

# COMPANY PROFILE



## THE RESPAK

THE RENEWABLE ENGINEERING SERVICES PAKISTAN



## About Us

The Renewable Engineering Services Pakistan “THERESPAK” was established in 2017 and local based company, and working as a one window solution provider in the fields of Renewable energy sector and Industrial Solutions.

The Respak having expertise in wind sector and solar activities ranging from, complete End of warranty inspections, Balance of Plant (BOP), Civil Construction, Operations & Maintenance, HSE-Consulting & Technical Trainings, wind turbine spares & Services.

Offering quality engineering services with productivity analysis and controllable process in line with its client's needs.

THRESPAK have most experienced and dynamical staff in Wind Power Market having experienced trained and certified staff.

In the near future, the need for more productive more competent and broader service networking will increase in Pakistan.

# Our Vision

To become a leading engineering solution provider company in the region. The Respak, aims to provide the best local wind energy expertise services in Pakistan.



## THE RESPAK

**1**

The Respak “Renewable Engineering Services” is a local based company of Wind Turbine Maintenance, parts & spares in Pakistan.

**2**

We have most experienced and dynamical staff in Wind Power market. We have experienced, trained and certified staff.

**3**

In the near future, the need for more productive more competent and broader service networking will increase in Pakistan.

**4**

The strategic importance of renewable sources of energy, the country knows very well, production in Pakistan focused on renewable energies like (solar, wind etc) with aim to offer standard services.

# Mission



Win by providing pro-active, innovative solutions and value added services to our customers.

The strategic importance of renewable sources of energy, the country knows very well, Production in Pakistan focused on renewable energies like (solar, wind etc) with aim to offer standard services.

In line with the needs of its customers, The Respak provides excellent engineering services with checkable processes and efficiency following, adding value to its business partners.

The Respak's operation and maintenance solutions can offer new and flexible services to the customer with the right budget.

# Our Scope



THERESPAK is working energetically in the renewable sector (Wind, Solar etc.) Industry with its WTG Installation, O&M and Electrical Balance of Plant (EBOP), Operations & Maintenance team to provide key services as per the demand of the industry.

Additionally other categories included power plants, petro-chemical oil, Gas, building, and roads construction.

# Our Services

## Yearly Inspection, Repair & Certification

- End of Warranty Inspection (Drive-train/without Drivetrain)
- Blade inspection (Rope access and UAV by Drone).
- Gearbox Bore scope Inspection (BSI).
- Vibration Analysis.
- Balance Measurements (Blades, Rotor, Tower).
- Unscheduled Maintenance.
- Gearbox Oil Exchange.
- Hoist/OSL.
- Fall Arrest Device Block Stop.
- Fall Arresting Rail System
- Climbing Ladder Systems.
- Drive Components.
- Service Lift.
- Crane.
- Chain Hoist

## Scheduled Maintenance (Short or long term contract)

- Equipment
- Foundation and Outer Area
- Power Modules
- Tower
- Nacelle
- Yaw System
- Drivetrain
- Gearbox
- Secondary Brake and Hydraulic System
- Generator
- Hub
- Blades
- BOP (Balance of Plant)

## Operation and maintenance of Rotary and Stationary equipments

Rotoary Equipments	Stationary Equipments	Installation of RO Plants
<ul style="list-style-type: none"><li>• Pumps Recirocating, cetrifugals, submersible</li><li>• Compressors</li><li>• Generators</li></ul>	<ul style="list-style-type: none"><li>• Heat exchangers</li><li>• Hydraulic system</li><li>• Hyderqulic press machines (150,300 ton etc)</li><li>• Vessels and tanks</li><li>• Valves</li></ul>	<ul style="list-style-type: none"><li>• Operataion and its troubleshooting</li><li>• Spares supply chain</li></ul>

# Scope of Services

## Annual preventive contracts include:

- Preliminary inspection of the wind turbine at the start of the contract
- Preventive-maintenance according to the manufacturer's specifications:
- Oil change
- Greasing
- Review of torque and screws
- Measuring of electrical values and temperatures
- Analysis of oils
- Supply And comprehensive management of spares and consumables
- Staff availability 365/24
- Supply of tools and equipment for working in aeros
- Monitoring and control of the plants, delivery of detailed periodic reports with photographs

## Corrective maintenance:

- Identifying and resolution of electrical faults
- Replacing small components
- Replacing large components
- Retrofits



# Electrical (BOP)

RESPAK provides complete EBOP solutions which include (although not limited to) Installation, Testing and commissioning, O&M Management, fault analysis and root cause failure analysis, incident investigation, inspections and audits, Schedule and unscheduled maintenance, suggestions for performance optimization, asset management site health and safety management, spare parts and refurbishment management, assist client on clearance of invoices from Power Purchaser.

RESPAK engineers have experience in the Installation, testing and commissioning of Power transformer, Switchgears, Protection and control systems, CT, PT, and SVC covering complete AIS, GIS and Hybrid substations.

