

Doc. N°: PA-00  
Rev. 6  
date: 24/07/2006



# COMPANY PROFILE

## SUMMARY OF CONTENTS

- 1.0 INTRODUCTION
- 1.1 HEADQUARTERS AND FACTORIES
- 1.2 OFFICES AND FACTORY FOR CENTRAL-SOUTHERN AREA
- 1.3 PERSONNEL AND COVERED MANUFACTURING AREA
- 1.4 STORAGE AREA
- 1.5 COMPANY OUTLOOK
  - 1.5.1 BANK REFERENCES
- 2.0 SERVICES
- 3.0 LINES OF PRODUCTION – REFERENCES
  - 3.1 STORAGE TANKS
    - 3.1.1. MAIN REFERENCES
  - 3.2 SILOS FOR GRANULAR AND POWDERED PRODUCTS
    - 3.2.1 MAIN REFERENCES
  - 3.3 PIPING FOR THE CHEMICAL INDUSTRY
    - 3.3.1 MAIN REFERENCES
  - 3.4 UTILITY LINES
    - 3.4.1 MAIN REFERENCES
  - 3.5 ENVIRONMENT PROTECTION
    - 3.5.1 MAIN REFERENCES
  - 3.6 FGD PLANTS
    - 3.6.1 MAIN REFERENCES
  - 3.7 CHIMNEYS
- 4.0 SPECIAL WORKS IN COMPOSITE MATERIALS
  - 4.1 MAIN REFERENCES
- 5.0 ADVANCED COMPOSITE MATERIALS
  - 5.1 MAIN REFERENCES

## 1.0 INTRODUCTION

SELIP S.p.A. has been working in the FRP and composite materials field since 1961. Today Selip is a leading company in the manufacturing and engineering of tanks, silos, chimneys, scrubbing towers, piping, FGD spray banks and many other special works.

### 1.1. HEADQUARTERS AND FACTORY:

I - 43012 Fontanellato (Parma) - Via Provinciale, 36  
Tel. +39 0521 824211  
Telefax +39 0521 821944  
E-Mail: [info@selip.it](mailto:info@selip.it)  
**web site:** <http://www.selip.it>

### 1.2. OFFICES AND FACTORY FOR CENTRAL SOUTHERN AREA:

I - 00040 Ariccia (Roma) - Via Cancelliera 49/51  
Tel. +39 06 9344267 -  
Telefax +39 06 9343792  
E-Mail: [info@selip.it](mailto:info@selip.it)  
**web site:** <http://www.selip.it>

### 1.3. PERSONNEL AND COVERED MANUFACTURING AREA:

Fontanellato Plant : nr. 40 people and m<sup>2</sup> 7.600  
Ariccia Plant : nr. 30 people and m<sup>2</sup> 9.400

### 1.4. STORAGE AREA:

Fontanellato Plant : m<sup>2</sup> 20.000  
Ariccia Plant : m<sup>2</sup> 9.000  
  
Capital Stock : Euro 400.000,00  
Total turnover 2005: Euro 9.099.067,00

### 1.5 COMPANY OUTLOOK

SELIP S.p.A. has been operating in the FRP field since its inception in 1961. Its manufacturing plants are conveniently located for easy connections throughout Italy and Northern Europe.

SELIP is ISO 9002 certified since October 1998 and since 2003 it is UNI EN ISO 9001:2000 certified.

Moreover it has obtained both TÜV and DIBt qualifications

Its procedures comply with the rules of the main Italian and European customers, just as: Enel, Fiat Engineering, Fisia, Snamprogetti, Alenia-Oto Breda, Intermarine, etc.

#### **ANC Registration:**

- CAT 5 F1 Euro 390.000,00
- CAT 10 A Euro 1.550.000,00

Associated to UNIONPLAST and "Unione PArmense degli Industriali" corporation.

### 1.5.1 BANK REFERENCES:

- Banca Nazionale del Lavoro - Parma Branch
- Cassa di Risparmio of Parma & Piacenza – Parma Head Office
- Banca Popolare Emilia Romagna – Parma Branch
- Banca del Monte S.p.A. – Parma

## 2. SERVICES

SELIP can provide the following services:

- Engineering , design, design analysis
- Technical specifications
- Moulds manufacturing
- Quality Control (working process, control and testing procedures)
- Computer-aided design
- Chemical and technological laboratory
- Assembly and installation
- After Sales Service

## 3. LINES OF PRODUCTION - REFERENCES

### 3.1. STORAGE TANKS

For chemical and foodstuff

Capacity: from 1.000 to 200.000 litres.

