

### pewag Choker Chains and Rope Pulleys

**Transport on ground course** 







3

#### Content

# Forestry chains and components for safely pulling loads over the ground

Unique to pewag are the special choker profiles providing maximum grip and bearing surfaces for easy chain adaption without reduction of the tensile force during usage.

The hauling of timber requires a high level of safety. For that purpose you can find our sophisticated and innovative products here.

pewag group	
Welcome to the pewag group History, quality management Business areas, environment Customer proximity	4–5 6 7 8
Choker chains in G10	
Informations for choker chains Assembled choker chains G10 Accessories for choker chains G10	12 13 16
Choker chains in G8	
Assembled choker chains G8 Accessories for choker chains G8	22 23
Rope pulleys	
Rope pullyes Rope glider	28 31
User manual	
General, assembly Restrictions in the usage cause Tests, elimination criteria	34 34 35

Content

#### Welcome to the pewag group

We are an internationally operating group of companies. Our track record goes back to the year 1479.

#### Mission Statement pewag group's Mission Statement expresses the goals of our actions as follows:

Because of our joy and determination to innovate, we at pewag group strive to manufacture the world's best products wherever we compete – today and in the future. The high quality of our products and services, as well as the passionate performance of our employees are our biggest assets to reach excellence and total customer satisfaction.

#### Principles of pewag group

#### Leading in Quality

The values of our premium product brands are demonstrated by our first class quality and innovations and are communicated consistently and coherently.

We anticipate market demands and changes in the environment and adapt our strategies, organizations and actions accordingly to satisfy our customers' needs through providing the best value for the money; timely delivery; efficient and obliging service.

#### Leading in Responsibility

We commit ourselves to careful treatment of the environment, by reducing the use of energy and raw materials, ensuring the longevity of our products and making them recyclable.

We value an open, honest and team-oriented work-style, which is based on transparent communication honoring ideas, opinions and experience of our employees as valuable inputs for our decision making process.

We strive for stable and fair partnerships with our employees, customers, suppliers and other business partners and take social aspects into consideration when making business decisions.

#### Leading in Technology

We secure our technological leadership through highest product quality, constant improvements and innovations of products, as well as manufacturing processes.

We are dedicated to keep on top of product technology. This ensures that our customers always have the best solutions available and that we expand and protect our market position.

#### Leading in Economics

In all our processes we use due diligent business practices and efficiency and strive to improve these continuously.

In the long-term, we will continuously increase our economic performance to raise corporate value, achieve sustained growth and thus secure a successful future of the organization.



We are a modern group of companies which looks back to a tradition and experience of more than 500 years. Since our founding years, a lot has changed, but the values that made our success possible from the beginning remain.



# History of the pewag group

#### Quality management

#### Advantage through tradition

The history of pewag group goes back to the 15th century and therefore makes us the oldest chain manufacturer worldwide. With our experience we are ready for the future.

#### Timetable of important events

1479 First documented references of a forging plant in Brückl

1787 Foundation of a chain forge in Kapfenberg

1803 Foundation of a chain forge in Graz

1836 Establishment of an iron casting plant in Brückl

1912 Production of the first snow chain in the world

**1923** Merger of plants in Graz and Kapfenberg – Creation of the name "pewag"

1972 Foundation of a sales company in Germany

1975 Foundation of a sales company in the USA

1993 Foundation of pewag austria GmbH

1994 Foundation of the first subsidiary in Czech Republic

1999 Acquisition of the Weissenfels Group

2003 Separation from the Weissenfels Group

2005 Reorganization into 2 groups:

Schneeketten Beteiligungs AG Group – Snow Chains pewag austria GmbH Group – Technical Chains

2009 Acquisition of Chaineries Limousines S.A.S.



Lithography forging plant Brückl 1855



Anchor chain forge 1878



Chain forgers 1956

## Our ultimate goal is to achieve customer satisfaction

To reach this goal, the quality management of the pewag group is determined by the principle: "We supply our customers with high-quality products which fully meet technological standards and its usage requirements," this is summarized in the four following mandatory principles:

#### Market oriented quality

To maintain and improve its competitive position, the quality of products and services of the pewag group must meet both the specifications of our customers and the standards one can expect from the technological leader in the industry.

#### **Economic quality**

As a profit-oriented company, the quality is also determined by the material used, labour costs and financial possibilities, i.e. also within the framework awarded by the customer.

#### Responsibility for Quality

Quality management is the task and obligation of executives at all levels. Every employee of the pewag group has to be integrated by management in the preparations, execution and evaluation of the quality management measures.

Every employee takes the responsibility for the quality of his work.

#### Process oriented quality assurance

The close interaction between sales, product development, production and customer service is regulated within the individual companies by fixed processes and activities, as well as responsibilities with the aim to reach and maintain the defined quality standards.







#### Business areas

# Environment – we take responsibility

# Working with pewag products

The pewag group has a substantial and diverse spectrum of products and services.

