

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 VIP-Grade 100 Chain. 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 components prior to use. Damaged, 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-authorized modification and/or any incorrect use of the equipment not adhered to within these user instructions waives this declaration invalid.

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

Designation of the equipment:

Type: **VIP-Grade 100 Chain**

Manufacturer's mark: 

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



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: Chain sling Grade 100 - VIP
MD 4-28 mm adjustable/not adjustable

The following harmonized norms were applied:

EN 12169 : 2011-03	EN 1677-1 : 2009-03
EN 1677-2 : 2008-06	EN 1677-3 : 2009-06
EN 1677-4 : 2009-03	EN 818-1 : 2008-12
EN 818-2 : 2008-12	EN 818-4 : 2008-12
EN 818-6 : 2008-12	

The following national norms and technical specifications were applied:

BGR 500, KAP2.8 : 2008-04	DIN 15428 : 1978-08
DIN 15425 : 1978-07	DIN 5586-3 : 2007-04
DIN 5592 : 2011-04	DIN 685 : 1981-11
PAS 5061 : 2005-04	

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

Aalen, den 27.06.2014 Dr.-Ing. Arne Kriessmann (Prokurist/QMB)
Name, function and signature of the responsible person

User Instructions - Part 2

1. What is VIP?

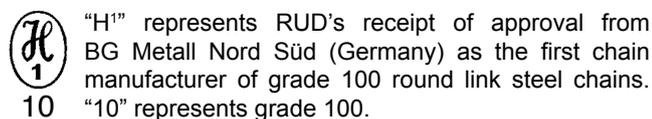
VIP chain is a high quality grade 100 (V400) chain that is manufactured with tight tolerances in the inner width (size W1). The material used in manufacturing of VIP chain is CrNiMo-high grade steel which is specially heat treated.

VIP chain offers following key characteristics due to material selection and heat treatment applied during manufacturing:

- High impact toughness
- Reduced notched sensitivity
- Reduced risk of hydrogen embrittlement as compared to a quality grade 8

Standard VIP chains are coated with distinctive fluorescent pink colour. VIP can also be supplied in special finishes on request.

Every chain is marked with following stamp:



VIP chains are stamped with a serial and a batch number at regular intervals. This provides full traceability to our manufacturing process.

2. VIP Key Features

Increased WLL and enhanced mechanical properties:

Due to the special material and heat treatment process applied by RUD during the manufacturing process, VIP chains provide up to 30 % increase in the WLL in comparison to quality class 8 for the same size chain. This results in reduced sling tare weight.

VIP chains are highly resistant to mechanical abrasion and damage. This results in significantly increased chain and sling life.

Surface Protection:

The high quality VIP chains and components are provided with a duplex surface protection.

This comprises of two processes i.e. pre-treatment and pink powder coating. Due to this two-step process, a relatively better surface protection is achieved in comparison to zinc plating.

RUD VIP Mecano assembly system:

- RUD master link with an integrated all multi-directional movable welded connector, ensuring that only the correct chain diameter and number of legs can be connected.
- Complete identification tag with the WLL indications.
- Connecting bolts and tensioning sleeves are pre-assembled. Other pins are not pre-assembled and must be relocated to the corresponding component.
- Fool proof simple system makes it impossible to install the incorrect chain size.
- Dimension X prevents the assembly of a bigger RUD chain size.
- The diameter Y of the load pin prevents from a connection of a smaller RUD chain size.
- Only RUD chains and RUD components with the same nominal size can be assembled (*picture 1*).

Attention:

Special quality VIP 10: only chains, components and pins stamped with VIP-H1-8S or H1-10 can be used or assembled.

Slot of the retaining pin must be visible from outside.

Use retaining pins once only.

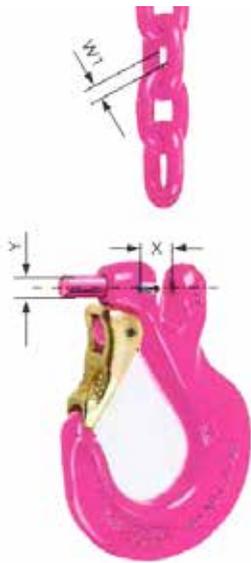
The assembly of chains and components from different manufacturers is not permitted!

