O Grupo Saint-Gobain e a Inovação

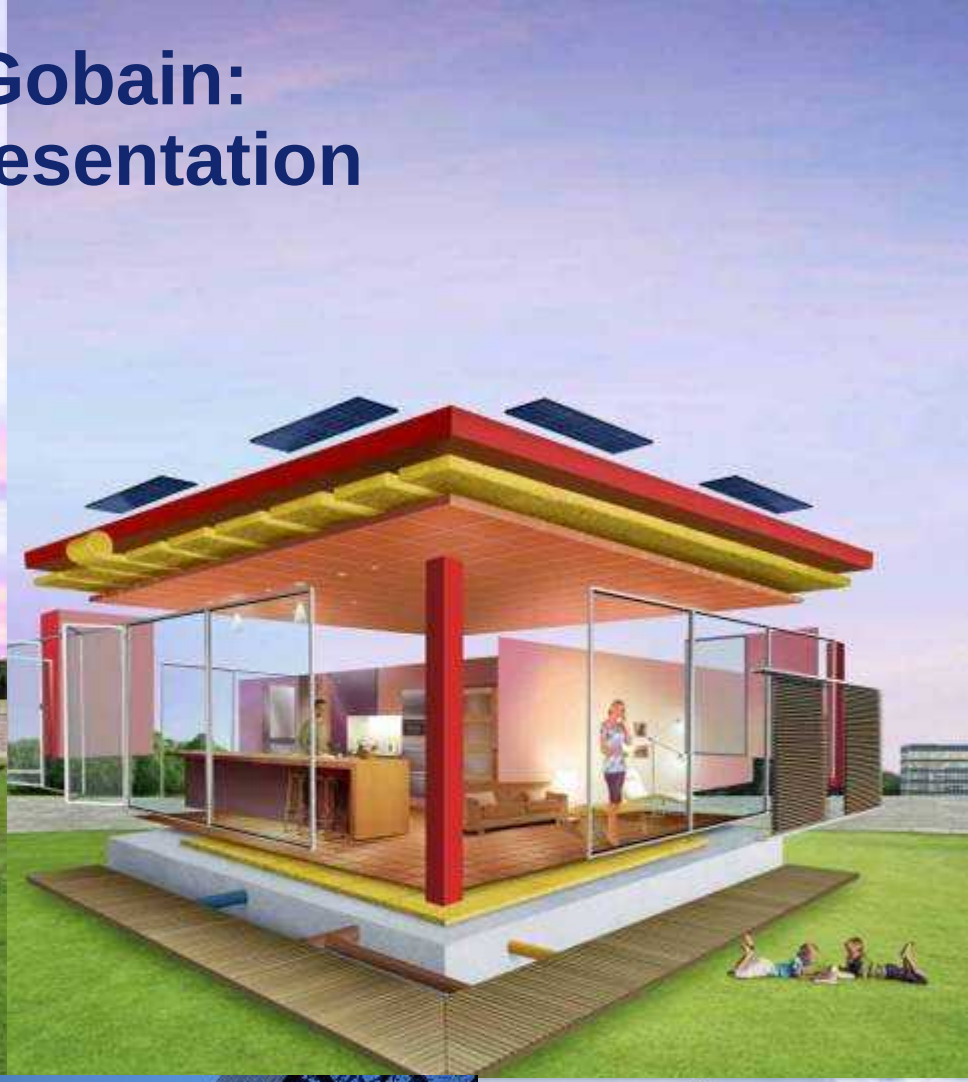
Paul Houang abril / 2010

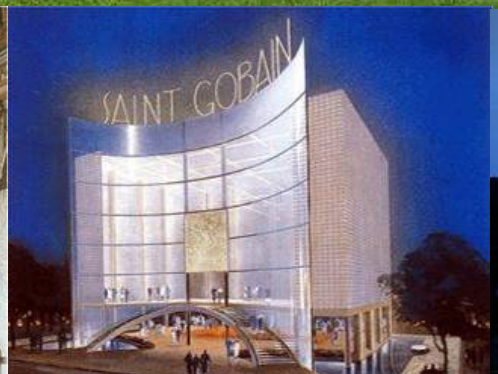
SAINT-GOBAIN

Apresentação Pessoal

- Brasileiro,
- Formado em Eng. Civil pela Poli – USP em 1977
- Doutorado em Eng. Química – Compiègne – França em 1985
- No Grupo Saint Gobain desde 1986 – sempre atuando em Inovação:
  - 2 anos na Saint Gobain Recherche – França – principal lab de P&D do Grupo na área de vidros
  - 10 anos na Divisão de Vidros Planos – Sekurit
  - 6 anos na Brasilit – Diretor de P&D Substituição do Amianto
  - 3 anos – Diretor de lab de P&D na França – Lab Central de P&D de Materiais de Construção
  - 4 anos – Diretor Técnico da Quartzolit

