



# BONDING SOLUTIONS

Double-Sided Tape Assortment Overview

# TOP SOLUTIONS

## Double-Sided Tapes for Varied Applications

### The World of Bonding Applications

As a leading global manufacturer of adhesive solutions, our experience comes with a deep understanding of expert services. For this reason, we offer a wide range of specially developed double-sided tapes that effectively meet the application requirements of our customers.

The result: an assortment of adhesives, liners, and backings that provide custom bonding solutions for a diverse field of business.

### Advantages of Double-Sided Tapes vs. Liquid Glue and Mechanical Fastening

		Double-sided tapes	Liquid glue	Mechanical fastening (e.g., rivets, screws, nails)
Quality	Compensates for irregular or uneven surfaces – gaps between bonded surfaces are eliminated	•••	••••	•
	Tension compensation and stress dissipation – mechanical fasteners have a single bonding point which can lead to material breakage	••••	••	•
	Shock absorption	••••	••	•
	Reduced risk of corrosion	••••	••••	•
	Sealing function – tape seals and protects against dust and moisture	••••	••••	••
	Noise-dampening properties – eliminate sounds cause by vibrations	••••	•••	•
Assembly	Fast application process – eliminate cure time and reduce of complexity	••••	•	••
	Healthy working environment and clean production sites	••••	••	••
Design	Improved visual appearance – no damage to the material	••••	•••	•
	Invisible fastening – mounted surfaces appear seamless	••••	•••	•

•••• Very good ••• Good •• Medium • Low

#### Overview

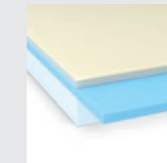
- Our double-sided adhesive system
- Release liner categories
- Construction of our double-sided tapes
- Test methods

4 – 5



#### Film Tapes

- High tensile strength
- Well suited for die-cut production
- For high-speed manufacturing processes



#### Differential Tapes

- Differential adhesive coating weight on both sides of the backing
- Strongly differing peel adhesion

6 – 9



#### Non-woven Tapes

- Flexible and extremely conformable
- Hand tearable, but nick resistance
- Cushioning features



#### Paper Tapes

- Flexible
- High temperature resistance
- Hand tearable

10 – 11



#### Cloth Tapes

- Flexible
- High temperature resistance
- Thick backings are abrasion resistant



#### Transfer (without backing)

- Heat activated film for extremely high bonding demands

12 – 13



#### Foam Tapes

- Compensation of tension, gaps, and irregular surfaces
- High bonding power even on rough surfaces
- Excellent shock absorption
- Sealing function against dust and moisture

14 – 17



#### tesa® ACX<sup>plus</sup>

- Viscoelasticity
- Bonding power
- Stress dissipation
- Temperature and weather resistance



#### tesa HAF®

- Heat activated film for extremely high bonding demands
- Reliable under extreme environmental conditions

18 – 21

#### Application tips and storage

- Application tips for double-sided tapes
- Storage
- The right double-sided tape solution for your requirements
- Our offering

22 – 23

# EXCELLENT QUALITY

## Discover the Features of Our Double-Sided Tapes

### Our Double-Sided Adhesive Systems

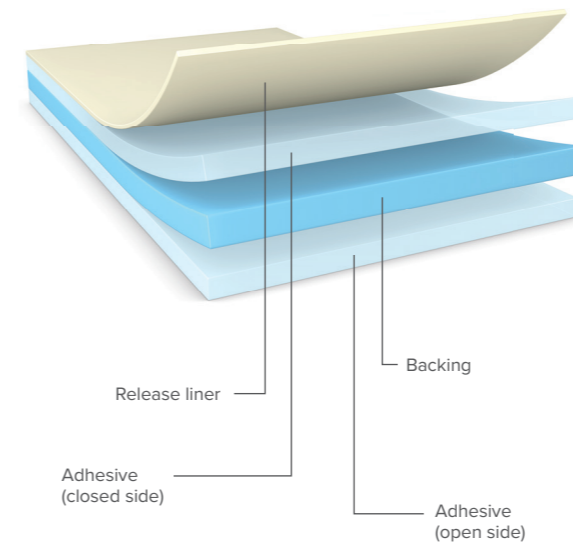
Product type	Attributes
<b>Pure acrylic</b>  Pure acrylic adhesive is especially suitable for outdoor applications and applications at elevated temperatures.	<ul style="list-style-type: none"> <li>• Good adhesive strength on polar and pretreated non-polar surfaces</li> <li>• Very good performance -at elevated temperatures</li> <li>• Resistance against environmental conditions (e.g., UV, humidity) and aging.</li> </ul>
<b>Tackified acrylic</b>  Tackified acrylic is a versatile adhesive with a well-balanced performance on a wide variety of surfaces for permanent applications.	<ul style="list-style-type: none"> <li>• Very good adhesive strength on polar surfaces, good on non-polar surfaces</li> <li>• High initial adhesion power</li> <li>• Resistance against environmental conditions (e.g., UV, humidity) and aging.</li> </ul>
<b>Synthetic rubber (SiS)</b>  SiS adhesive is suitable for a variety of surfaces but offers limited aging and temperature resistance.	<ul style="list-style-type: none"> <li>• High immediate adhesive bonding strength</li> <li>• Good shear resistance</li> <li>• Very good bonding on polar and non-polar surfaces</li> </ul>
<b>Natural rubber</b>  Natural rubber adhesive is extremely sticky for use on rough surfaces.	<ul style="list-style-type: none"> <li>• High immediate adhesive bonding strength</li> <li>• Very good bonding on polar and non-polar surfaces</li> <li>• Preferred for use in indoor applications</li> </ul>