Our range of products varies from traction chains for tires (snow chains for passenger cars, trucks and special-purpose vehicles, tire protection chains for mining vehicles) over different industrial chains to products for the do-it-yourself sector (light chains, belts, etc.)



Segment A
Snow and forestry
chains



Segment B Hoist and conveyor chains



Segment C Do-it-yourself



Segment D Engineering



Segment F Lifting and lashing chains and accessories



Segment G
Tire protection chains

## Ecological awareness in all areas



We continuously strive to keep the influence of our business on the environment as low as possible. Our production and warehousing is organized so that all legal requirements on environmental protection are fulfilled. Furthermore, we consider ecological aspects for our product

development, processes and distribution channels and include these in our business planning.

Consequently, we are permanently striving for a continuous improvement and development of our established products to reach higher load capacities and safety for our customers with lighter weights and longer life spans.

Wherever we cannot avoid an environmental impact, we strive to reduce the use of energy, environmentally harmful emissions and keep the production of waste to a minimum. When investing in new machines, we consider the technically most adequate and economically feasible state-of-the-art designs for their designated area of

Our environmental management is certified according to ISO 14001:2004. Regular internal audits assist to supervise compliance, test the effectiveness of our set standards and serve as a basis to determine improvement potentials.

Out of this long-lasting tradition, we take responsibility for our products, employees, our sites and the environment very seriously.

We commit to comply with all environment-related regulations and continually improve our performance for the environment by defined goals. For that purpose, we use modern production technologies. We enhance the ecological awareness of our employees by regular trainings.

We engage with our customers, neighbours and government agen-cies in an open communication and inform them about our environmental management wherever appropriate.

By providing advice, we want to inform our customers about the environmental aspects related to the use of our products – especially their long life spans. We are striving to motivate our customers and suppliers to consider environmental protection in their sphere of influence and use the same environmental standards as we do.

#### Customer proximity

#### International presence

In the ambitious five-hundred year history pewag has evolved from a small and modest company to a global organization with several subgroups.

With 8 production and 26 sales and other locations on the continents of Europe, America and Africa pewag documented its claim as the world's number one chain manufacturer.

In addition to the numerous locations pewag as an international company relies on his capillary, strong, and professional partner network. These collaborations provide optimal customer service in currently more than 100 countries around the world.

#### Production and sales locations

Europe	
Austria	pewag austria GmbH, Graz pewag austria GmbH, Kapfenberg pewag Schneeketten GmbH & Co KG, Graz pewag Schneeketten GmbH & Co KG, Brückl pewag engineering GmbH, Kapfenberg AMW Grünberger Handelsgesellschaft mbH, Wien pewag Ketten GmbH, Klagenfurt pewag International GmbH, Klagenfurt
Germany	pewag Deutschland GmbH, Unna pewag Schneeketten Deutschland GmbH, Unna
France	J3C SAS pewag France, Seyssins Chaineries Limousines SAS, Bellac Chaineries Limousines SAS, Limoges
Italy	pewag italia srl, Andrian
Nederland	pewag nederland BV, Hillegom APEX International BV, Hillegom Interparts Industrie Mij BV, Hillegom

Poland	pewag polska Sp. z o.o., Buczkowice
Russia	OOO "PEWAG", Moscow OOO "pewag russia", Moscow
Sweden	pewag sweden AB, Emmaboda
Slowakia	pewag slovakia sro, Nitra
Czechia	Řetězárna Česká Třebová sro, Česká Třebová pewag sro, Vamberk
Ukraine	TOV pewag Ukraine, Lviv
North Ameri	са
USA	pewag Inc, Bolingbrook, Illinois
	pewag Inc, Rocklin, California
Africa	
South Africa	HMV Engineering (Pty) Ltd, Houghton



pewag group presents itself on the internet. More ... www.pewag-group.com www.pewag.com



Content 10

#### Choker chains in G10

Information for choker chains	12
Assembled pewag choker chains G10	13
Accessories for pewag choker chains G10	16





# **Choker chains**

# in G10 **Product overview**



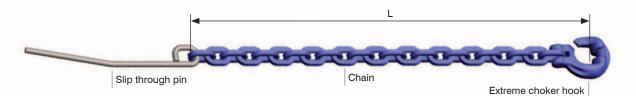
## Information for choker chains

The safety in the usage is the result of quality-controlled manufacturing according to ISO 9001. All chains and components will be specially tested. Research results from the chain sling production currently give us optimized material- and heat treatment processes.

The special choker-profile of pewag chains guarantee best grip also after rough usage. Due to the highest material strength we can guarantee a maximum of tensile force with smaller and lighter G10 chains – and a reduction of weight of approx. 25% in comparison to commercially available G8 pewag choker chains. The continuous building block system enables an easy assembling and repair without any specialty tool, also on site.

Please take note of the user manual in the appendix!





#### Sliding shoe GBGV 7/8

Connecting element between choker chain of dimension 7 respectively 8 and the rope winch.

#### **GBGV 7/8**

Sliding Nominal diameter (appropriate for chain with dimension 7 and 8)



GBGV: Please order separately in the appropriate dimension.



