ELTMAN has elaborated executive projects in the electric, civil, mechanical and architecture engineering disciplines to segments of Hydroelectrical Plants, Electric Thermal Plants, Distribution and Transmission Substations of up to 500 KV, Roadway Systems and Electric Traction.

These projects aim activities of equipments dimensioning and systems, elaboration of Plants to installation of equipments, electric diagrams, including logical diagrams and configuration of HMI screens and DEIs to Levels 1 and 2 of supervision and control systems, civil basis to structures and equipments, portal dimensioning and metallic structures, fire detection and combat systems, among others.

ELTMAN has elaborated executive projects in electric engineering matters, telecommunication, construction, architeture and mechanic to hydroelectrical plants, substations until 500 kV, industrial installations, several systems and electrical traction segments.

# **Electrical Executive Project:**

Trifiliars diagrams, functionals and logicals;

Digital systems of control and protection:

- Communication projects of high speed Networks in optical fibers;
- Dimensioning;
- Detailed Architeture diagram ;
- Digital System points report;
- Protection and control units configuration;
- Protection and control units programming;
- Man / Machine Interface units in Levels 1, 2 and 3 configuration;
- Man / Machine of 1,2 and 3 levels screens elaboration;
- Data Base(s) configuration.

Panels project, including:

- internal and external vision,
- connection tables (From-To).
- labels and material lists;

Power cables dimensioning;

Cable connection, including:

- interconnection diagrams;

- cable lists;

Layout designs, floor plans and cuts;

Equipments installation designs;

Aerial Network designs

Electrical conductors designs: tray, electricaltubes and gutters;

Soil Loop designs;

Lights and sockets designs; Protection atmospheric designs; Material lists.

## **Civil Executive Project**

Civil layout, floor plans and cuts; Shapes and frameworks designs to basis and gutters; Equipment basis and Portals dimensioning; Drainage system designs; Edification architeture designs; Hydro edification designs.

# **Telecommunication Executive Project**

Telephony Network; Cable connection Equipments; Optical Fiber Network; Telecommunication equipment installation details.

### **Mechanical Executive Project**

Mechanic layout; Refrigeration water system tubulation designs, drainage and depauperation; Fire fight and detection system designs; Ventilation system designs Generator refrigeration system designs; Drainage and depauperation systems designs; Metalic structure designs.

### Aerial Network Executive Project:

Aerial Network track; Pole and portals definition; Pole and Portals structure efforts calculation; Pole rent; Aerial Network pieces and triangle definition; Cables floor plan definition; Aerial Network sectioning cuts; Counterweight calculation;

Sectionators and circuit breakers installation project

Materials installation lists;

Aerial Network fill in project;

Pole and Portals civil basis project.