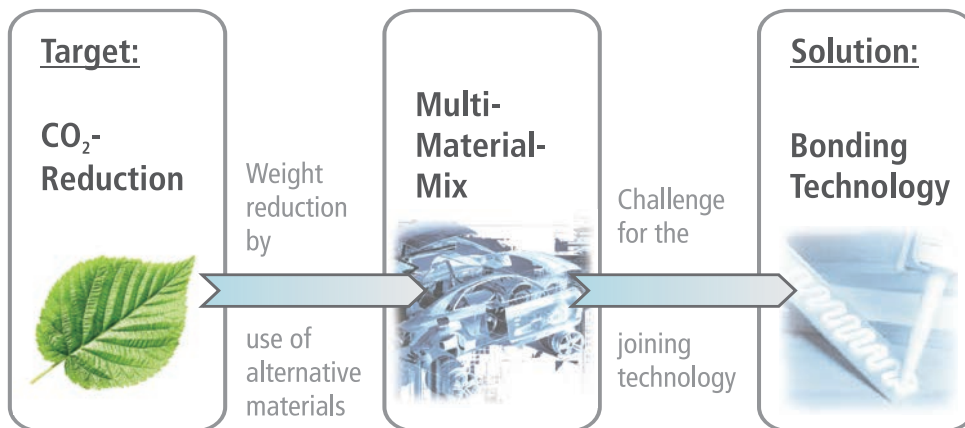


ADHESIVES FOR
LIGHTWEIGHT CONSTRUCTION



LIGHTWEIGHT CONSTRUCTION

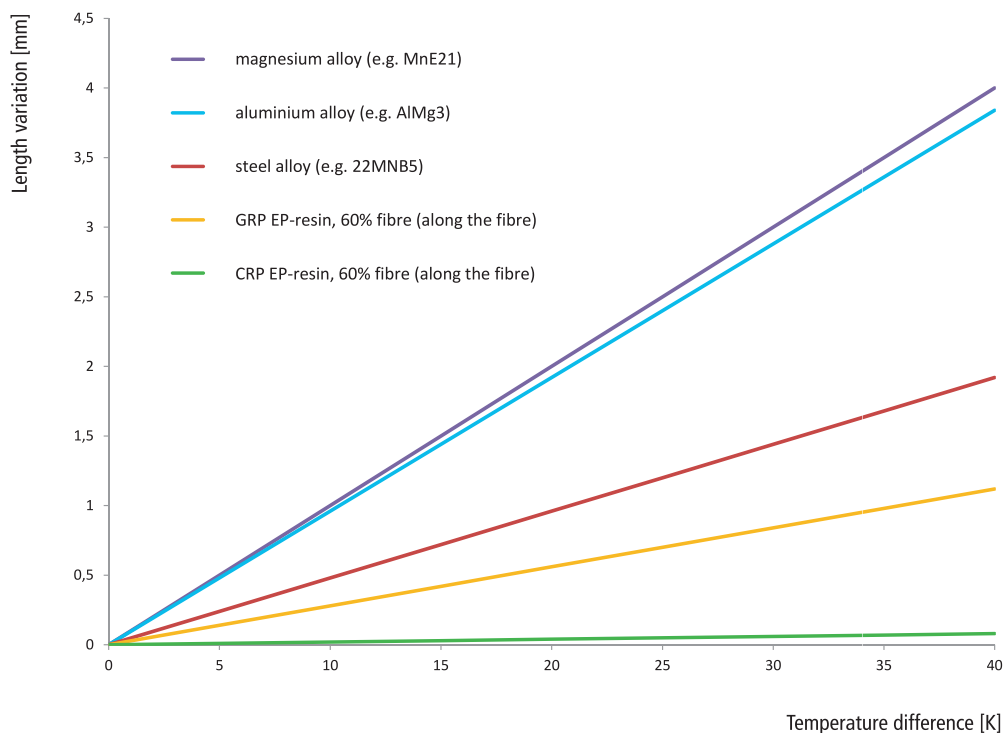
LIGHTWEIGHT CONSTRUCTION IN THE VEHICLE TECHNOLOGY



Modern lightweight construction requires specific material combinations. Intelligent solutions are only possible through the use of innovative adhesive technologies. It is only through the use of adhesives that the materials being used in lightweight construction can deliver maximum benefits. KÖMMERLING adhesives for lightweight construction provide the best solution for a safe bond.

