PESTEL®

… PURe FORMsache

PURe FORM

Company

PESTEL was founded in 1990 as one of the first industrial enterprises after the German reunification. The production now takes place on more than 6000 m². Due to more than 25 years of experience our strong core competencies in production of poly-urethane parts have increased.

PESTEL has its own construction area in which your individual ideas and requests can be transferred into a design tailored to plastic.

In our proprietary toolroom aluminium-moulds up to 19 tons total weight have already been constructed and produced.

Our production plant provides all usual methods of reaction-casting (Reation injection molding). Parts up to 100 kg weight and surfaces with maximum 4,00 m × 2,00 m can be produced within 7 seconds injection time.

Our proprietary paint shop enables all common liquid paintings as well as special paints like conductive (EMC) or softtouch coats. As a matter of course we also prepare the parts for this step.

Therefor we have the ability to support our customers with a full project realization finishing with ready-to-install and pre-assembled parts. We consider high quality and timeliness as standard. PESTEL is certified according to **DIN EN ISO 9001.**

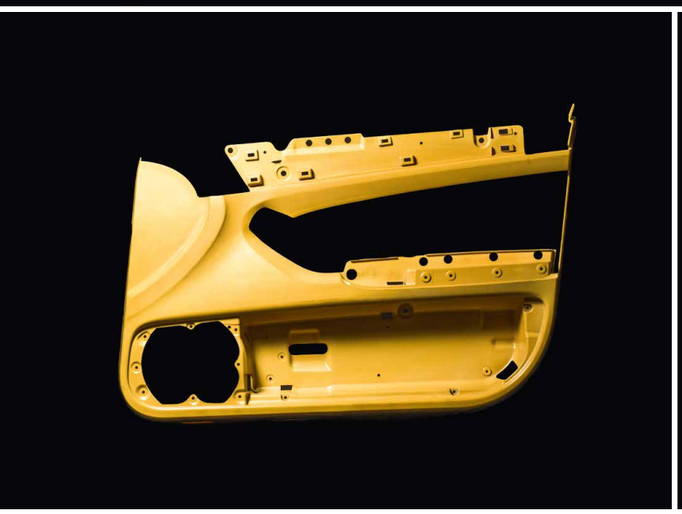
PURe FORM – what does it stand for?

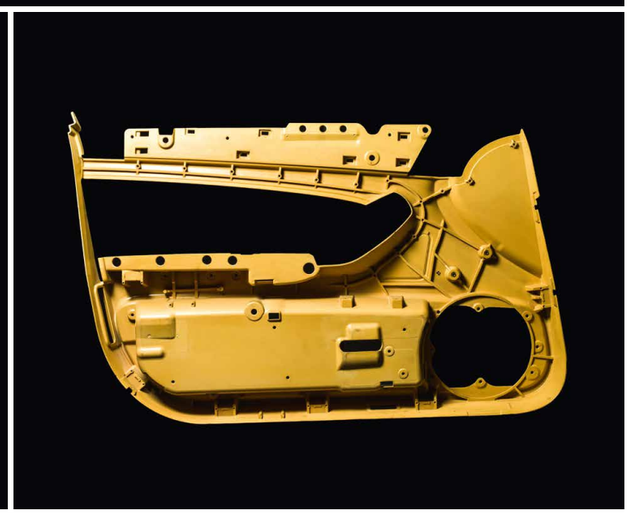
- PURe Fairness & Cooperation
- PURe Perfection & Proefessionalism
- PURe Quality & Timeliness
- PURe Challenge
- PURe Enthusiasm
- PURe Sustainability

Your projects:
Formed as PUR-part!

Customers

DAIMLER · CLAAS · KALDEWEI · Thermo Fisher SCIENTIFIC – The world leader in serving science · vivipar · SIEMENS · multicar · indikar · certus · Atronic – Great Games Great People · DIEHL Aerospace · NEWAYS · wez SUISSE · Audi Vorsprung durch Technik · ARCOMA · AGRIKON KEM · STRAIL · LELY – partners in turfcare · ZEISS · LOGO CAFÉ





Polyurethane

Polyurethane is a so called duromer-plastic, which results from mixing a minimum of two components. The mould can be filled partially (material foams up) or completely (compact at a density of more than 1 kg/m^3). A distinction is made between soft, elastic and hard systems although there is no strict borderline. Therefor this plastic material offers many possibilities. Polyurethane is recyclable.

