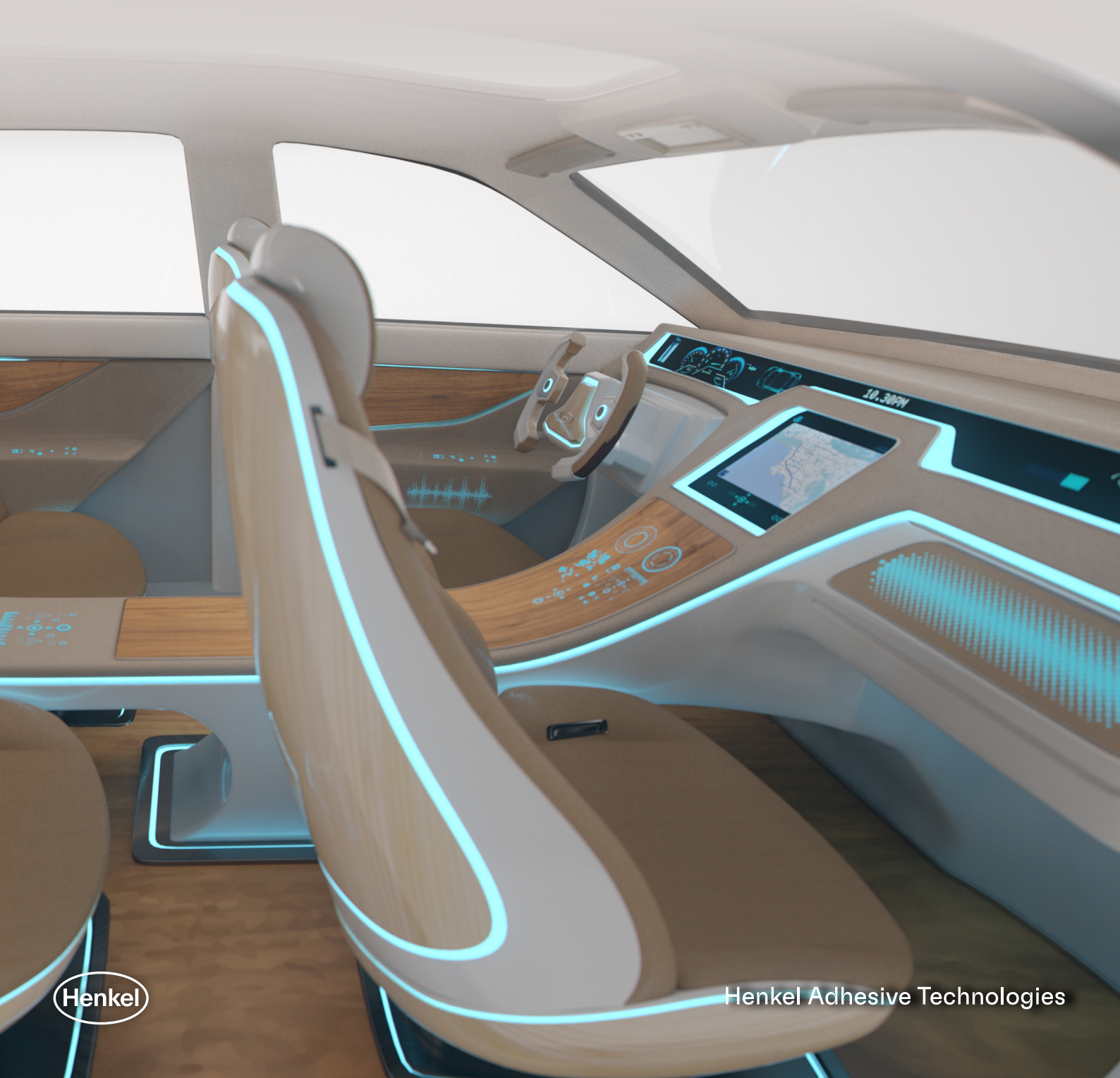


TECHNOMELT[®]
TEROSON[®]
AQUENCE[®]

HENKEL SOLUTIONS FOR INTERIOR LAMINATION





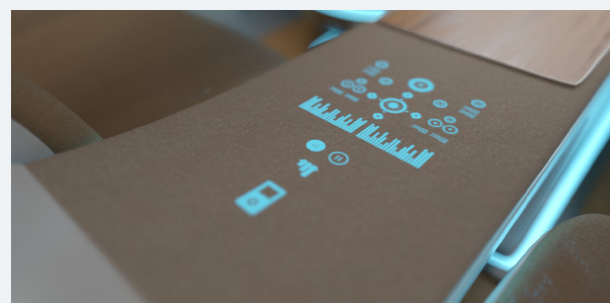
ADDRESSING TRENDS IN AUTOMOTIVE INTERIOR WITH HENKEL SOLUTIONS

Henkel offers a comprehensive portfolio of adhesives for automotive interior applications. With products ranging from reactive hot melts, PSA hot melts, and water-based adhesives, to micro emission hot melt adhesives, we will solve any lamination and assembly challenge.



