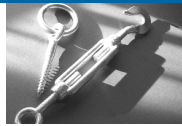
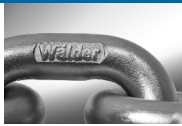


cromox[®] Operating instructions for weldable
stainless steel lifting points NSAG



Last revised: July 2009

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Operating instructions for weldable stainless steel lifting points, NSAG 05/1/2

Instructions for safe use and prevention of hazards.

The instruction manual/manufacturer's declaration on hand must be kept for the complete lifetime of the product. We hereby declare (supported by the certification according to ISO 9001) that the model described below is in accordance with the Essential Health and Safety Requirements of the EC Directives. This declaration shall become void in case the model is modified without our approval or if the periodic test procedures according to BGR 500, Chapter 2.8 ("Operation of load suspension devices in hoist operation and the corresponding country-specific regulations") are not performed regularly

Please note:



The machine at which the components supplied are attached to may not be taken into operation until its compliance with machine directive 2006/42/EC has been verified

The weldable stainless steel lifting points are made of the material 1.4404 whose low carbon content makes it resistant against intercrystalline corrosion even after welding. The material 1.4404 is resistant against normal atmospheric influences and low-chloride media but not saltwater-proof

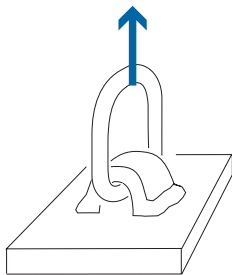
1. Load-bearing capacity:

- Please refer to the following table for information on the load capacity of the lifting points in relation to the load direction.

Sling types for NSAG

Number of sling point	1 Load capacity/t		2 Load capacity/t		2 Load capacity/t		3 or 4 Load capacity/t	
	0°	90°	0°	90°	0 - 45°	45° - 60°	0° - 45°	45° - 60°
Angle of inclination								
Article code								
NSAG 05	0,50	0,50	1,00	1,00	0,70	0,50	1,10	0,75
NSAG 1	1,00	1,00	2,00	2,00	1,40	1,00	2,10	1,50
NSAG 2	2,00	2,00	4,00	4,00	2,80	2,00	4,20	3,00

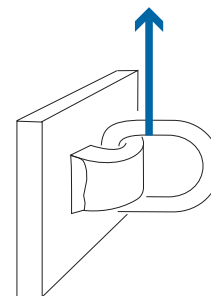
Angle of inclination 0°



Angle of inclination 90°



Angle of inclination not allowed



2. Place of installation:

- The attachment points must be mounted such that they can be reached freely and easily to attach and detach loads.
- The attachment points must be mounted such that no safety hazards (bruise, cut, catch or knock spots) are created, which might compromise the attachment points or obstruct transport by protruding.
- The mounting position at the load must be chosen such that the parent material absorbs the introduced forces deformation, which otherwise might result in safety hazards.
- The position at the load must be selected—in consideration of the centre of gravity—such that impermissible loads are avoided and the load cannot change its position unexpectedly during transport.
- The attachment points must be mounted at the load such that the direction of the sling is not changed by other structural components. Potential damage of the sling through structural components such as sharp edges must be precluded.
- The mounting surface at the load should be flat.

3. Welding:

- Welding work should only be performed by DIN EN 287-1 certified welders.
- The welding block is made of the well-weldable material 1.4404.
- All welding filling materials must be selected in accordance with the parent materials used. Regarding the allocation of parent materials to filling materials, please refer to EN 1600 for

- electric welding and to EN 12072 for WIG welding.
- Excessive heating of the ring during welding must be avoided.
 - The material cross-section of the welding block must be welded in full length and width. The individual layers combined must be at least as thick as the cross-section of the weld-on clevis.
 - Tacking and welding must be started at the centre of the welding block.
 - Carefully clean the root pass prior to applying the cover seams.
 - Do not let the weld between the individual welded seams allow to cool off.

**4. Application/
inspection:**

The attachment points must be:

- inspected after initial mounting and then at least once per year by an expert.
- used by briefed personnel only and the general BGR-regulations (accident prevention regulations) must be observed.
- inspected for functionality, strong corrosion, wear, cracks of the welded seal, deformations, etc., regularly prior to their use.

**5. Utilisation as
load restraint
point**

If the weldable stainless steel lifting points are used exclusively for restraining loads, the permissible load restraining capacity is twice the load bearing capacity. $L. C. = 2 \times W.L.L.$ In this context, however, country-specific regulations must be observed. For Germany this is DIN EN 12640, DIN 75410-1 and BGI 649..