Advantages:

- Empirically only 30 % mould-production-costs compared to injection moulding
- Small manufacturing tolerances possible
- High stiffness with increasing densitiy
- Extensive design options
- Problem of sink marks can be ignored
- Less costs due to the option of variating wallthicknesses which enables a simplified construction of parts and moulds
- Option of inflammability (B2 or UL 94 V-0)
- Accoustic and thermal insulation
- Elastic characteristics feasible
- Haptically-decorative surfaces
- Good mechanical properties and great resistance to chemicals
- High weather resistance
- Excellent paintability
- Also efficient in small and medium-sized quantities

Polyurethane

Generally we are able to offer all usual 2-components PUR systems (cold systems). Our production facilities can be adapted or set up according to our customers requirements. Various dosing systems enable a performance of 100 kg in 7 s and our presses offer closing forces from 30 tons up to 400 tons.

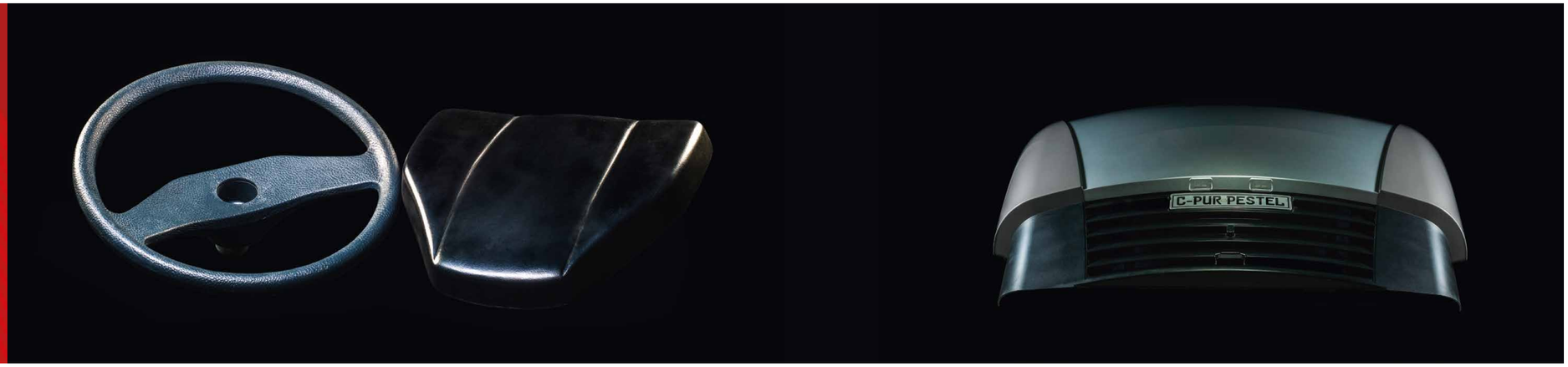
Fields of application:

- Medical technology
- Automotive
- Electrical engineering
- Machine and device enclosures
- Transport and storage containers, logistics
- Heavy equipment and construction machines
- Furniture industrie
- Accoustic and thermal insulation
- Handles and pads

Processes and materials:

- PUR compact foam
- PUR integral foam
- PUR casting system
- PUR semi-hard foam & integral semi-hard foam
- PUR leigthweight-systems
- PUR energy absorption foam

Our qualified employees are happy to assist you concerning matters of processes or materials.



Toolroom

The fact that we are able to construct and produce moulds, which are necessary for manufacturing PUR-parts, produces many advantages concerning choice of methods, quality, timeliness and flexibility in matter of changes.