Sustainability

- » Label free reactive adhesives
- » Non-VOC lamination adhesives
- » Hot melts with up to 60% renewable and recycled raw materials
- » Reduced energy consumption in lamination process due to reduced process temperature
- » Vehicle interior air quality
- » Low carbon footprint adhesive



Comfort & Safety

- » **New Ambient Lighting Concepts:**
Transparent and UV resistant, non-yellowing adhesive for back-lighting
- » **Premium & Smart Surfaces:**
Natural textile fibers, vegan interior, delicate leather surfaces



Manufacturing Process & Cost Leadership

- » Short process times through fast setting adhesives
- » Reduced number of process steps
- » Low reactivation temperature

AUTOMOTIVE INTERIOR ADHESIVES

TECHNOMELT **TECHNOMELT** **AQUENCE** **TEROSON**

REACTIVE HOTMELTS **NON-REACTIVE HOTMELTS** **WATER-BASED DISPERSIONS** **SOLVENT-BASED**

CHEMISTRY	PUR	PSA, PO	PUD	TPU, CR
ADHESIVE APPLICATION	Spray application Roll coat On carrier / Spacer fabric	Spray Roll coat On carrier / Spacer fabric	Spray application Roll coat On carrier / Spacer fabric	Spray application Roll coat On carrier / Spacer fabric
DRYING STEP	None Required	None Required	Oven Drying	Product Dependent
LAMINATION PROCESS	Prepositioning of dry laminate Successive lamination	Assembled when adhesive is liquid except PSA based	Prepositioning of dry laminate Successive lamination	Assembled as liquid adhesive Successive lamination

Please **contact us** to learn more about our portfolio of water-based adhesives for the APAC region.



Roll coat application



Spray application



INTERIOR SYSTEMS

01 Overhead & Headliner

- » Headliner
- » Sun visor

02 Door System

- » Armrest
- » Door beltline
- » Door bolster
- » Door panel

03 Cockpit and Instrument Panel

- » Center consoles
- » Instrument panel
- » Instrument cluster
- » Steering wheel
- » Glove compartment
- » Shift knob

04 Seating System

- » Cushion
- » Recliner
- » Seat track
- » Seat frames
- » Seat plates
- » Seating suspension
- » Seat belt
- » Arm rests
- » Head rests

