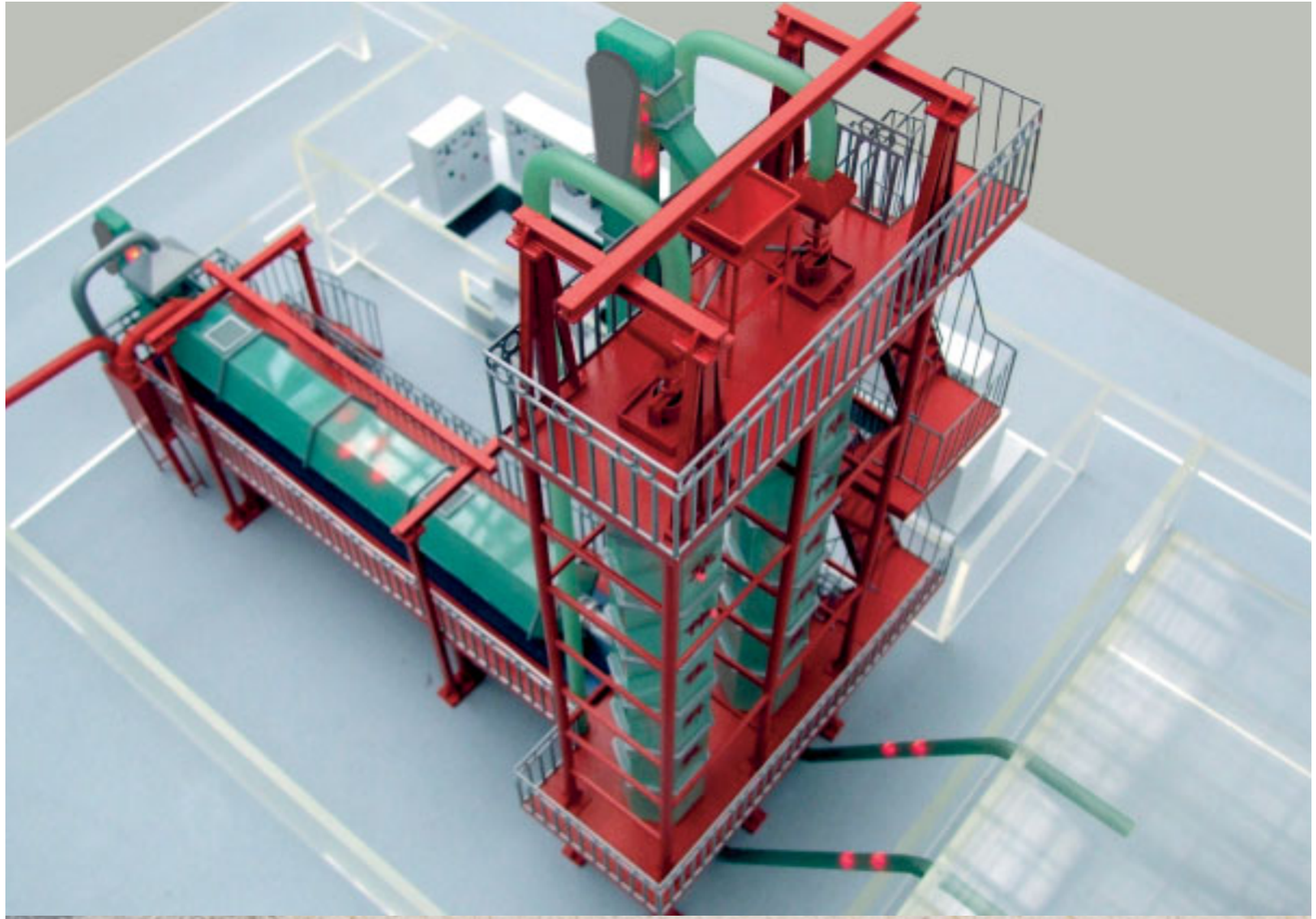