Horizontal and vertical configuration tanks for storage and transport. Equipped with thermal insulation.

Tanks supplied with internal PVC, PVDF or MOPLIN liner.

Single or double wall execution

#### 3.1.1. MAIN REFERENCES:

- **Enel** Roma / Italy
- **Bayer S.p.A.** Milano / Italy
- **Montedison** Milano / Italy
- **Gruppo Fiat e Consociate** Torino / Italy
- **Solvay & C.le** Rosignano S. (Livorno) Italy
- **Anic S.p.A.** S. Donato Milanese (Milano) / Italy
- **Sncf** Ste Etienne / France
- **Galbani** Melzo (Milano) / Italy
- **Enichem** Milano / Italy
- **Panigal** Bologna / Italy
- **Mira Lanza** Genova / Italy
- **Idreco** Voghera ( Pavia ) / Italy
- **Fisia Italmimpianti** Genova / Italy
- **Thermokimik** Milano / Italy
- **Procter And Gamble** Pomezia ( Roma ) / Italy
- **Wacker Chemie** Burghausen / Deutschland
- **Messo Gmbh** Duisburg / Deutschland
- **Thyssenkrupp Encoke Gmbh -** Bochum / Deutschland
- **Noell Gmbh** Würzburg / Deutschland
- **Babcock Borsig Power Environment (L. & C. Steinmuller Gmbh)** -Gummersbach / Deutschland
- **Ae Energietechnik Gmbh** Wien / Austria

- **Thermoselect S.A.** Locarno / Switzerland
- **Snamprogetti** Milano – Fano (An) / Italy
- **Henkel Chimica S.p.A.** Milano / Italy
- **Stork Comprino** Antwerpen / Belgium
- **Lewa Gmbh** Leonberg / Deutschland

### 3.2. SILOS FOR GRANULAR AND POWDERED PRODUCTS

Capacity from 10 to 200 mc.

With conical bottom for easy product removal.

For agricultural products (maize, grain, mash, wheat, etc.) animal food, flour and other foodstuff for humans and animals.

For chemical products and granular plastic materials.

#### 3.2.1. MAIN REFERENCES:

- **Romana Di Macinazione** Grottarossa (Roma)
- **Latteria Sociale Soresinese** Cremona
- **Savid S.p.A.** Como
- **Scaglia** Bergamo
- **Az. Agric. Valbaganza** Parma
- **Industria Termoplastici Pavese** Pavia
- **Baldi** Cuneo
- **Enichem** Milano
- **Magic** Parma

### 3.3. PIPING FOR THE CHEMICAL INDUSTRY

From 25 mm to 3,000 mm diameter

For distribution of chemical products. Fireproof systems.

Joints: butt or flanged.

Connections and fittings.

#### 3.3.1. MAIN REFERENCES:

- **Enel** Power plants of : Fiumesanto, Melilli, Termini Imerese, Torre Valdaliga, etc
- **Bayer S.p.A.** Milano
- **Solvay & C.le** Rosignano S. (Li)
- **Ispra** DN 1200 radioactive gas dish. Main
- **Off. Mecc. Reggiane** Reggio Emilia
- **Termomeccanica** La Spezia
  
- **Rossetti - Bouygues** Off-Shore Platforms (RA)
- **Koch International** Spray Headers for FGD plant - Milan
- **Sit** Smoke duct DN 1200 – Mantua-
- **Recordati** DN 1500 x 600 m (acid solutions) –Latina
- **Bristol** DN 800/700 (exhaust fumes) - Latina
- **Babcock Borsig Power (L.&C. Steinmüller- D)** Spray Headers for FGD plant in China, complete with installation on Site

### 3.4. UTILITY LINE

Water mains, sewage disposal mains, irrigation systems.  
Bell and spigot joints with double "O-Ring" and release proof joint.