3. Material and Testing

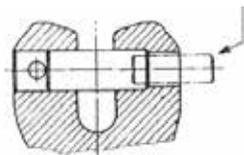
	Size d (mm Ø)	4	6	8	10	13	16	20	22	28	
	Pitch P (mm)	12	18	24	30	39	48	60	66	84	
	inside width W1 bi min. (mm)	5.2	7.8	10.4	13	17	21	26	28.6	36.4	
	WLL (t)	0.63	1.5	2.5	4.0	6.7	10	16	20	31.5	
	Proof load MPF min. kN	15.7	37.5	62.5	100	166	250	395	500	772	
	Breaking load sw BF min. kN	25	60	100	160	265	400	630	800	1240	
	Weight (kg/m)	0.36	0.85	1.5	2.4	4.0	6.0	9.5	12.3	18.6	
	Surface:	Duplex protection = pre-treatment + pink powder coating									
	Order no:	7984399	7100477	7100478	7100479	7100481	7983689	7983689	7100482	7900670	
	Surface:	Corrud - DS - Black									
Order no:	7987349	7987591	7986226								
Minimal ultimate elongation: natural black ^ 25 %, Pink ^ 20 % Stamped: VIP identification stamped in every chain link, manufacturing number and the BG approval stamp H1											

Table 1: VIP Grade 100 (V400) round steel link chain.

User Instructions - Part 2



The VG-bolt of the next smaller size drops out.



Picture 1: VIP-Fool-proof Mecano assembly

VIP chains are made from specially quenched and tempered CrNiMo alloy steel.

The minimum breaking elongation is 20% for pink powder coated chain. This goes up to minimum 25% when chain is in its natural black surface finish (picture 3).

Bending tests show that the requirement of $0.8 \times d$ (diameter of chain) based on DIN EN 818-2 and AS 2321 : 2014 is by far exceeded by RUD VIP chain.

The ratio of WLL: Proof load is 1: 2.5 and the ratio of WLL: Break load is 1: 4 for VIP chains.

RUD VIP chains and components are designed and manufactured in accordance with DIN EN 818, DIN EN 1677, PAS 1061, AS 2321, AS 3776 and AS 3775. VIP chains and components are designed and tested for a dynamic loading of more than 20,000 load cycles at a 50% overload ($1.5 \times$ WLL).

Corrosion testing is done in accordance with PAS 1061 for improved resistance to stress corrosion cracking and hydrogen embrittlement.

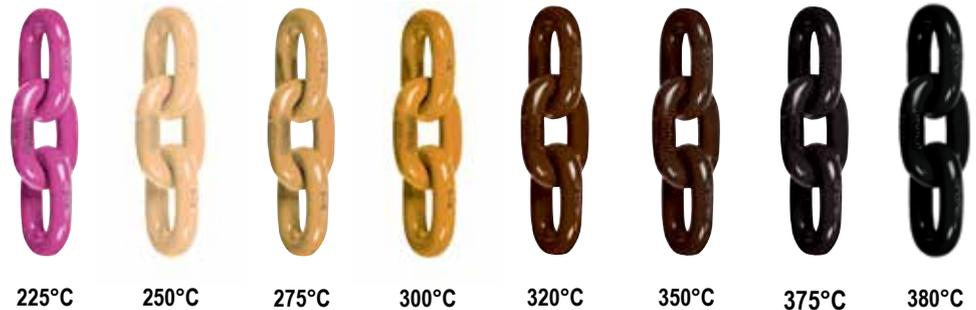
4. Patented Heat Indicator

In high temperature environments, the special fluorescent pink powder coating permanently changes its colour.

