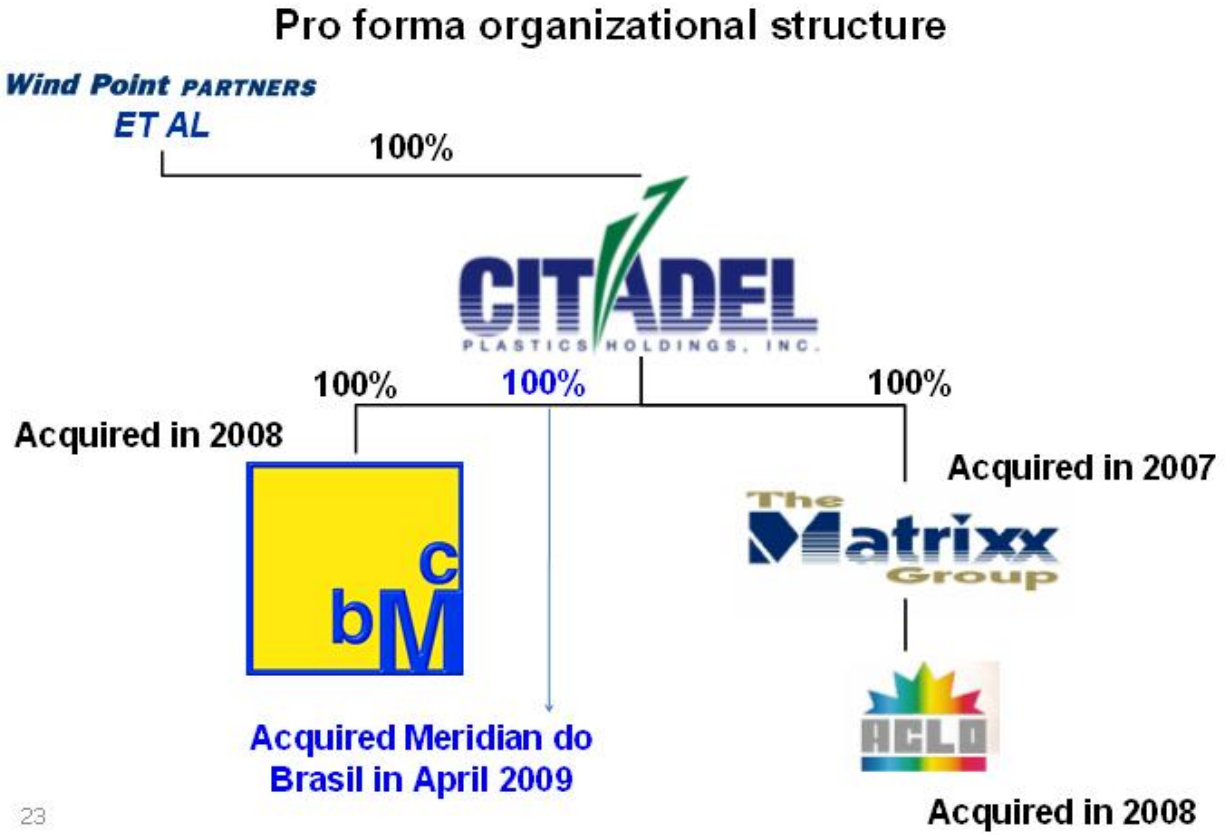
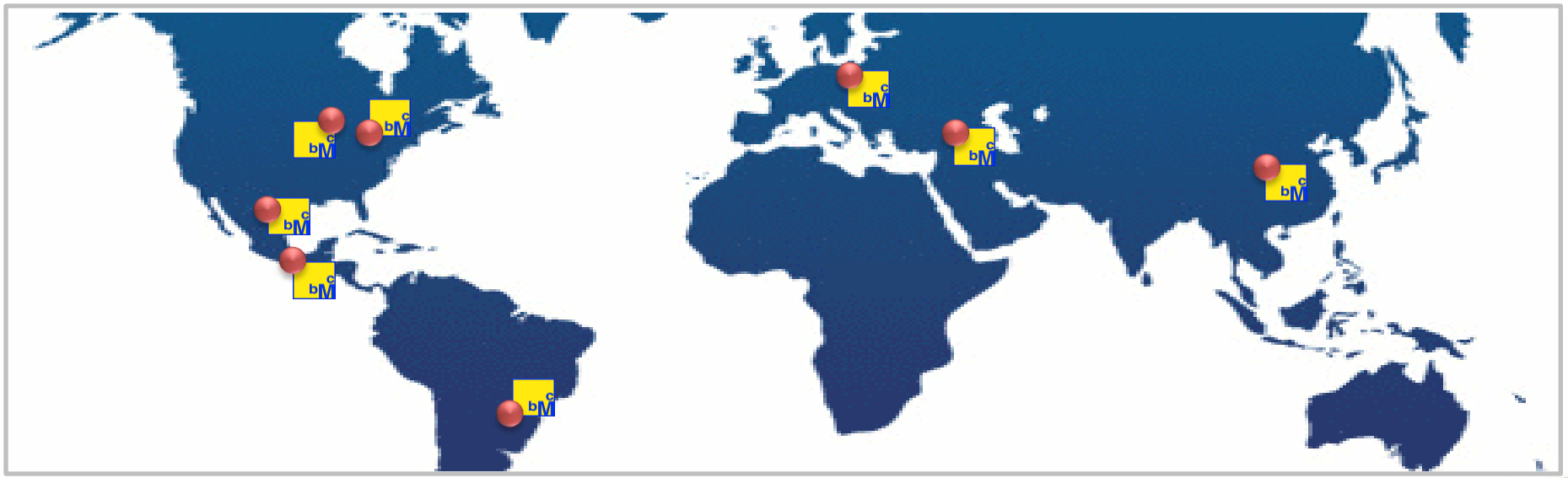
Bulk Molding Compounds

