POWERPOINT® WPP/ WPPH/ WPPH-VIP

Complies with the machinery directives 2006/42/EC

NB: Please ensure that the safety instructions have been fully read and understood before initial use of the Power Point® WPP / WPPH / WPPH-VIP weld-on lifting point. Failure to do so may result in serious injuries and/or material damage and eliminates manufacturers warranty.

User Instructions - Part 1

Safety instructions

This safety instruction/declaration of the manufacturer must be kept on file for the lifetime of the product.

ATTENTION: Please inspect all lifting points prior to use. Damage, incorrect assembly or improper use may result in serious injuries and/or material damage.

EC-Declaration of the manufacturer

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

We hereby declare that the design and construction of the equipment detailed within this document, adheres to the appropriate level of health and safety of the corresponding EC regulation.

Any un-authorised modification and/or any incorrect use of the equipment not adhered to within these user instructions waivers this declaration invalid.

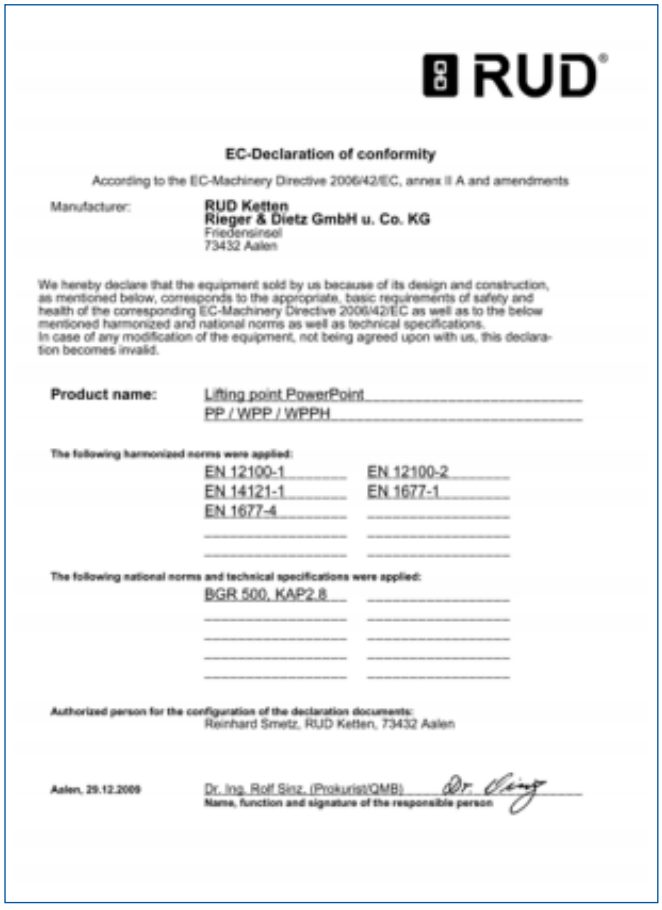
The equipment must be regularly tested and inspected as per BGR 500. Failure to carry out the recommended maintenance and testing waivers this declaration invalid.

Designation of the equipment:

Type: **Power Point® WPP / WPPH / WPPH-VIP weld-on lifting point**

Manufacturer's mark:

Drawings (iges, dxf and step), product information and other support material can be downloaded from www.rud.com.au.



RUD

EC-Declaration of conformity

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

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

We hereby declare that the equipment sold by us because of its design and construction, as mentioned below, corresponds to the appropriate, basic requirements of safety and health of the corresponding EC-Machinery Directive 2006/42/EC as well as to the below mentioned harmonized and national norms as well as technical specifications. In case of any modification of the equipment, not being agreed upon with us, this declaration becomes invalid.

Product name: Lifting point PowerPoint
PP / WPP / WPPH

The following harmonized norms were applied:
EN 12100-1, EN 12100-2
EN 14121-1, EN 1677-1
EN 1677-4

The following national norms and technical specifications were applied:
BGR 500, KAP2.8

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

Aalen, 29.12.2009 Dr. Ing. Rolf Sinz, (Prokurist/QMB)
Name, function and signature of the responsible person

POWERPOINT® WPP/WPPH/WPPH-VIP

User Instructions - Part 2

The weldable RUD PowerPoint® is available in 2 different versions; >WPP< turnable and >WPPH< fixed.

