- Available in both Indoor/Outdoor version and extensible.
- Manual operation with HRC fuse protection.
- No arc chute hence minimal maintenance.
- Compact design with aesthetic look
- Yearly production capacity 250 units.

Metering panel

- Visibility of current, voltage, frequency, power factor and all electrical power & energy related data.
- Robust.
- Accommodate all kinds of meters.
- Maintenance so easy and comfortable.
- Visibility of maximum demand, incoming power, outgoing etc.
- Yearly product capacity = 500 unit.

Gas insulated switchgear



- Production: 36kV, 31.5kA, 1250Amp. and 2500Amp.
- Robust mechanism based on European design.
- Three pole operation system.
- Fully motor driven spring operated mechanism for all range.
- Three position disconnecter based operating system.
- Interlocking between vacuum circuit breaker and disconnector / earthing switch.
- SF₆ pressure indicator.
- Auto low pressure tripping system.

Other switchgear & control products

AC-DC Distribution board:

- Product range: up to 1000 Amps
- Compartmentalized or modular type and non-modular type.
- Design can be modified based on customer's requirement .
- Both Indoor & Outdoor type.
- Yearly production capacity 1300 units.

Marshalling kiosk & Junction box:

- Product range: from 33kV up to 400kV.
- Junction panel between CRP & switchyard.
- Some testing of CT&PT or indoor equipment can be done or MK without interrupting the system.
- Yearly production capacity 600 units.

Rectifier

- Product range: from 24VDC to 230VDC.
- Fully automatic & solid control
- Auto/ manual operation
- LED indication for all model of operation
- Maximum protection provided
- Yearly production capacity 120 units.

RECTIFIER

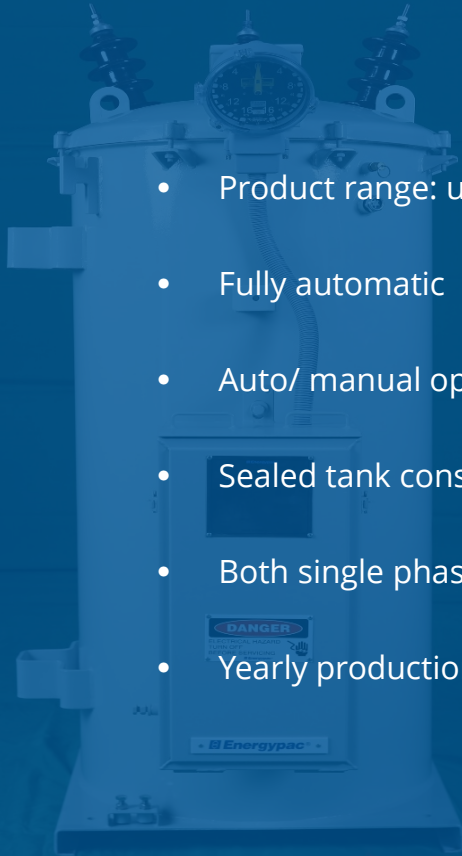
URTO 230V DC
100 UNIT/YEAR

Automatic voltage regulator

- Product range: from 230V to 12kV AC.
- Fully automatic
- Auto/ manual operation
- Maximum protection provided
- Wave from distortion nil (0%)
- Yearly production capacity 250 units

Step voltage regulator

- Product range: up to 12kV
- Fully automatic
- Auto/ manual operation
- Sealed tank construction
- Both single phase & three phase system
- Yearly production capacity 250 units



Variac

- Voltage rating 230V AC TO 460V AC
- Oil cooled type up to 2000 Amps
- Air cooled type up to 28 Amps
- High grade raw materials
- High efficiency and long life and low maintenance
- Linear output voltage
- Yearly production 1200 units

Low voltage components

- MCB
- MCCB
- ACB
- Magnetic contactor
- Thermal overload relay
- Manual motor starter (MMS)
- Multifunctional meter
- Capacitor bank