BMC Inc


Pro forma organizational structure
Wind Point PARTNERS
ET AL
100%
CITADEL
PLASTICS HOLDINGS, INC.
100%
100%
100%
Acquired in 2008
Acquired in 2007
The Matrixx Group
ACLO
Acquired Meridian do Brasil in April 2009
Acquired in 2008

Plantas da BMC Inc no Mundo:

- ✓ *2 plantas nos Estados Unidos (West Chicago e Perrysburg)*
- ✓ *2 plantasno México (Cidade do México e Juarez)*
- ✓ *1 planta no Brasil (Rio Claro – SP)*
- ✓ *2 planta na Europa (Hamburg, Germany e Turquia)*
- ✓ *1 planta na China (Dongguan)*



BMC Inc

MÉXICO CITY

CHICAGO, USA

RIO CLARO, BRASIL

BMC Inc

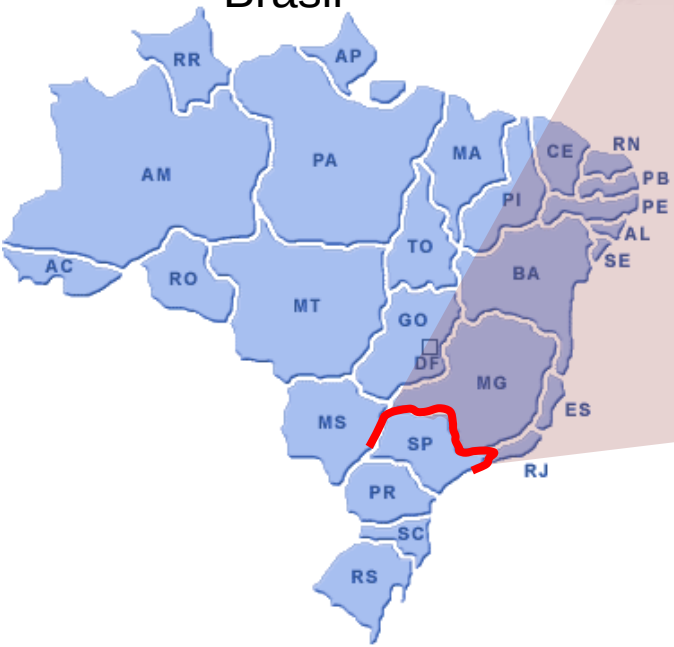
PERRYSBURG, USA

DONGGUAN, CHINA

HAMBURG, GERMANY

Brasil

Brasil



São Paulo

BMC RIO CLARO

Terreno: 43.665,29 m²

Área Construída: 8.821,13 m²

Início

1987

Colaboradores:

87

Endereço: Rua Meridian, 55
Rio Claro - SP – Brail
(180 km de São Paulo)

BMC do Brasil

BMC do Brasil

Produtos e Processos – BMC do Brasil

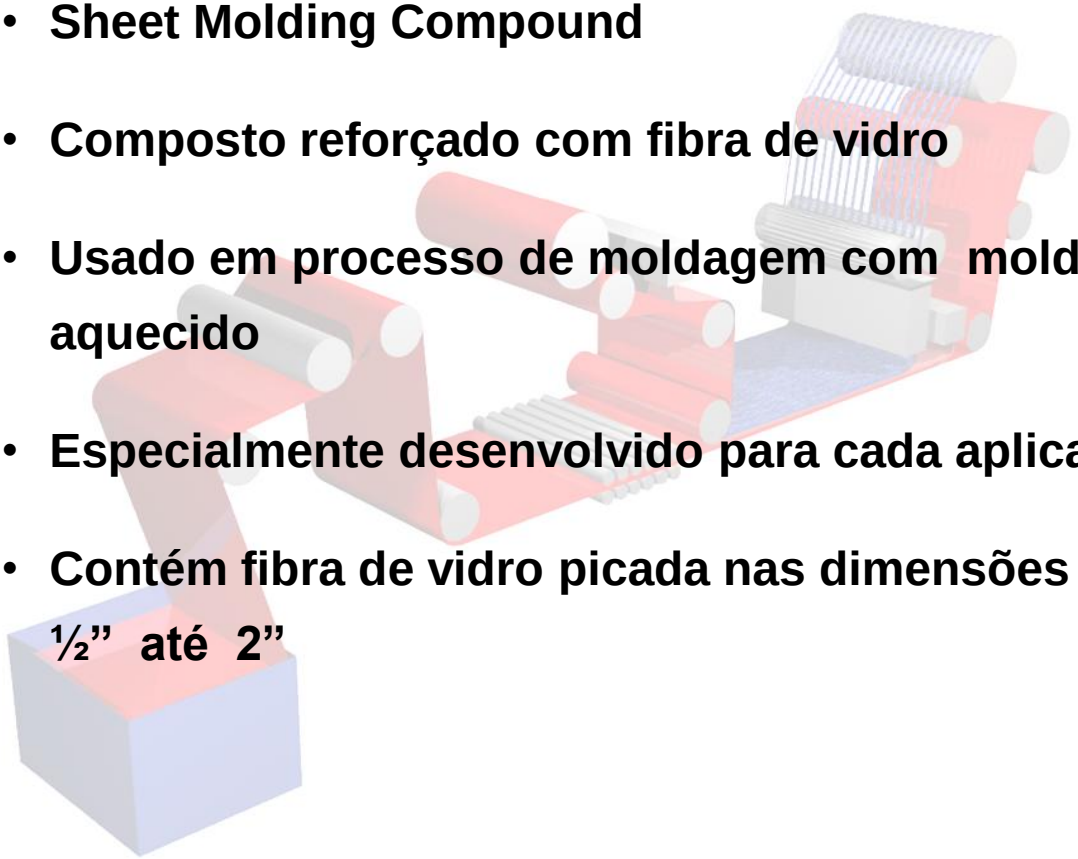
- SMC
- BMC

- Compressão
- Injeção
- Pultrusão

SMC

O que é SMC?

