

# RoRo-Lashing Point welding

## Safety instructions

This safety instruction/declaration has to be kept on file for the whole lifetime of the product.

Translation of the original safety instruction



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RoRo-Lashing Point for welding

## Herstellereklärung

Hiermit erklären wir (unterstützt durch die Zertifizierung nach ISO 9001), dass die nachfolgend bezeichnete Ausrüstung aufgrund ihrer Konzipierung und Bauart, sowie der von uns in Verkehr gebrachten Ausführung, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der Europäischen Union entspricht. Bei einer nicht mit uns abgestimmten Änderung der Ausrüstung verliert diese Erklärung ihre Gültigkeit. Weiterhin verliert diese Erklärung ihre Gültigkeit, wenn die Ausrüstung nicht entsprechend den in der Betriebsanleitung aufgeführten bestimmungsmäßigen Fällen eingesetzt wird.

Hinweis: Beim Zurrpunkt angewendete harmonisierte Normen DIN EN ISO 12100 T1 und T2 sowie in Anlehnung an EN 1677 und EN 29367.

Bezeichnung der Ausrüstung:

**Zurrpunkt**

Type: **RoRo-Zurrpunkt**

Herstellerzeichen: RUD

## Declaration of the manufacturer

We hereby declare (supported by certification as per ISO 9001) that the equipment, as mentioned below, corresponds to the appropriate, basic requirements of safety and health of the corresponding European Union in the design as it is sold by us because of its design and construction. In case of any modification of the equipment, not being agreed upon with us, this declaration becomes invalid. Furthermore, this declaration will become invalid if the equipment is not used according to the prescriptions mentioned in the manual.

Hint: Applied standards: DIN EN ISO 12100 T1 and T2 in particular EN 1677 and EN 29367.

Designation of the equipment:

**Lashing Point**

Type: **RoRo-Lashing Point**

Manufacturer's sign: RUD

## User Instructions

1. Usage only by authorized and trained persons.
2. Before each usage please check the Lashing Points in regard of cracks within the weld seam, strong corrosion, wear, deformations etc.
3. The material construction to which the Lashing Point will be attached should be of adequate strength to withstand forces during lashing without deformation. The weld-on material must be suitable for welding and the contact areas must be free from dirt, oil, colour, ect.

The material of the forged welding block is: S355J2+N (1.0577+N (St52-3))

4. The quantity and the arrangement of the Lashing Points on vehicles have to be determined acc. EN 12640 or EN 75410 (for RoRo traffic (Roll-on/Roll-off) acc. DIN EN 29367) as long as the vehicles are not designated acc. their design and mechanism for the transport of specific goods with special demands for load securing. The Lashing Points shall be arranged as wide as possible to use the full loading area and they should not protrude in steady position. Execute the position of the Lashing Points with the load in such a way that unacceptable stress like twisting or tilting will be avoided.

### Attention: Lashing points must not be used for lifting!

5. Determine the required, permitted Lashing Capacity acc. EN 12 195-1 „Load securing devices on road vehicles“ - calculation of Lashing Capacities and acc. VDI 2700. **RUD-Lashing Points are marked at the welding block with the permitted lashing capacity „LC“ in daN.**

6. The Lashing device must be free moveable within the RoRo-Lashing Point. During hang up and unhinge of the lashing devices there must no crush, cutting or traps occur for the handling. Avoid damage of lashing means resulting from sharp edges.

7. Suitability of temperature use: RUD RoRo-Lashing Points are suitable for the temperature range from -40°C up to 400°C. For the use within the following temperature range, the WLL must be reduced by the following factors:

200°C up to 300°C: by -10 % and

300°C up to 400°C: by -25 %

The evidence of the suitability of the used weld metal must be mentioned by the respective filler material manufacturer.

8. Please make RoRo-Lashing Point easy visible by using a contrasting colour as paint.

9. By the position of the weld-seam (HY-continuous) the following requirements will be observed: DIN 18800 steel constructions requires: *at outdoor buildings, especially when endanger of particular corrosion may occur, all weld seams shall be carried out as circumferential continuous fillet weld seams.*

10. After welding, or sooner if conditions dictate, an annual inspection should be undertaken by a authorized person to check the continuance of the appropriateness. This inspection must also be done after each event of damage or special incident.

