







ESNAD draws on its longstanding track record, expert team and robust partnerships with major international industry specialists to meet, if not exceed, client expectations.

By consistently delivering high quality, cost-effective offerings - both standard and customized - paired with exceptional after-sales services, ESNAD supports clients in reducing operating costs, while enhancing overall performance.

# **BUSINESS SECTORS**

ESNAD caters to the requirements of numerous industries through its diversified, world-class products and services, which are sourced from innovative and reputable principals worldwide. **Industries include:** 

OIL & GAS

**CEMENT** 

MINING & MINERALS

**METALS** 

**IRON, STEEL & ALUMINUM** 

REFINERIES & PETROCHEMICALS

DESALINATION PLANTS

WATER AND WASTE TREATMENT

PORTS & AIRPORTS

POWER GENERATION, TRANSMISSION & DISTRIBUTION

FOOD, GRAINS & BEVERAGES

SCHOOLS, UNIVERSITIES & EDUCATIONAL INSTITUTES

# **POWER TRANSMISSION**

- © Electrical motors up to 35 MW (Squirrel cage induction, Slip ring, Traction, DC). Geared motors up to 160 kW (Helical, Bevel helical, In parallel, Warm helical).
- Industrial Gear boxes up to 5 MW for all applications (Cement & raw mills, Kilns, Conveyor belts, Agitators)
- Girth gears
- © Couplings
- V-belts
- Pulleys
- Chains
- Chains sprockets
- Conveyor chains and accessories
- Kiln and dryer accessories (Riding tires, Thrust rollers, Carrying roller support, and Bearing housings)





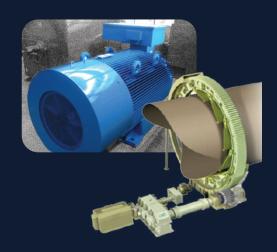




# **DRIVE SYSTEMS**

ESNAD offers complete drive systems customized to meet customers' requirements.

- Electrical motors
- Standard and tailormade gearboxes
- Kiln support system: Girth gear, tires and rollers



# INSTRUMENTATION AND CONTROL SYSTEMS

## Also, the instrumentation group can supply complete systems;

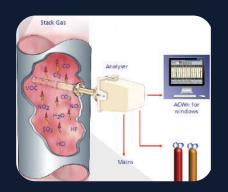
- Weighing Systems
- Sampling Systems
- Continuous Emission Monitoring Systems (CEMS)
- Closed-circuit television camera (CCTV)
- Full Control Systems
- PLC (Programmable Logic Controller)
- SCADA (supervisory control and data acquisition)
- HMI (Human Machine Interface)
- DAHS (Data acquisition & handling system)



**WEIGHING SYSTEMS** 



**SCADA SYSTEMS** 



CONTINUOUS EMISSION MONITORING (CEMS)

# **MATERIAL HANDLING**

Material handling systems and equipment are used in transporting and storing materials that are required to be moved frequently between specific points.

## This group includes:

- Belt conveyors (Abrasion Resistant, Heat Resistant, Oil & Grease Resistant, Fire Resistant, Chevron, Side Wall, Steel Cord, Pipe Conveyor)
- Screw conveyors
- Bucket elevators
- rollers and idlers
- Belt pressing machines and repair materials (adhesives)
- Overhead crane
- Hydraulic & mechanical grabs
- Table top chains









# MATERIAL HANDLING SYSTEMS

- Complete mechanical conveying systems, comprising:
  - Bucket elevators
  - Belt conveyors
  - Pan conveyors
- Complete pneumatic conveying systems
- Storage systems and silos
- Loading and unloading systems

veying systems, comprising:

eying systems
stems

www.esnadinternational.com

www.esnadinternational.com



# **THERMAL**

The thermal group contains wide range of products related to heat control.

Main products fall within the following categories:

- Insulation & Lining Products:
  - Refractory Material (Bricks & castables)
  - Insulation Material
  - Rubber Lining
  - Coating
  - Fireproofing
- **Heat Transfer Products:** 
  - Heat Exchangers (Plate heat exchanger, Shell & tube heat exchanger, air cooled heat exchanger,...,etc.)
  - Cooling Tower
- Heating Source Products (Burners, Heat Tracing, Tracer & Flares).
- Heating and Cooling Systems (Kilns and Dryers, Furnaces & Incinerators, Coolers, Boilers, Chillers).
- Special Fabricated Products (Pressure Vessels & Reactors)
- Pneumatic & Ventilation (Fans & Impellers, Blowers)
- Compressors, Packaging, & Dryers (Air Compressors, Gas Compressor, Packaged Compression System, Air Dryers, Nitrogen Generators)

# **FLOW**

## **ESNAD** offers wide range of flow equipment such as:

- Valves (All types; manual & actuated operating)
- Pumps (All types; bare shaft, motorized)
- Expansion joints (All types)
- Hoses (All types)
- Strainers
- Steam traps
- Fittings

Actuators



# **MATERIALS**

Materials group consists mainly of steel products together with different materials like (Stainless Steel, Carbon Steel, Alloy Steel, Tool Steel, Tin plated, CORTEN, HARDOX, Duplex, Cast Iron, Ductile Iron, Nickel Alloys, Copper Alloys, Brass, Aluminum alloys, HDPE, FRP, GRE, PVC, PP, Others) in addition to the latest innovation in metallurgical science.