Saint-Gobain:
a short presentation

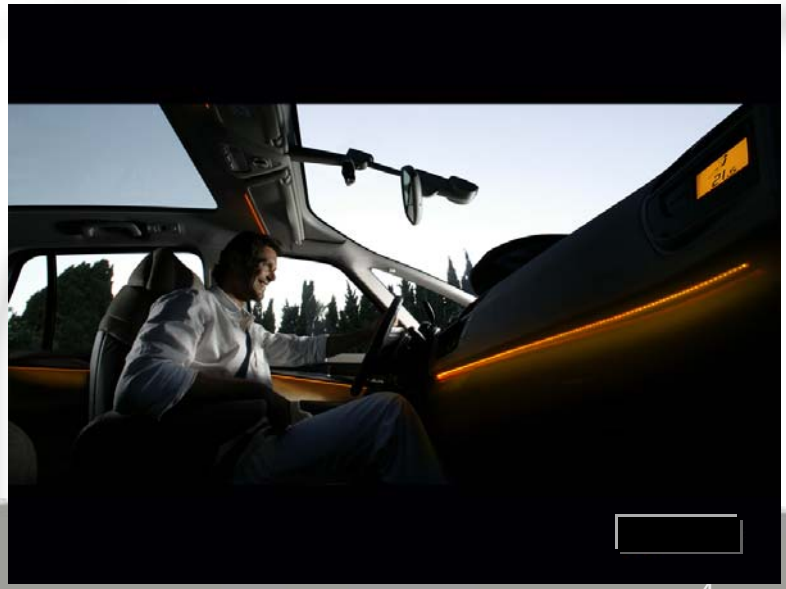




As Atividades da SG no Brasil
Pólo Vidro Plano

SAINT-GOBAIN GLASS

SAINT-GOBAIN SEKURIT



As Atividades da SG no Brasil

Pólo Embalagem

SAINT-GOBAIN
SANTA MARINA

SAINT-GOBAIN
EMBALAGENS

As Atividades da SG no Brasil
Pólo Distribuição de Materiais de Construção

Telhanorte

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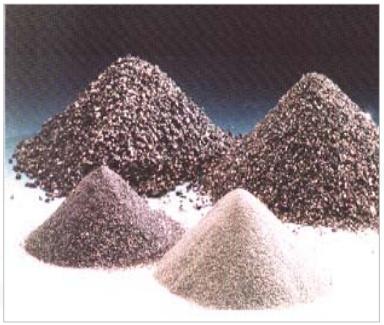
As Atividades da SG no Brasil
Materiais de Alta Performance

NORTON

CARBORUNDUM

WINTER



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As Atividades da SG no Brasil
Pólo Produtos para Construção

BRASILIT
SAINT-GOBAIN

weber
quartzolit

PAM
SAINT-GOBAIN

ISOVER
SAINT-GOBAIN

Placo®
SAINT-GOBAIN

Saint-Gobain: an ancient company

1665: Versailles: Louis XIV

Saint-Gobain, one of the world's hundred leading industrial corporations

- Operations in **59 countries** worldwide,
- **208,000 employees**
- European or world **leader** in each of its competencies.

2008	**€ bn**
Sales	43.8
Net income	1.4
Cash flow	3.5
Capital expenditure	2.2

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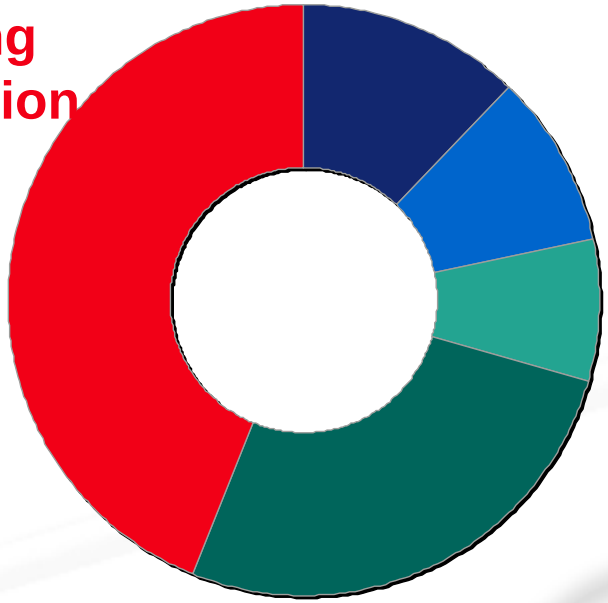
Industrial presence worldwide

SAINT-GOBAIN

Saint-Gobain Sectors

Breakdown of Sales per Sector in 2008



Flat Glass (12%)

#1 in Europe
#3 worldwide

High-Performance Materials (9%)

#1 worldwide

Packaging (8%)

#1 in Europe
#2 worldwide

Construction Products (27%)

#1 worldwide

Building Distribution (44%)