#### Joker V D-XF choker chain

Choker chain with extreme choker hook XF + slip through pin
Easy building of choker slings without reduction of the tensile force
thanks to the special design of the XF choker hook.
High tensile chain with unique Joker profile.

	Code	Tensile force 1	Dimension dn	Length <sup>2</sup>	Weight
Joker V D-XF choker chain		[daN]	[mm]	[mm]	[kg/pc.]
	Joker V 7 D-XF 2000	4.500	7	2.000	3,20
	Joker V 7 D-XF 2500	4.500	7	2.500	3,90
( ): Commence of the commence	Joker V 8 D-XF 2000	6.000	8	2.000	3,90
	Joker V 8 D-XF 2500	6.000	8	2.500	4,70

<sup>&</sup>lt;sup>1</sup> Thanks to the new extreme choker hook XF there is no reduction of the tensile force necessary.

#### Joker V D-KSRV choker chain

Choker chain G10 with clevis choker hook KSRV + slip through pin Shortening possibility thanks to the sliding shoe GBV or GBG-V. Allows easily passage of the chain underneath the trunks with the slip through pin D. The clevis choker hook KSRV makes it easy to form and open choker slings. High tensile tested chain.

Joker V D-KSRV choker chain	Code	Tensile force <sup>1</sup> [daN]	Tensile force [daN]	Dimension dn [mm]	Length <sup>2</sup> [mm]	Weight [kg/pc.]
(Approximation of the second	Joker V 6 D-KSRV 2000	3.250	2.600	6	2.000	2,20
	Joker V 6 D-KRSV 2500	3.250	2.600	6	2.500	2,60
Commonwed A	Joker V 7 D-KSRV 2000	4.500	3.600	7	2.000	3,00
	Joker V 7 D-KSRV 2500	4.500	3.600	7	2.500	3,70
	Joker V 8 D-KSRV 2000	6.000	4.800	8	2.000	4,50
	Joker V 8 D-KSRV 2500	6.000	4.800	8	2.500	5,30
	Joker V 10 D-KSRV 2500	8.500	6.800	10	2.500	6,90
	Joker V 10 D-KSRV 3000	8.500	6.800	10	3.000	8,10

<sup>&</sup>lt;sup>1</sup> Application difficulties are not considered e.g. shear effect in the GB or KSR.

<sup>&</sup>lt;sup>2</sup> Length without slip through pin.

<sup>&</sup>lt;sup>2</sup> Length without slip through pin.

#### Joker V KCOV-XF choker chain

Choker chain G10 with sliding hook KCOV + extreme choker hook XF

The sliding hook can be hung into the rope easily without any assembly work. The extreme choker hook XF makes it easy to form and open the choker slings. High tensile tested Joker V chain in grade 10. No shortening possible.

Joker V KCOV-XF choker chain	Code	Tensile force <sup>1</sup> [daN]	Dimension dn [mm]	Length [mm]	Weight [kg/pc.]
	Joker V 7 KCOV-XF 1500	4.500	7	1.500	2,80
	Joker V 7 KCOV-XF 2000	4.500	7	2.000	3,40
	Joker V 8 KCOV-XF 2000	6.000	8	2.000	4,10
	Joker V 8 KCOV-XF 2500	6.000	8	2.500	4,90

<sup>&</sup>lt;sup>1</sup> Thanks to the new extreme choker hook XF there is no reduction of the tensile force necessary.

#### Joker V KK-KSRV choker chain

Marcon Co.

#### Choker chain G10 with head KK + clevis choker hook KSRV

Clevis swivel head KK for quick hanging into the rope gliding eye. The clevis choker hook KSRV makes it easy to form and open choker sling. High tensile tested Joker V chain in grade 10. No shortening possible.

F 1 A13			
[daN]	[mm]	[mm]	[kg/pc.]
6.800	10	2.000	5,40
6.800	10	2.500	6,55
	6.800		



#### WINF IA-P Multipurpose chain G10

High tensile tested chain, grade 10, with master link and grab hook for shortening of the chain and forming of slings, which shall not tighten up. May not be used for lifting!

	Code	Tensile force	Dimension	Length .	Weight
MANERA BAR III			dn	1	F1 / 7
WINF IA-P Multipurpose chain G10		[daN]	[mm]	[mm]	[kg/pc.]
Q	WINF 7 IA-P 2500	3.800	7	2.500	3,50
	WINF 7 IA-P 4000	3.800	7	4.000	5,30
	WINF 8 IA-P 2500	5.000	8	2.500	4,70
	WINF 10 IA-P 5000	8.000	10	5.000	13,50

#### WINF IA-P-P Multipurpose chain G10

High tensile tested chain, grade 10, with master link and grab hook for shortening of the chain and forming of slings, which shall not tighten up. May not be used for lifting!