The equipment includes:

- Multiple machining centers with maximum part-size 2 m × 4 m × 1,1 m and 3 to 5 machining axes
- CAD/CAM workplace
- CNC-lathe technology
- Special milling machine for PUR-parts-adaption freely programmable with teach-in
- Measuring via 3-D-Scanner

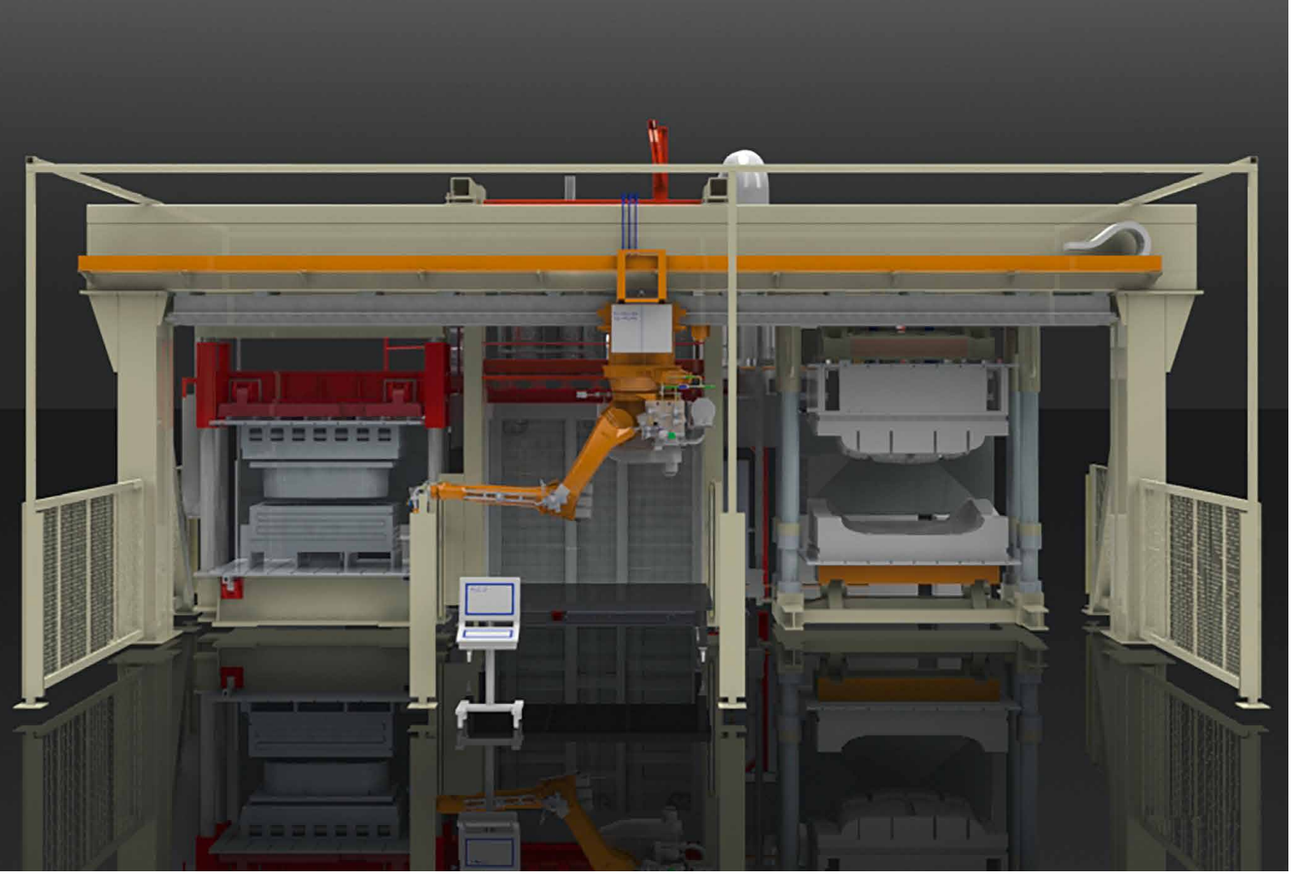
Prototypes & Model-making

Paint shop

Our proprietary paint shop enables all usual liquid paints. Since it is integrated into our workflow we are able to offer short delivery times as well as paints corresponding to the material.

Coating technologies:

- 2-component paint
- Water-based paint
- Softtouch lacquer
- Conductive lacquer (EMC)
- High gloss lacquer
- Structure paint
- Antimicrobial coatings
- Flexible lacquer
- Micro-effect-lacquer
- Coatings according to your specifications



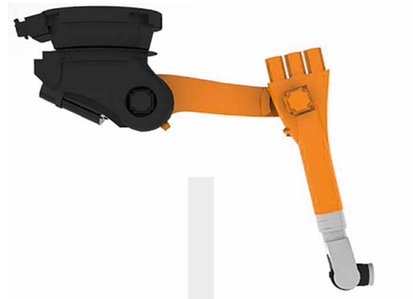
Pilot plant station

Our pilot plant station is a combination of dosing machines, two presses and a hanging mounted robot plus heat radiator.
A mixing head equipped with a cutting system enables inserting fiber glass. Our pilot plant station is exceptional concerning size and possibilites.