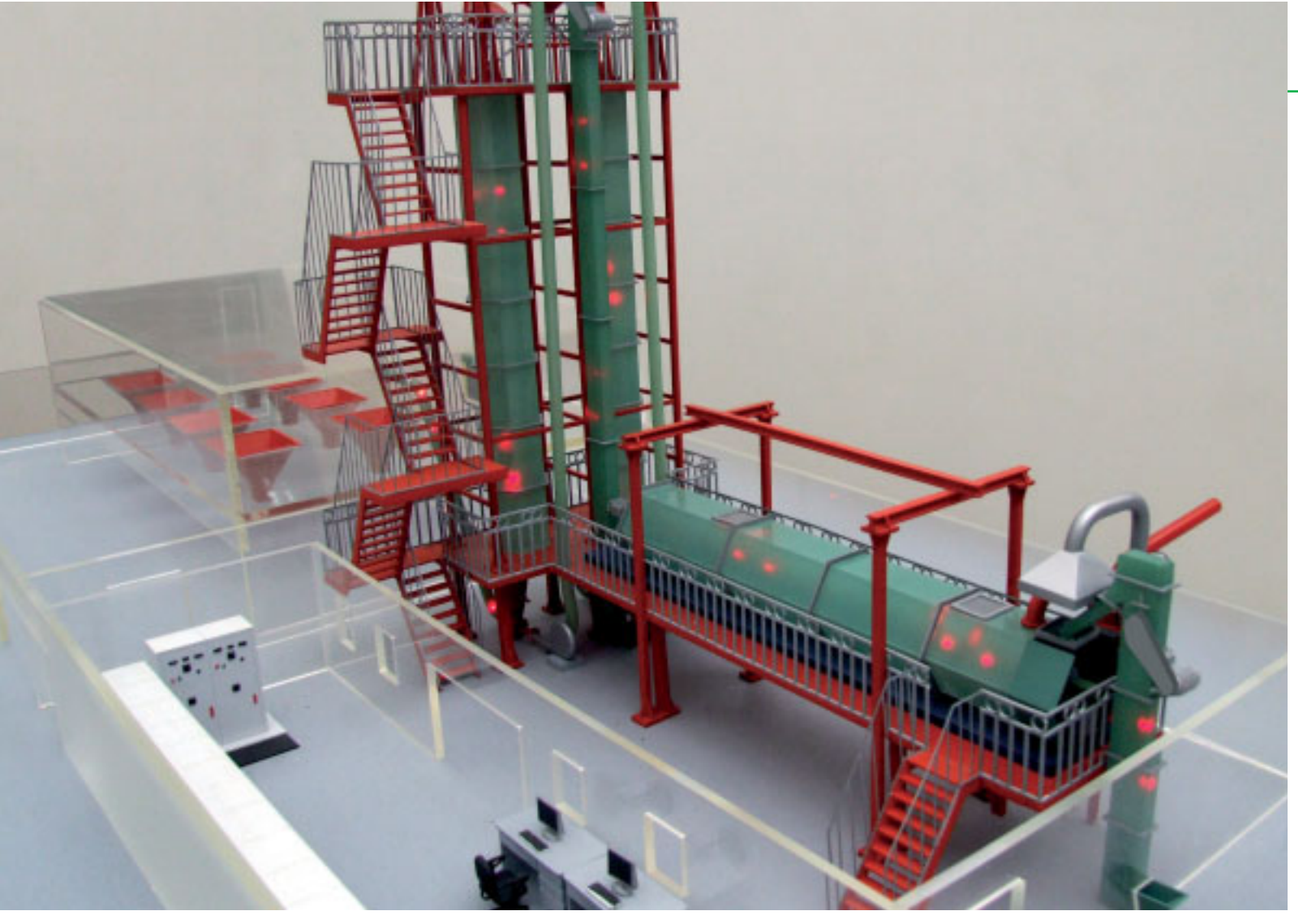


