

Foundry Hook

>IWH<
>VWH<

Assembly instruction

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

TRANSLATION OF THE ORIGINAL ASSEMBLY INSTRUCTION

This assembly instruction is valid in addition to the safety instructions for RUD Sling chains (ICE-Nr. 7995555 or VIP-Nr. 7101649).



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RUD-Art.-Nr.: 7905254-EN / 06.014



ICE
Grade 120



VIP
Grade 100

Foundry Hook



Simple inspection, administration and documentation of work equipment and components which must be inspected regularly.

EG-Einbauerklärung

entsprechend der EG-Maschinenrichtlinie 2006/42/EG, Anhang II B und ihren Änderungen

Hersteller: **RUD Ketten**
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen

Hiermit erklären wir, dass die nachfolgend bezeichnete unvollständige Maschine den grundlegenden Anforderungen der Maschinenrichtlinie 2006/42/EG (Anhang 1) entspricht. Die nachfolgend bezeichnete unvollständige Maschine darf, in der gelieferten Ausführung erst dann in Betrieb genommen werden, wenn festgestellt wurde, dass die Maschine, in die diese unvollständige Maschine eingebaut werden soll, den Anforderungen der EG-Maschinenrichtlinie 2006/42/EG entspricht.

Produktbezeichnung: Weltmaulhaken
VWH / IWH / WH

Folgende harmonisierten Normen wurden angewandt:

<u>EN 12100</u>	<u>EN 1677-1</u>
_____	_____
_____	_____
_____	_____

Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:

<u>BGR 500, KAP2.8</u>	_____
_____	_____
_____	_____
_____	_____

Die speziellen Unterlagen zur unvollständigen Maschine nach Anhang VII Teil B wurden erstellt und werden auf begründetes Verlangen in geeigneter Form übermittelt.

Für die Zusammenstellung der Konformitätsdokumentation bevollmächtigte Person:
Reinhard Smetz, RUD Ketten, 73432 Aalen

Aalen, den 03.01.2013 Dr. Ing. Rolf Sinz, (Prokurist/QMB) Dr. Sinz
Name, Funktion und Unterschrift Verantwortlicher

EC-Mounting declaration

According to the EC-Machinery Directive 2006/42/EC, annex II B and amendments

Manufacturer: **RUD Ketten**
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen

We hereby declare that the following incomplete machines correspond to the basic requirements of the Machinery Directive 2006/42/EC (annex 1). The following incomplete machine, in the delivered machine, may only be put into operation when the machine in which the incomplete machine shall be assembled, has been tested according to the requirements of the EC-Machinery Directive 2006/42/EC.

Product name: Foundry hook
VWH / IWH / WH

The following harmonized norms were applied:

<u>EN 12100</u>	<u>EN 1677-1</u>
_____	_____
_____	_____
_____	_____

The following national norms and technical specifications were applied:

<u>BGR 500, KAP2.8</u>	_____
_____	_____
_____	_____
_____	_____

The special documents about the incomplete machine according to annex VII part B have been created and can be handed over in a suitable form on request.

Authorized person for the configuration of the declaration documents:
Reinhard Smetz, RUD Ketten, 73432 Aalen

Aalen, 03.01.2013 Dr. Ing. Rolf Sinz, (Prokurist/QMB) Dr. Sinz
Name, function and signature of the responsible person

The present user's instruction is valid for the following item variants of the Foundry Hook:

- **IWH** ICE-Foundry Hook in ICE-Pink (Purple colour, quality grade 120, D1 stamping)
- **VWH** VIP-Foundry Hook in VIP-Pink (Magenta, quality grade 100, H1 stamping)



Please read assembly instruction carefully before initial operation of Foundry Hook. Make sure to understand all volumes. Disregard of the assembly manual can lead to serious physical injury and property damage and eliminates warranty. In doubt or in misconception please note that the German version of this document is decisive.

1 Safety instructions



ATTENTION

Wrong assembled or damaged lifting and lashing means as well as improper use can lead to injuries of persons and damage of objects when load drops. Please inspect all lifting points before each use.



ATTENTION

When using hooks without a safety latch (f.e. the Foundry Hook) increased caution must become affect, resp. before the usage a risk assessment according to Betr.SichV §3 must be carried out. Lifting means with a Foundry Hook must only be used when unintentional unhinge is impossible.



ATTENTION

Foundry Hooks must not be used at construction sites. Foundry Hooks are not suitable for the transport overhead of people.

- Please be also aware of extreme circumstances or shock loads when selecting the used Foundry Hook.
- Only the determined RUD round steel chain of the correct nominal size and quality grade must be used with the Foundry Hook.
- RUD-Foundry Hook must only be used by instructed and competent persons considering BGR 500 and outside Germany noticing the country specific statutory regulations.