### Release Liner Categories

Product features/advantages	Color	Thickness [µm]	Weight [g/m²]	Breaking force [N/cm]
<b>Siliconized paper</b> <ul style="list-style-type: none"> <li>• Low electric discharge</li> <li>• Stable under pressure due to hard paper core</li> </ul>	Brown	70	82	>63
<b>PE (polyethylene) coated paper</b> <ul style="list-style-type: none"> <li>• Good tensile strength</li> <li>• Excellent die-cutting properties</li> <li>• Excellent humidity resistance</li> </ul>	White	122	120	>73
<b>PP (polypropylene) release film</b> <ul style="list-style-type: none"> <li>• Dust-free convertibility</li> <li>• High tear resistance</li> <li>• Safe use in automated processes</li> </ul>	Red	80	72	>180
		120	108	>180
<b>PET (polyethylene terephthalate) release film</b> <ul style="list-style-type: none"> <li>• Excellent tear strength</li> <li>• Good thickness tolerance</li> <li>• Dust-free processing</li> </ul>	Transparent	50	72	>70
		75	109	>100
<b>PE (polyethylene) release film</b> <ul style="list-style-type: none"> <li>• Flexible and soft for easy application on curved surfaces</li> <li>• No fraying during the sawing process</li> </ul>	Dark blue	100	94	>16

### Construction of Our Double-Sided Tapes

#### Structure of double-sided adhesive tapes



#### Our double-sided tapes consist of three main components:

##### Backing

The backing contributes to some of the main features of double-sided tape. For rougher surfaces thicker foams come into play, while smooth and transparent surfaces typically call for film backings. Thanks to their viscoelastic characteristics our extruded products like tesa® ACXplus tapes are suitable when stresses dissipation is required.

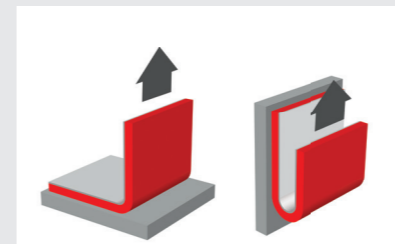
##### Adhesive system

The proper choice of the adhesive system depends on how the double-sided tape will be used, the kinds of surfaces which are to be bonded, how long the bond is supposed to last, and whether it is an indoor or an outdoor application.

##### Liner

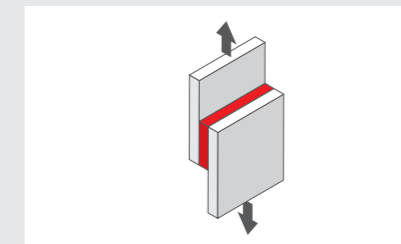
The liner covers the adhesive system and is an important element for the application and removal process. Filmic liners are usually used for automatic and paper liners for manual applications.

### Test Methods



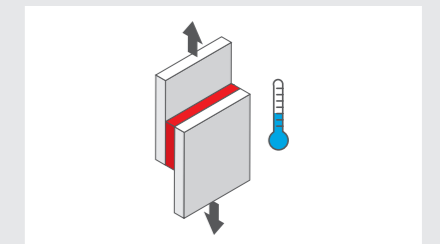
#### Peel adhesion

Adhesive strength describes the bonding power of the tape to steel. Hence, the value is an important parameter in any application. Its value depends significantly on the surface characteristics, the pressure, and the time exposed to the bonding materials. A tape's peel adhesion is calculated in N/cm and is measured by peeling the tape from the test substrate at a 90° or 180° angle. After 72 hours' dwell time the tape can be removed at a constant speed of 300 mm/min.



#### Static shear resistance

Shear resistance is defined by the inner cohesiveness of an adhesive and describes the holding power of a tape in a product application. Thus, shear resistance applies when the tape encounters high stress. A tape's shear resistance is measured by bonding the tape to a 2.6 cm² steel surface. After adding a 10 N weight to the bonded area the shear resistance is observed in an environment with 23°C and 50 percent humidity.



#### Temperature resistance

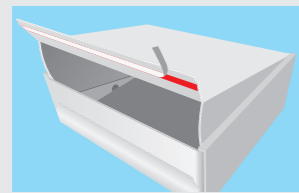
Temperature resistance characterizes the holding power of a tape in a product application at elevated temperatures. It is divided into short term (15 minutes) and long term (3 months). Subsequently, the tape's shear distance over the specified time is evaluated at elevated temperatures.

# DIMENSIONALLY STABLE

## Film Tapes: Ideal for Bonding to Flat, Smooth Surfaces

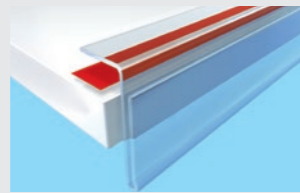
Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 4926	Thick double-sided tape with excellent bonding power on critical surfaces. The thick coating weight supports cushioning and gap filling. tesa® 4926 is mainly used for mounting components in the consumer electronics industry.	PET	Tackified acrylic	Transparent	250	16.2	16.5	7.5	•••	200/100
tesa® 4965	Exceptional bonding performance on critical surfaces and rough materials. tesa® 4965 shows excellent holding power at elevated temperatures and high initial adhesion power. It is used for a broad variety of applications, for example mounting of ABS/PE/PVC parts.	PET	Tackified acrylic	Transparent	205	11.8	13.0	6.9	•••	200/100
tesa® 51865	tesa® 51865 Profile FIT is the first asymmetrical film tape designed to fit the needs of trim and profile applications. The higher coating weight is located on the closed side of the tape to work on a great variety of surfaces.	PET	Tackified acrylic	Transparent	165	13.5/10.5*	14.0/11.0*	8.0/7.0*	•••	200/100
tesa® 4967	Well-balanced ratio of adhesive power and shear strength combined with outstanding humidity and temperature resistance. It is used in signage, splicing, and laminating trims and profiles.	PET	Tackified acrylic	Transparent	160	13.4	11.9	5.7	•••	200/100
tesa® 4928	For bonding of various polar (ABS, PC) and rough surfaces, for example signs, scales, or blinds. Balanced ratio between adhesion power and shear strength.	PET	Tackified acrylic	Transparent	125	12.0	10.1	5.4	•••	200/100
tesa® 4982	Excellent combination of high adhesion power and shear strength. Often used for bonding components in the consumer electronics industry. tesa® 4982 has an excellent temperature resistance.	PET	Tackified acrylic	Transparent	100	11.7	10.0	5.1	•••	200/100
tesa® 4980	Good bonding strength on most common smooth and even substrates. Reduced immediate contact adhesion makes initial repositioning possible. Used for mounting nameplates, badges, and light signs as well as decorative profiles in the furniture industry.	PET	Tackified acrylic	Transparent	80	9.7	10.7	4.6	•••	200/100
tesa® 4972	Thin product with high adhesion level relative to its thickness. tesa® 4972 allows repositioning and shows excellent resistance to demanding environmental conditions. Used to mount plastic badges and signs as well as components in the consumer electronics industry.	PET	Tackified acrylic	Transparent	48	9.6	9.4	3.5	•••	200/100
tesa® 4983	Very thin product with good adhesion level and excellent resistance to demanding environmental conditions. tesa® 4983 shows outstanding handling performance in converting processes and is used for bonding smaller components in the electronics industry.	PET	Tackified acrylic	Transparent	30	7.6	6.4	3.3	•••	200/100
tesa® 51977	Excellent initial tack and adhesion level, especially designed for carpet-laying applications and mounting of heavy decorative materials and displays.	PP	Tackified acrylic	White	240	15	14	7	•••	120/60
tesa® 51970	Exceptional bonding results on smooth and uneven surfaces. tesa® 51970 has an excellent balance between adhesion power and shear strength combined with high aging resistance. It is used for mounting solid decorative components, displays, and signs.	PP	Tackified acrylic	Transparent	220	13.5	17	6.8	•••	130/80
tesa® 64620	Very high initial bonding power, even on hard-to-bond and non-polar surfaces. Limited aging and temperature resistance. Applicable for example for mounting of building and furniture components and lamination of magnets.	PP	Synthetic rubber	White	185	26	25	9.5	••••	80/40
tesa® 64624	Exceptional high initial bonding power and high adhesion power on critical surfaces such as PE or PP. tesa® 64624 is used for example for temporary fixing of trims and profiles under normal temperature conditions.	PP	Synthetic rubber	Transparent	170	15.9	15.1	9.3	••••	80/40