#### 3.4.1. MAIN REFERENCES:

- **Co.Fi.Sa** – Roma ml. 1000 DN 2500
- **Co.Ma.Ba** – Napoli ml. 1500 DN 2500 undersea main
- **C.M.C.** – Ravenna DN 600 pipe or Ravenna Commune
- **Impresa Pizzarotti** – Parma Several works
- **Ministero Protezione Civile**- Pozzuoli (Napoli) DN 1500 sewage disposal main
- **Enel** – Malta DN 1200 seawater suction main
- **Enel** - Fiumesanto Pipes DN 2500 x 1000 ml
- **Impresa Di Battista** - Bari ml 3000 pipes DN 3000 /2800/2500.  
Rig. 3000 / 5000 N/m<sup>2</sup> Melfi (Italy)
- **Cotramarine** – Marsiglia / F ml. 700 seawater pipe DN 1700 (Libyan)

### 3.5. ENVIRONMENT PROTECTION

Water Treatment, Gas cleaning, Incinerating Plants.

#### 3.5.1. MAIN REFERENCES:

- **Enichem** – Ravenna DN 3000 x 40 m hgt. Gas washer and DN 2200 service lines.
- **Nuova Rayon** - Rieti equipment and tanks
- **Termomeccanica** - La Spezia desalination plant fittings and filters
- **Off. Reggiane** - Reggio Emilia piping and fittings for ENEL Brindisi
- **Officine Bosco** - Narni (Terni)
- **Italimpianti S.p.A.** - Genova
- **Koch International** - Milano washing towers for solid waste urban incinerators
- **Enichem** – Terni DN 3500 x 35000 mm hgt. gas washer with Moplen liner
- **F.Ili Delfino** – Milano
- **Technipetrol** – Roma
- **Hydrotechnik** – Salisburgo / A
- **Degremont S.p.A.** – Milano
- **Sopra** – Milano Tower for AMGA – Bergamo
- **Ctip** – Roma Solvay - Thailand 1995 - 1.000.000 USD
- **L.&C. Steinmuller Gmbh** - SO<sub>2</sub> - HCl gas washer for Hamburg and Gumpersbach / D Böhlen
- **THYSSEN STILL OTTO Gmbh** - n. 4 gas washer for Noord Brabant / NL Bochum / D
- **NOELL Gmbh** - Würzburg / D Scrubbers for waste incinerators - Kempten
- **Nuova Rayon** – Rieti N. 4 Scrubbers Ø 3500 x 22.000 mm H
- **Austrian Energy & Environ. Gmbh** - Vienna / A N. 4 Scrubbers Ø 3800 x 18.000 mm H
- **Thermoselct S.A.** – Locarno/Ch Decanters for R.S.U
- **Thermokimik** – Milano Filters for Enel-Plant – S. Filippo del Mela

### 3.6. FGD PLANTS

SELIP provides:

Design, engineering, design analysis, dimensioning,, moulds and production equipment.

#### 3.6.1. MAIN REFERENCES:

- Jgc Corporation 1995 Opatovice - Czech Rep.
- L. & C. Steinmüller Gmbh 1998 - Banshan - P.R.C.
- L. & C. Steinmüller Gmbh 1998 - Beijing - P.R.C
- L. & C. Steinmüller Gmbh 1998 - Chongqing P.R.C
- Beijing Longyaun Environment Protec. 2001 - Jingneng P.R.C
- Beijing Longyaun Environment Protec 2002 - Beijing - P.R.C
- Beijing Longyaun Environment Protec 2002 - Jiangyin - P.R.C
- Wuhan Kaidi Electric Power Ltd 2003 - Taiyuan - P.R.C
- Wuhan Kaidi Electric Power Ltd 2004 - Zhenjiang P.R.C.
- Innovation Hong Kong 2004 Shajiao C P.R.C

### 3.7. CHIMNEYS – MAIN REFERENCES

- Karrena – Milano 1 Chimney DN 3.000 x 70.000 mm H
- Maurer Söhne Gmbh-München/D 2 Chimneys DN 2.100 x 80.000 mm H
- Fisia – Genova 2 Chimneys DN 1.400 x 50.000 mm H/  
50.000 mm H. installation on-site with steel  
structure, stairs and elevator.
- Agea - Ferrara
- TM.E. – La Spezia 3 Chimneys DN 1700 x 65.000 mm H  
to be installed in Granarolo (Bologna)  
incinerating plant.  
3 Chimneys DN 1500 x 42.000 mm H  
+ 2 Chimneys DN 1700 x 42.000 mm H  
to be installed in Gioia Tauro incinerating  
plant.

