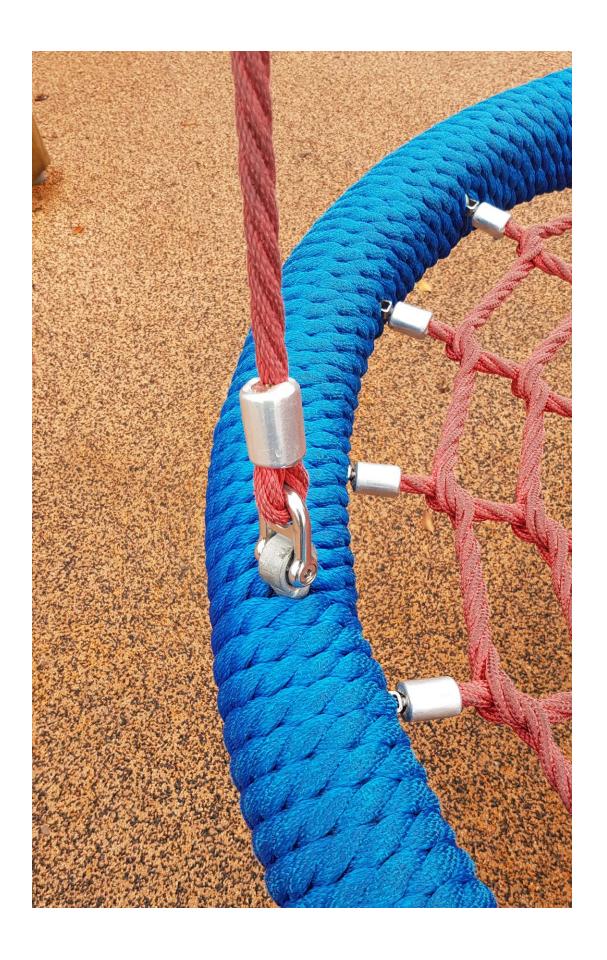


# GERRO™ COMBI Playground Systems

PLAYING SAFE SINCE 1993







# GERRO™ COMBI SYSTEMS

GERRO™ COMBI is a world leading playground system of ferrules to be used together with GERRO™ COMBI combination rope.

The aluminium ferrules ensure a long lifetime and safe environment.

The system is widely used all over the world for applications such as protection nets, playground equipment, sports and leisure, stage and

TALURIT® has been the original since 1948 and it shows.

rigging and even fishing eqipment.

Thanks to the innovative design all GERRO™ COMBI ferrules are swaged with smooth edges. It requires minimum manual grinding to ensure smooth edges and great safety for the end user.

All data regarding load and required pressure is based on extensive testing with our  $GERRO^{TM}$  COMBI combination rope. Maximum load can vary with variations in combination ropes. The load value is stated in kN, where 30 kN is about 3000 kg.

The number in the article number is a reference of combination rope to be used. e.g. GC16-E is for rope diameter 16 mm.





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## **Bolt-joint ferrules** - Aluminium

### GCxx-B, GCxx-BK

The Gerro Combi B and BK ferrules are pressed on the end of a combination rope together with a threaded rod och M10 (or equivalent) eye-bolt on the opposite end of the rope. This feature makes it a great option when attaching netting to a fixed structure. The GCxx-BK is a shorter version of the standard B-version and the perfect choice when you have limited space available or when you need to retro-fit a secure end to an existing fixture.

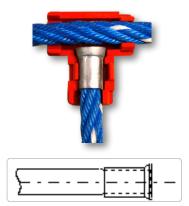
Suitable for both M10 and 3/8" UNC b	bolts.	
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Art no.	Max load approx	Required pressure
GC16-B	15 kN	900 kN
GC16-BK	7 kN	450 kN
GC18-B	20 kN	900 kN
GC18-BK	10 kN	500 kN
GC20-B	20 kN	1200 kN
GC20-BK	10 kN	700 kN



## **T-joint ferrules** - Mild steel GC16-T

The GC16-T is swaged directly on to the combination rope as a type of end stop. The ferrule can then be used in combination with different kinds of net construction systems. A great product for retrofitting and playground maintenance.



Art no.	Max load approx	Required pressure
GC16-T	10 kN	700 kN

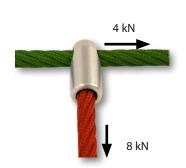


## T-cross joint ferrules - Aluminium

#### **GCxx-TCK**

Our GCxx-TCK is used for quick and easy construction of playground netting where you need a T-cross termination of two ropes.