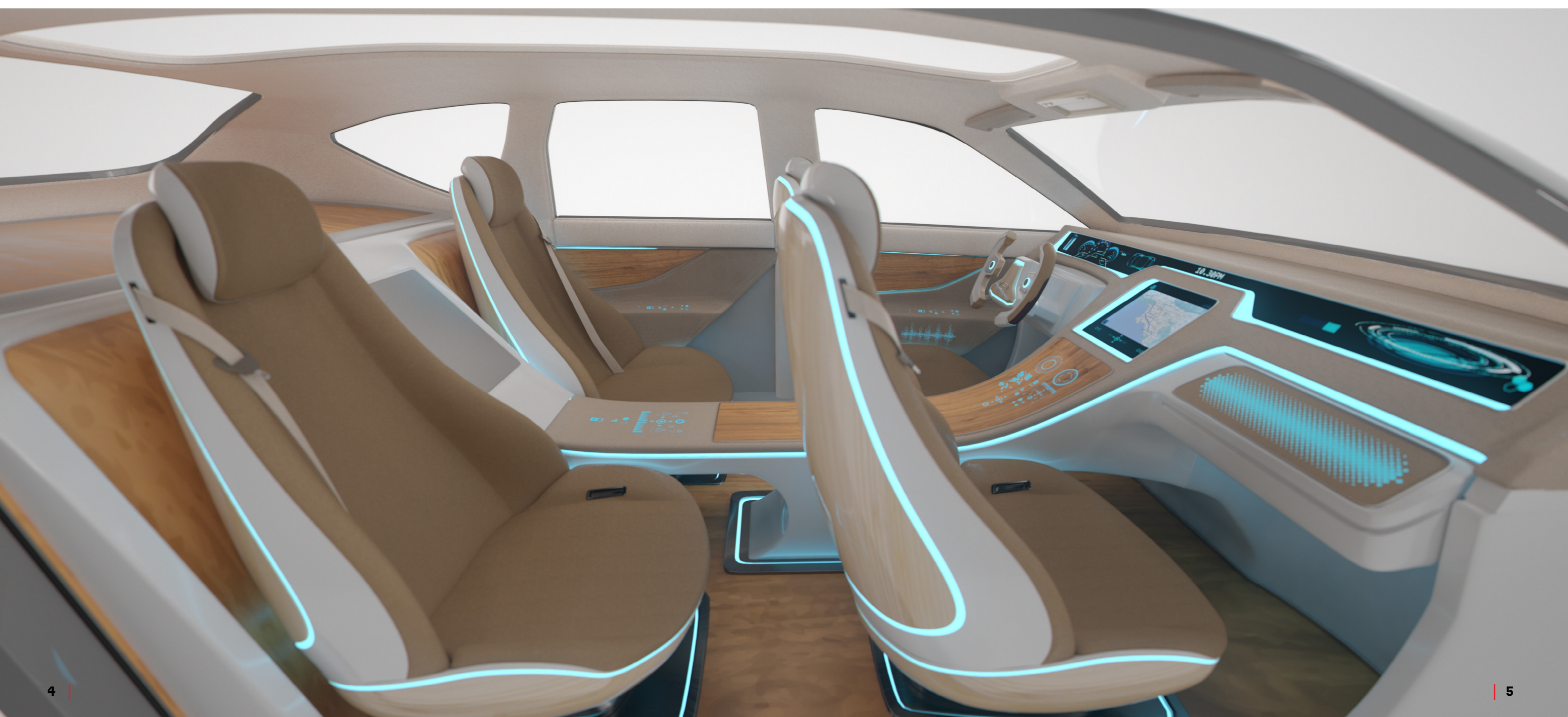
05 Carpeting & Textiles

- » Carpet
- » Load floor
- » Package trays
- » Textiles

06 Other Interior

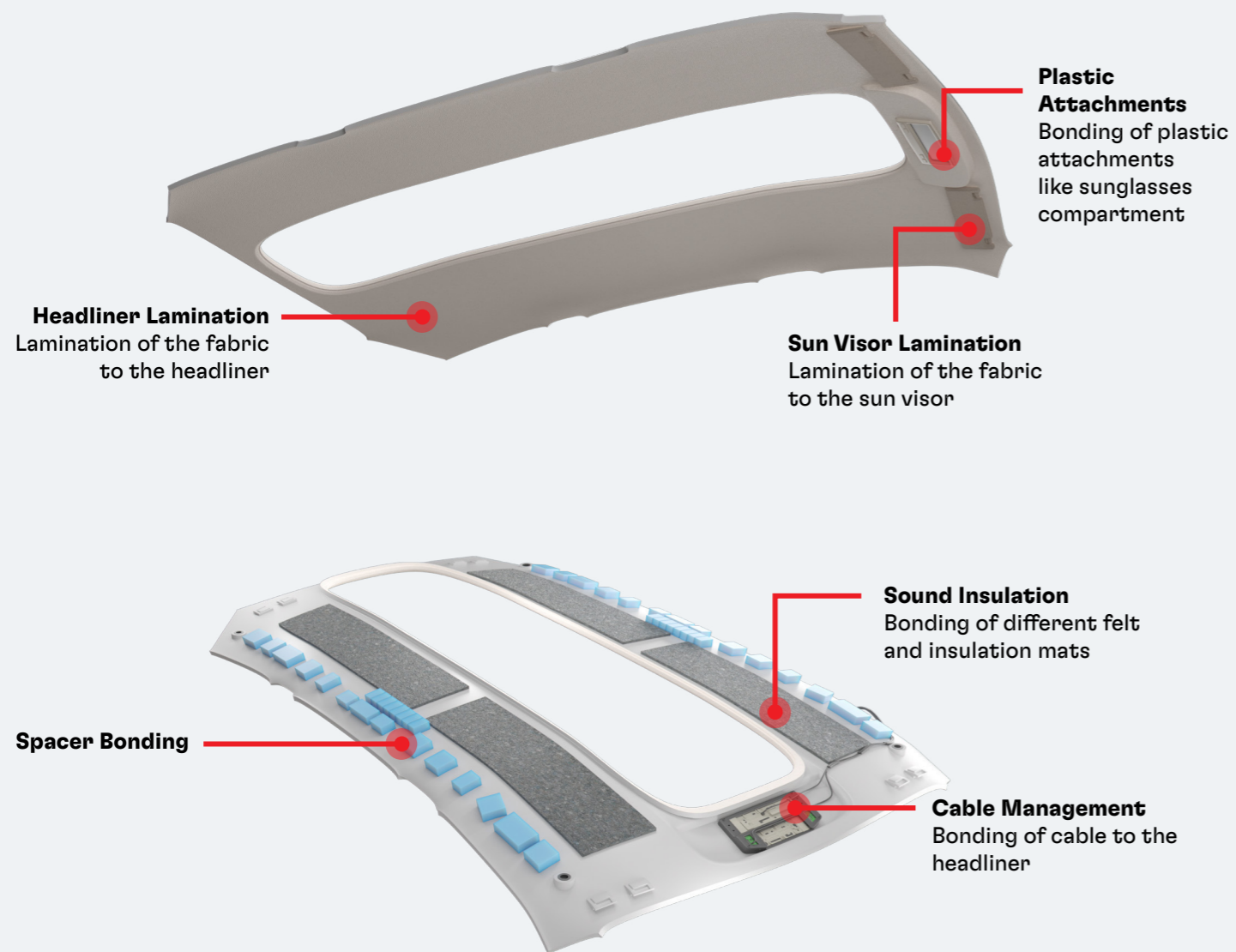
- » PVC bi-laminates
- » Pillar trim
- » Rear view mirror

 Click **graphic** to interact





OVERHEAD & HEADLINER



Good to know...