### Inspection criteria concerning paragraph 2 and 10:

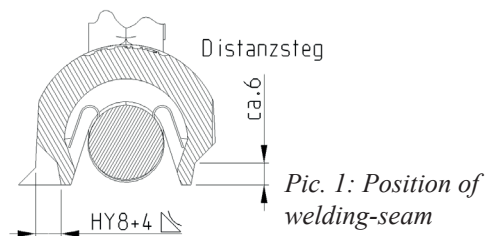
- Completeness of Lashing Point
- Complete and readable marking of Lashing Capacity as well as manufacturer sign
- Deformation at supporting structures like Basic Components and Lashing Rings
- Mechanical damage like strong notches, particularly in areas with tensile stress
- Reduction of cross sectional diameter caused by wear > 10 %
- strong corrosion (pittings)
- Evidence of cracks
- Cracks or any other damage of the weld seam

**The welding should only be carried out by an authorized welder according to EN 287-1.**

### Welding sequence:

- **Start tacking and root welding in the middle of the weld-on block**
- **Before carrying out roof weld (top run), carefully clean root of seam.**
- **The whole welding should be carried out at the same temperature. Do not interrupt welding.**
- **Warning: Do not weld at the quenched and tempered load ring!**

*Non-observance can lead to serious personal injuries and material damage! Subject to technical alterations!*

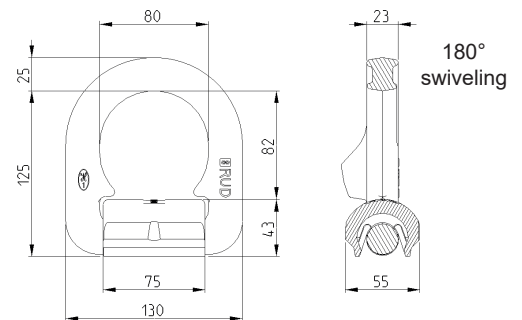


## Welding method + Welding filler metals:

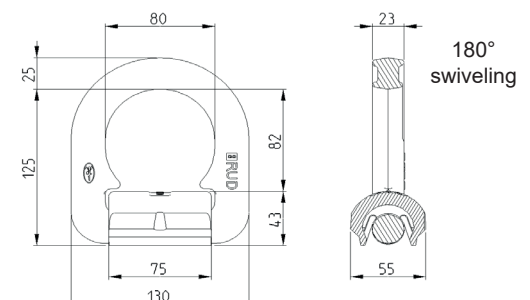
	Europa (DE, GB, FR, .... )	USA, Canada, ..
	Mild steels, low alloyed steel	
<b>MAG / MIG</b> (135) GAS SHIELDED WIRE WELDING	ISO 14341:G4 Si 1 z.B. Castolin 45250	ISO 14341:G4 Si 1 AWS A 5.18 : ER 70 S-6 z.B. Eutectic MIG-Tec Tic A88
<b>E-Hand</b> <b>Gleichstrom =</b> (111) Stick Electrode <b>Direct Current</b>	EN ISO 2560-A - E 42 6 B 3 2; EN ISO 2560-A - E 38 2 B 12 H10 z.B. Castolin 6666 * Castolin 6666 N*	AWS A 5.5 : E 8018-G AWS A 5.5 : E 7016 EN ISO 2560-A - E 42 6 B 3 2; EN ISO 2560-A - E 38 2 B 12 H10 z.B. Eutectic 6666/ 35066 CP *
<b>E-Hand</b> <b>Wechselstrom ~</b> (111) Stick Electrode Alternating Current	EN ISO 2560-A - E 38 0 RR 1 2 EN ISO 2560-A - E 42 0 RR 1 2; z.B. Castolin 6600 Castolin 35086 Leerlaufspannung 35-48 (max.) V	AWS A 5.1 : E 6013 EN ISO 2560-A - E 38 0 RR 1 2 EN ISO 2560-A - E 42 0 RR 1 2; z.B. Eutectic Beauty Weld II
<b>WIG</b> (141) TIG Tungsten Arc Welding	ISO 636: W3 Si 1 z.B. Castolin 45255W	ISO 636: W3 Si 1 AWS A 5.18 : ER 70 S-6 z.B. Eutectic TIG-Tec-Tic: A 88

Table 3 \* Follow the drying instruction

Attend to the process specifications of the welding additives.



Pic. 2: Ro/Ro with supporting knobs: 7983031



Pic. 3: Ro/Ro without supporting knobs: 7905292