- Sheet Molding Compound
- Composto reforçado com fibra de vidro
- Usado em processo de moldagem com molde aquecido
- Especialmente desenvolvido para cada aplicação
- Contém fibra de vidro picada nas dimensões de ½” até 2”



SMC

COMPRESSÃO

Produtos em SMC

Step

Produtos em SMC

Tampas para Baterias

Console

Partes Externas

Produtos em SMC

Pára-Choque - RENAULT X70

Produtos em SMC

NACCO – Forklift

Produtos em SMC

Plancher

Produtos em SMC

Reforço Grade

Grade

Produtos em SMC

Assento e Encosto

BMC

“Complete Composite Solutions”

O que é BMC?

- **Bulk Molding Compound**
- **Composto de resina poliéster e cargas minerais com fibra de vidro.**
- **Utilizado em processos de moldes aquecidos**
- **Especialmente desenvolvido para cada aplicação**
- **Contém de 10 % a 20 % de fibra de vidro**
- **Pode ser moldado por Injeção, Compressão ou Transferência**

INJEÇÃO

Produtos em BMC

Refletores

Produtos em BMC

Tampa de Válvula

Tampa de Válvula - Estudo de Caso

Bulk Molding Compounds Inc. has recently commercialized our new thermoset material BMC 665 in three Chrysler Powertrains including cylinder head covers for the 3.7L V6 and 4.7L V8. BMCI developed the unsaturated polyester BMC 665 specifically as a highly cost effective material for use in automotive engine sealing applications.

Tampa de Válvula - Estudo de Caso

This material was formulated to provide lower costs and improved injection and compression processing while meeting the long-term, demanding performance requirements associated with ever-increasing under-the-hood temperatures. The material was subjected rigorous high temperature engine durability test schedules in all applications and was able to exceed all requirements and specifications.

Tampa de Válvula - Estudo de Caso

Additional properties of this material include lower specific gravity (1.67) and excellent surface appearance for aesthetically critical engine parts. BMC 665 is inherently flame resistant, offers a coeffcient of thermal expansion similar to aluminum, tight dimensional stability and a glass transition temperature nearing 200°C/392°F.

Tampa de Válvula – Data Sheet

Properties:	TEST METHOD	UNITS	VALUES
Density	ISO 1183	g/cm3	1.67
Flexural Strength	ISO 178	MPa	123
Flexural Modulus	ISO 178	GPa	10.2
Notched Izod Impact	ISO 179	KJ/m2	36
Tensile Strength	ISO 527	MPa	33
Tensile Modulus	ISO 527	GPa	10.2
Compressive strength	ISO 604	Mpa	170
Water Absorption	ISO 62	%	0.08
HDT - A	ISO 75	°C	> 260
Barcol Hardness			40
Flammability	UL94	HB (1/16”)	
Color	Black		
Molding Temperature		°C	> 140
Glass Fiber Content		%	20