The headliner requires a broad range of bonding solutions. From easy ones like cable management and bonding of sound insulation to more complex applications like plastic attachments where a longer open time is required due to the handling time these parts require.

REACTIVE PUR HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PUR 4663	Cable management	Manual / Robot bead application	Cable, felt, headliner	Long open time
TECHNOMELT® PUR 6225 LE	Plastic attachments	Manual / Robot bead application	Headliner, metal frame, ABS	Low emission grade
TECHNOMELT® PUR 9622-02 UV/03	Headliner lamination	Roller coater / spray application	Textile to headliner	Short cycle time

WATER-BASED ADHESIVE*

Product	Application	Process	Substrates	Benefits
TEROSON® PU A235 W + AQUENCE® CATALYST R397	Headliner lamination	Manual / Robot spray application	Textile to headliner	NMP/APEO free Long open time Tack free

PRESSURE SENSITIVE HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PS 203A	Sound insulation, spacer	Manual / Robot bead application	Felt, PU foam	Short cycle time

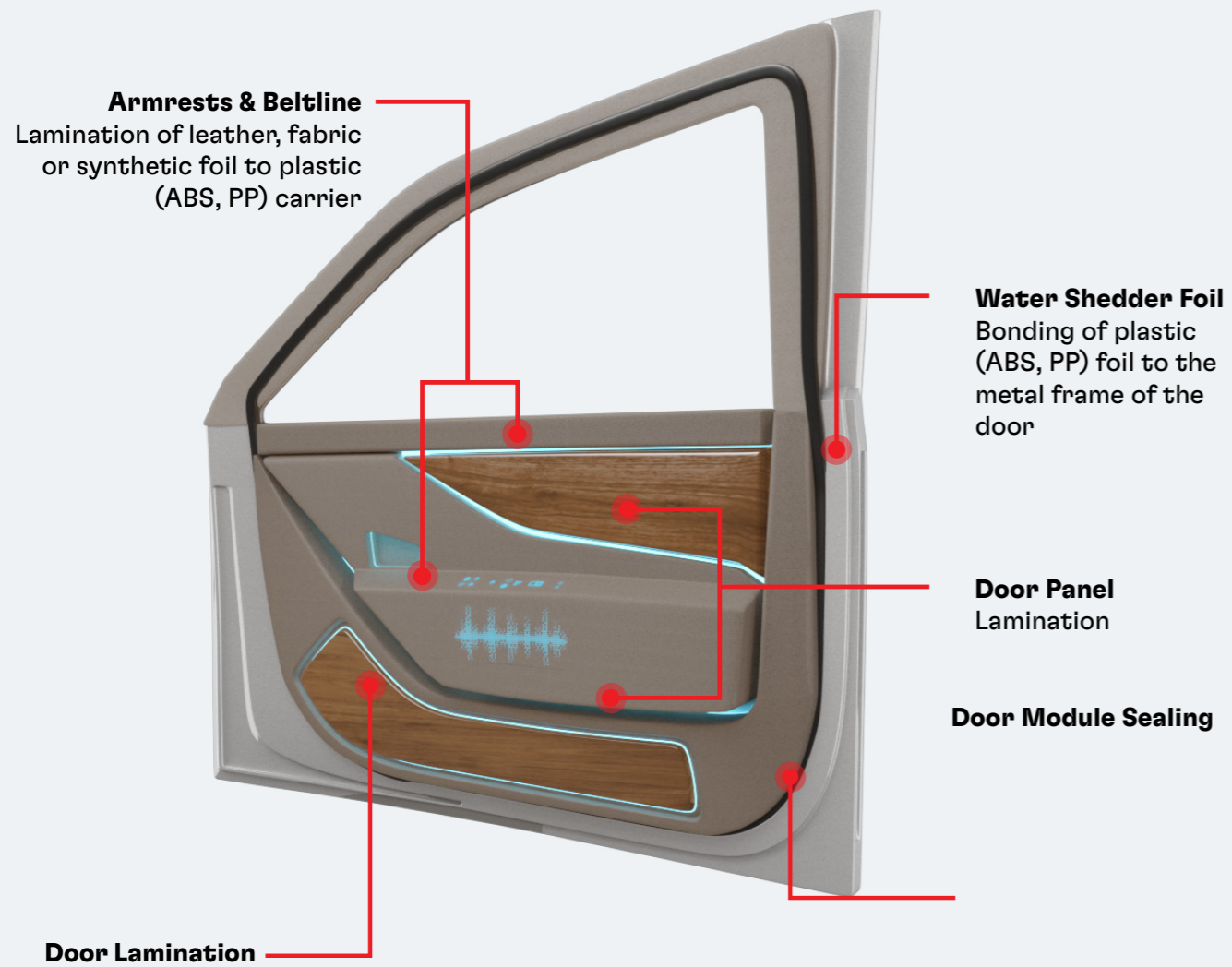
NON-REACTIVE POLYOLEFIN HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® AS SP101	Sun visor lamination	Roller coater application	Fabric, PP foam	Good adhesion to non-polar substrates