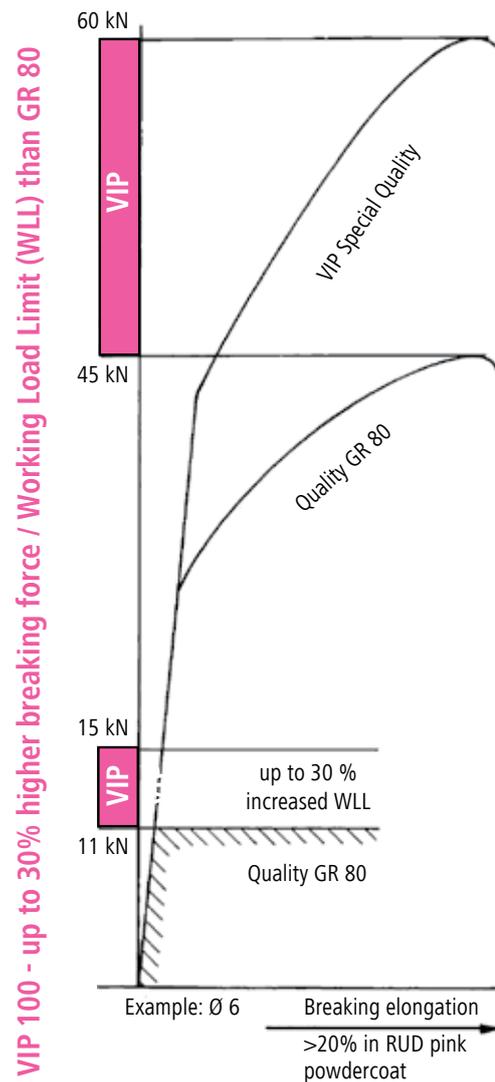
Above 380°C the colour changes permanently to black (refer picture below). If this happens, the chain assembly should be taken out of service (picture 2).



Slot of the tensing sleeve must be visible facing to the front! The tensing sleeve must be used only once.



Picture 2: Patented Heat Indicator



Picture 3: VIP key features

User Instructions - Part 2

5. RUD VIP v's Grade 80 (AS 2321)

RUD VIP can be used at -40°C at 100% WLL as compared to -10°C for AS 2321 Grade 80.

Table 2 (over) shows a (AS 2321:2014) comparison of working load limits for RUD VIP v's Grade 80 chain (*table 2*).

6. RUD VIP v's other Grade 100 chains

Grade 100 chains are made in type V200 and V400. RUD VIP chains are made in the superior V400 type. RUD VIP chain far exceeds the performance requirements for AS 2321 V400.

Table 3 (over) presents the key points of difference between Grade 80, Grade 100 (V200), Grade 100 (V400) and RUD VIP Grade 100 (V400) chains (*table 3*).

7. Selection of sling chains

When selecting sling chains, the following must be taken in to consideration:

- The weight of the corresponding load must be known.
- The centre of gravity from the load must be known.
- Method of sling
 - a) The included angle between legs should be between

30° and 120°. This is because the angles less than 30° create instability and angles above 120° create overloading situations.

- b) Symmetric multiple leg lifts (3 and 4 leg) should always be based on 2 legs taking the load (except engineered lifts)
 - c) Relevant reduction factors must be used to calculate WLL based on the configuration being used
 - d) Asymmetrical loads - If one leg must be shortened in a multiple leg application, this could be an indication for an uneven load. Each chain sling leg and lifting point shall be rated to the full load that is to be lifted. (Refer to AS 3775.2 - 2014 clause 7.1 (e) for further guidance).
- Refer to table 4 for the RUD VIP WLL chart.

8. Care and use:

When using lifting chain assemblies, attention must be paid to AS 3775.2 - 2014 for guidance on care and use.

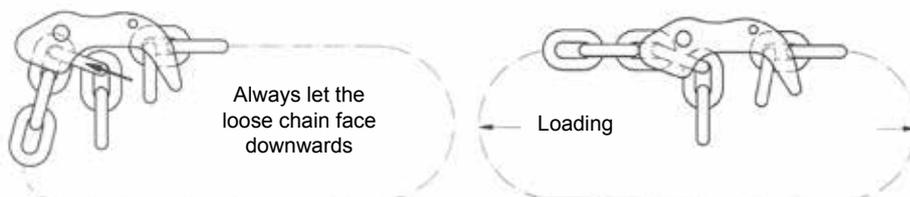
Before the first lift ensure that:

- The chain assembly corresponds to the order specification.
- The test certificate with the details from AS 3775.2 - 2014 and declaration of conformity is present.
- The details marked on the identification tag of the chain

Assembly:
Pull loose chain strand through the crucifix. Secure the chain in the locking pocket at the required position and drive in the retaining pin (A).
The multi shortening claw is fixed in the VIP chain strand. It is preferable to fit and secure the claw from the suspension link for maximum adjustment.
Slide the chain into the slot and secure.

Handling:
Laterally swing out VMVK.
In a loosened condition, insert the required slack chain leg into the pocket support of the VMVK (1).
Pull down the chain leg and press the securing bolt 3. The securing bolt locks automatically.
Check the locking. To unlock, reverse the above procedure while simultaneously pressing the securing bolt 3.