Film Tapes



Corrugated closure, e.g.:

- tesa® 51970
- tesa® 64624



Shelf edge strips, e.g.:

- tesa® 4965
- tesa® 51865



Magnetic strips, e.g.:

- tesa® 51865\*
- tesa® 4967



Mounting of transparent signs and displays, e.g.:

- tesa® 4965
- tesa® 51970



Mounting of profiles on various surfaces, for example skirtings and wall edging strips, e.g.:

- tesa® 4970



Decorative trims, e.g.:

- tesa® 51970
- tesa® 51865

\*side with lower coating weight

■ Adhesive ■ Backing •••• Very good ••• Good •• Medium • Low

## Film Tapes: Ideal for Bonding to Flat, Smooth Surfaces

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 51908	High bonding power combined with aging and humidity resistance. tesa® 51908 is used for permanent bag sealing. Tape can be easily cut with common hot wire systems.	PP	Tackified acrylic	Transparent	100	13.7	11.5	4.3	•••	120/80
tesa® 64621	Very high initial bonding power, even on non-polar surfaces. Limited aging and temperature resistance. Applicable for example for mounting of decorative trims and profiles or bonding of metal, cloth, paper, and synthetic materials.	PP	Synthetic rubber	Transparent	90	15.0	9.5	6.5	••	80/40
tesa® 4968	Flexible backing with excellent initial bonding strength. tesa® 4968 is to a large extent plasticizer resistant and has outstanding converting properties. Applicable for example for car mirror mounting.	PVC	Tackified acrylic	White	295	28.2	23.0	8.8	•••	70/60
tesa® 4970	Exceptional bonding performance on smooth and rough surfaces. The tape shows very good plasticizer and aging resistance and is used for mounting of heavy signs and point of sale displays.	PVC	Tackified acrylic	White	225	13.6	16.6	9.1	•••	70/60
tesa® 4963	Product with good shear strength and humidity resistance. tesa® 4963 features a creped, non-siliconized liner. Applicable for example for sealing of synthetic and paper bags and splicing applications.	PVC	Natural rubber	Transparent	110	6.1	5.9	4.5	••••	70/40

### Fingerlift



- Fingerlift benefits
- Overlapping liner for convenient release
  - Clean and easy mounting
  - Available as single- and double-sided fingerlift

### Spools



- Benefits of our high-quality cross-wound spools
- Proven performance in automated processes
  - Less downtime, higher production output
  - Less material waste

# PRACTICAL EFFECTIVENESS

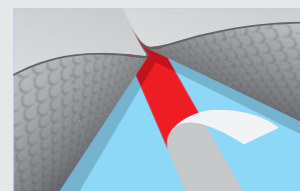
## Differential Tapes: High Quality Results

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 4720	Double-sided self-adhesive tape with differential acrylic adhesive. Open side: high adhesion level/secure bond of different substrates. Covered side: low adhesion level, residue-free removability.	PET	Tackified acrylic/pure acrylic	Transparent	100	12.9/5.7	11.5/5.3	4.9/1.1	•••	200/80
tesa® 4917	Differential adhesive tape with high aging and humidity resistance. Suitable for example for reversible and non-permanent sealing of plastic bags and production support in the manufacturing of compounds.	PP	Tackified acrylic	Transparent	90	11.4/4.1	11.0/7.0	4.1/2.3	•••	120/80
tesa® 51960	Differential adhesive coating weight for residue-free removal on one side and high bonding strength on the other. Very resistant to aging and plasticizers. Applicable for example for floor laying, even for PVC and CV floors.	PP film reinforced fabric	Tackified acrylic/pure acrylic	Transparent	248	6.6/13.7	6.2/13.8	3.5/5.1	••	120/60
tesa® 51903	Differential adhesive makes the product especially suitable for the closure systems of bags and mounting in the lithographic industry. Supplied without liner.	PVC	Tackified acrylic	Transparent	86	3.0/4.6	2.5/5.2	1.8/0.7	•	70/60
tesa® 4914	This differential tape shows excellent initial tack and high temperature resistance. Due to a specially foamed adhesive on the closed side, it is highly conformable to rough surfaces. It is used for example for cable mounting in the automotive industry.	Non-woven	Tackified acrylic	Translucent	250	7.8/9.3	7.7/7.8	3.4/5.3	•	140/80
tesa® 4939	Specially formulated adhesive on the open side combines a high bonding power with residue-free removability for up to 14 days from most common surfaces. Applications include temporary floor laying during fairs and exhibitions. tesa® 4939 is hand tearable.	Cloth	Synthetic rubber	White	235	5.5/8.0	5.9/11.2	2.0/5.0	••••	80/40