#1 in Europe

European or world LEADER

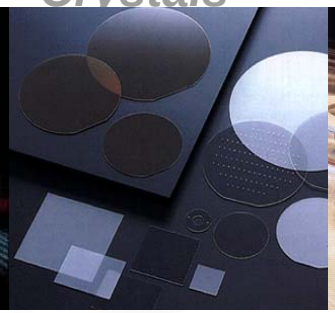
Flat Glass

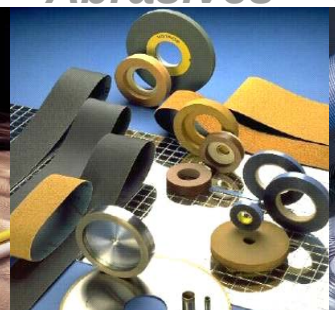
Many products and technologies

Base product *Building* *Automotive* *Specialties*

High Performance Materials

Grains& Powders *Ceramics* *Crystals* *Plastics* *Abrasives* *Glass textiles*



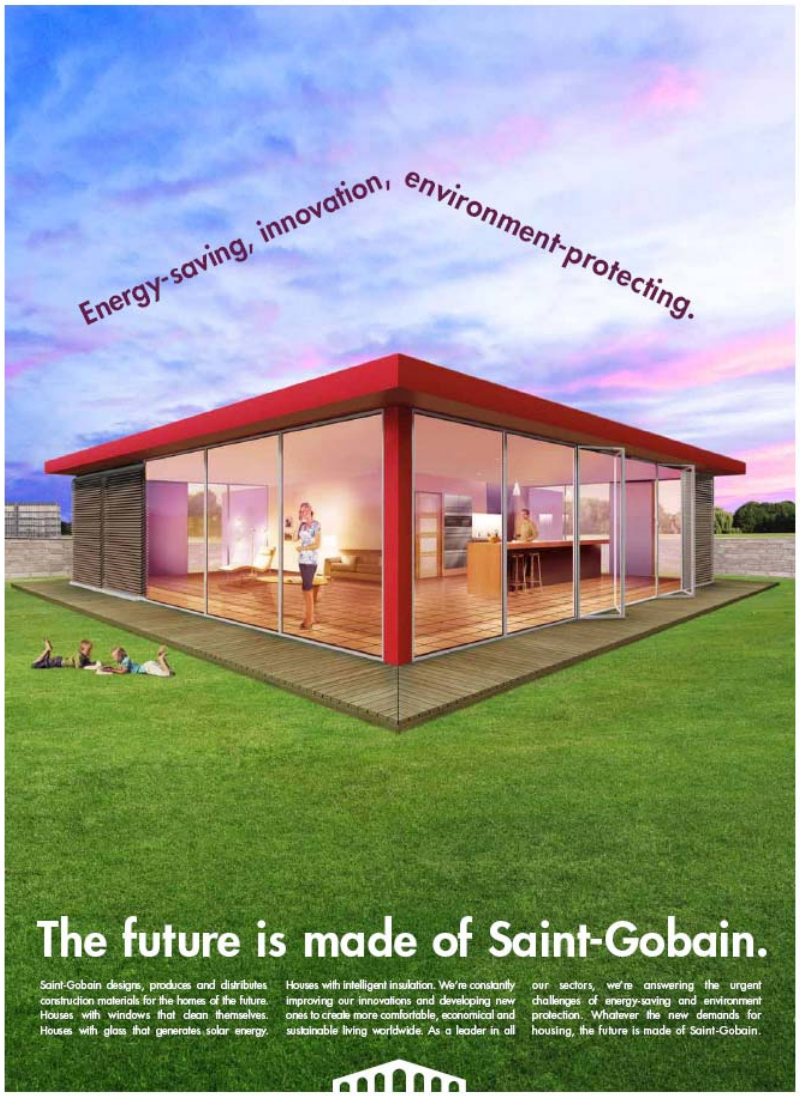


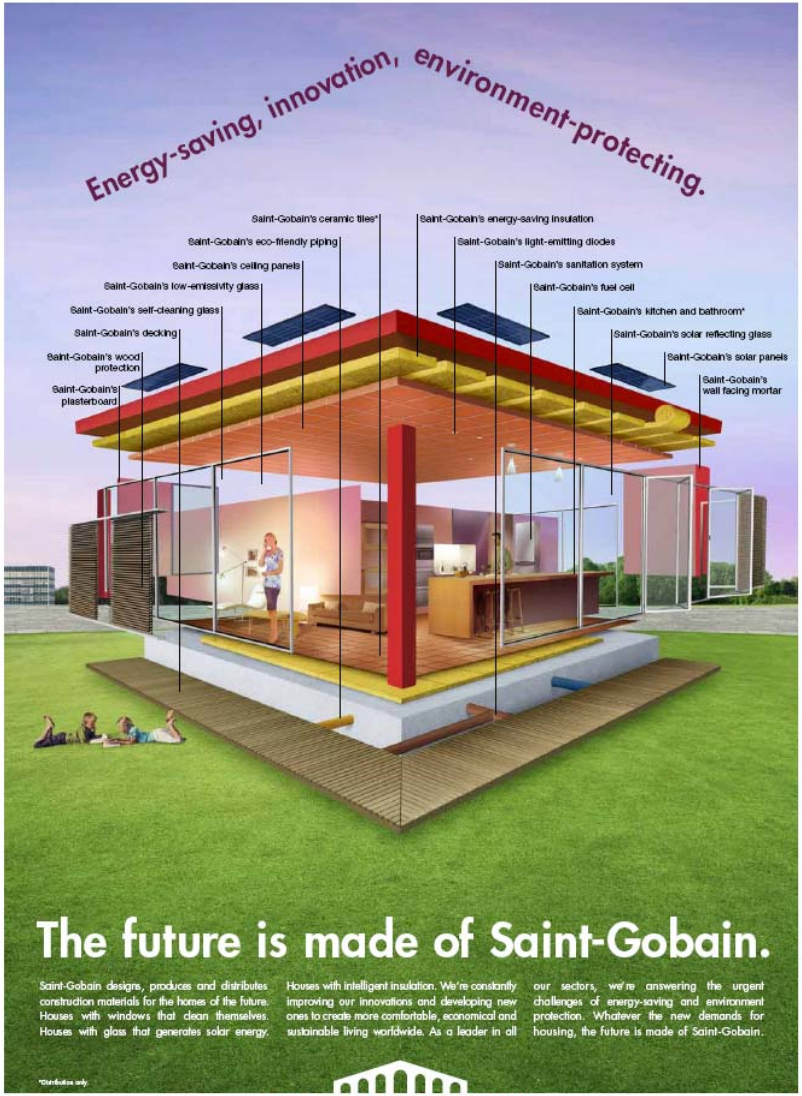
Building Products

Insulation *Pipes* *Mortars* *Exter. products* *Gypsum*

Saint-Gobain’s mission statement

« worldwide leadership in the construction market, offering innovative solutions to meet the challenges of our time: growth, energy, environment. »