Attention:
If the VMVK is used without securing bolt the chain must always be completely seated in the locking slot (B).
When pulling/fitting the shortened chain assembly attention must be paid to ensure that the chain remains in the locking slot (B) until the lift has been completed.



NOTE!

It makes it easier for a chain basket assembly.

Picture 4: VIP-Multi-shortening claw VMVK

VIP-GRADE 100 (V400)

User Instructions - Part 2

assembly correspond to the specification on the test certificate.

- The details are in the chain card file/lifting gear register. This documentation should include a description of the chain assembly, as well as the proof of identity (test certificate resp. declaration of conformity/ref. no.).

9. Handling

Lifting chains must be used with straight legs without twists, knots or breaks. Lifting hooks are not designed for tip loading and must be equipped with safety latches to avoid unintentional unloading. Before the usage of hooks without a safety latch a risk assessment has to be carried out and the whole operation must be made extra careful. When using chain shorteners AS 3775.2 - 2014 must be observed in regard to the technical requirements.

Master links must be freely articulating at the bowl of the crane hook. Avoid shock loading, sharp edges, bending and damaging chain links and components. For sharp edges use edge protection, the next chain size up or reduce the WLL by 25 %.

10. Influences of high and low temperature

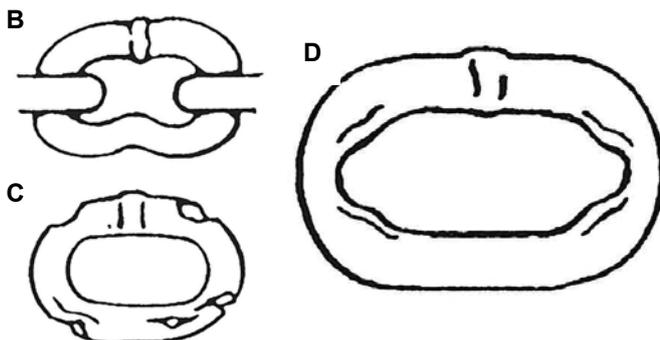
If sling chains are used in temperatures ranging from 200°C upwards (e.g. in hot environments such as steel production, forges, foundries etc.) the WLL has to be reduced according to the following table.

Reduced WLL in % where the chain slings exceeds temperatures of:

VIP	°C	-40° to +200°C	above 200° up to 300°	above 300° to 380°
	%	100%	90%	60%

With lower temperatures, the sling chains must not be used because of their sensitivity against brittle failure.

The special fluorescent pink powder coating signals permanently the maximum temperature at which the VIP chain had been used. The pink colour changes to black when the chain is used in temperature areas higher than 380°C (forbidden) and starts to bubble. Replace VIP chains or return to manufacturer for inspection.



11. Chemical influences

VIP special quality 10 must not be used under chemical influences (acids, alkaline solutions and vapours) e.g. in pickling baths or hot dip galvanising plants. Attention should be paid to special instructions such as BGR 500/DGUV 100 - 500 or other country specific statutory regulations.

Before using sling chains in chemicals, the manufacturer must be contacted first regarding the concentration, period of penetration and temperature of use.

12. Inspection and testing

12.1 Visual and function test

For inspecting sling chains, regular inspection by a competent person has to be carried out within a period of no more than 12 months (Refer to AS 3775.2 - 2014 app. C).

Depending on the conditions of use, e.g. permanent usage, increased wear or corrosion the inspection needs to be carried out earlier.

The competent person has to record the examination in the chain card/ lifting gear register. Protocols of tests and any other records have to be kept.

Should any of the following damage occur, the sling chain should immediately be taken out for maintenance and service:

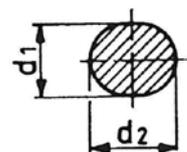
- The identification tag is unreadable or the tag is missing.
- Twisting, deformation and breakage of chains, components and master links.
- Lengthening of the chain by plastic deformation of individual links by more than 5 % referred to the pitch of 3d.
- Wear occurs at the chain links caused by abrasion on the outside and between chain links hanging together.

For measuring the wear with a caliper, the chain must not be under load.