	Code	Tensile force	Dimension dn	Length I	Weight
WINF IA-P-P Multipurpose chain G10		[daN]	[mm]	[mm]	[kg/pc.]
<b>4</b>	WINF 7 IA-P-P 2500	3.800	7	2.500	3,90
	WINF 7 IA-P-P 4000	3.800	7	4.000	5,70
	WINF 8 IA-P-P 4000	5.000	8	4.000	7,40
	WINF 10 IA-P-P 5000	8.000	10	5.000	14,30

#### Joker V G10 profile steel chain

Patented profile, highest tensile force, best wear-resistance. Highest grip traction thanks to joker profile with "resharpening edges". The hardness test shows: clear distinct "grip markings" on the hardwood in comparison to the square chain.

	Code	Dimension dn	Standard length	Length t	Inside width b1 min.	Outside width b2 max.	Tensile force	Breaking load	Weight
Joker V G10 profile steel chain		[mm]	[m]	[mm]	[mm]	[mm]	[daN]	[kN]	[kg/m]
dn b1 min b2 max	Joker V 6	6	50	20	9	24	3.250	65	1,01
	Joker V 7	7	50	24	10	28	4.500	90	1,35
	Joker V 8	8	50	28	12	32	6.000	120	1,79
H	Joker V 10	10	50	35	14	37	8.500	170	2,55

#### XF Extreme choker hook

Alternative for KSRV7 and KSRV 8. Thanks to a special design a reduction in the permissible tensile force is not necessary in case of choking.

XF Extreme choker hook	Code	Tensile force [daN]	d [mm]	e [mm]	s [mm]	Weight [kg/pc.]
	XF 7	4.500	9	55	10	0,60
d d	XF 8	6.000	10	55	10	0,60
e						

#### KSRV Clevis choker hook

Allows an easy hanging and taking out of the chain. Designed to prevent the chain from slipping out.

KSRV Clevis choker hook	Code	Tensile force [daN]	d [mm]	e [mm]	s [mm]	Weight [kg/pc.]
-	KSRV 6	3.250	7,4	43	8	0,22
d↑	KSRV 7	4.500	9	58	10	0,32
s	KSRV 8	6.000	10	59	10	0,38
e e	KSRV 10	8.500	12,5	81	12	0,76



#### D Slip through pin

Allows easily passage of the chain underneath the trunks.

D Slip through pin	Code	d [mm]	l [mm]	Weight [kg/pc.]
I 3	D 5/6	7	250	0,10
id 7	D 7/10	9,5	220	0,18

#### **GBGV Sliding shoe**

The hardness test shows: under severe conditions that the pewag sliding shoe is no longer the weakest part in the chain. Thanks to its optimal design it ensures the chain protection. No reduction of the chain values compared to the normal sliding shoe. The chain can be hung on both sides – therefore a maximum safety for personal and equipment is guaranteed. Please tighten the nut only as far as the screw is still moveable.

	Code	Tensile force	d	w	I	Weight
GBGV Sliding shoe		[daN]	[mm]	[mm]	[mm]	[kg/pc.]
→ Aw	GBGV 7/8	6.000	34	20	145	0,61
	GBGV 10	8.500	42	36	208	1,38

Please note the safety instructions in the appendix.

#### **GBV Sliding shoe**

Sliding shoe – pewag choker chains to be hung up only from the correct side into the plate – see safety instructions!

Please tighten the nut only as far as the screw is still moveable.

	Code	Max. tensile	d	w	α	Weight
GBV Sliding shoe		[daN]	[mm]	[mm]		[kg/pc.]
<u>4 w</u>	GBV 6	3.250	30	20	45°	0,40



<sup>&</sup>lt;sup>1</sup> Please note the safety instructions in the appendix.

#### **KCOV Sliding hook**

Used as sliding hook on the rope of the winch. Due to its slot the rope can be hang up and demounted quickly. An easy accommodation of the equipment in the rope is constiuted by the actual demand.

KCOV Sliding hook	Code	Tensile force [daN]	d [mm]	e [mm]	s [mm]	b [mm]	Weight [kg/pc.]
d_	KCOV 7	4.500	9,0	87,5	16,5	36,0	0,78
	KCOV 8	6.000	10,0	87,0	16,5	36,0	0,78
	KCOV 10	8.500	12,5	85,5	16,5	36,0	0,78
e							

# GBGK Sliding shoe for synthetic rope

For textile forestry ropes – optimized rounded contact-radii to preserve the rope. Completely assembled with restoring plate for choker chains diameter 7 and 8 mm.

GBGK sliding shoe for synthetic rope	Code	Tensile force [daN]	For chain	Rope-ø max. [mm]	Length [mm]	Weight [kg/pc.]
	GBGK 7/8	6.000	7 + 8	14	170	0,72



#### SEL 08 Rope end cap

For high-performance rope winches, universally thanks to a pin access. Accurate shortening ear to be ordered separately. Please take note of the safety instructions. Please tighten the nut only as far as the screw is still moveable.

	Code	Tensile force <sup>1</sup>	Rope-ø	Length	Weight
SEL 08 Rope end cap		[daN]	[mm]	[mm]	[kg/pc.]
	SEL 08	6.000	8–12	165	1,10



<sup>&</sup>lt;sup>1</sup> In case of ground course. Please note the safety instructions in the appendix.