Please [contact us](#) to learn more about our portfolio of water-based adhesives for the APAC region.



DOOR SYSTEM



REACTIVE PUR HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PUR 9622-02 UV	Door lamination	Automated roller coater application, Vacuum / press lamination	ABS, PP (pre-treated), TPO foil	Standard grade for door lamination
TECHNOMELT® PUR 6220 UV LV	Armrest lamination	Manual / Robot, spray application	ABS, PP (pre-treated)	Good spray ability, low viscosity
TECHNOMELT® PUR 9700 / 9720	Door lamination	Automated roller coater application Vacuum lamination	PVC foil, ABS, acrylic NF	Good plasticizer resistance (PVC foil) fast setting time
TECHNOMELT® PUR 4663 / 4650	Armrest bonding Retainer bonding	Manual / Robot, bead application	ABS, PP (pre-treated), NF	Long open time
TECHNOMELT® PUR 9800	Door lamination	Automated roller coater application Vacuum / press lamination	ABS, PP (pre-treated), TPO	Low carbon footprint based on recycled and renewable raw materials

WATER BASED PU DISPERSION*

Product	Application	Process	Substrates	Benefits
AQUENCE® PL 2506	Upper door panels lamination	Manual / Robot, spray application	PVC foil, ABS, PP (pre-treated)	NMP / APEO free, low reactivation (55°C)

NON-REACTIVE PRESSURE SENSITIVE HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PS 203A	Water shedder foil bonding	Manual / Robot, bead application	PE foil, metal car body	Good adhesion to different surfaces

Please [contact us](#) to learn more about our portfolio of water-based adhesives for the APAC region.