Both can be assembled with the components:

WPP-S: the standard version

WPP-B: the lifting ring version for hook assemblies

WPP-VIP: the direct chain connection

Attention: Other combinations with non RUD lifting components may be dangerous! These are not permitted and RUD will not accept any warranty claim.

1. Reference should be made to relevant standards and other statutory regulations. Inspections should be carried out by competent persons only.

2. Before installing and every use, visually inspect RUD lifting points, with particular attention to any evidence of weld cracks, corrosion, wear, deformations, etc.

3. The material construction to which the lifting point will be attached should be of adequate strength to withstand forces during lifting without deformation. The contact areas must be free from inpurities, oil, colour, etc.

The material of the forged welding part is 1.6541 (23MnNiCrMo52)

4. The lifting points must be positioned to the load in such a way that movements are avoided during lifting.

a.) For single leg lifts, the lifting point should be vertically above the centre of gravity of the load.

b.) For two leg lifts, the lifting points must be equidistant to/or above the centre of gravity of the load.

c.) For three and four leg lifts, the lifting points should be arranged symmetrical around the centre of gravity in the same plane if possible.

5. Load symmetry: The required WLL of the individual RUD lifting point are calculated using the following formula and are are based on symmetrical loading:

$$WLL = \frac{G}{n \times \cos ß}$$

WLL = required of lifting point/individual leg (kg)
G = load weight (kg)
n = number of load bearing legs
ß = angle of inclination of the individual leg

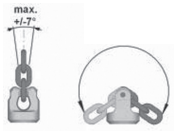
NOTE: For WLL Calculations

- ß angle is taken from the vertical plane.
- Included angle is the angle between the sling legs.

6. Safety: When lifting points are used in a multileg assembly, care should be taken to calculate the WLL (Working Load Limit) due to the deration caused by forces acting in multiple directions. The reduction in WLL (Working Load Limit) for multileg assemblies should be checked with relevant Standards e.g. AS 3775-2004 - Chain Slings-Gr t (8)

The lifting points should be mounted in such a way that they may easily be accessed for inspection and assembly/ disassembly of the sling.

7. The type WPPH-VIP (rigid, with VIP clevis connection) has to be aligned in regard of the vertical slot for the chain link, when used in multiple leg usage with inclination angle, straight into the direction of pull.



8. All fittings connected to the PP-versions should be free moving. Also, the assembled components on the PP must be free moveable and should not be used over sharp corners. When connecting and disconnecting the lifting means (wire ropes, chain slings, roundslings) pinches and impacts should be avoided. Damage of the lifting means caused by sharp corners should also be avoided. Before lifting, the hooks must be installed without twists in the direction of pull.

WPP-S

WPPH-B

WPPH-VIP

9. Effect of temperature: During use in overheated areas the WLL of the PowerPoint® has to be reduced according as follows:

-10° up to 200°C	no reduction (14°F up to 392°F)
200° up to 300°C	minus 10% (392°F up to 572°F)
300° up to 400°C	minus 25% (572°F up to 752°F)

Temperatures above 400°C (752°F) are not allowed.

10. RUD-Lifting points must not be used under chemical influences such as acids, alkaline solutions and vapours e.g. in pickling baths or hot dip galvanising plants. If this cannot be avoided, please contact the manufacturer indicating the concentration, period of penetration and temperature of use.

11. If the lifting points are used **exclusively** for lashing the value of the working load limit can be doubled.

LC = 2 x WLL

12. After welding, an annual inspection or sooner if conditions dicate should be undertaken by a competent person examining the continued suitability. Also inspect after damage and special occurrences.

Inspection criteria regarding paragraphs 2 and 12:

- The lifting point should be complete
- The WLL batch code and manufacturers stamping should be clearly visible on the lifting point.
- Deformations of the components parts such as body and fittings.
- Mechanical damages such as notches, especially in high stress areas.
- Wear should be not more than 10% of cross sectional diameter.
- Evidence of corrosion.
- Evidence of cracks.
- Cracks or other damages to the welding.
- The upper fork head part of the PP-version >WPP< must rotate smoothly.
- The PP-version >WPP< should only be used within the nom WLL. See RUD chart.
- Due to double bearing races, proof testing is not suitable for the PowerPoint range. Testing should be MPI (magnetic Partical Inspection) and visual.
- The maximum gap between upper- and lower part of the PowerPoint® >WPP< must not be exceeded:

PP-..-0.63t up to PP-..2.5t	max. 1.5 mm
PP-..-4t up to PP-..8t	max. 2.5 mm

Any non-adherence to this advice may result in damages of persons and / or materials!