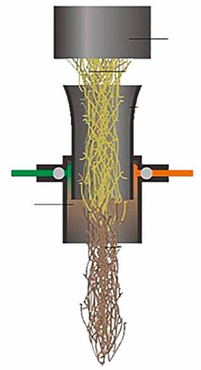
Options:

- Classical PUR-manufacture
- PUR casting system
- Thermoplastic deep drawing
- Handling via grabber
- Integration of glass or carbon fiber
- PUR fibre spraying
- Compressing up to 280 t

Options



Grabber



Mixing head with long fiber injection

Stationary mixing head

Lightweight

Lightweight despite constant stability becomes more and more important. Our pilot plant station offers many possibilites to implement those requirements. Therfor the advantages of polyurethane are combined with binder enhancing fibers (glass, natural or carbon fibers etc.) and different core materials (paper honeycomb, foam core etc.).

Pepural®

Pepural is a patent material combination out of an aluminium foam core and polyurethane-bonded top sheets out of glass or carbon fiber.

Fields of application:

- Floor panels
- Covers and flaps of commercial vehicles
- Reinforced components

Advantages:

- High stiffness whilst low weight
- Good heat resistance
- Great resistance against chemical influences and humidity
- Core can be formed via pressure grouting
- Material can be adapted (drilling, milling etc.)
- Good insulating properties

Awards


TOP 100
Top-Innovator 2014


MATERIALICA
DESIGN+TECHNOLOGY AWARD 2013
Silver Award Certificate
Material Category
Product:
PEPURAL®
Manufacturer:
PESTEL PUR-Kunststofftechnik GmbH & Co. KG, Chemnitz, D
Awarded with the special award:
SILVER AWARD
Congratulations!
Robert Metzger
Munich Expo Veranstaltungs GmbH
Ulrich Seiler
designaffairs GmbH, Head of Jury

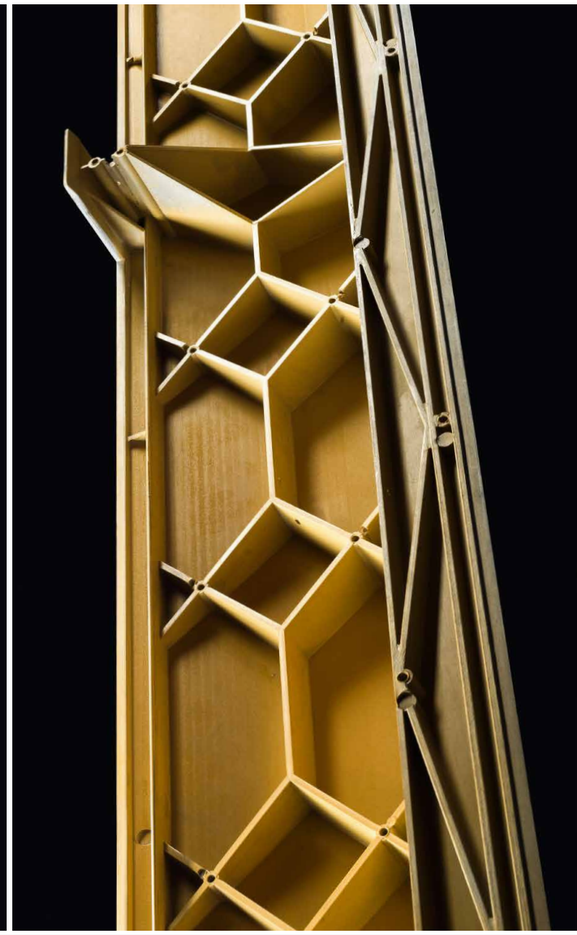

INNOVATIONSPREIS 2009
TOP 10
Pestel PUR-Kunststofftechnik GmbH
Großvolumige PUR RIM Verkleidungsteile
(Karosserieteile für Erntemaschinen)
Dresden, 8. Juni 2009
Thomas Jurk,
Sächsischer Staatsminister für Wirtschaft und Arbeit
Freistaat Sachsen
COMMERZBANK
VON ARDENNE
ADT
U R K U N D E

