

# Bonding to military products

- Contents and requirements of TL A-0023 -

## Objectives of TL A-0023:

The “Bonding and associated processes – quality requirements on manufacturing and maintenance companies for military products” technical supply specifications applies to the bonding of joining parts during the production and repair of military products. It specifies the minimum requirements for quality assurance systems and describes the procedure for obtaining operational qualification for military products.

## Qualification Process for Companies:

As an independent institution, TC-Kleben offers to assess and certify companies. The certification process and the associated further requirements are explained on the following pages.



## Contents of the TL

- Requirements on the company
- operational qualification
- quality management
- personnel requirements
- company equipment
- manufacturing documentation
- quality requirements and component classification
- tasks and responsibilities
- verification
- technical equipment/infrastructure
- documents requiring verification
- subcontracting
- process for achieving operational qualification

## Component Classes:

The requirements for the necessary degree of personnel qualification are measured in classes. Depending on the component class, the user must have suitable adhesive-technical personnel and comply with the degree of quality assurance. These component classes are defined by the manufacturer (responsible for design) on the basis of the stress, safety significance and usability of the component.

## Technical Bonding Personnel:

In addition to requirements on organization and equipment, the requirements on the company's personnel are also addressed in the TL. The supervisor in charge's responsibilities are specified there, for example. For many years now, the qualification requirements necessary for this function have been offered by further training courses in Germany. This means the qualifications published by the DVS which are harmonized with European directives.

The TL A-0023  
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## Classification as Manufacturer (M) and Servicer (S)

User operations responsible for construction and process are considered manufacturers in the sense of TL A-0023. User operations who manufacture or service components following manufacturer instructions are considered servicers.

## Classification Depending on Application

The above H- or I- classes are further divided depending on the application:

- H1/I1: General products
- H2/I2: Safety function
- H3/I3: Aviation suitability

## Acquisition of Operational Qualification:



Manufacturers and Repairer of military products must submit an appropriate operational qualification in accordance with the requirements contained in TL A-0023. This means that an authority which has been recognized by the German Wehrwissenschaftlichen Institut für Werk- und Betriebsstoffe (WIWeB) must perform an operational inspection with technical discussions in which the company can verify the requirements in acc. to the TL A-0023.

The basis for the above is formed by the following documents in their currently applicable versions:

- TL A-0023
- DIN 2304-1
- DVS 3311

Following a successful audit of compliance with the requirements of TL A-0023, the certifying body certifies the user company and issues the corresponding certificate. The validity of the certificate is limited to a maximum of three years. The operating qualification is tied to one operating site. Within the period of validity of the certificate, monitoring can be carried out by the recognised body.

## Contact:

Technologie Centrum Kleben GmbH

Recognised Authority in acc. w. TL A-0023  
 Certifying Body in acc. w. DIN 6701  
 Technical Bonding Centre for the DVS e.V  
 Affiliated partner of GSI mbH  
 Member of DVS e.V. and Dechema e.V.

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