



YOUR PARTNER FOR METERING AND
MIXING TECHNOLOGY

VEHICLE MANUFACTURING



WHO WE ARE – AND WHAT WE STAND FOR

Joined materials – metals, glass, plastics and composites – is omnipresent in our world, countless products are manufactured from them. Bonding technologies have become more and more replaced traditional joining processes during recent decades, and Reinhardt-Technik is recognized as a pioneer of this trend.

What started in 1962 with a team of ambitious engineers has grown over half a century to a leading global supplier of metering and mixing systems with a proven record of innovative solutions on the market.

Our well received core competences are the processing of liquid performance materials for applications of adhesives and sealants, dispensing technology and surface treatment – combined with full systems integration and process control.

As a technology leader of adhesive and sealant processing we belong to J. Wagner GmbH since 2012.

Wagner is a leading manufacturer of surface technologies with more than 1,400 employees worldwide and headquarters in Markdorf near Lake Constance.

- > **Customer orientation**
- > **Partnership**
- > **Innovative products**
- > **Individual solutions**
- > **Automation**
- > **Reliable applications**
- > **Global service**

ABOUT THE INDUSTRY

The global environment for commercial transportation vehicle manufacturers has evolved drastically throughout the recent decades. Growing demand for goods transportation, agricultural and special vehicles as well as public and private transportation has come along with new challenging requirements from customers.

BUS AND COACH

Bus and coach operators have been faced with changing requirements, passenger expectations but also legal and environmental regulations.

Lower vehicle emissions as well as passenger and driver safety plus additional comfort have been in focus of developments.

TRUCK AND TRAILER

Truck and Trailer manufacturers have been challenged to provide improved solutions to the transportation market. Carrier and shipping agents demand overall lower transportation costs, which calls for lower weight, higher capacity and improved ergonomic handling of the vehicles.

RAIL VEHICLES

Rail vehicle manufacturers have been encountered with more competition from air traffic. Which led to fast evolving design changes plus functionality to address lower operational costs, passenger safety and comfort.

RECREATIONAL VEHICLES

Recreational vehicles owners demand increasing comfort in their motor homes and caravans but also more modern exterior designs are demanded – nowadays it express the lifestyle of the owner more than ever before.

AGRICULTURAL VEHICLES

Agricultural vehicles are typically used in very harsh working conditions. Longterm withstand against shocks and vibrations is key for structural joints in such vehicles.

PROCESSING AND APPLICATION, ADHESIVES AND SEALINGS

While the vehicle segments differ as such, the requirements for the manufacturers are similar – it is all about new designs, new materials and evolving assembly processes.

The choice of the right adhesives and sealants plays a major role, however, a key aspect is also the processing and application of the these different materials.

Learn more about manufacturing applications and get convinced about our products and system solutions - Made in Germany.