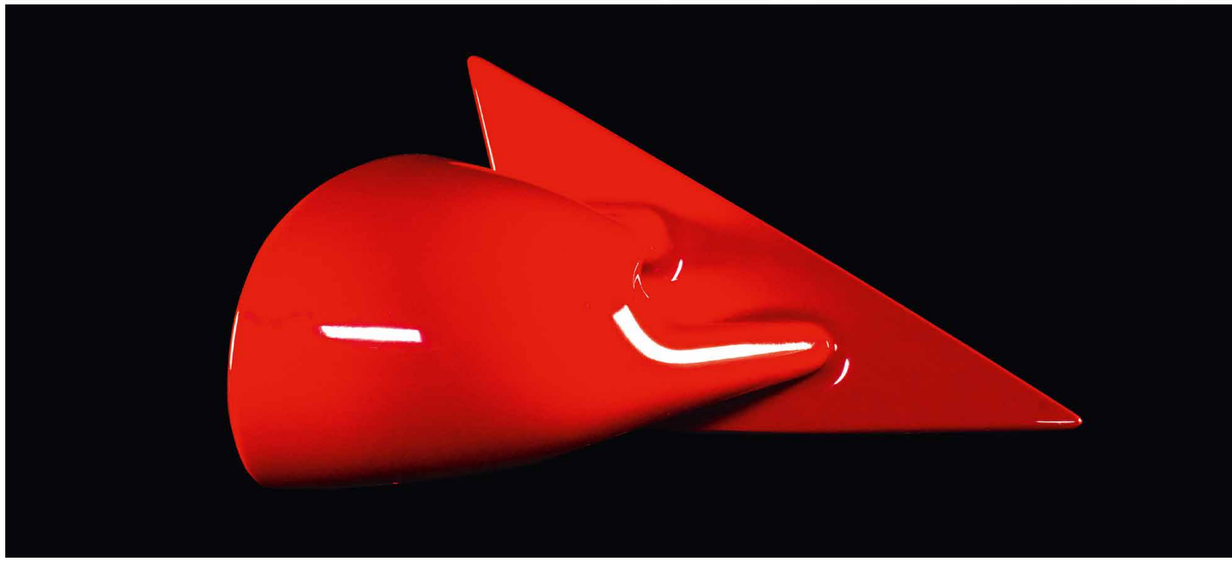

INTERNATIONALE GESELLSCHAFT
FÜR KUNSTSTOFFTECHNIK E.V.
AUTOMOTIVE AWARD - PARTS & COMPONENTS 2009
Third Prize - Body Exterior "Verkleidung SFH 7000"
PESTEL PUR-KUNSTSTOFFTECHNIK GMBH
was presented at the "12th AUTOMOTIVE AWARD NIGHT"
Düsseldorf – 12. Juni 2009
Die Gesellschaft widmet sich der Förderung des wissenschaftlichen
und technischen Fortschritts in der Kunststofftechnik.
The objective of Society shall be to promote the scientific
and engineering knowledge relating to plastics.
The International Plastics Society
SOCIETY OF PLASTICS ENGINEERS, INC.


MATERIALICA
DESIGN AWARD 2005
Best of Certificate
Category Products
Product:
Frontverkleidung für MZ 1000SF
Manufacturer Material:
Bayer Material Science AG, Leverkusen, Germany
Manufacturer frontal fairing:
Pestel PUR Kunststofftechnik GmbH, Chemnitz, Germany
Manufacturer motorbike:
MZ Engineering GmbH, Zschopau-Hohndorf, Germany
Design:
raumann design, München, Germany
Awarded with the special award: BEST OF PRODUCTS
Congratulations!
Robert Metzger
Munich Expo GmbH
Herbert H. Schultes
Head of Jury


Deutschland
Land der Ideen
Ausgezeichneter Ort 2014/15
Nationaler Förderer
Deutsche Bank


Qualitätsmanagement
ISO 9001:2008
Regelmäßige freiwillige Überwachung
DEKRA Certification
DEKRA
zertifiziert





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