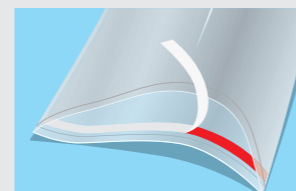
Headliner cable mounting, e.g.:

- tesa® 4914



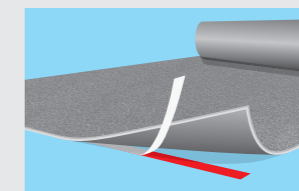
Laminating PVC and CV floors, e.g.:

- tesa® 51960



Resealable closing of plastic bags, e.g.:

- tesa® 4917



Floor laying, e.g.:

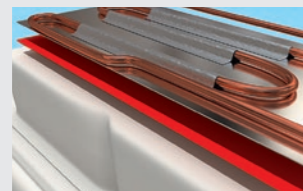
- tesa® 4939

■ Adhesive ■ Backing •••• Very good •••• Good •• Medium • Low

# EASILY TEARABLE

## Non-Woven and Paper Tapes: Conform to Slightly Irregular Surfaces

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 4959	Product with highly flexible backing, high initial bonding power and well-balanced ratio of shear strength and adhesive power. tesa® 4959 is extremely age resistant and especially designed to bond flexible materials.	Non-woven	Tackified acrylic	Translucent	100	8.5	14.0	4.5	•••	200/80
tesa® 4960	Product with good shear strength and humidity resistance. Applicable for sealing synthetic and paper bags and splicing applications.	Non-woven	Tackified acrylic	Translucent	100	4.7	3.8	0.5	•	200/80
tesa® 4943	High initial bonding power and a good shear resistance make this product suitable for splicing applications. The flexible backing is applicable for the lamination of leather, textiles, and foams.	Non-woven	Tackified acrylic	Translucent	100	8.1	10.8	1.6	••••	100/70
tesa® 68644	Very good balance of adhesion and cohesion, and excellent temperature resistance. tesa® 68644 is used for the mounting on various kinds of plastic and metal surfaces.	Non-woven	Tackified acrylic	Translucent	100	9.4	11.8	3.8	•••	200/80
tesa® 68645	High peel adhesion level and good shear resistance. tesa® 68645 is recommended for deco panel mounting in elevators and also for some general-purpose mounting.	Non-woven	Tackified acrylic	Translucent	120	12.0	11.0	3.5	••	150/80
tesa® 4987	Good ratio of high initial tack and ultimate adhesion level even on rough surfaces. tesa® 4987 shows good shear resistance and resistance against environmental conditions. Used for example for fixing of furniture parts and lamination of foam and rubber substrates.	Non-woven	Tackified acrylic	Translucent	125	11.2	11.4	4.8	•••	200/80
tesa® 4962	Excellent bonding results on smooth and rough surfaces combined with high initial adhesion power and outstanding aging resistance. tesa® 4962 is used for example for mounting of automotive interior components and flying splice applications.	Non-woven	Tackified acrylic	Translucent	160	12.0	15.0	7.0	•••	200/80
tesa® 4940	Very good anti-repulsion performance and high adhesion level on various kinds of surfaces. tesa® 4940 is used for the mounting of plastics, foam parts, felt, and cardboard.	Non-woven	Tackified acrylic	Translucent	160	11.3	12.2	3.8	•••	150/80
tesa® 52215	Ultra low VOC and conformable tape especially designed for demanding lamination and converting requirements. tesa® 52215 features secure mounting even to nonpolar plastics and composites.	Non-woven	Acrylic	Translucent	150	13.0	14.0	4.2	••	150/80
tesa® 51570	High initial bonding power, also on non-polar surfaces. Very flexible for processing of elastic material, for example the closure of film and plastic bags, and splicing in the paper and carton industry.	Non-woven	Synthetic rubber	Translucent	110	13.0	12.5	7.0	•••	80/40
tesa® 51571	Flexible product with high bonding and shear strength, even on non-polar surfaces. Applicable for example for lamination of foams, film bags, posters, and displays.	Non-woven	Synthetic rubber	Translucent	160	13.0	13.0	8.5	••••	80/40
tesa® 4961	Product with very high shear strength, but removable from firm surfaces. Applicable for example for mounting of synthetic materials and splicing of paper and film.	Paper	Natural rubber	White	205	8.0	6.3	4.1	••••	110/40



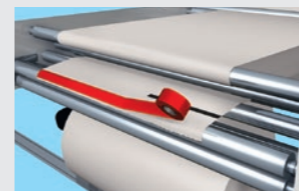
Mounting of evaporators in the appliance industry, e.g.:

- tesa® 4959
- tesa® 51571



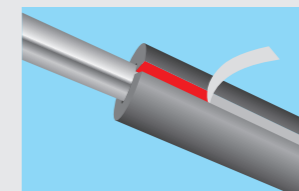
Sewing aid for leather in the manufacturing of shoes and bags (prefixation), e.g.:

- tesa® 4962
- tesa® 51571



Overlapping splicing in corrugated business, e.g.:

- tesa® 4962
- tesa® 4959
- tesa® 4943



Tube isolation, e.g.:

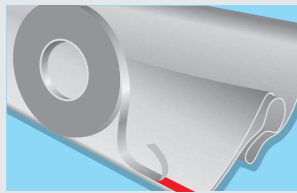
- tesa® 51571

■ Adhesive ■ Backing •••• Very good ••• Good •• Medium • Low

# RELIABLE BONDINGS

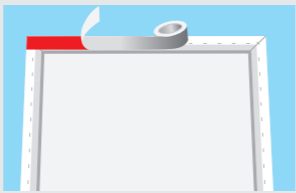
## Cloth Tapes: For Rough Surface Applications