A wear up to 10 % (dm) is permissible.
- Cuts, notches, grooves, failure, increased corrosion, discolouring due to heat, bent or twisted chains and components. Especially deep notches in the tensile strength region and sharp-edged notches in lateral direction are not allowed.
- At the lifting hook, the widening of the hook must not exceed 10 % of the nominal value. The hook securing (safety latch) must still slip into the hook tip in order to occur from closure. Carefully examine the bowl of the hook for notches.

$$d_m = \frac{d_1 + d_2}{2} \geq 0.9 d$$

dm = average link width
d1/d2 = actual sizes
d = nominal size



Picture 5: Inspection and testing

User Instructions - Part 2

12. Inspection and testing

12.2 Examination for cracks

For inspections requiring more than visual checking, refer to the corresponding regulations/standard for Non-Destructive Testing (NDT).

RUD recommends, respectively to BGR 500 chapter 2.8, to do a crack test inspection at least after 3 years.

A proof load test for chains and components is insufficient because cracks can only be recognized with a magnetic crack test.

13. Repair and Maintenance

Repair works must only be carried out by a competent person.

Components and chains with failures, bent, twisted and considerably deformed must be replaced. With damaged chain, the complete leg has to be replaced. Minor faults such as notches and grooves can be carefully ground/machined. The cross section of the material must not be decreased by more than 10 %. Welding on chains and components is forbidden.

Maximum of allowed wear of the pin diameter = 10 %. Fundamentally, use new connecting bolts and tensioning sleeves when changing these parts. Use only original RUD spare parts!

It is only allowed to connect RUD-chains with VIP components. Any repairs, maintenance carried out have to be recorded in the chain card file or into the RUD-ID-NET®-Application.

It is not allowed to combine RUD chains and components with chains and components from different manufacturers.

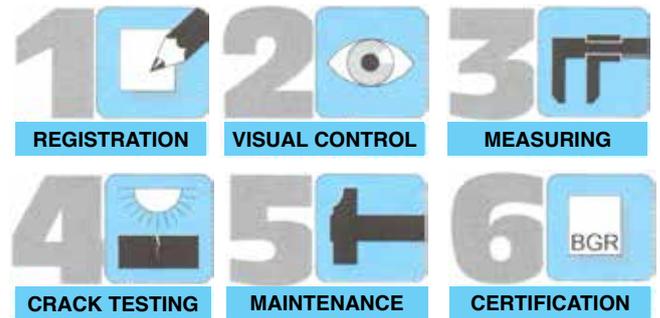
14. Documentation

14.1 Chain card file

The chain card file contains the continuous history of a chain sling. The contents are: first record (section 12), inspection/test dates (section 12) as well as repair and maintenance (section. 13).

If there are any repairs, the reason must be indicated. The records in the chain card file give proof on steady supervision measurements of the user during the use of the sling chains.

Carefully adhere to statutory requirements and code of practice requirements.



NOTE: It is not allowed to combine ICE chains and components with chains and components quality class 10 and 8 without approval from RUD

14.2 RUD-ID-NET®



The RUD-components are equipped with a RUD-ID-Point® and can clearly be related by the identification serial number.

This number can be determined with the RUD-ID-EASY-CHECK® readers and data can be transferred into the RUD-ID-NET®- Application.

The application will support your product administration and documentation.

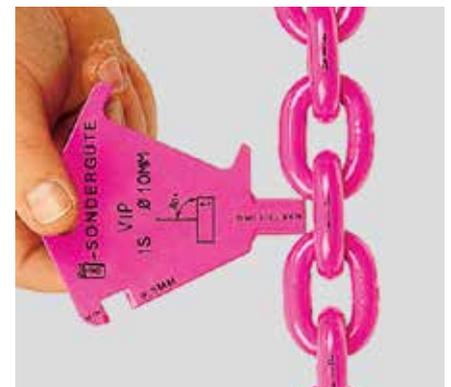
Further information on the RUD-ID-NET can be found on page 10 of this document, via our website: www.rud.com.au or by calling our Brisbane office (07) 3809 1300.



Testing wear of nominal diameter



Testing pitch elongation caused by wear of nominal diameter



Testing plastic elongation caused by overloading

Picture 6: VIP identification tag with integrated chain testing gauge*

VIP-GRADE 100 (V400)