User Instructions - Part 3

WELDING SIZE		
	size	volume approx cm³
WPP-..-0.63t	◺ 3.5	2.3
WPP-..-1.5t	◺ 4.5	3.2
WPP-..-2.5t	(HV) 3 + (a) 5	5.0
WPP-..-4t	(HV) 3 + (a) 6	8.0
WPP-..-5t	(HV) 3 + (a) 8	13.0
WPP-..-8t	(HV) 3 + (a) 10	23.3
WPPH-..-0.63t	◺ 3.5	2.0
WPPH-..-1.5t	◺ 4.5	2.8
WPPH-..-2.5t	(HV) 3 + (a) 5	4.5
WPPH-..-4t	(HV) 3 + (a) 6	6.8
WPPH-..-5t	(HV) 3 + (a) 8	11.4
WPPH-..-8t	(HV) 3 + (a) 10	20.6

Table 1

The welding should only be carried out by an authorised welder, according to AS1554 or EN287 or relevant AWS Standards.

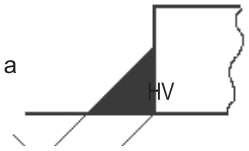
1 Prepare surface and ensure all contact areas are clean. Check preparation and welding consumables for conformance.

2 Carefully clean the root run before carrying out subsequent runs.

3 Apply fillet weld (see table 1). The welding process must not be interrupted for such a time that the welding blocks lose the welding temperature.

Attention: Do not weld on the connecting elements (eyehook, chain, ovallink etc.)

Welding size definition:
measurements “HV” and “a” have to be according to weld size chart.



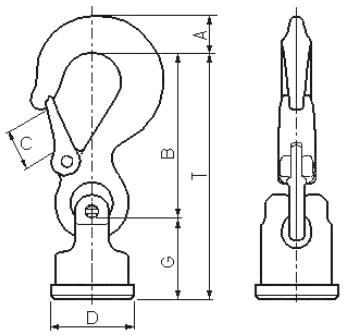
POWERPOINT® WPP/WPPH/WPPH-VIP PRODUCT DESCRIPTION		WORKING LOAD LIMITS (G - in tonnes)				
		Single Leg G	Single Leg G	2, 3 or 4 Legs G Maximum Included Angle (Degrees)		
				60°	90°	120°
 WPP-S WPP-B WPP-VIP	**POWERPOINT - SWIVELLING**			60°	90°	120°
	WPP-S / WPP-B / WPP-VIP	0.63	0.63	1.1	0.89	0.63
	WPP-S / WPP-B / WPP-VIP	1.5	1.5	2.6	2.1	1.5
	WPP-S / WPP-B / WPP-VIP	2.5	2.5	4.3	3.5	2.5
	WPP-S / WPP-B / WPP-VIP	4.0	4.0	6.9	5.6	4.0
	WPP-S / WPP-B / WPP-VIP	6.7	5.0	8.6	7.0	5.0
	WPP-S / WPP-B / WPP-VIP	10.0	8.0	13.8	11.3	8.0
 WPPH-S WPPH-B WPPH-VIP	**POWERPOINT - FIXED**			60°	90°	120°
	WPPH-S / WPPH-B / WPPH-VIP	0.63	0.63	1.1	0.89	0.63
	WPPH-S / WPPH-B / WPPH-VIP	1.5	1.5	2.6	2.1	1.5
	WPPH-S / WPPH-B / WPPH-VIP	2.5	2.5	4.3	3.5	2.5
	WPPH-S / WPPH-B / WPPH-VIP	4.0	4.0	6.9	5.6	4.0
	WPPH-S / WPPH-B / WPPH-VIP	6.7	5.0	8.6	7.0	5.0
	WPPH-S / WPPH-B / WPPH-VIP	10.0	8.0	13.8	11.3	8.0

