

---

SINARTIA PROCESS SERVICES (SPS) provides consulting and engineering services to the Process Manufacturing Industry for more than 10 years. The company delivers high quality and value services to its customers by maintaining highly skilled professionals and by collaborating with leading local and international firms. SPS specializes in:

*Alternative Fuels*

*Chemicals Processing*

*Food and Beverages*

*Minerals Processing*

*Petroleum Refining*

*Pharmaceuticals*

*Pipeline / Terminals*

*Power Generation*

*Waste Treatment*

*Water Treatment*

SPS can do any type of **process engineering** work in Process Design, Process Modeling and Simulation, Process Safety and Environmental Compliance. Projects can range from simple new equipment process specification to full process optimization.

SPS can also provide **software development and customization** services on customer promise. Manufacturing Execution Systems projects can range from simple reporting to full scale in-house or licensed system commissioning.

---



# SPS

## SINARTIA PROCESS SERVICES

*Computer Aided  
Chemical Process Engineering  
Services and Solutions*

**SINARTIA PROCESS SERVICES (SPS)**

28th October 23-25

Marousi, 14563

GREECE

Phone +30-(210)-8056531

Mail: info@sinartia.gr

[www.sinartia.gr](http://www.sinartia.gr)

---

# SPS

## *SINARTIA PROCESS SERVICES*



*Process Engineering Tools and Services for:*

*Refining and Chemicals*

*Power Generation*

*Pharmaceuticals*

*Food and Beverages*

[www.sinartia.gr](http://www.sinartia.gr)

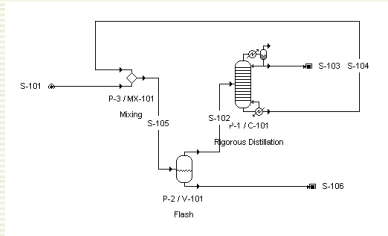
SINARTIA PROCESS SERVICES (SPS)

28th OCTOBER 23-25, MAROUSHI, 15123

GREECE +30-(210)-8056531

---

## Process Modeling and Simulation



SINARTIA PROCESS SERVICES (SPS) uses commercial process simulation software and in-house simulation programs to perform:

- ❖ Detailed mass and energy balances
- ❖ Unit operation design/evaluation
- ❖ Piping system hydraulics calculations
- ❖ Relief and flare system design/evaluation

## Software Development Services

Services include software development, customization, commissioning and support for:

### Process Modeling and Simulation

- ❖ Empirical/Short-cut models for process operation
- ❖ Advanced thermodynamic models for property prediction
- ❖ Advanced mathematical models for steady-state and dynamic simulation

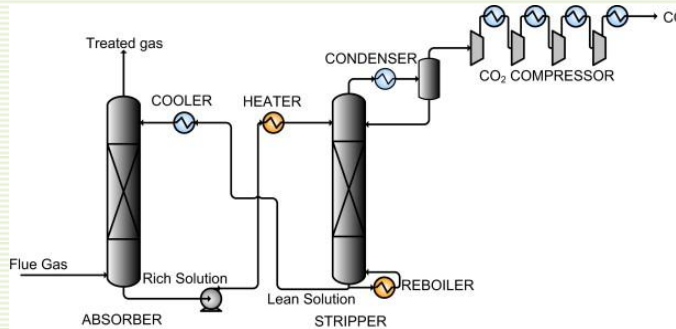
### Process Monitoring/ Execution Systems

- ❖ Process Monitoring/Supervisory Systems
- ❖ Continuous Emissions Monitoring Systems
- ❖ Operator Training
- ❖ Environmental Compliance Reporting

## Process Engineering Services

Services provided in process engineering include:

- ❖ Process alternative evaluations
- ❖ Process modeling and simulation
- ❖ Mass and energy balances
- ❖ Process design basis development
- ❖ Conceptual process design
- ❖ Basic engineering packages
- ❖ Vendor proposal evaluations
- ❖ Process flow diagrams
- ❖ Process cost estimates
- ❖ Equipment specifications



## Process Safety Services

Services provided in process safety include:

- ❖ Process Hazards Analyses (PHAs)
- ❖ Developing process safety programs
- ❖ Developing various process safety information including relief valve sizing and process documentation
- ❖ Conducting process safety audits
- ❖ Safety Integrity Level Analysis (SIL)
- ❖ Layer of Protection Analysis (LOPA)
- ❖ Performing Hazard Assessments Studies (HAZOP)
- ❖ Process Safety Training Courses

## Environmental Compliance

### Air & Gaseous Emissions

- ❖ Evaluation of overall compliance status
- ❖ Air pollution control system design
- ❖ Stack sampling planning and coordination
- ❖ Performance test planning & coordination
- ❖ Permit construction/operation support



### Water and wastewater

- ❖ Assessment of process input/feeds
- ❖ Assessment/inventory of recycle/reuse and substitution opportunities
- ❖ Evaluation of process modifications to enhance performance
- ❖ Regulatory assessment to summarize current and future requirements
- ❖ Process water or wastewater treatment system design
- ❖ Wastewater permit preparation support

### Solid Waste

- ❖ Assessment of process waste, treatment and disposition alternatives
- ❖ Evaluation of opportunities to recycle or minimize waste generation
- ❖ Solid waste residue treatment system design
- ❖ Solid waste permit preparation support
- ❖ Waste residue generation planning