Produtos em BMC

Máquina de Costura

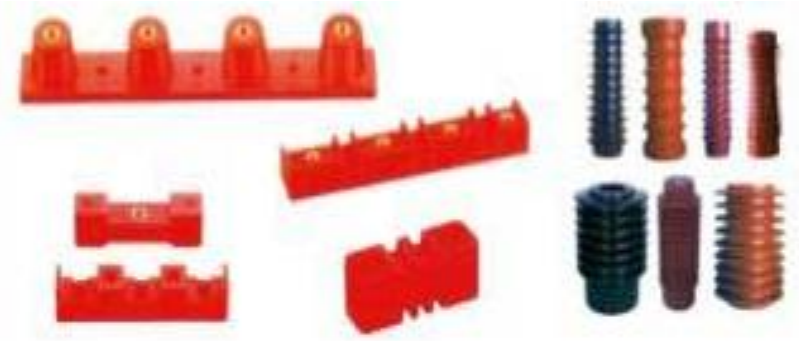
SINGER | Fashion

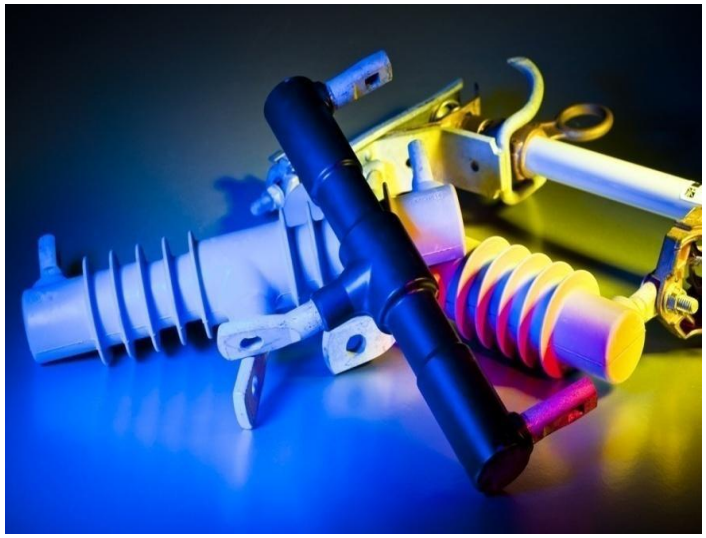
Produtos em BMC

Segmento Elétrico

Produtos em BMC

Segmento Elétrico





Produtos em SMC /BMC

Placas para isolação elétrica moldadas em smc / bmc

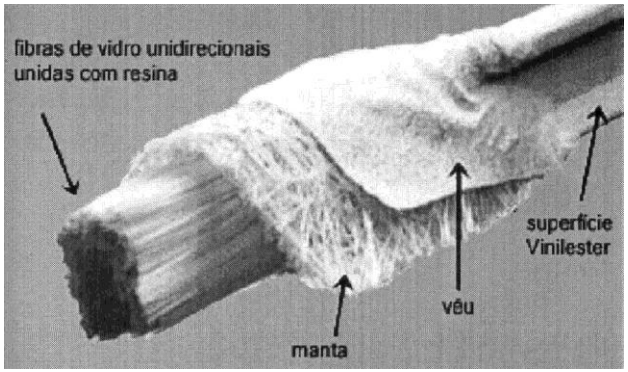
Por quê utilizar o BMC ou SMC?

- **Ciclo rápido de moldagem (alta produtividade)**
- **Fácil manuseio**
- **Balanço positivo entre as propriedades mecânicas, elétricas, térmicas e químicas**
- **Excelente acabamento superficial**
- **Baixo custo**
- **Estabilidade dimensional**
- **Moldados na Cor Final**
- **Liberdade de Design**

PULTRUSÃO

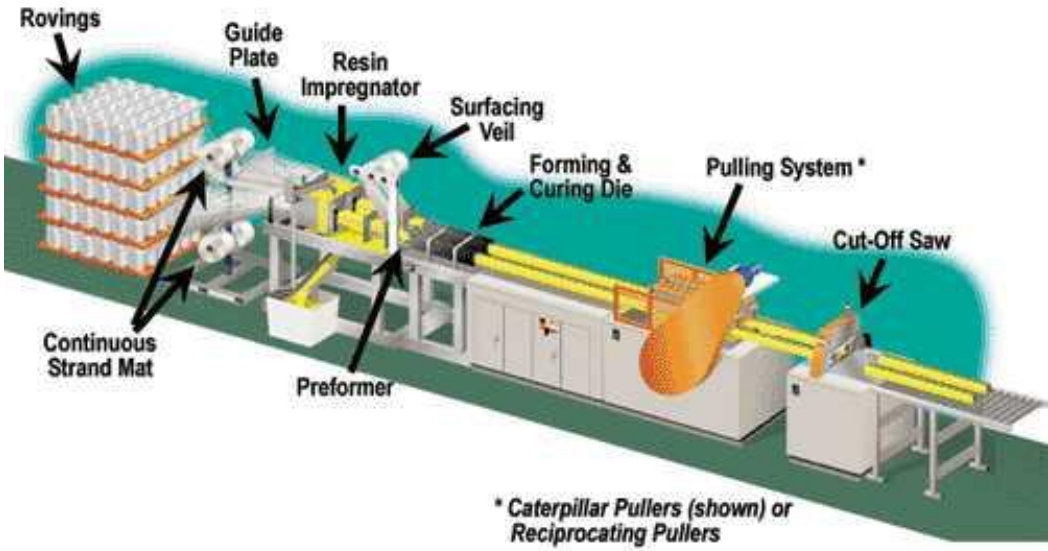
O QUE É PULTRUSÃO?