KEY APPLICATIONS

1

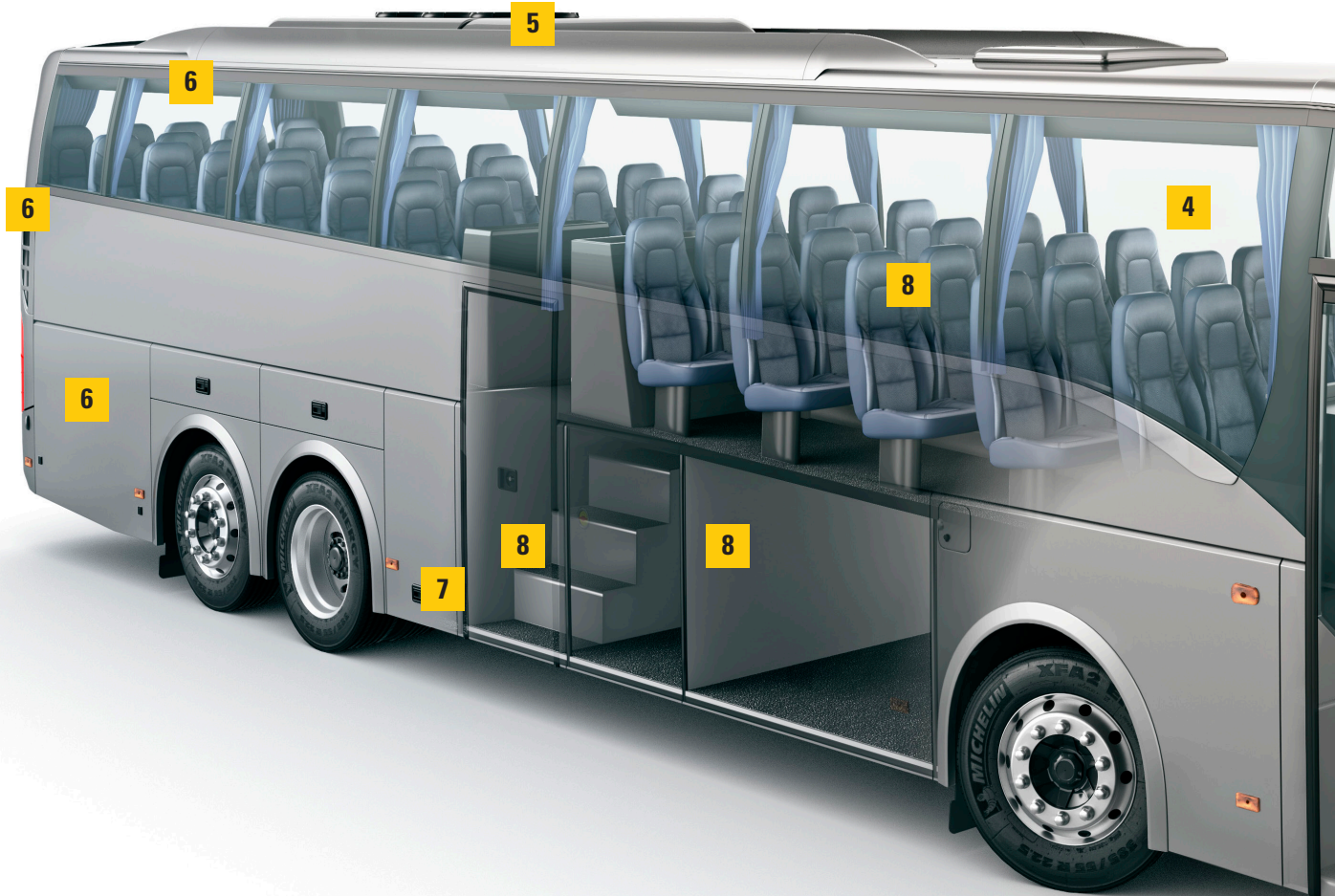
Manual application
with ergonomic Ultra Mix Plus hand-
gun (cabin window)

2

**Bonding of bumper modules and
front panels**

3

**In-mold-coating for paintable
class-A surfaces**



4

Direct glazing

Manual or automated volumetric adhesive application

5

Structural bonding

Body-in-white assembly

6

Exterior component

Bonding and sealing of
- Mirror
- Roof
- Rear and side panels

7

Acoustic dampening

Underbody coating

8

Interior Component Bonding

Luggage compartments and lashing rails

9

Trailer

- Bonding and sealing of structure
- Sandwich (insulation) panels
- Bonding of lashing rails

10

Floor bonding

11

Headlights bonding and sealing



Ecostar evo

Compact and flexible metering and mixing plant for manual application of two component materials.



Visco Star

Powerful, robust and user friendly single component processing plant for 20 or 200 ltr. drums.



Visco Star plus

Offers you a benefit plus in processing single component and booster (accelerator).



Conti Flow Versa

Versatile two component gear metering and mixing plant for highest precision.



