



PROCESS ENGINEERING, HOUSEHOLD WASTE INCINERATION, WATER AND SLUDGE TREATMENT







TYPES OF SERVICES

- Process support,
- Installation plans (Piping and Instrumentation Diagram) with lists of associated lines,
- Studies and plans for installing material,
- Studies of installations.

TYPES OF WORK

- Guide Plans for civil engineering,
- Guide Plans for structures,
- Guide Plans for mechanically welded machinery,
- Plans for installation of piping,
- Notes for calculating flexibility,
- Studies and plans for pipe supports,
- Isometric designs.

SECTORS

- Household waste incineration unit,
- Sludge incineration unit,
- Complete study of water substations,
- Unit for the treatment of phosphorous,
- Unit for the treatment of smoke,
- Study of steam networks,
- Unit for the treatment of effluent from refineries.

ORGANISATION

- Draft project,
- Costing,
- Process,
- Dimensioning,
- Control.
- Studies,
- Implementing details,
- Ready for manufacture.

CALCULATION SOFTWARE

- SOLIDWORKS SIMULATION,
- ROBOT.
- ANSYS.

CAD **SOFTWARE**

- PDMS,
- SOLIDWORKS,
- CATIA V5,
- AUTODESK,
- AUTOCAD,
- CREO (PRO ENGINEER),
- UNIGRAPHICS,
- MICROSTATION.

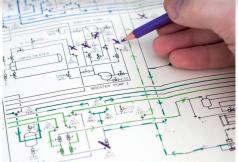






PROCESS ENGINEERING, SUGAR PRODUCTION INDUSTRIES







TYPES OF SERVICES

- Process support,
- Studies and plans for installing material,
- Preparing detailed drafts as listed below

TYPES OF WORK

- Guide Plans for civil engineering,
- Guide Plans for structures,
- Guide Plans for mechanically welded machinery,
- Plans for installation of piping,
- Notes for calculating flexibility,
- Studies and plans for pipe supports,
- Isometric designs.

SECTORS

- Biotechnology platform,
- Storage unit and placing in containers,
- Alcohol distillation unit,
- Mashing unit, liquefaction and fermentation
- Water storage and pumping unit,
- Evaporation unit,
- Nuclear.

ORGANISATION

- Draft project,
- Costing,
- Process,
- Dimensioning,
- Control,
- Studies,
- Implementing details,
- Ready for manufacture.

CALCULATION SOFTWARE

- SOLIDWORKS SIMULATION,
- ROBOT,
- ANSYS.

CAD SOFTWARE

- PDMS,
- SOLIDWORKS,
- CATIA V5,
- AUTODESK,
- AUTOCAD,
- CREO (PRO ENGINEER),
- UNIGRAPHICS,
- MICROSTATION.

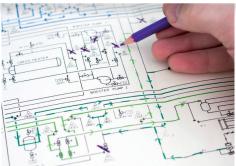






CALCULATIONS: SHEET METAL COMPONENTS, FLEXIBILITY OF PIPING, AERAULICS AND HEAT







TYPES OF SERVICES

- Permanent and transient thermomechanical analysis,
- Aeraulics, hydraulics and electronics,
- Fluid mechanics and thermal mechanics,
- Fluid coupling / structure,
- Calculation of loss of loads,
- Heat transfers.

TYPES OF WORK

- Pressure equipment,
- Storage tanks and Skids,
- Technical specifications of equipment,
- Determining thicknesses,
- Defining tubing, shells and skirt reinforcements,
- Analysis of flexibility of pipe networks,
- Defining anchoring points and types of support,
- Dynamic and seismic calculations, waterhammer and valve opening calculations.

SECTORS

- Industry,
- Construction.

SOFTWARE

- SOLIDWORKS SIMULATION,
- ANSYS,
- CAESAR,
- PIPESTRESS.

CODES APPLIED

MECHANICALLY WELDED COMPONENTS

- CODAP2005,
- ASME,
- TUV,
- ADM, TEMA.
- SPVC SVBD,
- RVTO.

PIPING

Static: ANSI,

CODETI, ASME,

RCC-M.

HEI,

- NEMA,
- API,
- WRC107.

Tubing flexibility:

WRC297.