User Instructions - Part 3

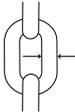
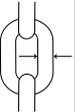
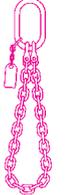
 VIP Chain Dia. (mm)	Single leg slings			Slings of 2,3 or 4 Legs			Basket Sling	2 Leg Basket Sling*	Reeved Slings of 2, 3 or 4 Legs	 GR. 8 Chain Dia. (mm)
	 Straight Sling	 Adj. Sling	 Reeved Sling	 Straight Multileg Slings			 60°	 60°	 60°	
				60°	90°	120°				
VIP 4	0.63	0.63	0.5	1.1	0.9	0.63	0.8	1.4	0.8	
	1.1	1.1	0.8	1.9	1.6	1.1	1.4	2.5	1.4	6
VIP 6	1.5	1.5	1.1	2.6	2.1	1.5	2.0	3.4	2.0	
	2.0	2.0	1.5	3.5	2.8	2.0	2.6	4.5	2.6	8
VIP 8	2.5	2.5	1.9	4.3	3.5	2.5	3.3	5.6	3.3	
	3.2	3.2	2.4	5.5	4.5	3.2	4.2	7.2	4.2	10
VIP 10	4.0	4.0	3.0	6.9	5.6	4.0	5.2	9.0	5.2	
	5.3	5.3	4.0	9.2	7.5	5.3	6.9	11.9	6.9	13
VIP 13	6.7	6.7	5.0	11.6	9.4	6.7	8.7	15.1	8.7	
	8.0	8.0	6.0	13.8	11.3	8.0	10.4	18.0	10.4	16
VIP 16	10.0	10.0	7.5	17.3	14.1	10.0	13.0	22.5	13.0	
	12.5	12.5	9.4	21.6	17.6	12.5	16.3	28.1	16.3	20
VIP 20	16.0	16.0	12.0	27.7	22.6	16.0	20.8	36.0	20.8	
	15.0	15.0	11.3	26.0	21.2	15.0	19.5	33.8	19.5	22
VIP 22	20.0	20.0	15.0	34.6	28.2	20.0	26.0	45.0	26.0	
	21.2	21.2	15.9	36.7	29.9	21.2	27.6	47.7	27.6	26
VIP 28	31.5	31.5	23.6	54.5	44.4	31.5	41.0	70.9	41.0	
	31.5	31.5	23.6	54.5	44.4	31.5	41.0	70.9	41.0	32

Table 2: WLL Comparison between RUD VIP Grade 100 v Grade 80

WLL in tonnes according to inclination angle at symmetric loading

*NB: Ensure that appropriate rated master and intermediate links are used for the 2 leg basket sling.

User Instructions - Part 3

CHAIN GRADE COMPARISON	Grade 80 (AS 2321:2014)	Grade 100 (AS 2321:2014 - V200)	Grade 100 (AS 2321:2014 - V400)	VIP Grade 100 PAS 1061 (exceeds AS 2321:2014 - V400)
Composition steel	No specific alloy requirement. Typically boron steel	0.4% Ni 0.4% Cr 0.15% Mo	0.7% Ni 0.5% Cr 0.30% Mo	High quality CrNiMo 0.7% Ni 0.5% Cr 0.30% Mo
Link bend test	YES	YES	YES	Bend & reverse bend
Elongation	17%	20%	20%	20% coated 25% uncoated
Wear resistance	Limited wear resistance	Varies by manufacturer. Typically better than GR 80	Varies by manufacturer Typically better than V200	Superior wear resistance
Toughness	28J @ -20°C	28J @ -20°C	28J @ -20°C	Avg 42J @ -40°C
Cycle test chain (20,000 @ 1.5 WLL)	NO	NO	NO	YES
Stress corrosion test	NO	NO	NO	YES
Temperature limit	-10°C to 400°C (as per AS 2321)	-10°C to 200°C (as per AS 2321)	-10°C to 380°C (as per AS 2321)	-40°C to 380°C

Table 3: RUD VIP PAS 1061 far exceeds the requirements of AS2321 2014 V400

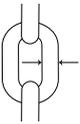
 Chain Dia. (mm)	Single leg slings			Slings of 2,3 or 4 Legs			Basket Sling	2 Leg Basket Sling*	Reeved Slings of 2, 3 or 4 Legs
	Straight Sling	Adj. Sling	Reeved Sling	Straight Multileg Slings			60°	60°	60°
				60°	90°	120°	60°	60°	60°
VIP 4	0.63	0.63	0.5	1.1	0.9	0.63	0.8	1.4	0.8
VIP 6	1.5	1.5	1.1	2.6	2.1	1.5	2.0	3.4	2.0
VIP 8	2.5	2.5	1.9	4.3	3.5	2.5	3.3	5.6	3.3
VIP 10	4.0	4.0	3.0	6.9	5.6	4.0	5.2	9.0	5.2
VIP 13	6.7	6.7	5.0	11.6	9.4	6.7	8.7	15.1	8.7
VIP 16	10.0	10.0	7.5	17.3	14.1	10.0	13.0	22.5	13.0
VIP 20	16.0	16.0	12.0	27.7	22.6	16.0	20.8	36.0	20.8
VIP 22	20.0	20.0	15.0	34.6	28.2	20.0	26.0	45.0	26.0
VIP 28	31.5	31.5	23.6	54.5	44.4	31.5	41.0	70.9	41.0
Load Factor >	1	1	0.75	1.73	1.41	1	1.3	2.25	1.3