CHALLENGE FOR BONDING TECHNOLOGY

THERMAL EXPANSION OF MATERIALS



KÖMMERLING adhesives, specially developed for lightweight construction, have sufficient flexibility to withstand the different expansion rates of the various materials used.

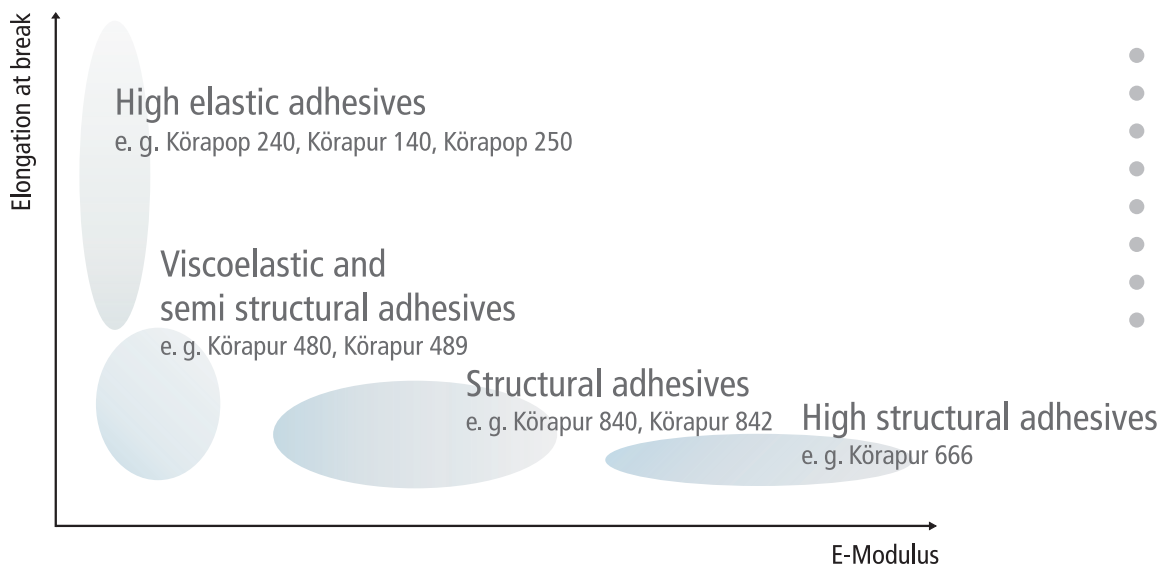
When joining metal with fibre-reinforced plastics contact corrosion may occur. Adhesives provide an excellent means of preventing this problem.

BONDING TECHNOLOGY IN LIGHTWEIGHT CONSTRUCTION

BENEFITS OF BONDING TECHNOLOGY

- joining of different materials
- copes with different rates of expansion
- even tension distribution
- no drilling or riveting required
- no contact corrosion
- energy absorption in a crash
- no thermal stress
- simultaneous sealing effect

SYSTEM SOLUTIONS BY KÖMMERLING



With its wide range of polyurethane and MS-polymer based cold-curing adhesives, KÖMMERLING can supply products with a broad spectrum of properties and offers custom-designed solutions to its customers.



Product	Tensile strength	Elongation a. b.	E-Modulus (+21°C)	Glass transition
Körapop 240	3.5 MPa	320 %	4.5 MPa	-62 °C
Körapop 250	4.4 MPa	400 %	5.0 MPa	-63 °C
Körapur 140	3.0 MPa	550 %	6.7 MPa	-48 °C
Körapur 480	8.0 MPa	150 %	25 MPa	-35 °C
Körapur 489	7.0 MPa	300 %	25 MPa	-35 °C
Körapur 842	11.0 MPa	55 %	500 MPa	+30 °C
Körapur 840	12.0 MPa	40 %	2000 MPa	+40 °C
Körapur 666	18.0 MPa	5 %	3000 MPa	+50 °C

KÖMMERLING bonding systems are available with different cure times and can therefore be selected according to specific requirements of each application.

Allow KÖMMERLING to develop individual solutions for you and to suggest the best approach for your needs. KÖMMERLING considers itself to be a supplier of system solutions, not only providing high quality products but also offering individual consulting, service and support. Take advantage of our experience in adhesives for lightweight construction.

KÖMMERLING WORLDWIDE



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