THERMOSILIT®

»A NEW DIMENSION
IN MINERAL TECHNOLOGY«

ECO®
Construction Material Systems



THERMOSILIT- FURNANCE®

THERMOSILIT®

NEW PATENTED MULTI-PURPOSE INSULATION MATERIAL

A specially patented process expands silicate mineral material into a cluster of glazed pellets, structurally similar to a raspberry. The pellets have a porous structure, being both light and having more strength than similar materials, such as perlites. The durability of the pellets reduces potential fragmentation and can handle more pressure during the mixing process...

Air and water vapour can easily penetrate the pellet's thin outer edge, but the pellet cavities remain water resistant during the mortar's setting time. This means that less water is required for mixing the bonding material with the light pellets.

»WE CREATE NEW STANDARDS
FOR A BETTER ENVIRONMENT«

WHAT MAKES THERMOSILIT® SO UNIQUE? WHAT ARE ITS BENEFITS?

THERMOSILIT® HAS FIRE RESISTANT QUALITIES

Thermosilit® has fire resistant qualities when used as mortar or plaster to cover various surfaces. Due to the low density of this material, heavier layers can be applied, but without a significant weight increase. As a result, fire risk is reduced. The fire resistant qualities of Thermosilit® have been tested and demonstrated on the following types of construction:

THERMOSILIT® PLASTER ON WOOD CONSTRUCTION*

*Wood construction - Wire mesh/screen nailed to wood surface - Rough hydrophobic base plaster - Fine white finishing plaster

Wood construction covered with wire mesh THERMOSILIT plaster
Initial temperature: 19°C

After 8 minutes
surface temperature: 1080°C
Wood surface temperature: 29°C

After 15 minutes surface temp.:1080°C,
Wood surface temperature: 44°C,
No damage to wood construction

THERMOSILIT® PLASTER ON BRICK CONSTRUCTION**

**Brick construction - Cement adhesive - Styrofoam insulation - Fiberglass mesh/screen - Rough hydrophobic base plaster - Fine white finishing plaster

Brick construction with Styrofoam insulation covered with THERMOSILIT® plaster - Initial temperature: 19°C

After 20 minutes
surface temperature: 856°C

After 30 minutes
surface temperature: 1080°C -
no damage to Styrofoam insulation

BRICK CONSTRUCTION WITH STYROFOAM INSULATION WITHOUT THERMOSILIT®

Brick construction with
Styrofoam insulation -
Initial temperature: 19°C

After 35 seconds
Styrofoam insulation disintegrates -
Surface temperature: Less than 1000°C

Appearance of damaged Styrofoam
insulation after cooling

STEEL CONSTRUCTION WITH AND WITHOUT THERMOSILIT®

Steel beam covered with
THERMOSILIT® plaster -
Initial temperature: 19°C

After 30 minutes
surface temperature: Over 1000°C -
No damage to steel beam

Steel beam without THERMOSILIT®
After 7 minutes surface temperature:
Over 1000°C - Steel beam begins to bend

further details (webvideo) about the tests: www.thermosilit.com/demonstration

...EVEN MORE BENEFITS!

THERMOSILIT® HAS SUPERIOR INSULATION PROPERTIES AND PRODUCES CRACK FREE PLASTER SYSTEMS

Using this material produces crack free wall systems, and its super insulating properties also help maintain either a warm or cool living environment.

THERMOSILIT® CONFORMS TO BUILDING MATERIAL STANDARDS

All existing material specification standards and regulations have been met. Since THERMOSILIT® does not absorb water, we are able to calculate the exact water and cement ratio to achieve the required pressure and strength standards.

THERMOSILIT® DECREASES DRYING TIME

Although THERMOSILIT® requires the same amount of water as conventional mortars, drying time is decreased. The pellet-like cell structure results in a faster moisture transfer that leads to a quicker and more consistent drying of the mortar.

THERMOSILIT® IS EASIER TO USE AND MORE ECONOMICAL

Applying mortar and plaster made of THERMOSILIT® is substantially easier, simpler and economical. A 10cm thick layer of mortar is easy to apply manually or with a machine. THERMOSILIT® is three to four times lighter than conventional mortar (over 2000kg per m2).

THERMOSILIT® SAVES ON TRANSPORT COSTS

Since this material is lightweight and has three to four times more volume, transportation cost can be reduced drastically. Since this technology allows us to manufacture this lightweight filler locally, transportation costs can further be reduced.

THERMOSILIT® SAVES ON ENERGY COSTS

Having a much higher volume for the same weight decreases transportation costs, which is further reduced because the materials are produced locally.

THERMOSILIT® PRODUCTION IS AN ENVIRONMENT FRIENDLY PROCESS

Since only water vapour develops during the manufacturing process, it is entirely pollution free.

THERMOSILIT® IS EASY TO RECYCLE

This product can be recycled and re-used in the construction process or used as agricultural fertilizer.

WWW.THERMOSILIT.COM

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