

Operating instructions for screw-on and weld-on hooks (EAHKG und EAHK)

General principles regarding the utilisation of lifting accessories and their components:

The operating instructions are to be stored together with the certificate and the EC declaration of conformity.

The falling of loads, caused by the failure and / or incorrect utilisation and handling of lifting equipment or its individual parts constitutes a direct risk to the life or health of the people who are present in the danger zone of lifting processes.

These operating instructions contain information with regard to the safe utilisation and handling of the lifting accessories and their components. Before using the lifting equipment, the assigned persons are to be briefed with regard to handling and utilisation by a qualified person.

The following principles apply:

- The Working Load Limit (WLL) (see label) of the lifting equipment must correspond to the load. The lifting equipment may not be used if the label is missing or is illegible.
- No danger areas (e.g. crushing points, cutting points, trapping or impact points) may occur that may hinder or endanger the person carrying out the slinging process and / or the transport.
- The base material and the constructive design of the load must be able to hold the applied forces without deformation.
- Stress that leads to a non-uniform load distribution, e.g. which is caused as a result of an off-centre introduction of force must be taken into account when selecting the lifting accessories and their components.
- In the event that extreme stress or strong dynamic strain (shock influences) may occur, this must be taken into account when selecting the lifting equipment and the Working Load Limit (WLL).
- The lifting equipment may not be used for the transportation of persons. No persons are ever permitted to remain present in the danger area of a suspended load.
- The lifting equipment may not come into contact with acids and other aggressive agents. Attention must also be paid to the fact that acid fumes may occur in certain production processes.
- Never make unauthorised amendments to the lifting equipment (e.g. grinding, welding, bending, and attachment of parts)!
- The lifting equipment may not be exposed to any forbidden manipulation of temperature.
- Only original spare parts may be used.
- The relevant additional regulations must be observed when transporting hazardous substances.
- Lifting accessories and their components must be stored in such a manner that they are protected against being damaged and do not cause any danger.
- If damaged, the lifting equipment must be immediately taken out of circulation and has to undergo maintenance work.
- When ready to be discarded, lifting equipment is to be correctly disposed of. Attention: Any substances present that are hazardous to the environment (e.g. greases and oils) are to be disposed of separately.

Inspection and maintenance:

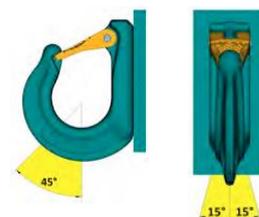
On a regular basis before being used, lifting equipment is to be closely inspected with regard to correct utilisation and faultless condition (e.g. screw fit, absence of strong corrosion and deformation, etc.), for example by the person carrying out the slinging process. Defective lifting equipment may not be used. It has to be tested at least once a year by a qualified person whilst taking the relevant standards and trade association regulations (e.g. DGUV Regel 109-017) into account. Every three years lifting equipment must be tested by a qualified person using a proper testing device in order to check that the product is free of cracks. The user must observe the results of the risk assessment in accordance with the occupational safety directives. The re-testing period is shortened in the event that the products are exposed to critical operating conditions. Inspection records are to be kept. The testing coefficient (EC-Machinery Directive 2006/42/EC point 4.4.1) is defined according to the respective standards and corresponds to 2.5.

Attention: In the event of violation, the operating permission will become void.

General assembly instructions

When assembling, the hook position is to be selected in such a manner that a flat bearing surface is created that is suitable for lifting the anticipated introduction of force. In doing so, the general construction and safety rules and recommendations for the slinging of loads are to be observed. The hooks are to be attached in such a manner that:

- The hook is aligned in the tensile direction if possible. Lateral deviations of up to 15° towards each side can be tolerated.
- The hooks are easily accessible without hindrance in order to attach and release the slinging equipment.
- Unpermitted strains, e.g. those caused by off-centre load application, and as a result, an unbalanced load distribution taking the centre of gravity of the load (also see EN 818-6) are avoided.
- The quantity and arrangement of the hooks must be selected in such a manner that the load cannot unexpectedly move position during transport.



Range of application : 45°
and permitted load 15° in sidewise pulling direction.