PRODUCT-SOLUTION-MATRIX

| APPLICATION | MATERIALS | SOLUTION |
|---|--|---|
| Direct Glazing - Front, rear, side and door systems/ windows | 1K Polyurethanes 1K Polyurethanes with Booster (Accelerator) | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Visco Star 20/200 plus ■ Vecdos eOne/Vecdos eTwin ■ Ultra Mix plus |
| Structural Bonding - Body frame - Body in white assembly | 1K Polyurethanes 2K Polyurethanes 2K Epoxies | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Ecostar evo ■ Conti Flow |
| Exterior Component Bonding and Sealing of - Mirrors - Side - Panels - Roofs | 1K Polyurethanes 1K Polyurethanes with Booster (Accelerator) 2K Polyurethanes | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Visco Star 20/200 plus ■ Ecostar evo ■ Conti Flow ■ Conti Mix 150 ■ Ultra Mix plus |
| Sandwich Panel manufacturing e.g. insulation panels for refrigerated trailers or containers | 1K Polyurethanes 2K Polyurethanes | <ul style="list-style-type: none"> ■ Conti Mix 150 ■ Conti Mix 200 ■ Visco Star 200 |
| Interior Component Bonding e.g. luggage compartments or lashing rails | 1K Polyurethanes 1K Polyurethanes with Booster (Accelerator) 2K Polyurethanes | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Visco Star 20/200 plus ■ Ecostar evo ■ Conti Flow ■ Conti Mix 150 ■ Ultra Mix plus |
| Acoustic Dampening, Underbody coating and fire resistant materials | Low viscous dispersions coatings | <ul style="list-style-type: none"> ■ Single Flow 200 |
| Floor bonding | 1K Polyurethanes 1K Polyurethanes with Booster (Accelerator) | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Visco Star 20/200 plus ■ Ultra Mix plus |
| Roof bonding | 1K Polyurethanes 1K Polyurethanes with Booster (Accelerator) 2K Polyurethanes | <ul style="list-style-type: none"> ■ Visco Star 20/200 ■ Visco Star 20/200 plus ■ Ecostar evo ■ Ultra Mix plus |
| Bumper modules | 2K Polyurethanes | <ul style="list-style-type: none"> ■ Conti Flow Versa ■ Ecostar evo |
| Headlights bonding and sealing | 1K Silikons 2K Silikons 1K Polyurethanes Hotmelt | <ul style="list-style-type: none"> ■ Conti Flow ■ Vecdos eOne ■ Vecdos eTwin ■ Warm Melt 800 |
| In-mold-coating for paintable class-A surfaces | Urethane-acrylates | <ul style="list-style-type: none"> ■ IMCoatec |

BENEFITS

- Innovative solutions help to save material, increase productivity and enhance sustainability
- Robust 1K and 2K processing equipment for reliable operation in demanding production environments
- Easy handling due to operator friendly and ergonomic design
- Optimized design and functionally based on close cooperation with material manufactures
- Standardized product portfolio provides on the spot service and spare parts availability

FURTHER INNOVATIVE PRODUCTS

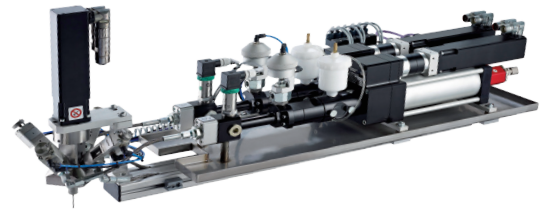
Ultra Mix plus

Innovative handgun for ergonomic application of booster-fed material. Helps to reduce purging cycles and increase productivity.



Vecdos eOne Vecdos eTwin

Servo controlled volumetric dosing units for precise and repeatable adhesive and sealant application in automated lines.



AUTOMATION

The challenges of our customers continuously drive our on going innovations and technology developments.

New applications call for new ideas.

Beside our standard product lines we provide customized solutions for various bonding and sealing applications – from product adoptions up to fully integrated robot assembly cells.





YOUR GLOBAL PARTNER IN VEHICLE MANUFACTURING

- Processing and application of single and multi component adhesive and sealants
- Ambient or temperature conditioned equipment
- Complete systems for manual or fully automatic processes
- Innovative process control and verification