## Primary Equipment Testing

- Oil Testing
- Power Transformer
- Switchgear
- Current Transformer
- Potential Transformer
- Circuit Breakers
- HV, MV and LV Cables
- Surge Arrestors
- Capacitive Voltage Transformers
- SVC Systems

## Secondary Equipment Testing

- Protection Relays
- Control Panels

## AC/DC Auxiliary System Testing

- AC/DC distribution system
- DC Chargers and battery banks
- Auxiliary Transformers

## SCADA Testing

- Desktop review
- Alarms and trends analysis

## Test and Commission (AIS/GIS)

Testing and commissioning of all AIS, GIS and Hybrid substation equipment including

- 220kV and 500kV switchyard
- MV and LV panels
- GSU transformer
- Power Cables
- Control and protection panels
- SCADA
- Telecom Equipment
- Battery bank
- AC and DC auxiliaries
- DC charger 110V and 48V

# WHAT WE DO BEST



Operation and Maintenance



Gear Oil Replacement



Major Parts Replacement



Retrofit and Solutions



Independent Engineering (IE)

# Completed Projects

## ZEPHYR POWER LIMITED

[Cap: 50 MW: 25 WTGs. Model: SG 114/2 MW]

- End of Warranty inspection
- Internal tower inspection
- Borescope inspection (BSI) of Gearbox
- Vibration check
- Blade inspection (Via Drone camera)
- Generator-shaft Alignment



Zephyr

## ACT WIND

[Capacity: 30 MW: 20 WTGs Model: GW 82/15000]

- End of Warranty Inspection (EOWI) of WTGs
- Internal tower inspection
- Borescope inspection (BSI) of Gearbox
- Vibration check
- Blade inspection (Via Drone camera)



## MASTER WIND

[Capacity: 49.5 MW: 33 WTGs Model: GW 82/15000]

- End of Warranty Inspection (EOWI) of WTGs
- Internal tower inspection
- Borescope inspection (BSI) of Gearbox
- Vibration check
- Blade inspection (Via Drone camera)
- Generator-shaft Alignment



## **HAWA POWER**

**[Capacity: 49.375 MW: 29 WTGs Model: GW 1.715]**



- End of Warranty Inspection (EOWI) of WTGs
- Internal tower inspection
- Borescope inspection (BSI) of Gearbox
- Vibration check
- Blade inspection (Via Drone camera)

## **JHIMPIR POWER LIMITED (JPL)**

**[Capacity: 49.5 MW: 29 WTGs Model: GE 1.715]**



- End of Warranty Inspection (EOWI) of WTGs
- Internal tower inspection
- Borescope inspection (BSI) of Gearbox
- Vibration check
- Blade inspection (Via Drone camera)

## **FWEL-1**

**[Cap: 50 MW: 20 WTGs, Model : N100/2500]**

- Internal tower inspection



## **Hydraulic and Pneumatic System & Machines**

- 1500 ton Hydraulic press machine over hauled
- 300 ton press machine over hauled
- Main Motorised Gate 40x20 fits pneumatic Hydraulic system .
- EPC project

## **Mechanical Fabrication and civil works**

- Civil work 1145 sft Shipyard training school STS building Hall completed

# Curricular Services



## CONSULTANCY & CERTIFICATION SERVICES

We also provide the consultancy and certification by joint venture with reputed companies to achieve certification but to improve the overall Business Processes of an Organization.

We provide Consultancy HR Services in different organization .Some of our major services are as follow:

- Gap Analysis
- Consultancy Services
- Compliance
- Training Services
- Internal Auditing services
- Maintenance Services
- HR Services
- Recruitment Services

## OIL ANALYSES

We cover a wide range testing which includes lubricants, fuels industrial chemical etc. with collaboration reputed testing labs, which are performed according to ASTM, ISO, IEC, IP and internal standards.

## CIVIL INSPECTION

### INDEPENDENT ENGINEERING (IE)

We have extensive experience team in field of inspection, testing and commissioning in order to achieve through going assurance of the safety, quality and reliability of any equipment and fully understand the EPA codes of testing.

General scope of IE:

- Carry out the duties of IE specified in EPA accordance with the highest professional standards and duty of care, both to the Seller and to the Purchaser.
- Act independently and impartially, based on expertise and knowledge in relation to all matters referred to him in relation to the EPA and carrying out other duties ascribed under the EPA.
- On or before the Commercial Operations Date, a certificate from IE addressed to the Seller and the Purchaser to the effect that based upon its monitoring and review of construction, the construction of the Complex has been carried out in all material respects in compliance with the terms of the EPA.
- Certificate from IE confirming each successful commissioning test of major equipment

---

**DIVERSITY  
IN ONE  
PURPOSE.**

# Our Team

THERESPAK has well experienced , dedicated work force of engineerings , supervisors , technicians and other categories of skilled staff to undersatnd any kind of civil mechnaical and electircal projects. Our technical team – always ready to support you.

## Managers



Burak Aydin  
**Operation Head**



Sayed Ali Mir Shah  
**Business Development**



Jibran Ali  
**Chief Account Officer**

## Technical Team



Michael Melsheimer  
**Vibration Expert**



Noman Razzak  
**UAV Operation Expert**



Erhan Ozlap  
**Wind Turbine Expert**



Affan Bin Shaffi  
**Electrical Engineer (EBOP)**



Soomar Ali Shahikh  
**Turbine Specialist**



Akash Ali  
**Mechanical Engineer**



Touqeer Ahmed  
**UAV Operation Observer**



Mujeeb Ur Rehman  
**Civil Engineer**



ZULFIQAR ALI  
**Sr. Mechanical Engineer**



# CLEAN ENERGY INITIATIVES





## Our Service Partners



**THE RESPAK**

Office #1203 Muhammadi Trade Tower Road new Challi Karachi.

+92 (300) 2165296

info@therespak.com

<https://www.therespak.com>



/therespak