Hooks to screw on EAHKG

- Only crack-tested screws of strength class 8.8 or 10.9 may be used.
- The hook must be tightened using a spanner until flush with the bearing surface.
- The tightening torques as according to Table 2 are to be observed (reference value).
- In the event that EAHKG are secured with screw nuts, these nuts must correspond to strength class 8 / 10 and be crack-tested.
- It must be checked that the correct screw size, thread size and screw-in length is used. When dealing with blind holes, the thread depth must be at least 1.1 times of the screw-in length.
- The screw-down saddle also serves as the marking template.
- We recommend the following screw-in lengths:

in steel	1	x d	
in cast iron	1.25	x d,	in cast iron with strengths < 200 MPa min. 1.5 x d
in aluminium	2.5	x d	
in aluminium-magnesium alloys	2	x d	

(whereby d = thread size, e.g. when M 24 d = 24 mm)

When dealing with hooks to weld on (EAHK), the separate welding information is to be observed.

Working load limit, temperature use and screw tightening torques

In the event that the working load limit is not forged into the hook, the working load limit of the single-leg chain of the respective nominal size applies. The respective nominal hook size is forged into the hook (Table 1).

Hooks to screw on EAHKG

When screws with a strength grade of 8.8 and 10.9 are used, depending upon the **working temperature**, the working load limits are to be reduced in accordance with the details provided by the screw supplier. In the event that hooks are to be applied in temperatures ranging from +200 and +400°C, we recommend the use of welding hooks.

Hooks to weld on EAHK

Special attention should be paid to the maximum temperature the lifting equipment can assume on an individual basis. The impact of higher temperatures on the working load limit (WLL) of various grades of lifting equipment is stated in Table 3:

Table 1	EAHKG	Table 2	EAHK	Table 3
Bezeichnung code	Working load limited WLL [t]	Screw [mm]	Tightening torque [Nm]	Working temperature in °C
ENORM EAHK / EAHKG 6	1.4	M 12	70-84	minus 20°C - plus 200°C
ENORM EAHK / EAHKG 8	2.5	M 12	70-84	plus 200°C - plus 300°C
ENORM EAHK / EAHKG 10	4	M 16	160-206	plus 300°C - plus 400°C
ENORM EAHK / EAHKG 13	6.7	M 20	340-415	above 400°C
ENORM EAHK / EAHKG 16	10	M 24	600-714	not allowed

*applies only for EAHK



Translation of the original operating instructions
 In case of doubts or misunderstanding, the German version of the document is decisive.



Conformity Declaration



EG-Konformitätserklärung der Fa. JDT

EG-Konformitätserklärung
 EC Conformity Declaration
 Déclaration de conformité CE
 EG-Conformitätsverklaring
 Declaración de conformidad CEE
 Dichiarazione di conformità CE
 EY-yhdenmukaisuustodistus
 EF-Överensstemmelseserklaring
 EG-Konformitetsförklaring
 Deklaracja zgodności WE

Im Sinne der EG Richtlinie Maschinen 2006/42 EG und weiter ergänzender Richtlinien.
 As defined by the EC Guideline Machines 2006/42 EC and other complementary guidelines.
 Dans le sens des directives CE Machines 2006/42 CE et des directives complémentaires.
 Overeenkomstig de EG-richtlijn Machines 2006/42 EG en verdere aanvullende richtlijnen.
 Conforme a la Directiva CE de Máquinas 2006/42 CE y otras Directivas suplementarias.
 Ai sensi della direttiva CE sulle macchine 2006/42 CE e altre direttive integrative.
 Koneista annettun EY-direktiivin 2006/42 EY ja muiden lisädirektiivien tarkoittamassa mielessä.
 I overensstemmelse med EF-retningslinje maskiner 2006/42 EF og videre supplerende retningslinjer.
 I enlighet med EG : s Maskindirektiv 2006/42 EG samt vidare kompletterande direktiv.
 W rozumieniu dyrektywy maszynowej WE 2006/42WE oraz uzupełniających dyrektyw.

Der Unterzeichnende, bevollmächtigt von der/The undersigned, empowered by/Le soussigné, mandataire de/De ondergetekende, gemachtigde van de firma/
 El suscrito, autorizado por la/el sottoscritto, delegato dalla/Ällekirjoittanut, yhtiön/Den undertegnede, befudmægtiget af/förklarar undertecknad, bemyndigad av
 Nizej podpisany, upoważniony przez

