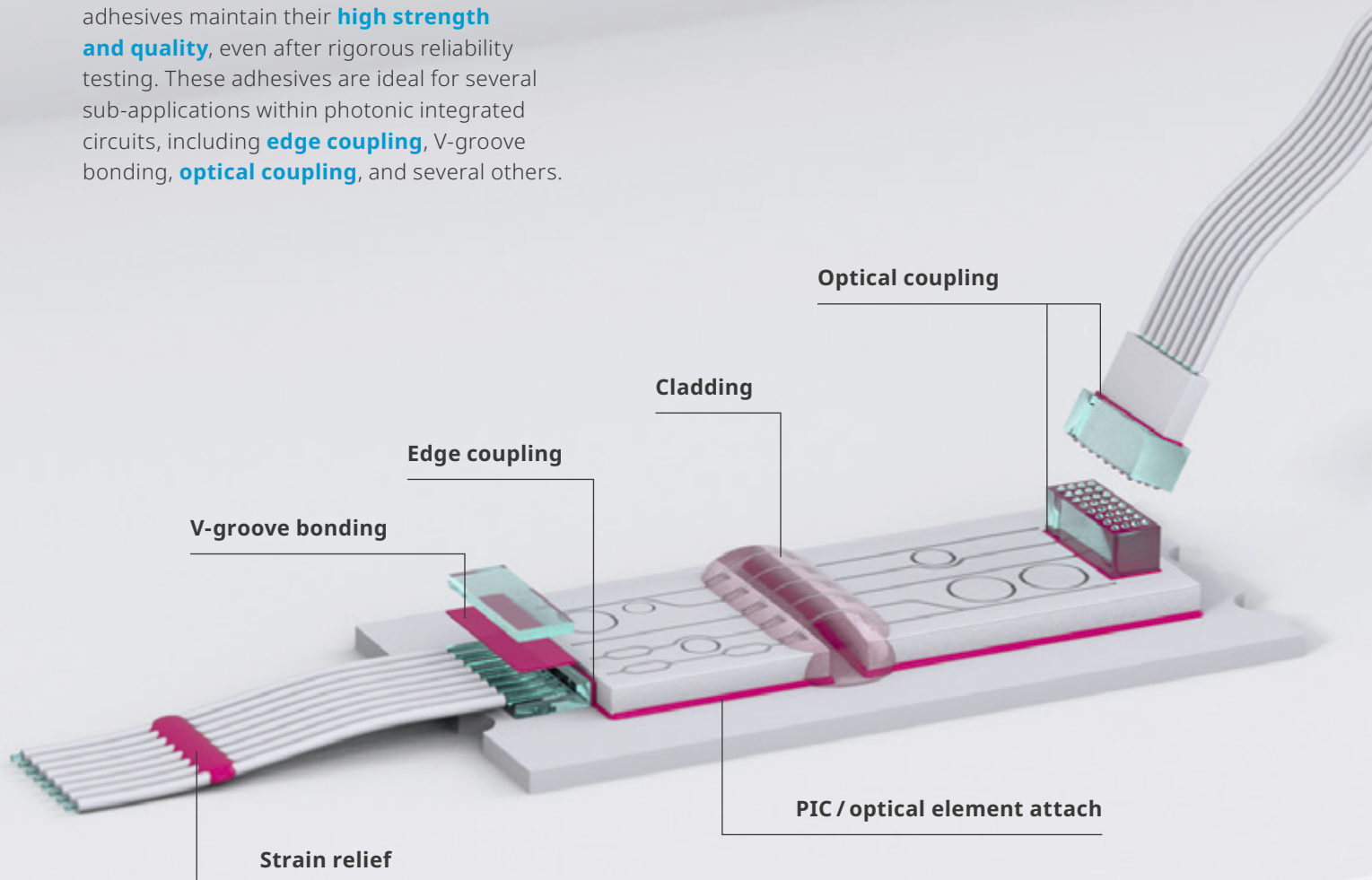


Connect it.

Adhesives for photonic integrated circuits (PIC)

DELO adhesives for PIC applications are developed **with reliability in mind**. From reflow to high-humidity storage, DELO PIC adhesives maintain their **high strength and quality**, even after rigorous reliability testing. These adhesives are ideal for several sub-applications within photonic integrated circuits, including **edge coupling**, V-groove bonding, **optical coupling**, and several others.



DELO has extensive expertise in optical coupling and edge coupling applications, and has developed bonding solutions for them. Other application fields include active alignment and many more. The following tables show which adhesive properties to look out for in which bonding task.

Product features

Strain relief	V-groove bonding	Optical and edge coupling
Mechanical support of fibers or fiber arrays	Bonding of fiber arrays (FA) into V-grooves	Connection PIC to X ("outer world")
<ul style="list-style-type: none"> › Tension-equalizing (flexibility) › Reliable bond strength › Low outgassing 	<ul style="list-style-type: none"> › Low-stress bonding › Good flow behavior › Wide range of viscosities available 	<ul style="list-style-type: none"> › High transmission › Low shrinkage › Reflow-compatible

Cladding	PIC / optical element attach
Cladding / encapsulation of e. g. photonic wire bonds or light guides	Bonding of PIC or optical element (OE) on substrate or submount
<ul style="list-style-type: none"> › Matching of refractive index (RI) › Low-stress bonding › High reliability 	<ul style="list-style-type: none"> › Flexible adhesives (for CTE mismatch) and rigid adhesives available › Fast fixation with active alignment possible › Dual-curing possible

Specific product information

can be found in our material selection guide which is available upon request.



Any questions?
photonics@delo.de

DELO Industrial Adhesives

**China | Czechia | France | Germany HQ | Italy | Japan
 Korea | Malaysia | Singapore | Thailand | USA**

The data and information provided are based on tests performed under laboratory conditions. Reliable information about the behavior of the product under practical conditions and its suitability for a specific purpose cannot be concluded from this. It is the customer's responsibility to test the suitability of a product for the intended purpose by considering all specific requirements and by applying standards the customer deems suitable (e. g. DIN 2304-1).

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