A COMPANY AT YOUR SERVICE

STM, established in 1980, is today one of the leading manufacturers with regard to R&D, the design and the construction of plants for the dry grinding and dosing of different material used in the industrial and environmental sectors.

Having the necessary background and well-experienced personnel, STM offers its partners a wide and complete service range from a single dry grinding mill to complete turnkey plants, from a feasibility study to the after-market service and maintenance.

Due to its own well-equipped grinding test center and laboratory, STM can simulate and verify the performance of every single equipment or complete plant, using different material and operation parameters.

The well-experienced personnel is prepared to provide every kind of technical assistance for the construction of new plants or the modification of existing installations, for upgrading existing plants or the improvement of its capacity by utilizing at its best the wide range of STM products.

STM supplies to the dry grinding industry most efficient and reliable machines and installations, designed in accordance with the most severe European regulations with regard to safety standards and environment protection and completed with first-class components only.

Responding to the permanent technical evolution and changing market requirements, STM offers:

- the highest possible quality standard
- a perfect and efficient service
- most competitive prices

To always maintain this, STM is divided into different specialized divisions, all supported by the Quality Assurance division. The various divisions are working closely together thus sharing a synergy effect and benefiting of the experience of several decades.
### Chemical Industry
- Flue gases treatment

### Foodstuff Industry
- Tea production lines
- Spices industry
- Confectionery industry
- Protein shifting for flours

### Animal Feed Industry
- Pharmaceutical industry
- Powder coatings
- Cosmetic industry
- Pigments and dyes
- Varnish in powder
- Toner, copying powders

### Mineral and Ore Industry
- Fine mineral powders
- Ceramic raw materials
- Refractory industry
- Hard materials / abrasives
- Rare earths
- Size reduction of plastics
- Recycling

### Design, production and startup of:
- Sieve mills
- Pin mills
- Classifier mills
- Jet mills
- Roller mills
- Cryogenic mills and installations
- Micro-ball mills
- Impact mills
- Mixers
- Equipments and mills for laboratory
- Packing machines

### Mills, Microselectors, Graders

| MODEL | CLASSIFIER MILLS | CLASSIFIER MILLS COMPACT | AIR JET STREAM MILLS | SIEVE MILLS | PIN MILLS | TABLE ROLLER MILLS | MICRO - GRADERS | MICRO - GRADERS SD | MICRO - GRADERS SDN | MICRO BALL MILLS | AIR JET STREAM MILLS FOR LABORATORY | AIR MILLS Q5 100 - Q5 1000 | AIR MILLS WITH HORIZONTAL DISC Q5 300 - Q5 350 Q5 600 - Q5 1100 | AIR MILLS WITH FLUID BED QLD | AIR MILLS WITH CIRCULATION TUBE QON | CLASSIFIER MILLS JCF | EMISSION MILLS JAT 1000 | DOUBLE SHAFT MILLS JCL 320 | HAMMER MILLS JCW 300 - JCW 410 | ULTRA FINE - HAMMER MILLS JCW 416 | GRADERS FQ2 | EMISSION MILLS IPW 100 - IPW 250 | PIN MILLS JBL | MICRO - GRADERS FYW | HIGH EFFICIENT VIBRATING MILLS ZDM | TARGET JET MILLS QBW +50 |
|-------|-----------------|-------------------------|---------------------|------------|----------|-------------------|----------------|------------------|------------------|----------------|-------------------------------|--------------------------|-----------------------------------|-----------------------------|---------------------------------|-----------------|----------------|-----------------|----------------|------------------|----------------|----------------|-----------------|----------------|----------------|-----------------|--------------------------|

### Properties
- Soft, brittle, crystalline
- Medium-hard, abrasive
- Hard, highly abrasive
- Elastic, tough, cuttable
- Fibrous
- Dust explodable
- Lumpy > 5 mm
- Coarse-grained 1 - 5 mm
- Medium-fine, 500 - 1000 μ
- Fine, 150 - 500 μ
- Finest, 50 - 150 μ
- Super fine, 10 - 50 μ
- Ultra fine, 2 - 10 μ

### Powder Finessness

<table>
<thead>
<tr>
<th>MODEL</th>
<th>MIXER MODEL PRINCIPLE OF FUNCTIONING</th>
<th>RANGE OF FINENESS / mm</th>
<th>REST ANGLE</th>
<th>WITH LITTLE DIFFERENCES BETWEEN THE COMPONENTS</th>
<th>WITH HIGH DIFFERENCES BETWEEN THE COMPONENTS</th>
<th>HIGH ABRASIVE</th>
<th>HUMIDITY CONTENTS</th>
<th>DISCHARGE</th>
<th>CLEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conical screw mixer</td>
<td>DSH</td>
<td>convection</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>Conical screw and ribbon mixer</td>
<td>LDSH</td>
<td>convection</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>Convolution mixer with double cone</td>
<td>LGH</td>
<td>diffusion</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>Horizontal spiral test mixer</td>
<td>WLSH</td>
<td>convection</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>Double shaft mixer with zero-gravity</td>
<td>WZ</td>
<td>convection</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>Counter mixer</td>
<td>LSH</td>
<td>convection</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
<tr>
<td>V powder mixer</td>
<td>VSP</td>
<td>diffusion</td>
<td>$&lt;0.1$</td>
<td>$0.1 - 0.5$</td>
<td>$0.01 - 0.1$</td>
<td>$&lt;45°$</td>
<td>$&lt;35°$</td>
<td>$&gt;35°$</td>
<td>High</td>
</tr>
</tbody>
</table>

### Humidity Contents
- Dry
- Humid

### Discharge
- Clean

### Not suitable
- Partially suitable
- Suitable
QUALITY ASSURANCE (QA)

STM has taken the necessary steps to constantly optimize its own quality system. The QA supports all company activities and strengthens in particular the competence of its own test center and laboratory, both completely equipped with machines of latest technology.

The QA maintains:
- The establishment, the evaluation and the control of the STM Quality Assurance system.
- The maintenance of the quality criteria during the project, production and final approval stages.
- The control and supervision of all tools used by the technical assistance personnel.
- The establishment and the update of the STM product information and data center.

TURN KEY PLANTS DIVISION

Design, production and startup of:
- Grinding plants
- Grinding and classifying plants
- Cryogenic grinding plants
- Reagents grinding and injection systems for toxic waste smoke treatment.

The Turn Key Plants Division is well prepared to provide engineering services such as feasibility studies, basic and detailed engineering service and R&D support.

TEST CENTER AND LABORATORY FOR ANALYSIS

STM has its own complete test center where every kind of grinding test can be executed. Demonstrating in real time the machine performance with regard to the product and the process, the client can screen and if necessary optimize the machines of his choice to obtain the best technical and most economic process.

The STM customer service is completed by the availability of the own laboratory for analysis where the characteristics of all ground products can be determined and controlled.

AFTER SALES MARKET AND MAINTENANCE DIVISION

STM offers a complete after sales market service including:
- Standard maintenance
- Special maintenance
- Spare part service