#### **Shortening plate to SEL 08**

With a special masterlink for the pin access to SEL 08. Can be hung on both sides of the chain in compliance with the tensile force!

	Code	Tensile force <sup>1</sup>	for chain	Length I	Weight
Shortening plate to SEL 08		[daN]		[mm]	[kg/pc.]
writing.	Shortening plate to SEL 08	6.000	7 + 8	135	0,40



<sup>&</sup>lt;sup>1</sup> Please note the safety instructions in the appendix.

Maximum tensile force: 6000 daN depending on dimension and grade of the chain.

#### Replacement-cotter to SEL 08

Original replacement-part can be used also for former rope end caps SER.

	Code	Tensile force	Length	Weight
Replacement-cotter to SEL 08		[daN]	[mm]	[kg/pc.]
	Replacement-cotter to SEL 08	-	100	0,20



Content 20

#### Choker chains in G8

Assembled choker chains G8	22
Accessories for choker chains G8	23





# **Choker chains** in G8



#### VKF D-KSR Choker chain

High-tensile tested Chain VKF in grade 8. The clevis choker hook KSR makes it easy to form and open choker slings. Allows easily passage of the chain underneath the trunks with the slip through pin D. Shortening possibility thanks to the sliding shoe GB.

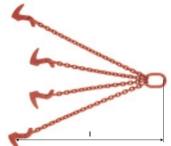
VKF D-KSR Choker chain	Code	Tensile force <sup>1</sup> [daN]	Tensile force [daN]	Dimension dn [mm]	Length <sup>2</sup>	Weight
VKF D-KSh Cliokei Clialli	VIVE 7 D VOD 4500				[mm]	[kg/pc.]
(AMERICAN PARAMANENTAN)	VKF 7 D-KSR 1500	3.250	2.600	7	1.500	2,30
Commence of the same of the sa	VKF 7 D-KSR 2000	3.250	2.600	7	2.000	2,90
(2000	VKF 7 D-KSR 2500	3.250	2.600	7	2.500	3,50
	VKF 8 D-KSR 2000	4.500	3.600	8	2.000	3,80
	VKF 8 D-KSR 2500	4.500	3.600	8	2.500	4,60

<sup>&</sup>lt;sup>1</sup> Application difficulties are not considerd e.g. shear effect in the GB or KSR.

#### **BSK Log trailing chain**

High tensile tested, grade 8 chain with forged steel hooks. Available with 4 legs and 6 legs. The hooks with links are also available separately.

	Code	Tensile force	Dimension dn	Length	Weight
BSK Log trailing chain		[daN]	[mm]	[mm]	[kg/pc.]
/	BSK 8 - 4 legs	4.000	8	1.000	6,40
and the same of th	BSK 8 - 6 legs	4.000	8	1.200	10,50



Length without slip trough pin.



#### VKF G8 Square section chain

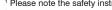
Particularly better grip than the round steel chain. Proven over many years.

VKF G8 Square sectio	n chain	Code	Dimen- sion dn [mm]	Standard length [m]	Pitch t [mm]	Inside width b1 min. [mm]	Outside width b2 max. [mm]	Tensile force [daN]	Breaking load [kN]	Weight [kg/m]
dn b1 min ↓	b1 min ↓	VKF 7	7	50	24	10	26	3.250	65	1,23
		VKF 8	8	50	28	11	29	4.500	90	1,66

#### **GB Sliding shoe**

Easy assembling on the rope. VKF chain can only be hung up from the correct side into the sliding shoe – see safety instructions! Please tighten the nut only as far as the screw is still moveable.

GB Sliding shoe	Code	Tensile force max. <sup>1</sup> [daN]	w [mm]	α	Weight [kg/pc.]
	GB 5/6*	2.240	20	80°	0,40
	GB 7/8 GL	4.500	20	45°	0,65
	¹ Please note the safety instructions in	the annendix			



<sup>\*</sup> Discontinued model

#### **GBD Sliding shoe swiveable**

The swivel avoids the jolleying of the chain resp. rope. pewag choker chains to be hung up only from the correct side into the plate – see safety instructions!

	Code	Tensile force	for chain	w	α	Weight
GBD Sliding shoe swiveable		[daN]		[mm]		[kg/pc.]
- (B)	GBD 7/8	4.500	7 + 8	20	45°	0,70



 $<sup>^{\</sup>mbox{\tiny 1}}$  Please note the safety instructions in the appendix.

#### **GOS Sliding lug for choker rope**

Due to tempered cast steel, it has a high breaking force and wear resistance at a small weight.

		Code	Tensile force	Rope-ø	d	b	1	Weight
			max.	max.				
GOS Sliding lug fo	r choker rope		[daN]	[mm]	[mm]	[mm]	[mm]	[kg/pc.]
		GOS choker	6.000	14	30	17	91	0,34



original ESCO Choker

#### **GO Sliding lug**

Made of tempered cast steel with a big and wide eye part – rope protective. With access for the clevis swivel head KK. Can also be used for slings with compressed clips.