## Materials group can provide wide range of equipment such as:

## Mill Internals and Spares

- Shell Lining
- © Complete Diaphragms & Diaphragm plates (Slotted & Backside plates)
- Water injection systems.
- Fastening items for ball mill.
- Spares for raw mill & ball mill.
- Grinding media.

## Casting

- Collar grate plates
- Crusher hammers
- Special casted parts (e.g.: nose ring)
- Railway spares (Brake shoes, Fish plates, Wheels, clips...)

#### Flat Materials

- Plates
- Strips and Coils
- Tinplate Sheets

## Fabricated Items

- Tanks
- Chequered plates
- Gratings

#### Consumables

- Welding electrodes
- Fasteners
- Wires and Ropes (Wires, Ropes (Wire ropes, mooring hawsers, fiber ropes, strands (Prestressed))

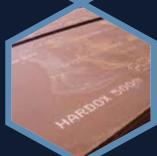
#### Structural Materials

- Profiles, Beams
- Angles
- Bars and rods

## Packing Materials

- Jumbo bags
- PE, PP bags









# **ELECTRICAL**

ESNAD serves all industries and power utilities by offering the best Electrical Power generation, transmission and distribution Solutions.

## **GENERATION:**

Our Generation products includes (But not limited to) the following:

- Turbine Control System.
- Online Monitoring System.
- Exciter Machine.
- Excitation Control System.
- Synchronization Panels.
- © DC Systems (Rectifiers, Inverters, & Batteries).
- Steam Turbine Generator.
- Gas Turbine Generator.
- Bearings, Fan blades, RTD, & wedges repair& replacement.
- Generator Services.
- Protection Relays.
- IPB, Segregated & Non-Segregated Phase Bus Ducts.
- Generator Circuit Breaker & Switchgear.
- Generator set up Transformers (GSU)
  Unit Transfer Equipment (UTE).
- Turbine & Generator spare parts



# **ELECTRICAL**

## TRANSMISSION PRODUCTS & SERVICES:

- Substation Protection.
- © Circuit Breakers & Switchgears.
- Step Down Transformers.
- DC Systems (Batteries & UPS's).
- Transducers.
- Emergency Restoration Towers.
  Consulting, Engineering, Design, Project
  Management & Inspection / Preventive
  Maintenance Services Of Grounding Solutions,
  Lightning Protection, & Surge Suppression.



## **DISTRIBUTION PRODUCTS & SERVICES:**

- Distribution Transformers
- Instruments transformers
- Special Transformers (Isolating, Electric Arc Furnace, Converter, Rectifier, Shunt & Customized design Transformers).
- Overhead Line Equipment.
- Switchgears:
  - Low voltage switchgears.
  - Medium voltage switchgears.
  - High voltage switchgears.
  - Motor control center.
  - Prefabricated substations.
  - Ring Main Unit (RMU).
  - © Compact Substations.
  - Customized Design.



## **DISTRIBUTION PRODUCTS & SERVICES:**

## MV & LV Products, including:

SF6, Vacuum and Air circuit breakers for LV & MV Switchboards. MCB's, MCCB's, Contactors & Fuses.

Protection Relays.

Sectionalizers & Reclosers.

Disconnectors and load break switches.

Measurements Transducers.

- Remote Terminal Units (RTU).
- © Cabling & Cable Services (Jointing, Terminations, etc.).
- Earthing & Lightning Protection.
- Three phase & Single Phase Energy Meters.

### O DC Products, Including:

Industrial UPS Systems.
Industrial Battery Chargers.
Industrial Inverters.
Industrial Batteries.

### Power Improvement Products:

Capacitors banks.

Power factor corrections.

AVR & Voltage stabilizers.



www.esnadinternational.com www.esnadinternational.com

# **LABORATORY & EDUCATION**

Laboratory equipment are related to educational (science and engineering), analytical studies, research & quality testing. We are capable of providing, installing, commissioning, training and providing after sales services.

#### Our Equipment & Systems can be used for:

- Education:
  - Universities (Science, engineering, medicine)
  - Postgraduate & Research
  - Schools
  - Vocational training requirements
- Industrial & quality control:
  - Pilot plants
  - Quality testing equipment
  - Equipment for standardization institute
  - Workshops





# **OUR PARTNERS**

Drawing on a solid base of strategic partnerships with major industry players, ESNAD provides clients from multiple sectors with a myriad of quality products on par with international standards - to ensure turnkey projects are implemented, international expertise are transferred to the local market and comprehensive, end-to-end solutions are competently delivered.



**ORIGIN:** 

## **AUSTRIA**

#### **PRODUCT RANGE:**

Generator Overhaul, Maintenance & Repair Rewinding/Repair of Motors



ORIGIN:

## **AUSTRIA**

#### **PRODUCT RANGE:**

MV/HV Electric motors up to 35 MW.

# **CECO Filters**

**ORIGIN:** 

## USA

#### **PRODUCT RANGE:**

Filters & Mist Eliminators



ORIGIN:

## **AUSTRIA**

#### PRODUCT RANGE:

Burners & Hot Gas Generators



**ORIGIN:** 

## USA

#### **PRODUCT RANGE:**

Batteries



**ORIGIN:** 

## BELGIUM/JAPAN

#### PRODUCT RANGE:

Cyclo Drive units & Geared Motors/ (Industrial & Cooling Towers Gear Boxes)



ORIGIN: **CERMA**I

**PRODUCT RANGE:** 

**Grinding Solutions**