R&D in Saint-Gobain

Joseph Louis GAY – LUSSAC – 1778 - 1850

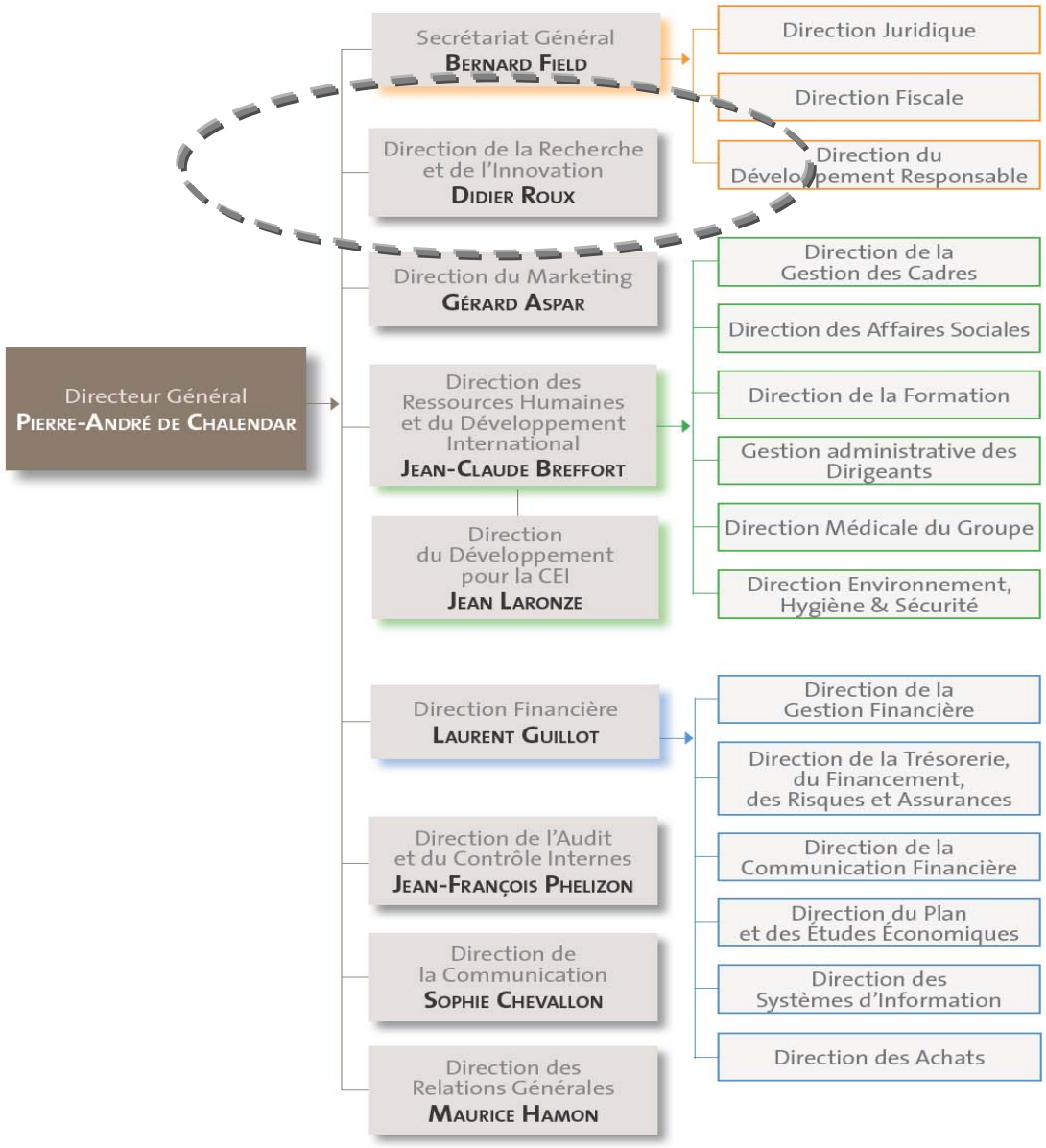
1844 – 1850 President of Saint – Gobain

Business + Science

SAINT-GOBAIN

Organigramme de la Compagnie de Saint-Gobain

Septembre - octobre 2009