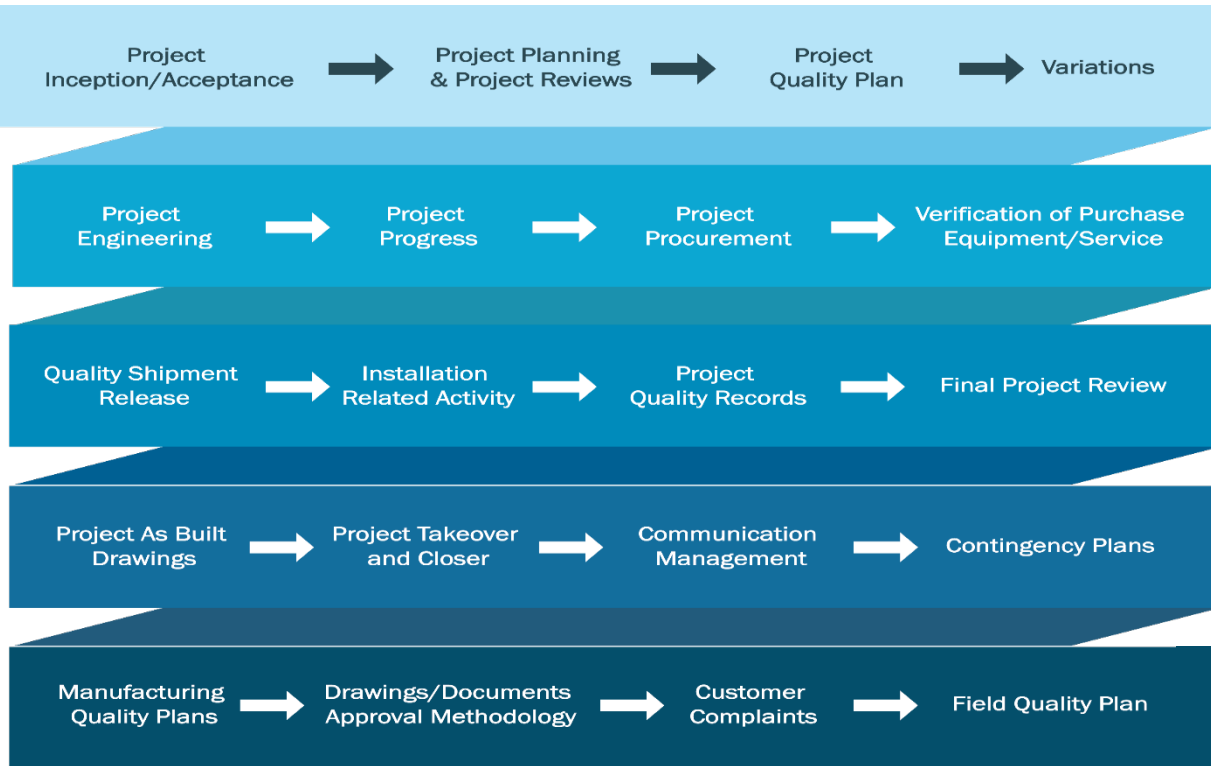
Project in focus



Project management methodology



Project execution methodology



400kV AIS switchyard

Design, supply, erection, testing & commissioning.

Completed

Owner: Summit Bibiyana II Power Company
Limited.

Location: Bibiyana Sherpur, Sylhet,
Bangladesh



132/33kV Substation

Design, Supply, Erection, Testing & Commissioning.

Completed

Owner: Nepal Electricity Authority

Location: Mirchiya – Katari, Nepal.



132/11kV Substation

Design, Supply, Erection, Testing & Commissioning.

Completed

Owner: United Jamalpur Power Limited
(115 MW)

Location: Jamalpur, Bangladesh.



132/11kV substation

Design, Supply, Erection, Testing &
Commissioning.

Completed

Owner: Power Grid Company of Bangladesh
Limited.

Location: Ruppur, Ishwardi, Pabna,
Bangladesh.



Type Testing Authorities

LOWAG



CESI

ISO Certificates





CERTIFICATE



This is to certify that

Energypac Engineering Limited
 Energy Center (1st & 2nd Floor)
 25 Tejgaon Industrial Area
 Dhaka - 1208
 Bangladesh

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**

Scope:
 I) Design, Development, Manufacture and Marketing, Installation and Servicing of Transformers (Power, Distribution, Indoor and Outdoor Type, Current & Potential, Cast Resin, Single Phase), Switchgears, including Control and metering Panels, Isolators (disconnectors), By-pass switches, Vacuum Circuit breakers, Load Break Switches, Auto Voltage Regulators, Battery Charger, Busbar Trunking
 II) Engineering, Procurement and Construction (EPC), Installation, Testing & Commissioning of Electrical Substations
 III) Repairing of Transformers and Industrial Motors.

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

ISO 9001 : 2015

Certificate registration no.	50253095 QM15	 
Date of original certification	2012-08-13	
Date of certification	2018-08-13	
Valid until	2021-08-12	

DQS Inc.

Brad McGuire
 Brad McGuire
 Managing Director

Accredited Body: DQS Inc., 1130 West Lake Cook Road, Suite 340, Buffalo Grove, IL 60089 USA
 Administrative Office: DQS India Quality Systems Private Ltd., 5th Floor, Arjuna Tech Park, 147, HAL Airport Road, Kothahalli, Bangalore - 560 017 - India

1 / 2



Certificate of Registration

This certificate has been awarded to

Energypac Engineering Limited
 Barupara, Ashulia, Savar, Dhaka, Bangladesh

in recognition of the organization's Environmental Management System which complies with

ISO 14001:2015

The scope of activities covered by this certificate is defined below

Please refer to the Appendix

Certificate Number:	Date of Issue: (Original)	Date of Issue:
8270863003 UR/EN	01 December 2015	18 December 2018
Issue No:	Expiry Date:	
3	30 November 2021	

Issued by: *[Signature]* On behalf of the Schemes Manager








National Accreditation Board for Testing and Calibration Laboratories
 (A Constituent Board of Quality Council of India)



CERTIFICATE OF ACCREDITATION

ENERGYPAC TESTING LABORATORY

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

Barupara, Ashulia, Savar, Dhaka, Bangladesh

in the field of

TESTING

Certificate Number	TC-5119	
Issue Date	26/11/2018	Valid Until
		25/11/2020

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
 (To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL.


 Anil Relia
 Chief Executive Officer



880769701000300031702



Energypac[®]

Engineering