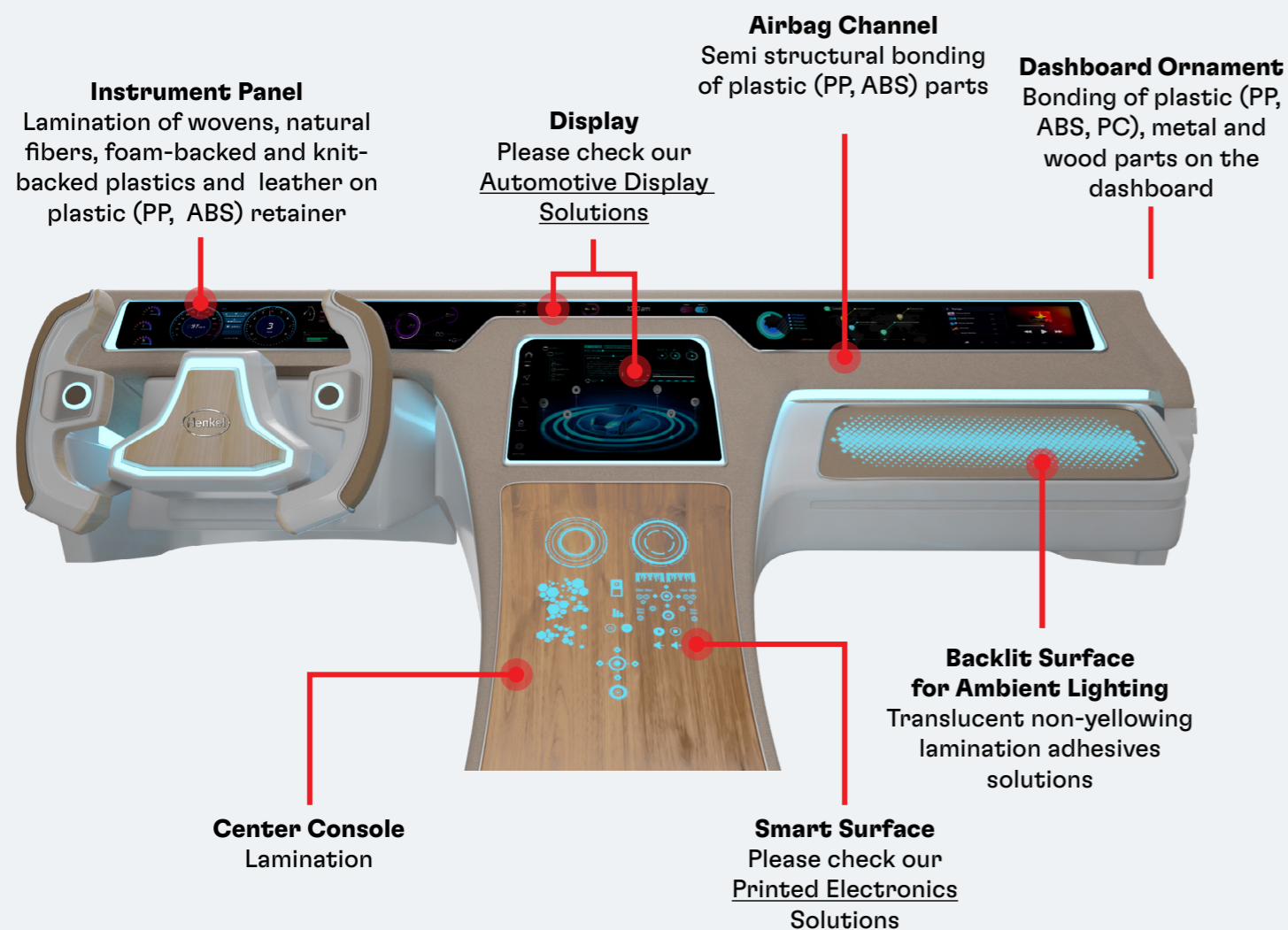


Good to know...

Henkel offers solutions for all three types of lamination processes (Vacuum-, Press- and IMG Lamination). The shape and complexity of the substrates have a big influence on the selection of the adhesive.



INSTRUMENT PANEL



Good to know...

Because of the complex 3d shape of an instrument panel, vacuum lamination is often not possible, as the coverstock would be overstretched and destroyed. Hence, the coverstock is composed of single parts to fit the complex shape. The adhesive is sprayed on the plastic carrier and the woven or foam-backed cover is manually stretched onto the carrier and prefixed with a hot air gun. Therefore, sprayable adhesives are needed.

REACTIVE PUR HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PUR 6221 UV	Instrument panel lamination	Automated by robot, manual correction Press lamination	Leather, TPO foil, ABS, treated PP	Standard grade for spray application
TECHNOMELT® PUR 6225 LE	Instrument panel lamination	Automated by robot, manual correction Press lamination	Leather, TPO foil, ABS, treated PP	Low reactivation temperature
TECHNOMELT® PUR 4663	Dashboard ornament bonding	Manual / Robot, bead application	Metal, Wood, ABS, PP (pre-treated)	Long open time
TECHNOMELT® PUR 9800	Door lamination	Automated roller coater application Vacuum / press lamination	ABS, PP (pre-treated), TPO	Low carbon footprint based on recycled and renewable raw materials

NON-REACTIVE POLYOLEFIN HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® AS 4209	Center console bonding Airbag channel bonding	Manual / Robot, bead application	PP, ABS	Good adhesion to non-polar substrates
TECHNOMELT® AS 8383	Instrument panel Center console	Roller coater spray application	PP, ABS	Good adhesion to non-polar substrates High heat resistance

MS POLYMER

Product	Application	Process	Substrates	Benefits
TEROSON® MS 930 / 647	Dashboard ornament bonding	Manual / Robot, bead application	Metal, wood, different plastic without pre-treatment	Elastic, good adhesion on different substrates
TEROSON® MS 647 2C	Airbag channel bonding	Manual / Robot, bead application	PP (pre-treated), ABS	Wide adhesion range, elastic



SEATING SYSTEM



Seat Back Lamination
Lamination of fabric and leather to the plastic parts on the back of the seat

Seamless Seat Cover
Textile lamination of seat cover on polyester fleece

Seat Frame
Structural bonding



Good to know...

A seat requires a wide range of solutions that Henkel can offer. It begins with the pre-treatment of the metal frame, bonding of additional parts to the frame, bonding of sensors in place and potting them, and it ends with the lamination of the seat cover.