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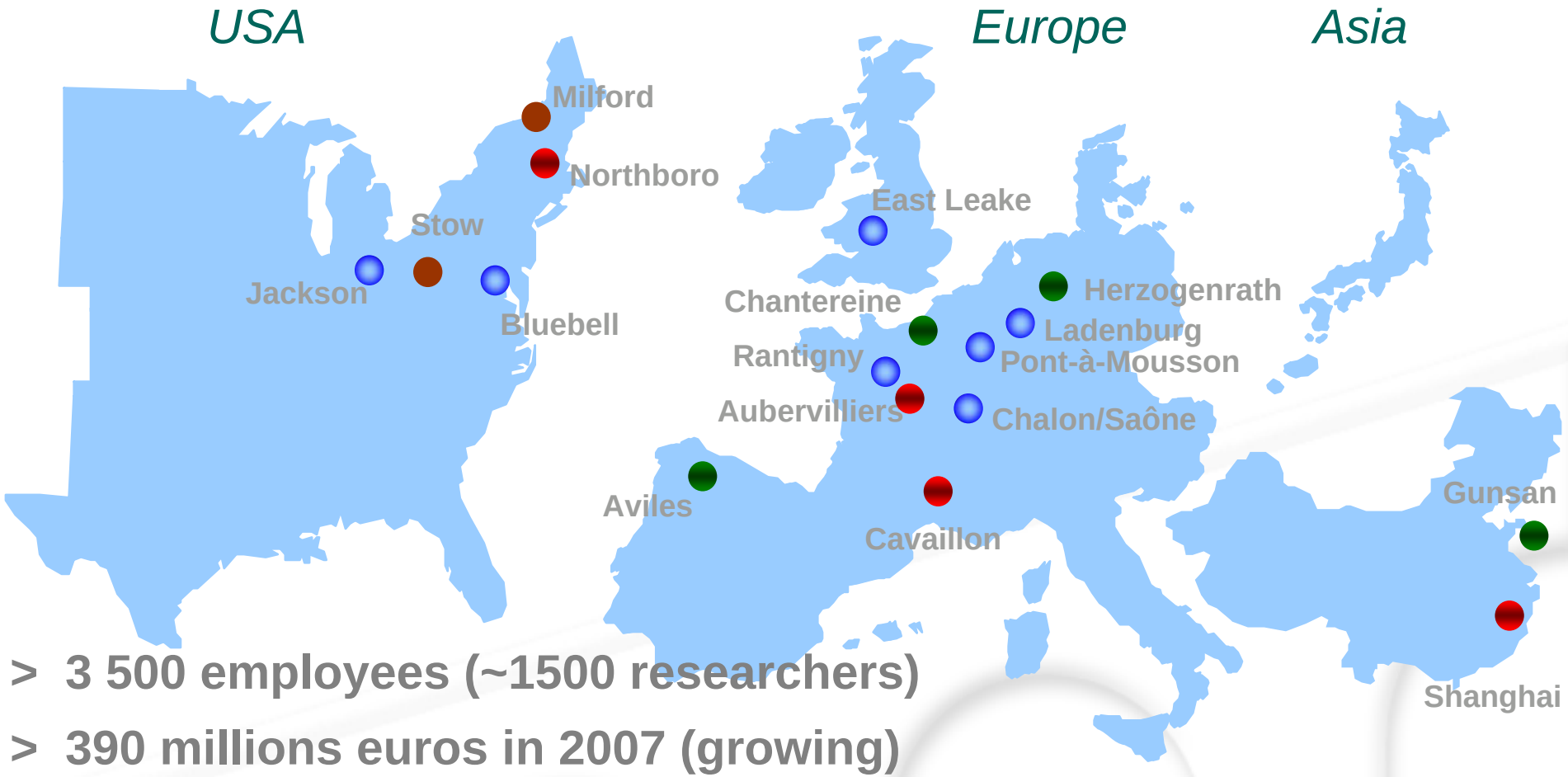
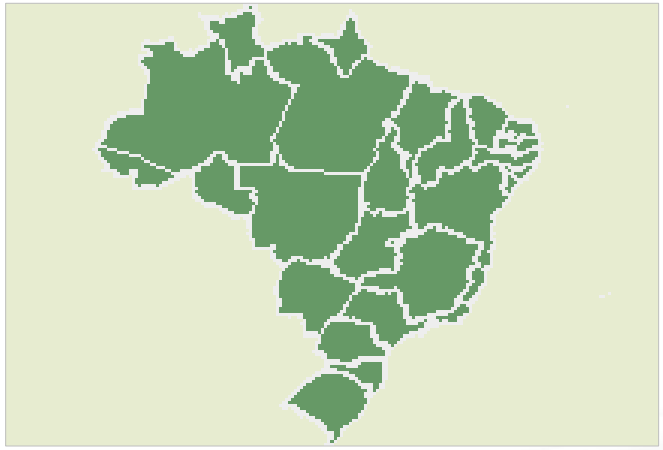
R&D : figures



- 3 500 employees (~1500 researchers)
- 390 millions euros in 2007 (growing)
- 15 research centers + 101 development teams
- More than 300 new patents filed each year