GO Sliding lug	Code	Tensile force max. [daN]	d [mm]	d1 [mm]	Weight [kg/pc.]
<u>d</u>	GO 10	7.000	30	30	0,73



#### KK Clevis swivel head

Connecting part of the chain with the GO sliding lug. Only swiveable in the sliding lug when not loaded.

	Code	Tensile force max.	d	d <sub>1</sub>	Weight
KK Clevis swivel head		[daN]	[mm]	[mm]	[kg/pc.]
T-10-11-11-11-11-11-11-11-11-11-11-11-11-	KK 10	7.000	13	27	0,32
d1					

#### **SGS Sliding hook**

For the assembly on ropes and for hanging up trailing chains and rope slings. Type SG without safety latch is available subject to demand.

GS Sliding hook	Code	Tensile force [daN]	Rope-ø max. [mm]	d [mm]	g [mm]	g1 min. [mm]	Weight [kg/pc.]
	SGS 13	3.000	13	16	25	17	0,69
g	SGS 16	5.000	16	22	26	17	0,97



Economical and approved for decades – pewag choker chains and components in G8. For higher demand, we recommend our innovative G10 pewag choker chains programme.



Content 26

#### Rope pulleys

Rope pullyes 28 Rope glider 31





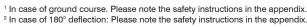
## Rope pulleys



#### SRL Rope pulley open

Deflection pulley for winch rope for trailing and choking in tight woods. Steel roller with ball bearings, electro galvanized. With connecting element for tree protection device. The rope can be inserted directly.

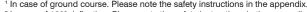
	Code	Tensile force 1	Winch tensile force max. <sup>2</sup>	Pulley-ø	Rope-ø max.	Weight
SRL Rope pulley open		[daN]	[daN]	[mm]	[mm]	[kg/pc.]
	SLR 10	2.500	1.250	100	10	3,18
	SRL 14	5.000	2.500	140	14	5,80
	SRL 16	10.000	5.000	160	16	7,85



#### **SRLK Rope pulley with** side opening plate

Roller made of steel, electro galvanized with ball bearings and plastic coated side plates. Simple insertion of the rope thanks to flap mechanism.

	Code	Tensile force 1	Winch tensile	Pulley-ø	Rope-ø	Weight
SRLK Rope pulley with side opening plate		[daN]	force max. <sup>2</sup> [daN]	[mm]	max. [mm]	[kg/pc.]
	SRLK 14	5.000	2.500	156	12	5,40
	SRLK 16	8.000	4.000	157	12	7,60
	SRLK 18	8.000	4.000	190	16	9,00
	SRLK 22	13.000	6.500	220	16	13



 $<sup>^{\</sup>rm 1}$  In case of ground course. Please note the safety instructions in the appendix.  $^{\rm 2}$  In case of 180° deflection: Please note the safety instructions in the appendix.



# SRLF Rope pulley with rigid side plates

Roller made of steel, electro galvanized, with ball bearing and plastic-coated side plates. With captive screw plug.

SRLF Rope pulley with	Code	Tensile force <sup>1</sup>	Winch tensile force max. <sup>2</sup>	Pulley-ø	Rope-ø max.	Weight
rigid side plates		[daN]	[daN]	[mm]	[mm]	[kg/pc.]
	SRLF 9	3.000	1.500	90	10	1,70
( @	SRLF 13	5.000	2.500	130	14	3,70
	SRLF 16	16.000	8.000	159	14	6,40
	SRLF 24	24.000	12.000	240	16	19,00

<sup>&</sup>lt;sup>1</sup> In case of ground course. Please note the safety instructions in the appendix.

# SRL-GBGV Rope pulley with sliding shoe

Can be assembled on the winch instead of the first sliding shoe. Facilitates simple and fast switching e.g. thinning out of the wood.

	Code	Tensile force <sup>1</sup>	Winch tensile	Pulley-ø	Rope-ø	Weight
SRL-GBGV Rope pulley with sliding shoe		[daN]	force max. <sup>2</sup> [daN]	[mm]	max. [mm]	[kg/pc.]
	SRL-GBGV 7/8	6.000	3.000	49	10	1,24



<sup>&</sup>lt;sup>1</sup> In case of ground course. Please note the safety instructions in the appendix.

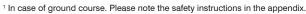
<sup>&</sup>lt;sup>2</sup> In case of 180° deflection: Please note the safety instructions in the appendix.

<sup>&</sup>lt;sup>2</sup> In case of 180° deflection: Please note the safety instructions in the appendix.

#### **SRLB Rope pulley with** movable side plates

Roller made of steel, electrogalvanized with ball bearing. Side plates with plastic coated eyelets. Rope assembly by twisting the side plates.