J.D. Theile GmbH & Co. KG, Postfach 18 29, D-58213 Schwerte

erklärt, dass das (die) umseitig bezeichnete(n) Anschlagmittel in der von uns in Verkehr gebrachten Ausführung bei bestimmungsgemäßer Benutzung mit den grundlegenden Sicherheits- und Gesundheitsanforderungen übereinstimmen.
 declares that sling gear, listed overleaf, conform in its marketed design with the requisite basic safety and health requirement, provided they are used in accordance with their intended purpose.
 déclare que le matériel de levage décrit au verso et employé conformément aux prescriptions, dans l'exécution mise en circulation par nos soins, est conforme aux exigences fondamentales de sécurité et de santé.
 verklaart dat de op de achterzijde aangegeven aanslagmiddelen in de door ons in het verkeer gebrachte uitvoering bij doelmatig gebruik met de principieel eisen omtrent veiligheid en gezondheid overeenstemmen.
 declara que el/(os) dispositivo(s) de suspensión mencionado(s) al dorso en la forma lanzada al mercado concuerdan con los requerimientos básicos impuestos a la seguridad y a la salud bajo la condición de una aplicación de acuerdo con los fines previstos.
 dichiara che il/(i) dispositivo(i) di arresto definito(i) a tergo, nel modello da noi distribuito, se usato(i) nel modo dovuto risponde (rispondono) ai requisiti basilari di sicurezza e sanità.
 vakuuttaa, että kääntöpuolella mainittu/tut kiinnitysväline/t myyntiin tuomassamme muodossa ja sitä/niitä asianmukaisesti käytettynä ovat perustavanlaatuisen turvallisuus- ja terveysvaatimusten kanssa yhdenmukaisia.
 erklærer, at det (de) omstændige anslagmidler (-midler) i den udførelse, som vi har givet den ud, ved bestemmelsens benyttelse stemmer overens med de grundlæggende sikkerheds- og sundhedskrav.
 att det (de) på omstående sida uppförda anslagmedlet (-medlen) i det av oss sålunda utförandet vid ändamålsenlig användning överensstämmer med de grundläggande kraven beträffande säkerhet och hälsa.
 oświadcza, że wymienione na odwrocie środki mocowania w wersji wprowadzonej przez nas na rynek są zgodne z zasadniczymi wymogami dotyczącymi bezpieczeństwa i ochrony zdrowia w przypadku zastosowania zgodnego z przeznaczeniem.

EG-Richtlinien
 EC Guidelines
 Directives CE
 EG-richtlijnen
 Directivas CEE
 Direttive CE
 EY-direktiivit
 EF-retningslinier
 EG-Direktiv
 Dyrektywy EG

EG Richtlinien Maschinen geändert durch
 EC Guideline for Machines amended by
 Directives CE Machines modifiées en
 EG-richtlijn machines gewijzigd door
 Directiva CEE "Máquinas" modificada por
 Direttive CE sulle macchine cambiate con
 Koneista annettu EY-direktiivi muutettu direktiivillä
 EF retningslinje maskiner forandret gennem
 EG:s Maskindirektiv ändrat genom
 Dyrektywy maszynowe EG zmienione w drodze

2006/42 EG

Harmonisierte Normen
 Harmonized standards
 Normes harmonisées
 Overeenkomstige normen
 Normas armonizadas
 Norme armonizzate
 Harmonisoidut standardit
 Harmoniserade normer
 Harmoniserade standarder
 Normy zharmonizowane

EN ISO 12100

- EN 818-1
- EN 818-2
- EN 818-3
- EN 818-4
- EN 818-5
- EN 818-6
- EN 818-7
- EN 1677-1
- EN 1677-2
- EN 1677-3
- EN 1677-4
- EN 1677-5
- EN 1677-6
- EN 13155
- EN 13889

Angewendete nationale Normen /
 Applied national standards
 Normes nationales appliquées
 Toegepaste nationale normen
 Normas nacionales aplicadas
 Norme nazionali applicate
 Sovelletut kansalliset standardit
 Brugte nationale normer
 Nationella normer som tillämpats
 Stosowane normy krajowe

- DIN 685-2 DIN 6888-1 DIN 6887-1 DIN 695
- DIN 685-3 DIN 6888-3 PAS 1001 DIN 32891
- DIN 685-4 DIN 6892
- DIN 685-5

R. Aberspach
 Leitung Qualitätswesen

Dokumentationsverantwortlich: R.Aberspach in Fa. J.D. Theile, Letmather Str. 26-45, D-58239 Schwerte

UKCA Declaration of Conformity

The undersigned, empowered by

J.D. Theile GmbH & Co. KG, Postfach 18 29, D-58213 Schwerte, Germany

declares that sling gear, listed overleaf and marked with UKCA, conform in its marketed design with the requisite basic safety and health requirement, provided they are used in accordance with their intended purpose.

- Applicable standards :
- UK Guideline Supply of Machinery (Safety) regulation 2008
 - BS EN 818-1 - BS EN 818-7
 - BS EN 1677-1 - BS EN 1677-6
 - BS EN ISO 12100 / BS EN 13155 / BS EN 13889

T. Muchowski
 Managing Director