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 4954	Product with high shear strength and very good tack, for example for bonding of leather, PVC, and aluminum during manufacturing. Product has a creped silicone paper liner.	Cloth	Natural rubber	White	430	5.7	5.3	3.5	••••	200/50
tesa® 4964	Product with high shear strength and high adhesive coating weight for use on rough and non-polar surfaces (PP/PE). Removable from clean and firm surfaces.	Cloth	Natural rubber	White	390	7.6	7.0	5.4	••	110/30
tesa® 4974	Very good bonding results on rough and fibrous substrates due to high adhesive coating weight, for example carpets.	Cloth	Natural rubber	White	380	6	5.0	3.6	•	110/30
tesa® 4934	Product with high tack for bonding of rough and fibrous surfaces, for example carpet laying. Product is hand tearable.	Cloth	Synthetic rubber	White	200	24.0	22.5	8.5	••••	60/40



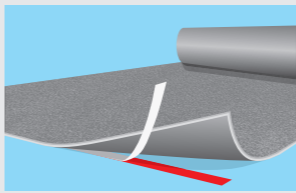
Mounting of fabrics and textiles, e.g.:

- tesa® 4964



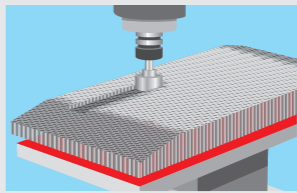
Mounting of pictures and posters, e.g.:

- tesa® 4964
- tesa® 4934



Floor laying, e.g.:

- tesa® 4964
- tesa® 4934



Honeycomb milling, e.g.:

- tesa® 4964

# PRACTICAL EFFECTIVENESS

## Transfer Tapes: High Quality in Practice


Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
						Steel	PVC	PE		
tesa® 68105	tesa® 68105 is a transparent transfer tape suitable for demanding lamination jobs. Main applications are lamination of overlays on touch switches, fastening of printed nameplates, and label stock.	Without backing	Pure acrylic	Transparent	50	6.7	6.7	1.6	••••	200/150
tesa® 52105	Conformable transparent transfer adhesive layer of water based acrylic that features very low total VOC values. Especially designed for all kind of converting and demanding lamination requirements such as lamination of critical, soft, light, smooth substrates / sheets to mount on LSE and 3D-shapes.	Without backing	Acrylic	Transparent	50	9.5	8.9	1.8	•	200/80
tesa® 52110		Without backing	Acrylic	Transparent	100	13	11.8	2.1	•	130/50
tesa® 4900	tesa® 4900 consists of a transparent pure acrylic adhesive which is aging resistant and has a high initial tack. tesa® 4900 also withstands elevated temperatures.	Without backing	Pure acrylic, fiber reinforced	Transparent	50	3.8	5.6	1.0	••	200/80
tesa® 4985	tesa® 4985 is a transparent transfer tape using a modified acrylic adhesive. Main applications: mounting of posters and photos, mounting of fabric for pattern books, splicing of paper.	Without backing	Tackified acrylic, fiber reinforced	Transparent	50	11.1	9.4	4.9	••	200/80

■ Adhesive ■ Backing •••• Very good ••• Good •• Medium • Low

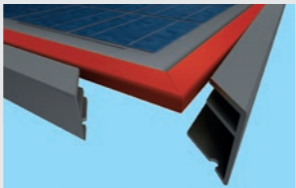
# OPTIMUM PERFORMANCE

## Foam Tapes: Bond Different Surfaces, Fill Gaps & Absorb Shock

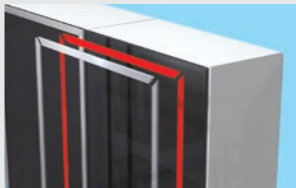
Product	Product description and application	Backing	Foam strength	Adhesive	Color	Thickness without liner [µm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term	Test reports
							Steel	PVC	PE			
<b>INDOOR MOUNTING</b>												
tesa® 64956	tesa® Indoor Mounting Tapes providing excellent tack, high bonding strength even on low energy surface substrates and good shear resistance at room temperature. The product has been designed for indoor applications or where the bond is not exposed to direct sun light. They are used for e.g. trims and profiles or indoor signs.	PE foam	Medium	Synthetic rubber	White/black	800	15.0*	15.0*	12.0	...	60/40	Leed certification
tesa® 64958		PE foam	Low	Synthetic rubber	White	1,050	4.0*	4.0*	4.0*	...	60/40	
tesa® 64962		PE foam	Medium	Synthetic rubber	White/black	1,600	16.0*	16.0*	16.0*	...	60/40	
<b>MULTI-PURPOSE</b>												
tesa® 62505	tesa® Multi-Purpose Tapes offering very good maximum peel adhesion even on rough and critical surfaces and a good shear resistance for moderate loadings. The backing is a high quality polyethylene foam with a special balance between strength and conformability. The tapes have been designed for permanent indoor and outdoor applications, e.g. mounting of decorative trims and profiles, solar frames or window muntin bars.	PE foam	Medium	Tackified acrylic	White/black	500	9.5*	9.5*	1.2	...	80/80	
tesa® 62508		PE foam	Medium	Tackified acrylic	White/black	800	13.5*	13.5*	0.9	...	80/80	UL file number E334507
tesa® 62510		PE foam	Medium	Tackified acrylic	White/black	1,000	13.5*	13.5*	0.9	...	80/80	UL file number E334507 TÜV Rheinland test report (solar) TÜV Rheinland LGA (mirror mounting)
tesa® 62512		PE foam	Medium	Tackified acrylic	White/black	1,200	13.5*	13.5*	0.9	...	80/80	UL file number E334507
tesa® 62516		PE foam	Medium	Tackified acrylic	White/black	1,600	13.5*	13.5*	1.2	...	80/80	
tesa® 62520		PE foam	Low	Tackified acrylic	White/black	2,000	6.0*	6.0*	2.0*	...	80/80	
tesa® 62530		PE foam	Low	Tackified acrylic	White/black	3,000	6.0*	6.0*	2.0*	...	80/80	
<b>HIGH BOND</b>												
tesa® 62932	tesa® High Bond Tapes offering a versatile adhesive with excellent immediate and maximum peel adhesion even on rough and critical surfaces and a good shear resistance for high loadings. The backing is a high quality polyethylene foam with high internal strength. The tapes have been designed for demanding indoor and outdoor applications, e.g. mounting of glass panels, mirror mounting or decorative profiles and elements on white/brown goods.	PE/EVA foam	High	Tackified acrylic	White/black	500	17.0*	17.0*	3.0	...	80/80	UL file number E309290/334507
tesa® 62934		PE foam	High	Tackified acrylic	White/black	800	17.0*	17.0*	2.8	...	80/80	UL file number E309290/334507 Leed certification
tesa® 62935		PE foam	High	Tackified acrylic	White/black	1,000	17.0*	17.0*	3.0	...	80/80	
tesa® 62936		PE foam	High	Tackified acrylic	White/black	1,600	19.0*	19.0*	3.0	...	80/80	UL file number E309290/334507