Processo de fabricação de perfis contínuos, em plástico reforçado com fibra de vidro.



Esses perfis são compostos basicamente por:

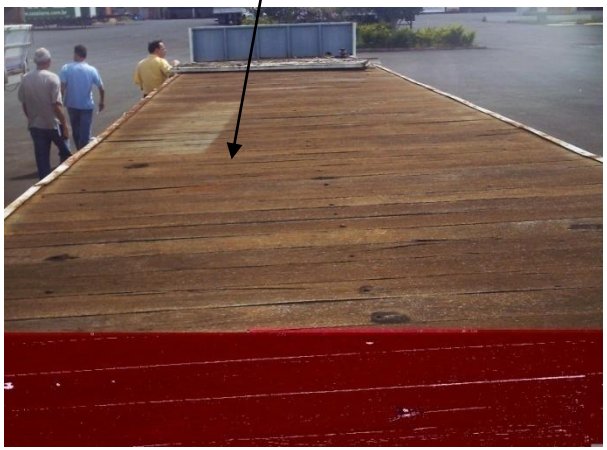
- **Fibra de vidro (manta + roving)**
- **Véu de acabamento**
- **Resinas Termofixas**
- **Carga Mineral**
- **Aditivos**



Produtos Pultrudados

• Perfil para prender lona

• Assoalho da carreta.