SRLB Rope pulley with movable side plates	Code	Tensile force <sup>1</sup> [daN]	Winch tensile force max. <sup>2</sup> [daN]	Pulley-ø [mm]	Rope-ø max. [mm]	Weight [kg/pc.]
	SRLB 10/15	3.000	1.500	105	15	1,90
	SRLB 14	6.000	3.000	140	14	4,30
	SRLB 16	12.000	6.000	174	16	7,10

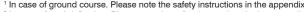


 $<sup>^{\</sup>rm 2}$  In case of 180° deflection: Please note the safety instructions in the appendix.

#### **SRLA Rope pulley for** automatical removal

Appropriate for persons working alone. Automatical change of direction when pulling. The rope falls out of the pulley by hitting the sliding shoe.

SRLA Rope pulley for	Code	Tensile force <sup>1</sup>	Winch tensile force max. <sup>2</sup>	Pulley-ø	Rope-ø max.	Weight
automatical removal		[daN]	[daN]	[mm]	[mm]	[kg/pc.]
	SRLA 10	5.000	2.500	100	14	5,80



 $<sup>^{\</sup>rm I}$  In case of ground course. Please note the safety instructions in the appendix.  $^{\rm 2}$  In case of 180° deflection: Please note the safety instructions in the appendix.





#### **SRLKG Rope pulley with** side opening plate

Casing made of cast aluminium. Roller made of hardened steel. Simple insertion of the rope thanks to flap mechanism – easy closure.

SRLKG Rope pulley with side opening plate	Code	Tensile force <sup>1</sup> [daN]	Winch tensile force max. <sup>2</sup> [daN]	Pulley-ø [mm]	Rope-ø max. [mm]	Weight [kg/pc.]
	SRLKG 8	2.000	1.000	80	8	1,00
A.	SRLKG 14	4.000	2.000	130	14	2,80

 $<sup>^{\</sup>rm 1}$  In case of ground course. Please note the safety instructions in the appendix.  $^{\rm 2}$  In case of 180° deflection: Please note the safety instructions in the appendix.

#### SG Rope glider with roller

Pressed steel and case-hardened, electro galvanized.

	Code	Tensile force 1	Inside-ø	Rope-ø	Weight
		[daN]		max.	
SG Rope glider with roller			[mm]	[mm]	[kg/pc.]
	SG	2.000	90	14	1,80



<sup>&</sup>lt;sup>1</sup> In case of ground course. Please note the safety instructions in the appendix.

Content 32

#### User manual

General, assembly	34
Restrictions in the usage cause	34
Tests, elimination criteria	35





#### **User manual**

pewag choker chains and rope pulleys



#### User manual

User information for the usage, storage, testing and maintenance of pewag choker chains and forestry accessories.

#### General

pewag choker chains and forestry accessories can be used in a wide range of forestry. In the case of normal use they offer a high level of security and a long life time. Property and personal injuries can be avoided only by normal use. Reading and understanding of our user information is a requirement for the use of choker chains, but on the other hand it does not exclude responsible and foresighted acting with all trailing procedures.

## Changing of the original state of the delivery

The original state may not be changed e.g. through bending, sharpening, separating of parts, welding, fitting of boreholes, marking etc. Exception: Slip through pin D. Do not remove safety-related parts such as bolting devices, safety lock pins or safety latches etc. Surface covers such as a hot-dip galvanizing and electronic galvanization may not be fitted to pewag choker chains and accessories. Leaching and/or etching are likewise dangerous processes and must be agreed with pewag.

If necessary, please get in contact with our technical service department.

## Assembly of pewag choker chains

pewag choker chains and accessories may only be assembled by a competent person with accessories and chains of our pewag forestry programme. In case of assembling, please only use the original provided parts (bolts, safety lock pins etc). pewag is offering the choker chains in grade 8 and grade 10, which differ in the colour: red = grade 8; blue = grade 10. The combination of chains and accessories of different grades and/or other manufacturers is only conditionally possible and must be checked, accomplished and accounted for in each individual case by a competent person. pewag is not liable for damage, which develops from such combinations. In each case, it is to be made certain that the applied tensile force is adapted to the weakest part in the pewag choker chain.

Please tighten the nut of the sliding shoes only as far as the screw is still moveable.

# Restrictions in the usage cause of environmental influences and/ or endangering conditions

Do not exceed the maximum tensile force of the chain, also not if trunks accumulate on an obstacle (stones, rootstock etc.) or if the winch rope is stronger than the tensile force of the chain. Attention: It is valid for safety factor 2 against break! That means that an overload can immediately lead to a break.

The choke hitch (common with choke applications) reduces the maximum tensile force of the chain by 20%. Exception: Extreme choker hook XF.



Sliding shoes can reduce the maximum tensile force.