2 Intended use

The described Foundry Hooks must only be used for lifting, lashing or transporting of goods, if unintentional unhinge is prohibited. This is not valid, if an unhinge without a rigging person is necessary due to special risks of accidents (f.e. high temperature).

Before the usage, a risk assessment according to Betr.SichV §3 should be carried out.

Foundry Hooks must not be used at construction sites.

Foundry Hooks are not suitable for the transport overhead of people.

3 Assembly- and instruction manual

3.1 General information

- Capability of temperature usage of **ICE-components (IWH)**:
When using the ICE-Foundry Hook at temperatures beyond 200°C the permissible WLL of the ICE-Foundry Hook has to be reduced:
-60°C up to 200°C no reduction
200°C up to 250°C minus 10 %
250°C up to 300°C minus 40 %
Temperatures exceeding 300°C are prohibited!
- Capability of temperature usage of **VIP-components (VWH)**:
When using the VIP-Foundry Hook at temperatures beyond 200°C the permissible WLL has to be reduced:
-40°C up to 200°C no reduction
200°C up to 300°C minus 10 %
300°C up to 380°C minus 40 %
Temperatures exceeding 380°C are prohibited!
- RUD Foundry Hooks must not be used with aggressive chemicals such as acids, alkaline solutions and their vapours.
- The WLL of components are depending on the following variables:
 - Quality grade of component (pictures 1 - 3)
 - Nominal size of component
 - in the present case

The permissible WLL should be taken out of the according ICE- and VIP user's instruction (or alternatively from the RUD website www.rud.com).

3.2 Hints for the assembly

Please observe correct assignment of chain and component when assembling the Foundry Hook. The quality grade/nominal size or the component can be identified by the stamping at component/bolt/chain resp. by the colour.

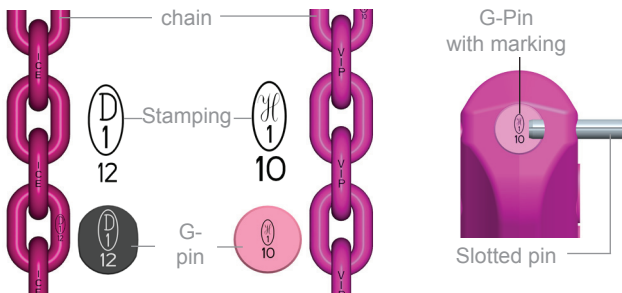


ATTENTION

Observe in any case the quality grade assignment at the components

- Assemble with **ICE components (IWH)** only G-pins with a D1-12 stamping
- Assemble with **VIP components (VWH)** only G-pins with a H1-10 stamping

Mixing of system components from different quality grades is not allowed.



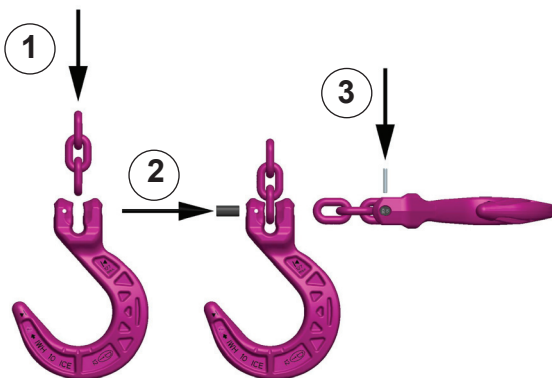
Pic. 1: **Quality grade 120**
ICE-Chain,
Stamping D1-12
Oval pin D1-12

Pic. 2: **Quality grade 100**
VIP-Chain,
Stamping H1-10
Round pin H1-10

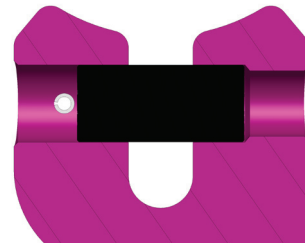
Pic. 3:
VIP-G-Pin
inkl. VIP-
Stamping +
Slotted pin

Basically essential:

- Assemble slotted spring pin for the securing of the G-pin in the clevis in such a way that the slot can be seen resp. faces the outside
- RUD G-pins are fool-proof:
 - For ICE components use only the oval ICE-G-pin (picture 1)
 - For VIP components use only the round VIP-G-pin (picture 2)
- The G-pin must be assembled captive with the slotted pin and with the step hole in the component (picture 4)
- Use slotted pin only once!
- Use only original RUD spare parts.
- Check finally the correct assembly (see chapter 4 Inspection criteria).



Pic. 4: Assembly of connecting pin



Pic. 5: G-pin assembly with slotted pin and step hole (right). G-pin of the next smaller size falls out.

3.3 General user information

- Check before each usage of the self-locking clevis hooks that the securing of the G-pin is in correct position.
- Make sure that the load force happens in the straight leg without being twisted, fold-over or kinked.
- Control frequently and before each operation the total lifting/lashing mean in regard of ongoing ability, strong corrosion, wear, deformation etc. (see chapter 4 Inspection criteria).