• Chapa lateral da carreta

Produtos Pultrudados

Projeto em Desenvolvimento

Produtos Pultrudados

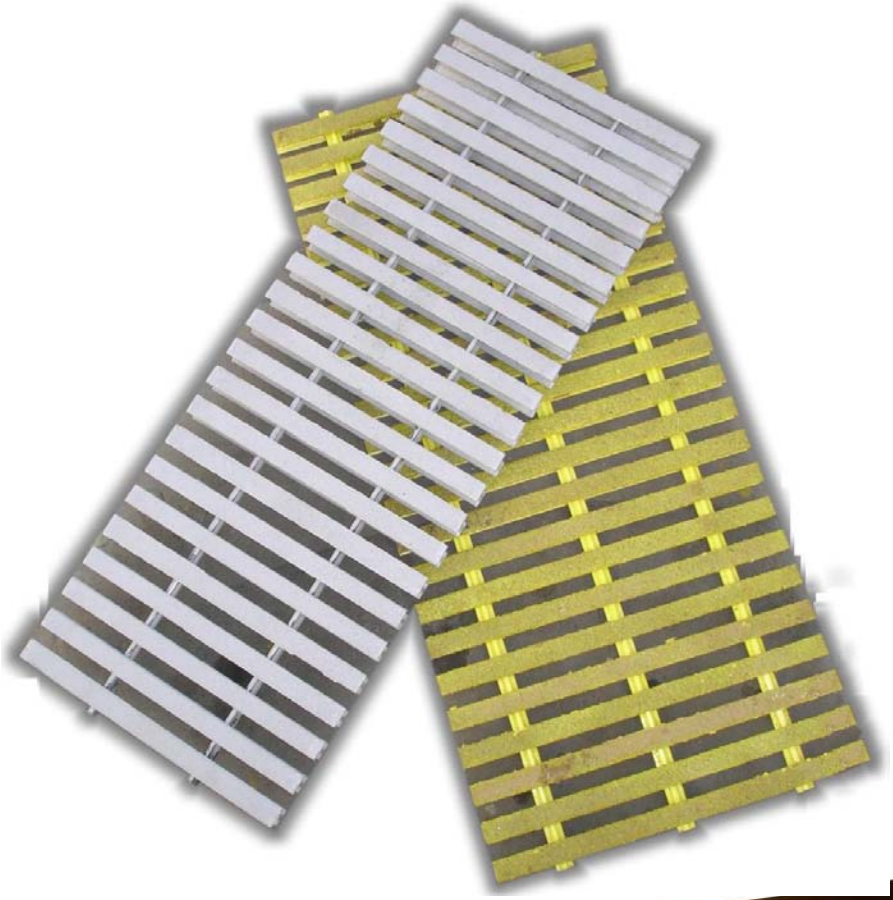
Bagageiro de Onibus

Duto de Ar

Calha de Iluminação

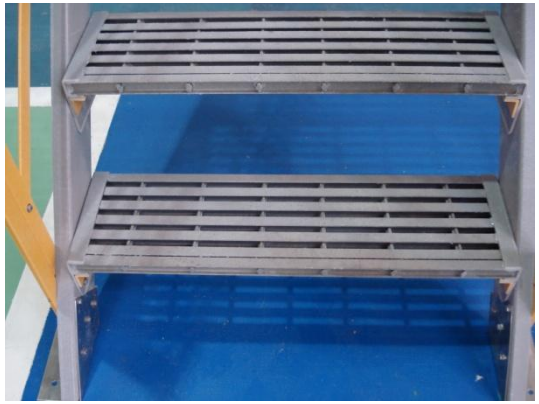
Produtos Pultrudados

Grade de Piso



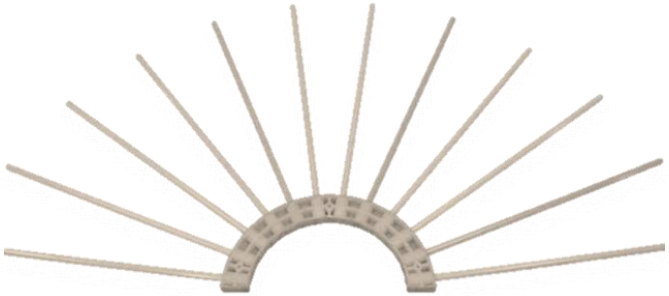
Produtos Pultrudados

Escada



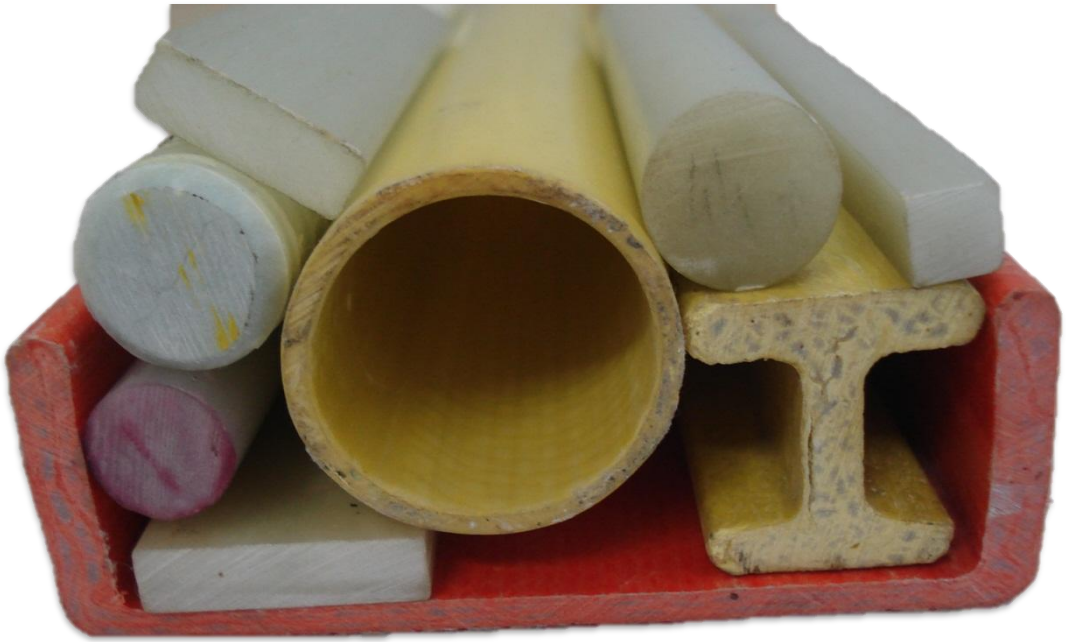
Produtos Pultrudados

Perfis Pultrudados



Produtos Pultrudados

Perfis Pultrudados



CERTIFICATE

DQS GmbH
Deutsche Gesellschaft zur Zertifizierung von Managementsystemen

hereby certifies that the company

BULK MOLDING COMPOUNDS DO BRASIL INDÚSTRIA DE PLÁSTICOS REFORÇADOS LTDA.
Rua Meridian 55 - Distrito Industrial
13505-610 Rio Claro SP
Brazil

has implemented and maintains a **Quality Management System**.

Scope:

The manufacture of fabricated plastic parts and compounds for automotive industry

An audit, conducted in accordance with the "Rules for certification bodies to ISO/TS 16949:2009 Third Edition" and documented in a report, has verified that this quality management system fulfills the requirements of the following ISO Technical Specification:

ISO/TS 16949 : 2009
(without product design)

Certification audit	2011-02-07 - 2011-02-08
Certification decision	2011-03-22
This certificate is valid until	2014-03-21
Certificate Registration No.	460024 TS9
IATF No.	0119056
Frankfurt am Main, Germany	2011-03-22

2-IAO-QMC-01001

Michael Drechsel
Managing Director

Jan Böge
Managing Director

August-Schanz-Straße 21, 60433 Frankfurt am Main