REACTIVE PUR HOTMELT

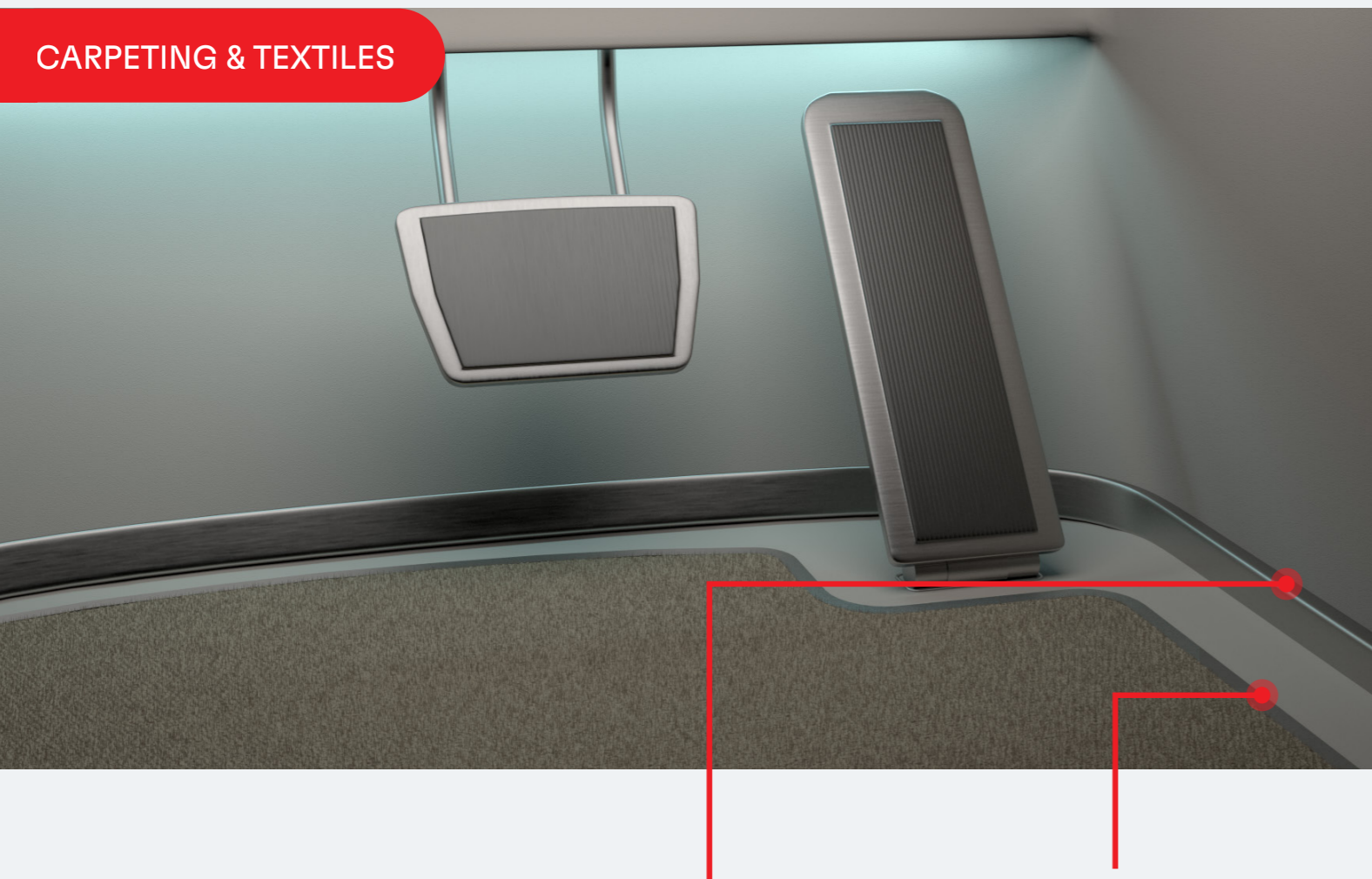
Product	Application	Process	Substrates	Benefits
TECHNOMELT® PUR 9700	Seat back lamination	Automated roller coater application	ABS, reinforces NF, PVC or TPO foil	Good plasticizer resistance (PVC foil)
TECHNOMELT® PUR 4663 ME	Seamless seat cover lamination	Manual / robot spray application (swirl)	Seat cover, polyester fleece	Micro emission grade

NON-REACTIVE PRESSURE SENSITIVE HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PS 8774	Seat heating bonding	Manual / robot bead application	Felt, seat heating	Very soft, flexible, tacky
TECHNOMELT® DM 5633	Seat back lamination	Robot bead Spray application	Felt	Low viscosity, solvent free, fast tack and grab, good temperature resistance for below the belt application



CARPETING & TEXTILES



Load Carpet
Carpet / textile to load floor bonding

Sound Insulation
Bonding of different felt and insulation mats

Carpet & Carpet Bonding
Carpet to body bonding
Carpet to felt / fleece bonding
Carpet to back seat bonding



Good to know...

Carpet applications usually don't require high bonding strength, and very often maximum service temperature does not exceed 80°C. So non-reactive hotmelts may be the right choice. Only overhead applications or complex 3D forms require reactive adhesives. Henkel offers both reactive and non-reactive adhesives that can help to accelerate and optimize the assembly processes and reduce total manufacturing cost.