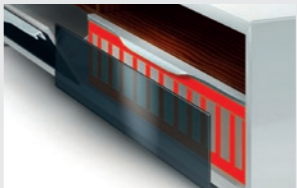
Cable channel Mounting, e.g.:  
• tesa® 64958



Solar frame mounting, e.g.:  
• tesa® 62508  
• tesa® 62510  
• tesa® 62512



Mounting of decorative trims, e.g.:  
• tesa® 62505  
• tesa® 62932



Decorative glass panel mounting, e.g.:  
• tesa® 62934  
• tesa® 62936

■ Adhesive ■ Backing ●●● Very good ●● Good ● Medium ● Low



# Foam Tapes: Bond Different Surfaces, Fill Gaps & Absorb Shock

Product	Product description and application	Backing	Foam strength	Adhesive	Color	Thickness without liner [µm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term	Test report
							Steel	PVC	PE			
<b>HIGH SHEAR</b>												
tesa® 62852	tesa® High Shear Tapes providing superior shear and temperature resistance with an excellent ultimate adhesion level for very high loadings. The backing is a high quality polyethylene foam with high to very high internal strength. The tapes have been designed for very demanding interior or exterior applications, e.g. automotive emblem mounting.	PE/EVA foam	High	Pure acrylic	Black	510	20.0*	>7.0	1.5	••••	100/90	
tesa® 62855		PE/EVA foam	Very high	Pure acrylic	Black	900	23.0*	>9.0	2.0	••••	100/90	
tesa® 62856		PE foam	High	Pure acrylic	Black	1,200	17.0*	>9.0	2.0	••••	100/90	

## SPECIALTIES

tesa® 4952	The acrylic adhesive combines a durable holding power with good adhesion on many substrates. tesa® 4952 has already been used in mirror mounting for over 20 years.	PE foam	Medium	Tackified acrylic	White	1,150	8.0*	8.0*	2.8	•••	80/80	
tesa® 4957	tesa® 4957 consists of a gap-filling PE foam backing and is used as a general mounting tape for trims and profiles.	PE foam	Low	Tackified acrylic	White/black	1,100	4.0*	4.0*	2.2	•••	80/80	
tesa® 4976	tesa® 4976 consists of a polyurethane foam and features especially high short-term temperature resistance. The tape is used e.g. in the automotive or electronics industry.	PUR foam	High	Tackified acrylic	White/Black	540	12.0*	12.0*	4.3	•••	200/80	
tesa® 62612	tesa® 62612 features an especially high ultimate adhesion level for a secure bonding performance. The product has been designed for dry window glazing.	PE foam	High	Pure acrylic	Black	1,600	19.0*	19.0*	1.0	••••	90/80	ift directive VE-08/2 part 1 (bonded glazing systems)
tesa® 62957	tesa® 62957 was designed for customers operating under cold temperatures on construction sites or in unheated production environments. Where other tape technologies fail, our tesa® 62957 shows an impressive performance on a variety of different substrates at very low temperatures (down to -10°C). The tape is used for e.g. mounting of shelf edge strips.	PE foam	Medium	Acrylic	White	1,000	13.5*	13.5*	3.5	••	80/80	ift directive MO-01/1: 2007-01 (structure connection of windows) Lead certification
tesa® 65605	tesa® 65605 Removable (multi-use) is equipped with a permanent adhesive on the open side and a removable adhesive on the covered side. The covered side removes residue-free without foam split and can be re-used on many non-delaminating surfaces.	PE/EVA foam	High	Tackified acrylic/pure acrylic	White	500	17.0/3.0	17.0/3.0	3.0/0.9	•••	80/80	
tesa® 65610	tesa® 65610 Removable (single-use) is especially suitable for customers that want to remove bonded parts from non-delaminating surfaces without leaving behind undesirable foam residue. Thanks to its unique product design foam residues can be removed quickly, easily and completely.	PE foam	Low	Tackified acrylic	White	1,200	4.0*	4.0	3.0	•••	80/80	



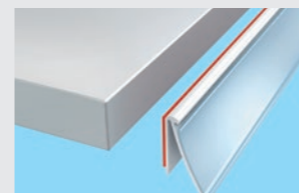
Muntin bar mounting, e.g.:

- tesa® 62508
- tesa® 4957



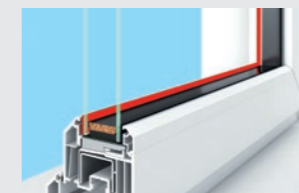
Mirror mounting, e.g.:

- tesa® 4952



Shelf edge strip mounting, e.g.:

- tesa® 65610
- tesa® 4957
- tesa® 64958



Dry glazing, e.g.:

- tesa® 62612

\*foam split

■ Adhesive ■ Backing •••• Very good ••• Good •• Medium • Low

# INTELLIGENT TECHNOLOGY

## tesa® ACX<sup>plus</sup>: For Permanent and Constructive Bonding

Product	Product description and application	Adhesive characteristics	Color	Thickness without liner [µm]	Ultimate peel adhesion [N/cm]			Shear resistance 23°C	Temperature resistance [°C] short/long term
					Steel	Aluminum	Glass		
<b>GRAY / WHITE</b>									
tesa® ACX <sup>plus</sup> 7042	tesa® ACX <sup>plus</sup> 704x series is a double-sided acrylic foam tape, available in gray or white. This product is especially designed for seamless bonding of decorative elements.  Additional thicknesses are available upon request.	Foamed pure acrylic	Gray/white	500	23	23	21	••••	200/120
tesa® ACX <sup>plus</sup> 7044		Foamed pure acrylic	Gray/white	1,000	33	35	32	••••	200/120
tesa® ACX <sup>plus</sup> 7046		Foamed pure acrylic	Gray/white	1,500	36	40	37	••••	200/120
tesa® ACX <sup>plus</sup> 7048		Foamed pure acrylic	Gray/white	2,000	38	40	40	••••	170/120
<b>HIGH TRANSPARENCY</b>									
tesa® ACX <sup>plus</sup> 7054	tesa® 705x series is a double-sided transparent acrylic core tape. This product line is suitable for transparent and translucent bonding and helps to provide an optically clear bond. Based on the requirements of the application we offer a specialized feature that removes the tackiness on the outer edges of the tape.  Additional thicknesses are available upon request.	Solid pure acrylic	Transparent	500	19	19	17	••••	200/100
tesa® ACX <sup>plus</sup> 7055		Solid pure acrylic	Transparent	1,000	24	24	24	••••	200/100
tesa® ACX <sup>plus</sup> 7056		Solid pure acrylic	Transparent	1,500	27	24	26	••••	200/100
tesa® ACX <sup>plus</sup> 7058		Solid pure acrylic	Transparent	2,000	29	24	28	••••	200/100
tesa® ACX <sup>plus</sup> 75530		Solid pure acrylic	Transparent	3,000	27	26	32	••••	200/100
<b>HIGH ADHESION</b>									
tesa® ACX <sup>plus</sup> 7062	tesa® ACX <sup>plus</sup> 706x series is a deep black, double-sided foam tape. This product is designed for "hard-to-bond-materials" such as powder-coatings or plastic materials.  Additional thicknesses are available upon request.	Foamed tackified acrylic	Black	500	24	27	27	••••	170/70
tesa® ACX <sup>plus</sup> 7063		Foamed tackified acrylic	Black	800	30	32	32	••••	170/70
tesa® ACX <sup>plus</sup> 7065		Foamed tackified acrylic	Black	1,200	40	35	36	••••	170/70
tesa® ACX <sup>plus</sup> 7066		Foamed tackified acrylic	Black	1,500	40	40	39	••••	170/70
<b>HIGH RESISTANCE</b>									
tesa® ACX <sup>plus</sup> 7072	tesa® ACX <sup>plus</sup> 707x series is a deep black, double-sided acrylic foam tape. This product is designed for permanent outdoor bonding applications and withstands exposure to extreme temperatures, UV, chemicals, salt water, and cleaning agents. Additional thicknesses are available upon request.	Foamed pure acrylic	Black	500	20	18	20	••••	220/120
tesa® ACX <sup>plus</sup> 7074		Foamed pure acrylic	Black	1,000	30	25	32	••••	220/120
tesa® ACX <sup>plus</sup> 7076		Foamed pure acrylic	Black	1,500	35	28	36	••••	220/120
tesa® ACX <sup>plus</sup> 7078		Foamed pure acrylic	Black	2,000	40	32	40	••••	220/120
tesa® ACX <sup>plus</sup> 70725		Foamed pure acrylic	Black	2,400	31	30	28	••••	220/120
tesa® ACX <sup>plus</sup> 70730		Foamed pure acrylic	Black	2,900	44	38	39	••••	220/120
tesa® ACX <sup>plus</sup> 70740		Foamed pure acrylic	Black	3,900	40	40	39	••••	220/120

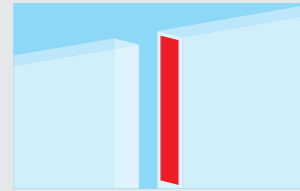
■ Adhesive ■ Backing •••• Very good ••• Good •• Medium • Low

## tesa® ACX<sup>plus</sup>: For Permanent and Constructive Bonding

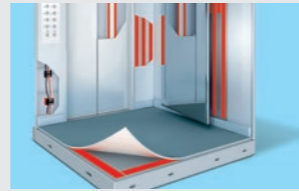
Product	Product description and application	Adhesive characteristics	Color	Thickness without liner [μm]	Ultimate peel adhesion [N/cm]				Shear resistance 23°C	Temperature resistance [°C] short/long term
					Steel	Aluminum	Glass	PP		
<b>LSE PERFORMER</b>										
tesa® ACX <sup>plus</sup> 7092	tesa® ACX <sup>plus</sup> 709x series is a double-sided acrylic foam tape, available in deep black. This product features an innovative functional adhesive layer that makes strong bonds to low surface energy substrates (such as critical plastics and powder coatings) possible. Furthermore, this series enables the ability to process tape in unheated production environments with temperatures down to 0°C. Additional thicknesses are available upon request.	Foamed pure acrylic with specialty adhesive for the entire 709x series	Black	500	40	40	40	40	••••	100/80
tesa® ACX <sup>plus</sup> 7094		Foamed pure acrylic with specialty adhesive for the entire 709x series	Black	1,000	40	40	40	40	••••	100/80
tesa® ACX <sup>plus</sup> 7096		Foamed pure acrylic with specialty adhesive for the entire 709x series	Black	1,500	40	40	40	40	••••	100/80
tesa® ACX <sup>plus</sup> 7098		Foamed pure acrylic with specialty adhesive for the entire 709x series	Black	2,000	40	40	40	40	••••	100/80



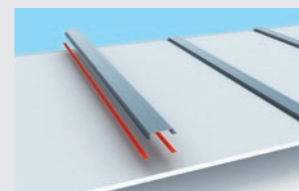
Deco panel mounting, e.g.:  
• tesa® ACX<sup>plus</sup> 7044



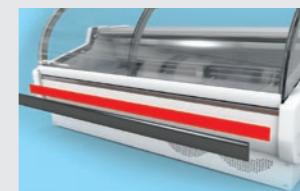
Glass-to-glass partition wall bonding, e.g.:  
• tesa® ACX<sup>plus</sup> 7058