SAINT-GOBAIN

Development teams in Brazil



weber quartzolit

BRASILIT
SAINT-GOBAIN

SAINT-GOBAIN
EMBALAGENS

ISOVER
SAINT-GOBAIN

NORTON

SAINT-GOBAIN
GRAINS & POWDERS

Strategic Programs

each SP = portfolio of (sub)programs, R&D projects, actions

- Defined by the market that is targeted
  - In line with the strategy of the group
  - Either of (or both)
    - High cost/risk
    - Across existing Businesses
- A specific label for:
  - Scrutiny by the Comité de Direction Générale
  - Special emphasis in communication
    - Externally
    - Internally

List of Strategic Programs as of Sep 2009

1. Solar
2. Lighting
3. Fuel cell: SOFC
4. Active glazings
5. High Performance Insulation Systems
6. Materials from Green Chemistry
7. External Insulation Systems
8. Energy efficient and environment friendly processes

Saint Gobain is increasing its opening toward outside world

1. Collaboration with suppliers and customers
   - Together Marketing and R&D
2. A Market and technological team devoted to emerging markets
   - TMT Techno Marketing Team
3. A Special organization to deal with start-ups
   - NOVA External Venturing
4. An international Academic Network
   - SUN : Saint-Gobain University Network

2- A Techno-Marketing Team

20 dedicated persons: Europe, US, Asia, mix of marketing and engineers

- **Identify** new applications **for** existing technologies
- **Assess** emerging markets **and** technologies
- **Propose** new approaches **for** new/existing markets

Cross-fertilizing core strengths
Beyond what current BUs already do well
For large market & application potentials

3- An External Venturing initiative

Started 22 months ago by establishment of a **dedicated team** in Europe, US and Asia

Combine ideas stemming from **Innovative start ups** with the **industrial strength and assets** of Saint-Gobain

Variety of working methods: licenses, partnerships, equity investments and joint ventures

~400 companies reviewed, **4 partnerships** agreed and **20 under active** due diligences or discussion

***Focused area*: Construction Products, Energy and Environment**

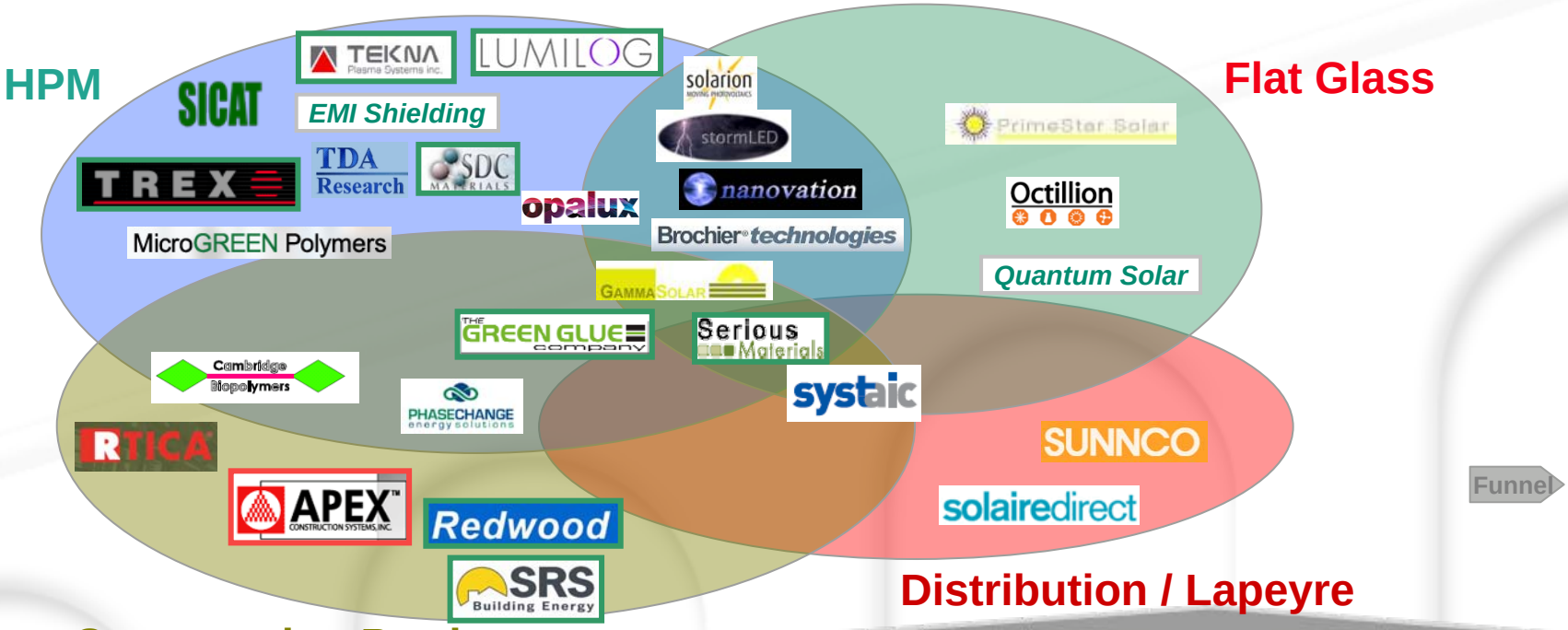
Input: from Venture Capital funds + internal (marketing, R&D)
Output: transfer to Businesses (sponsors identified early on)

Can lead to acquisitions providing access to new markets, to codevelopment partnerships, or simply stimulates our R&D !