REACTIVE PUR HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® PUR 4663	Load floor, carpet	Manual / Robot bead application	Baypreg, felt, carpet	Long open time
TECHNOMELT® PUR 9720	Load floor	Manual / Robot / Roller Coater / Bead application Press lamination	Baypreg, PVC foil, carpet	Good adhesion on PVC foil
TECHNOMELT® PUR 9800	Load floor, carpet	Roller coater / Bead application Press lamination	—	—

NON-REACTIVE PRESSURE SENSITIVE HOTMELT

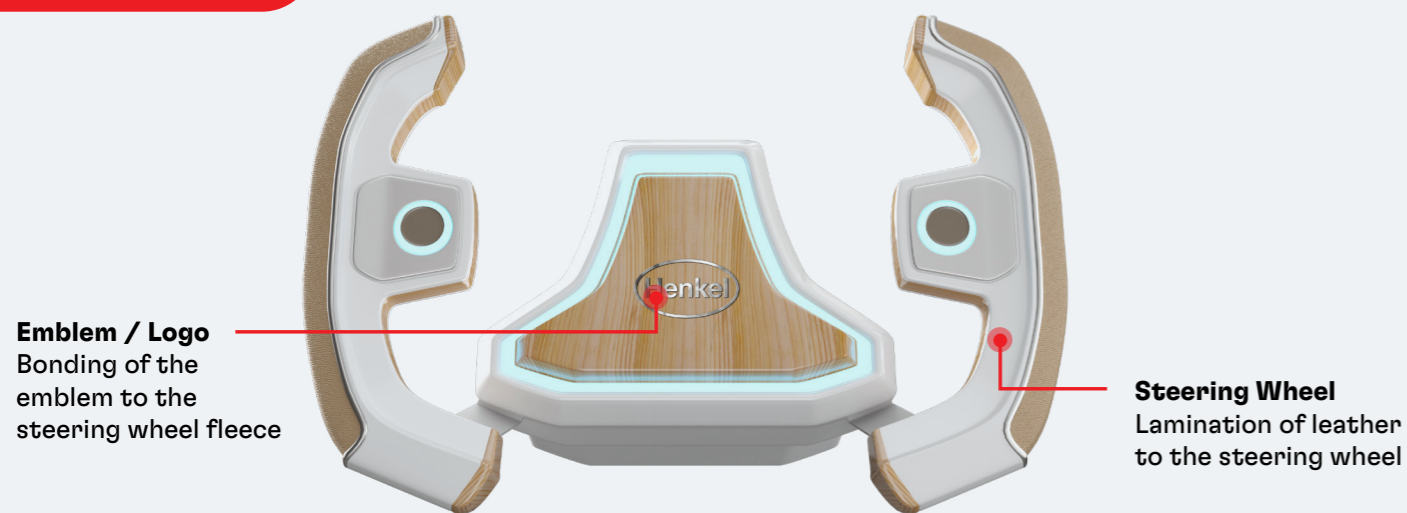
Product	Application	Process	Substrates	Benefits
TECHNOMELT® AS H321	Headliner lamination	Manual / Robot spray application	Textile to headliner	NMP/APEO free Long open time Tack free
TECHNOMELT® AS H418				
TECHNOMELT® AS H757	Load floor	Manual / Robot / Roller Coater / Bead application Press lamination	Baypreg, carpet, thermoformed parts	Good adhesion to non-polar substrates like PP

NON-REACTIVE APAO HOTMELT

Product	Application	Process	Substrates	Benefits
TECHNOMELT® AS 8383	Carpet, sound insulation	Manual / Robot / Roller Coater / Bead application	Felt, carpet, metal body, different plastic	Creep resistance up to 110°C, good adhesion to different surfaces



OTHER INTERIOR



Good to know...

Steering wheel lamination is typically done manually. Water based dispersions are a sustainable alternative to solvent based adhesives. It can be dried and activated in one step with a hot air gun. For brand logo bonding, many different adhesives can be used depending on the process.

WATER BASED DISPERSION*

Product	Application	Process	Substrates	Benefits
AQUENCE® PL 1506	Steering wheel lamination	Manual, brush or spray gun	Leather, synthetic leather	Drying and reactivation in one operation

MS POLYMER / 2C PU POLYMER

Product	Application	Process	Substrates	Benefits
TEROSON® MS 9120 TEROSON® MS 647 (1c or 2c) TEROSON® PU 6700 ME	Emblem bonding	Manual / Robot	PC-ABS, coating, ABS	Wide adhesion range, elastic Fast curing

Please **contact us** to learn more about our portfolio of water-based adhesives for the APAC region.

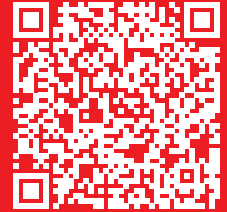


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