Table 2

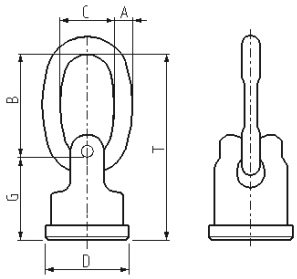
WELDING PROCESS	
MILD STEEL / LOW ALLOYED STEEL	
MIG GAS SHIELDED WIRE WELDING	AWS A5.18 eg: WIA - Austmig ES6 or Hobart XL 525) or equivalent. (Flux Cored for material >24mm).
MMA MANUAL ELECTRIC WELDING	AWS A5.5 : E8018-G. AWS A5.1 : E7018. eg: WIA - Austarc 18TC or Weldwell PH77 or equivalent.
NB. Please refer to the consumables manufacturer for user instructions and further information.	

Table 3

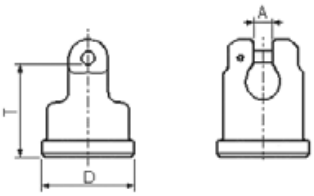
User Instructions - Part 4



WPP-S



WPPH-B



WPPH-VIP
Only for original VIP chain

Type	WLL (t)	A	B	C	D	G	T	weight (kg)	Welding size HV + filled weld	Ref-no. WPP	Ref-no. WPPH
WPP(WPPH)-S-0.63t	0.63	13	75	18	40 (34)	40 (34)	115 (109)	0.4 (0.35)	3.5	7990721	7990722
WPP(WPPH)-S-1.5t	1.5	20	97	25	46 (40)	50 (44)	147 (141)	1.0 (0.9)	4.5	7989944	7989966
WPP(WPPH)-S-2.5t	2.5	28	126	30	61 (53)	61 (53)	187 (179)	1.7(1.5)	3 + 5	7989945	7989967
WPP(WPPH)-S-4t	4.0	36	150	35	78 (68)	77 (67)	227 (217)	3.7 (3.2)	3 + 6	7989946	7989968
WPP(WPPH)-S-5t	5.0	37	174	40	95 (83)	93 (79)	267 (253)	7.2 (6.3)	3 + 8	7989947	7989969
WPP(WPPH)-S-8t	8.0	49	208	48	100 (88)	102 (88)	310 (296)	9.5 (8.8)	3 + 10	7989948	7989970
WPP(WPPH)-B-0.63t	0.63	9	65	35	40 (34)	40 (34)	105 (99)	0.35 (0.3)	3.5	7989954	7989976
WPP(WPPH)-B-1.5t	1.5	11	65	35	46 (40)	50 (44)	115 (106)	0.46 (0.36)	4.5	7989955	7989977
WPP(WPPH)-B-2.5t	2.5	13	74	40	61 (53)	61 (53)	135 (127)	1.05 (0.85)	3 + 5	7989956	7989978
WPP(WPPH)-B-4t	4.0	16	95	45	78 (68)	77 (67)	172 (162)	2.4 (1.9)	3 + 6	7989957	7989979
WPP(WPPH)-B-5t	5.0	19	130	60	95 (83)	93 (79)	223 (209)	5.1 (4.3)	3 + 8	7989958	7989980
WPP(WPPH)-B-8t	8.0	24	140	65	100 (88)	102 (88)	242 (228)	5.9 (5.2)	3 + 10	7989959	7989981
WPP(WPPH)-VIP-0.63t	0.63	4	-	-	40 (34)	-	40 (34)	0.25 (0.2)	3.5	7989960	7989982
WPP(WPPH)-VIP-1.5t	1.5	6	-	-	46 (40)	-	50 (44)	0.32 (0.22)	4.5	7989961	7989983
WPP(WPPH)-VIP-2.5t	2.5	8	-	-	61 (53)	-	61 (53)	0.85 (0.65)	3 + 5	7989962	7989984
WPP(WPPH)-VIP-4t	4.0	10	-	-	78 (68)	-	77 (67)	2.1 (1.6)	3 + 6	7989963	7989985
WPP(WPPH)-VIP-5t	5.0	13	-	-	95 (83)	-	93 (79)	4.1 (3.3)	3 + 8	7989964	7989986
WPP(WPPH)-VIP-8t	8.0	16	-	-	100 (88)	-	102 (88)	4.5 (3.8)	3 + 10	7989965	7989987

Table 4 **() = dimesions for WPPH**

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