Brasil

Certificado

ISO/ TS 16949:2009

CERTIFICATE

DQS do Brasil Ltda.

hereby certifies that the company

BULK MOLDING COMPOUNDS DO BRASIL INDÚSTRIA DE PLÁSTICOS REFORÇADOS LTDA.
Rua Meridian 55 - Distrito Industrial
13505-610 Rio Claro SP
Brazil

has implemented and maintains a
Quality Management System.

scope:

The manufacture of fabricated plastic parts and compounds for automotive and industrial application.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2008

Certificate registration no.	460024 QM
Date of certification	2011-03-22
Valid until	2014-03-21

TGA-ZM-11-01-00

Michael Drechsel
Member of the Board

Dezée Mineiro
Managing Director

Av. Adolfo Pinheiro, 1001 - 3º andar - 04733-100 - São Paulo - SP - Brasil

Brasil

Certificado
ISO 9001:2008

CERTIFICATE

DQS do Brasil Ltda.

hereby certifies that the company

BULK MOLDING COMPOUNDS DO BRASIL INDÚSTRIA DE PLÁSTICOS REFORÇADOS LTDA.
Rua Meridian, 55 - Distrito Industrial
13505-610 Rio Claro - SP
Brazil

has implemented and maintains a
Environmental Management System.

scope:
Manufacture of fabricated plastic parts and compounds for automotive and industrial application.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 14001 : 2004

Certificate registration no.	460024 UM
Date of certification	2010-01-08
Valid until	2013-01-07

TGA-ZM-11-01-60

Michael Drechsel
Diretor Executivo

Dezée Mineiro
Diretora Executiva

Av. Adolfo Pinheiro, 1001 - 3º andar - 04733-100 - São Paulo - SP - Brasil

Brasil

Certificado
ISO 14001:2004