Start-ups currently under study

- At last meeting we had 25 active projects, and since
  - 8 new active start-ups : solarion, GammaSolar, systaic, RTICA, EMI Shielding, TDA Research, Redwood, SDC Materials
  - 4 stopped projects : ceram polymerik, PETfix, GE2, SUPERIMAGING

Breakdown of the 29 Active start-ups today ("HOT", "BU Lead")



Funnel

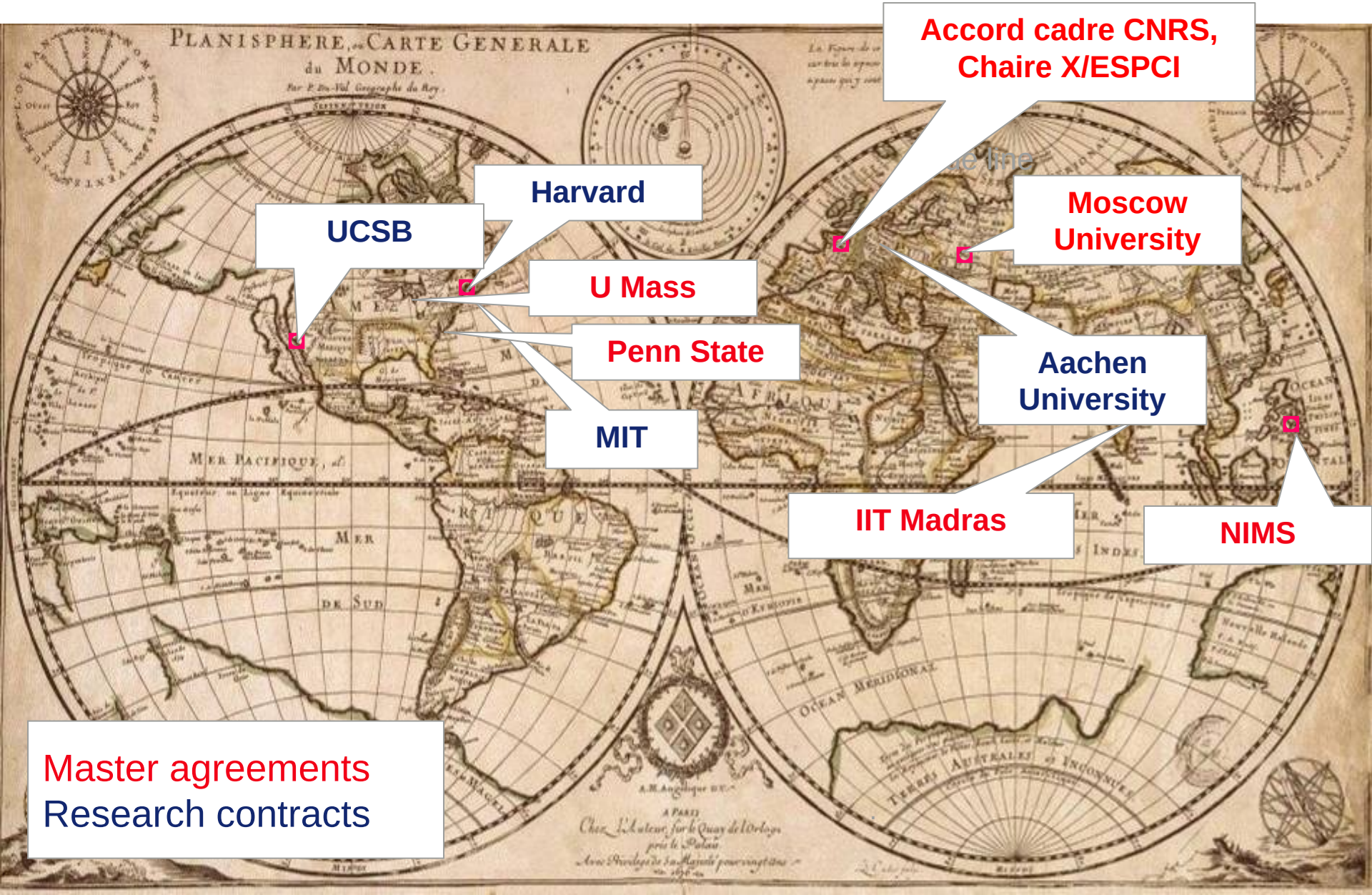
4- An academic network

Saint-Gobain University Network:

SUN

- **To develop long-term interactions with the best research teams in our domains**
- **To keep an eye on technological developments**
- **To hire of students from top universities in countries of strategic importance for Saint-Gobain by making our technologies better known**

SUN contracts end of 2009



- Projetos de Desenvolvimento de Produtos e de Métodos de Análise – Iniciação Científica, Mestrado, Doutorado
- Avaliação e Análise de Materiais,
- Treinamentos Específicos
- Transferência de Tecnologia

USP - Poli – Depto de Eng Civil
- Depto Eng de Minas
- Instituto de Química
- FAU