#### 4. SPECIAL WORKS IN COMPOSITE MATERIALS

The experience we have gained in working with FRP, coupled with the degree of specialization attained by our engineers and technicians have led us to the production of special works both in the military and civilian sectors.

Taking advantage mainly of the filament winding technology, both with polyester and epoxy resins, we provide studies, designs, experiments, production of moulds and working equipment for projects of a particular nature as regards both technology and quality.

Such works are carried out under the guidance of written work procedures, as well as under Quality Control (including AQAP norms) and are subjected to final testing on the part of the client and/or, when required, by external agencies (Navy, CAQ etc.).

To carry out such works we have at our disposal the following equipment:

- Temperature and humidity controlled 30 x 10 m cleaning room, for delicate works and gluing.
- Testing plane with 7 x 3 three-dimensional tracing.
- Numerically controlled three movement winding machine.
- Programmed 20 x 5 x 5 post-hardening room.
- Nr. 2 programmer and temporiser equipped epoxy ovens (with spindle rotation).

Some references in this sector are listed below, obviously within the limits of that which can be divulged:

- Study, design and construction of the mass production pre-prototype of 300 sea-to-air missile launchers. Roving winding with non-flame supporting resins with phenol honeycomb sandwich vacuum glued with epoxy resins.
- Study: new "Ribassato" launcher.
- Distortion-proof barrel and muzzle pipe for armoured tank. Constructed in filament winding with positioned metal inserts.
- Missiles 200 mm diam. launch tube. Constructed via multiple technologies (carbon, Kevlar, etc.)
- "R" glass winding.
- Anti-blast panels (glass, carbonium, Kevlar).
- Mine-sweeper hydraulic booster ogives and skirts.
- Mine-sweeper tanks and special works (for U.S. Navy, Intermarine Italia, Australian, Nigerian, Malaysian and Thai Navies).
- Epoxy resin wound mine containers.
- Gluing with epoxy resins and vacuum, silica fibre and phenol resins pre-impregnated thermal insulation.
- Pre-impregnation with manual stratification.
- Reverse osmosis epoxy piping.
- Realization of prototype and pre-production (120 pieces) of missile thrower constructed in carbon fibre – DN 800 X 6.000 l.

**4.1. MAIN REFERENCES:**

- **U.S. Navy**
- **Riva & Calzoni** Bologna
- **Intermarine S.p.A.** Sarzana (La Spezia) e Savannah (Usa)
- **Cisdeg** Roma
- **BPD Difesa e Spazio** Colleferro (Roma)
- **Aerea** Milano
- **Piaggio** Genova
- **Snia Fibre**
- **Avondale Ind. Inc.** Gulfport (Usa)
- **Crestitalia** La Spezia
- **Transfield** Australia (Licence For Mine-Hunter)
- **Alenia Difesa** Divisione Oto-Breda – La Spezia / Brescia

**5. ADVANCED COMPOSITE MATERIALS**

With the experience gained in the composite materials sector (manual stratification pre-impregnation, honeycomb frame with vacuum gluing and "R" glass winding), our company has entered the advanced composite materials field.

In 1984 the company started the research and development of the filament winding technology application of **Carbon Fibre and Kevlar**.

We are equipped with two state-of-the-art numerically controlled electronic winding machines with three movements for the utilization of carbonium and Kevlar, and the necessary instruments for the control and recording of the most important work phases.

Selip can manufacture spherical and conical-shape, cylinders with asymmetric caps and windings of square and rectangular shape.

We have also acquired experience in the post-hardening cycle, under vacuum.

The technologies developed, coupled with the available hardware and software and Quality Control procedures, qualify SELIP, in terms of assurance and consistency, for any variety of request.

**5.1. MAIN REFERENCES:**

- **Snia BPD** Colleferro (Roma)
- **Aeritalia** Pomegliano (Napoli)
- **Aerea** Milano
- **Alenia Difesa** Divisione Oto-Breda - La Spezia
- **University of Cagliari**
- **Aerospaziale** Programma Aster
- **Magnaghi** Milano
- **Oto Melara** La Spezia