Table 4: WLL in tonnes for symmetrical conditions

*NB: Ensure that appropriate rated master and intermediate links are used for the 2 leg basket sling.

VIP-GRADE 100 (V400)

Application Examples



RFID Technology

Inspection and documentation made easy!



Regular inspections of lifting applications are an essential requirement to ensure the highest standard of safety is met. Dated methods of inspections involve copious amounts of paper work and time consuming manual processes.

But due to the **RFID-technology** (Radio-Frequency-IDentification) these time consuming methods and huge amount of paper work become history.

RFID-technology has been specifically designed to track and identify applications quickly and effortlessly making inspections and documentation of products a quick and easy process.

Radio Frequency Identification (RFID) continues to evolve as a major technology – modernizing the way documentation and inventory mangement is done



RUD-ID-POINT®

The **RUD-ID-POINT®** (RFID chip) is embedded into the component. The RFID chip is branded with a unique identification number.

RUD-ID-READER

The robust RUD reading devices capture the identification number of the **RUD-ID-POINT®** and transfer it to the **RUD-ID-NET®** application (software) or alternatively to your PC applications (e.g. WordPad, MS Word, MS Excel, SAP) etc.

RUD-ID-NET®

The resourceful **RUD-ID-NET®** application (software) will support your product administration and documentation.

Size comparison:



VIP-GRADE 100 (V400)

RFID Technology

RUD-ID-Points®



Reference no.:
7902580



Reference no.:
7998881



Reference no.:
7903680



Reference no.:
7901001

The innovative and unrivalled **RUD-ID-POINT®** performs in varied conditions ranging from -80°C temperatures to an astonishing +270°C. They hold a high level of water and pollution resistance and are extremely robust against damage. The RFID-chip does not harm the capability of the components.

RUD-ID-POINT® 8 mm or 4 mm (13.56 MHz HF):

Press-fit transponder (in metal). No glue necessary.

Size: 8 mm x 3.25 mm or 4 mm x 3.50 mm.

The usage of **RFID-Chips** embedded into a component is a patented technological innovation.

RUD-ID-LINK® (13.56 MHz HF)

Connecting link with integrated transponder for chains, wire ropes, etc.

Size: dia. 8 mm x 35 mm open

RUD-ID-GLUE® (13.56 MHz HF)

Adhesive metal transponder for many other working means, subject to regular checking (clamps, grippers, cross bars, etc)

Size: dia. 19 mm x 4.5 mm

RUD-ID-READER



Reference no.: 7903364



Reference no.: 7901524 (Bluetooth)

The **RUD-ID-EASY-CHECK®** readers are compatible with the **RUD-ID-POINTS®** as well as with common high frequency transponders/chips (ISO 15693). The transfer of the identification number is carried out either by USB or Bluetooth and can be linked up with the **RUD-ID-NET®** application (software), almost all Office applications (WordPad, MS Word, MS Excel, Open Office) and also with SAP or other programs.

RUD-ID-BETTER-CHECK® (13.56 MHz):

USB-reader for identifying the unique number of the **RUD-ID-POINT®**.

RUD-ID-BETTER-CHECK® (13.56 MHz):

The unique identification number is shown on the **RUD-ID-POINT®** which is then displayed on the integrated LCD-display. The data can be transferred to any end device capable for Bluetooth 15 metres away.

RUD-ID-NET®



The **RUD-ID-NET®** application (software) has many advantages; it is easy to use, requires no digital maintenance and ensures you manage inspections of products effectively.

- It enriches your data by providing detailed product information, inspection dates, test reports and automatic test reminders to selected employees. The benefits are endless.
- Product information and documentation such as inspection reports and product data can be easily accessed via the RUD web portal.
- Upgradeable software for different work equipment which has to be inspected regularly (f.e. work platforms, roller shutter).