UFSCAR – DEMA
- Depto de Química
- Depto Eng Química e Materiais

UNICAMP – Polímeros

USP – São Carlos – Eng Produção

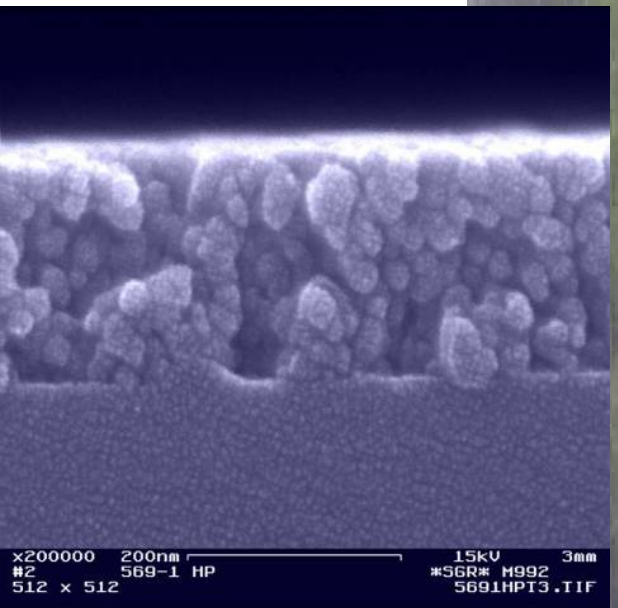
UFRJ – Eng. Mecânica

UFMG – Lab de Eng de Estruturas

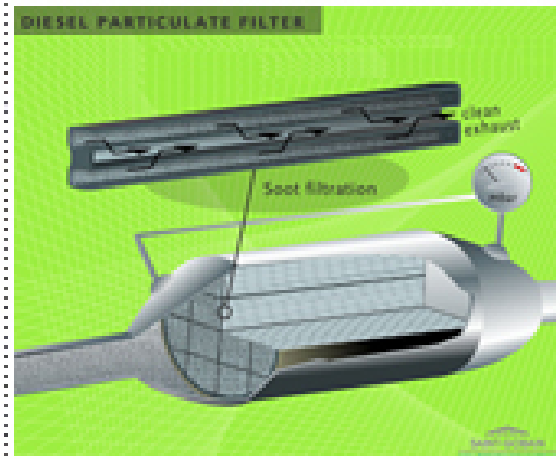
UFSC – Lab de Eficiência Energética

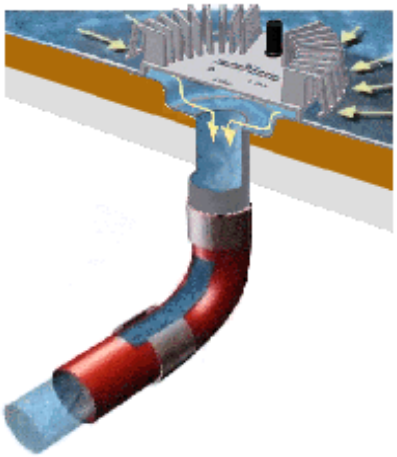
Alguns Exemplos de Produtos Inovadores

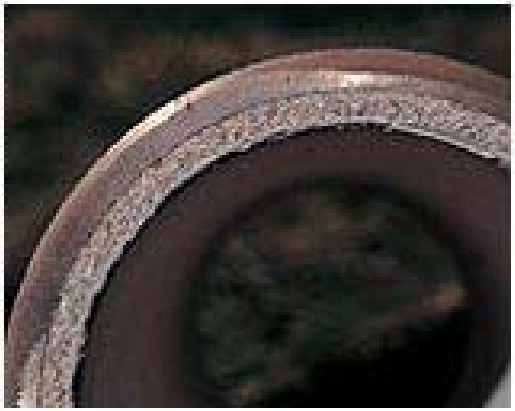
Bioclean : um vidro auto - limpante



Soluções para o isolamento térmico pelo exterior







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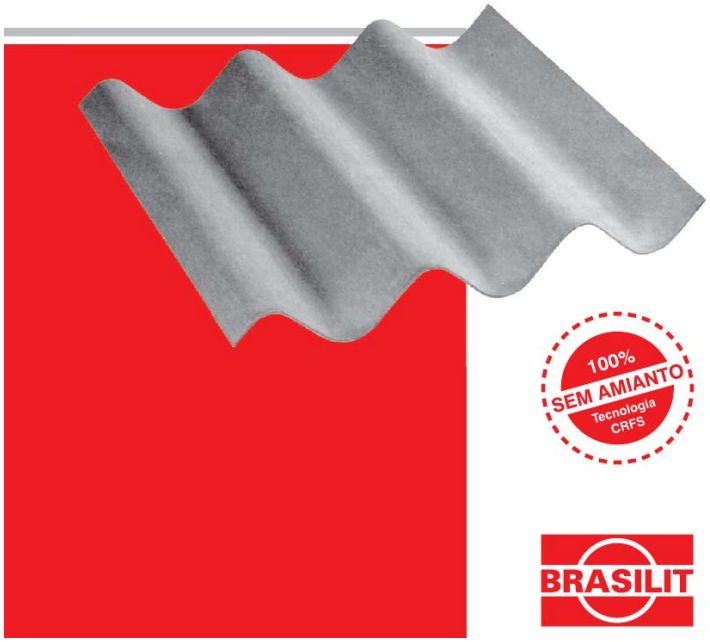

argamassa
SEM
POEIRA
TECNOLOGIA
WEBER
MÁXIMO CONFORTO E LIMPEZA

SAINT-GOBAIN

Obrigado pela Atenção !

paul.houang@saint-gobain.com

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