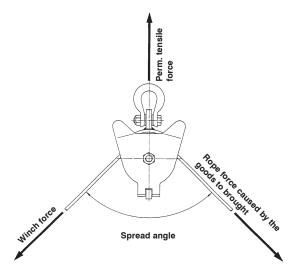
Incorrect! Mounted chain	Correct! Mounted chain
Tension side	
Tens	

	Reduction of per- missible tensile force correctly mounted chain to	Reduction of per- missible tensile force incorrectly mounted chain to
45° angle	75%	60%
80° angle	75%	60%
GBGV	100%	not possible



The spread angle of the deflected rope has a decisive influence on the load of the deflection pulley, which results in the following permissible force of the winch:

Spread angle	Winch force
II 0°	0,50 x perm. tensile force
∕ 90°	0,70 x perm. tensile force
120°	1,00 x perm. tensile force



The rope stores much energy during tensile load. With overloading and break the rope can shoot up in the air and can injure persons. Therefore please do not stay in the hazard area!

Choose sufficient strongly dimensioned choker chains. The indicated values in this catalogue are valid only for horizontal tension. Do not use pewag choker chains and components for lifting.

#### Influences by temperature

pewag choker chains can be used without temperature-dependant reduction of the max. permissible tensile force within a range of -30°C to +100°C. We ask for consultation in case of applications outside of this range.

#### Influences by edges

The maximum permissible tensile force of pewag choker chain has been determined on the base, that the load of the chain takes place in a straight tension, i.e. they are not led around edges. If chains are led around edges without the necessary protection, the maximum tensile force is reduced. See enclosed table.

Edge load	R = bigger than the 2x chain-ø	R = bigger than chain-ø	R = chain-ø or smaller
Load factor	1	0,7	0,5

#### Influences by acids, leaches and chemicals

Use pewag choker chains and accessories neither in acids/ caustic solutions nor suspend them to their steams. Attention: Certain production procedures set acids and/or steams free.

#### **Endangering conditions**

The classification of the max. permissible tensile force in this catalogue assumes no particularly endangering conditions are present. These are e.g. very steep and pathless areas, proximity to buildings and roads etc. In this case, you have to choose a higher safety i.e. to use stronger chains and accessories. Important information: Do not load the hook point!

# Incorrect! Correct! Tests

In front of the first handling of a pewag choker chain and/or accessory it should be guaranteed that:

- the pewag choker chain and/or the accessory exactly corresponds to the order (marking)
- all safety-related parts such as bolting devices, safety lock pins, safety latches etc. are present
- this manual is present and was read and understood by the personnel

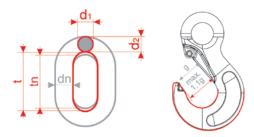
Check chains visually before using them for obvious damage or manifestations of wear. In each case of doubt/and or when damages are present or unusual events (e.g. strong shock loading), take the chains out of operation. Abrasion and damages can considerably reduce the permissible tensile force.

#### Elimination criteria for the visual inspection

- broken part
- elongation of the chain. The chain must be discarded if t > 1,05 t<sub>n</sub>
- wear is determined as the mean value of two measurements of diameters d<sub>1</sub> and d<sub>2</sub> carried out at a right angle (see picture). The chain must be discarded if

$$dm = \frac{d_1 + d_2}{2} \le 0.9 dn$$

In case of wear of the edges, the chain has to be withdrawn, if
 d < dn</li>



- cuts, notches, grooves, surface cracks, excessive corrosion, discoloration due to heat, signs of subsequent welding, bent or twisted links or other flaws
- cracks: Chains with cross-cracks that are visible to the naked eye must be discarded
- missing or non-functional safety device (safety catches if fitted) as well as signs of widening or twisting of hooks, i.e. noticeable enlargement of the opening or other forms of deformation. The enlargement of the opening must not exceed 10% of the nominal value

#### Elimination criteria:

Nomination	Measure	Max. permissible change
Chain	dn	-10%
	tn	+5%
Choker pin	d	-10%
Hook*	е	+5%
	g, g1, s	+10%
Sliding shoe GB, GBV	Change of angle	>5%
Sliding shoe GBGV	Change of angle	>5%
Rope end cap SEL	Diameter of bore hole	+10%
Rope pulley	Parallelism of the side plates to the roller	Not visible

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  XF, KSR-V, KCO-V, SGS, Swivel hook fitted in wire rope pulleys.

#### Maintenance

The maintenance of pewag choker chains may take place only by a competent person.

#### Stocking

pewag choker chains should be stored cleaned, dried and protected from corrosion e.g. easily oiled.

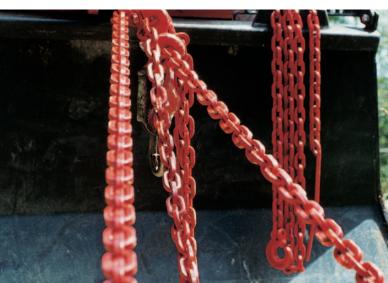
pewag choker chains and rope pulleys in use.













pewag tex lifting tapes and round slings for the professional use in the field of load securing and lifting purposes.

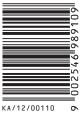




Snow chains for cross-country vehicles. Strong traction for tractors, snow plows and cross-country vehicles.







pewag austria GmbH
A-8605 Kapfenberg, Mariazeller Straße 143, Phone: +43 3862 2990-0, Fax: + 43 3862 2990-700, saleinfo@pewag.com, www.pewag.com