WARNING

Wrong assembled or damaged lifting- and lashing means as well as improper usage can lead to physical injury and damage of property when load falls.
Inspect lifting means before each use carefully!

- Leave hazardous area when possible.
- Watch always attached loads.
- For all lifting/lashing means observe the RUD sling chain Safety instructions for RUD lifting means resp. the relevant WLL (ICE quality grade 120 and VIP quality grade 100).

3.4 Hints for the periodically inspection

For the observation of lifting chains regularly inspections within a period of 12 months have to be carried out by a competent person.

Depending on the working conditions, f.e. when often used, or if increased wear or corrosion occurs, inspections should be carried out in shorter periods than one year.

The inspection is also necessary after special incidents and accidents.

- The competent person keeps his records on file either in the chain date card or at the RUD-ID-NET®-application.
- Please keep test protocols and records of the inspection at least until the next inspection takes place.

4 Inspection criteria

Please observe and control the following points before each usage, in regularly terms, at least 1 x per year after the assembly and after special incidents.

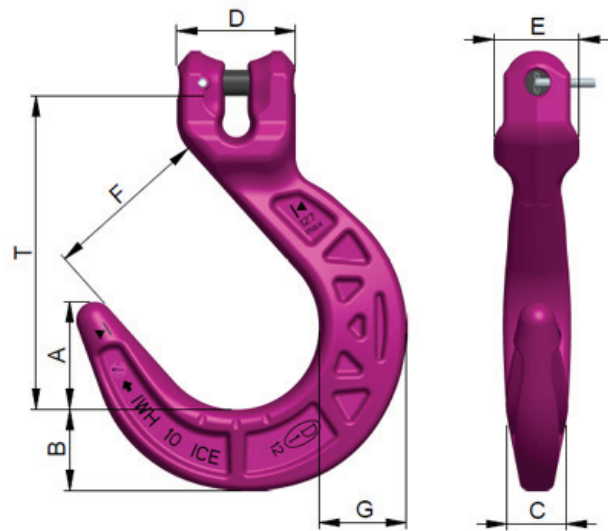
- Completeness of the Foundry Hook
- Readable size and manufacturer sign
- Mechanical damage like strong notches, especially in areas where tensile stress occurs
- Cracks or other defects especially notches at the bearing point of the hook, at the max. until the forged and patented wear markings are reached.
- Deformation or widening of the hook.

5 Hints for repairing

- Only RUD original spare parts must be used and all repairing and overhauling operations must be documented in the chain card file (of the complete lifting mean) or use the RUD-ID-System®.
- RUD Foundry Hooks are equipped with a RUD-ID-Point® and can be identified by the unique 16 character number. This code can be captured and transferred with the RUD-ID-EASY-CHECK® readers into the RUD-ID-NET®-application. This application supports you with the administration and documentation of your components.
- More information can be found either on the internet or through your local RUD contact person.

RUD components are designed acc. to DIN EN 818 and 1677 for a dynamical strain of 20.000 load cycles and tested with 50 % overload.

BG/DGUV = Employer's insurance association recommends: At a high dynamical strain with a large number of load cycles (continuous duty) the stress at WLL acc. to the mechanism group 1Bm (M3 acc. to Din EN 818-7) must be reduced.



Pic. 6: Dimensioning

	Deno- mination	Chain	WLL [t]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	T [mm]	weight [kg/pc.]	Ref.-No.
ICE	IWH-6	ICE-6	1.8	41	31	24	42	29	64	32	121	1.0	7904360
	IWH-8	ICE-8	3.0	49	37	29	50	36	76	40	143	1.75	7904361
	IWH-10	ICE-10	5.0	58	44	31	64	46	90	47	168	3.0	7903847
	IWH-13	ICE-13	8.0	66	50	39	75	56	100	55	193	4.7	7904362
	IWH-16	ICE-16	12.5	75	56	43	90	58	114	61	208	6.5	7904363
VIP	VWH-6*	VIP-6	1.5	30	22	18	30	22	50	22	87	0.5	7100210
	VWH-8*	VIP-8	2.5	41	31	24	42	29	64	32	121	1.0	7100211
	VWH-10*	VIP-10	4.0	49	37	29	50	36	76	40	143	1.75	7100212
	VWH-13	VIP-13	6.7	58	44	31	64	46	90	47	168	3.0	7100213
	VWH-16*	VIP-16	10	66	50	39	75	56	100	55	193	4.7	7100214
	VWH-20	VIP-20	16	96	80	73	102	80	136	80	277	15.1	7998157
	VWH-22	VIP-22	20	96	80	73	102	80	136	80	277	15.1	7998158

Chart 1: Dimension chart

Technical alterations subject to change

* We carry a remainder of stock without the skeletal design.



HINT

The permissible WLL should be taken out of the according ICE- and VIP user's instruction (or alternatively from the RUD website www.rud.com)