Reinforcement bar bonding in elevators, e.g.:  
• tesa® ACX<sup>plus</sup> 7065



Stiffener mounting in cassette systems, e.g.:  
• tesa® ACX<sup>plus</sup> 7078



Bumper rail mounting:  
• tesa® ACX<sup>plus</sup> 7094

# SUPERIOR BONDS

## tesa HAF®: For Bonding Requirements at the Highest Level

Product	Product description and application	Backing	Adhesive	Color	Thickness without liner [μm]	Dynamic shear resistance [N/mm <sup>2</sup> ]	Resistance against extreme environmental conditions	Shear resistance 23°C	Temperature resistance [°C] short/long term
tesa HAF® 8401	tesa HAF® 8401 is a reactive heat activated film based on phenolic resin and nitrile rubber. It is suitable for bonding of all thermal resistant materials such as metal, glass, plastic, wood and textiles. Main application is high-strength overlap splicing.	Without backing	Nitrile rubber / phenolic resin	Amber	200	12	••••	••••	300°C/220°C
tesa HAF® 8410	tesa HAF® 8410 is a heat activated double-sided amber adhesive film based on reactive phenolic resin and nitrile rubber. Main application is the embedding embedding of chip-modules into smart cards.	Without backing	Nitrile rubber / phenolic resin	Amber	60	12	••••	••••	300°C/220°C
tesa HAF® 8430	tesa HAF® 8430 is a heat activated double-sided amber adhesive film based on reactive phenolic resin and nitrile rubber. Main application is the embedding embedding of chip-modules into smart cards.	Without backing	Nitrile rubber / phenolic resin	Amber	45	12	••••	••••	300°C/220°C
tesa HAF® 58434	tesa HAF® 58434 is a heat activated double-sided black adhesive film based on reactive phenolic resin and nitrile rubber. Main application is the embedding embedding of chip-modules into smart cards.	Without backing	Nitrile rubber / phenolic resin	Black	50	12	••••	••••	300°C/220°C
tesa HAF® 8440	tesa HAF® 8440 is a heat activated, double-sided translucent adhesive film based on thermoplastic copolyamide. Main application is the embedding embedding of chip-modules into smart cards.	Without backing	Copolyamide	Translucent	40	12	••••	••••	n/a
tesa HAF® 8414	tesa HAF® 8414 is a translucent heat activated adhesive film that contains electrically conductive particles. It is designed for all applications where reliable electrical connections and strong bonds are required, such as chip module embedding in Dual Interface cards and for RFID tags.	Without backing	Copolyamide	Translucent	45	12	••••	••••	n/a

■ Adhesive ■ Backing •••• Very good •••• Good •• Medium • Low

# VERSATILE POSSIBILITIES

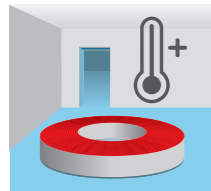
## Made to Meet Your Requirements

### Application Tips for Double-Sided Tapes



#### Surface preparation and cleaning

The surface should be free of dust, grease, oil, moisture, and other contaminants as they will decrease the level of bonding power significantly.



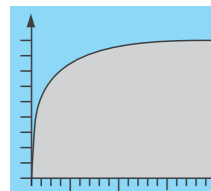
#### Temperature

Recommended optimal application temperature is from 20°C to 30°C in dry rooms. If possible, tapes should not be applied at temperatures below 10°C unless the tape is designed for application at low temperatures.



#### Application

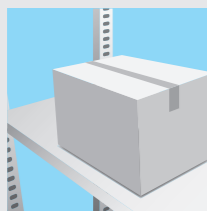
The tape should be applied to the surface at constant speed and pressure. For optimal results we recommend a uniform pressure, applied with an automatic or manual roller. After both parts are mounted together, we recommend a uniform pressure of 20 N/cm<sup>2</sup> over the complete area of the mounted components.



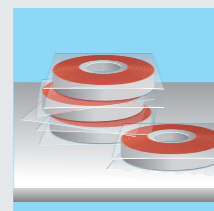
#### Bond build rate

The bond strength will increase over time until full strength is reached within 72 hours.

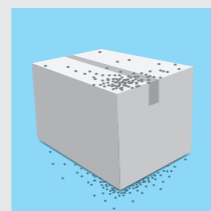
### Storage



Adhesive tapes should be stored at temperatures between 15°C and 35°C avoiding high humidity (optimal: 18°C and 55 percent humidity).



Especially for tesa® ACX<sup>plus</sup>: all slit edges should be covered with suitable separators made of siliconized film. If several rolls are stacked use two sheets per roll.



During transportation and storage ensure the tape does not come in contact with dust, dirt, or other contaminants.



### The Right Double-Sided Tape Solution for Your Requirements



**We offer you a wide range of products, while supporting you in all areas of your business.**

At tesa, mutual trust and cooperation goes far beyond the implementation of adhesive tape solutions. Our consultants and application engineers guide you to the most efficient and economic use of our products during every manufacturing step. Our laboratories provide the means and tools necessary for extensive application testing to simulate a wide range of extreme requirements and analyze critical materials and surfaces.

In our application solution centers, we analyze customers' materials in combination with several adhesive tape solutions. Depending on the customer-specific demands, the analysis includes tests on the resistance to UV light, high and low temperatures, peel adhesion, shock and tension absorption, and much more.

The result: adhesive tape solutions that are perfect for any technical application.

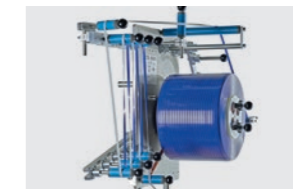
Benefit: A customer-specific solution that meets every requirement.

### Our Offering

No matter what industry, no matter what your production process or how you want to apply your tape: whether die-cuts, pancake rolls, or spools and logs, we deliver the tape in the format you need for your application.



In combination with our adhesive tapes, we offer dispensing and application tools for high-quality application results regardless of whether your production process is manual or highly automated. Our solutions allow you to implement a fast, simple, and clean assembly process, while reducing your total production costs. Our consultants and engineers are just a phone call away to support you with a proper dispensing solution and to make your production more efficient with the use of a double-sided tape solution.



Choose us and benefit from a strong partnership.

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to support you.



Our management system is certified according to the standards ISO 9001, ISO/TS 16949, and ISO 14001. All our products delivered to automotive customers are listed in the International Material Data System (IMDS).