Before swaging, the rope passing through the ferrule is secured with a screw. It is then swaged in a press die with one rounded pocket end, ensuring a smooth surface. This way it requires minimum manual grinding and great safety for the end user.



Art no.	Max load approx	Required pressure
GC16-TCK	4 kN / 8 kN	500 kN
GC18-TCK	4 kN / 8 kN	500 kN
GC20-TCK	4 kN / 8 kN	600 kN

Note: GC16-SCREW 4,8x50 (bolt 4,8x50 pozidrive)

## Eye ferrules - Aluminium

#### GCxx-E and GCxx-EK

These ferrules are swaged over two rope parts to form an eye. This assembly is perfect for multiple different ways of anchoring. To avoid wear and tear a thimble can be incorporated in the eye. GCxx-E and GCxx-EK are the same kind of ferrule with the EK-version being shorter. The E and EK ferrules are swaged in press dies with rounded pocked ends.

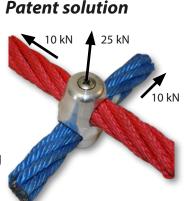
Art no.	Max load approx	Required pressure
GC16-E	30 kN	900 kN
GC16-EK	15 kN	450 kN
GC18-E	35 kN	900 kN
GC18-EK	20 kN	600 kN
GC20-E	50 kN	900 kN
GC20-EK	35 kN	600 kN



## Cross joint ferrules - Aluminium

#### GCxx-C

The innovative GCxx-C is a patented solution to make high quality cross joints on combination ropes. With custom designed press dies and a special Gerro Combi swager it is possible to press this slim cross fixing both on site and in a workshop and achieve high compression, ensuring an extremely safe termination. Before pressing, the ropes are fixed with a screw, which after pressing is non-detachable. Require minimum manual grinding to ensure smooth edges and great safety for the end user.



Art no.	Max load approx	Required pressure
GC16-C	10 kN / 25 kN	50 kN
GC18-C	10 kN / 25 kN	50 kN
GC20-C	10 kN / 25 kN	50 kN

GC16/18-SCREW 4,8x50 (bolt 4,8x50 pozidrive) GC20-SCREW 5,0x55 (bolt 5,0x55 pozidrive)

## Non swage cross joint ferrules - Aluminium GCxx-SCF

This cross ferrule is used to make a cross joint when producing for examples climbing nets. It is designed to be stable and durable and is by anodizing available in different colors. The cross ferrule is mounted with a screw and should not be swaged. It has a very slim and child-friendly design. GCxx-SCF is also available in blue, black or red.

Art no.	Max load approx	
GC16-SCF	1,5kN	
GC16-SCF screw (BOLT 4,2x40, TORX)		





# **Joint ferrules** - Aluminium GCxx-J

The GCxx-J ferrule makes a difficult job simple.

With this special ferrule it is possible to join two ropes end to end with great quality. Require minimum manual grinding to ensure smooth edges and great safety for the end user.

Art no.	Max load approx	Required pressure
GC16-J	15 kN	1000 kN
GC18-J	20 kN	1200 kN
GC20-J*	25 kN	2000 kN

<sup>\*</sup> Can be multi-swaged with a 130T swager

# **Stop ferrules** - Aluminium GCxx-S

Our GCxx-S is swaged directly on the combination rope at any given position to act as a stop. It can also be used as a short end joint, such as the GCxx-J where space might be limited.

The GCxx-S is swaged in a rounded pocket die that requires minimum manual grinding to ensure smooth edges and great safety for the end user.

Art no.	Max load approx	Required pressure
GC16-S	10 kN	500 kN
GC18-S	15 kN	500 kN
GC20-S	15 kN	500 kN

## Chain to rope ferrules - Aluminium GCxx-K

Our new rope to chain connector for situation that demands that extra creativity. Swings, handrails, bridges etc. This new type of connector ensures even greater designs in the playground industry. Compatible with GC16-RMU/RSP rope and 6 mm DIN 766 shortlink A4 chain.

Art no.	Max load approx	Required pressure
GC16-K	20kN	1000kN
GC18-K	20kN	1000kN



# Figure-8 ferrule - Aluminium SYNCRIMP™

of the termination.

SYNCRIMP™ ferrules are manufactured in "figure 8" thin walled extruded aluminium. They are used with hemp, manila, nylon dacron, cotton and all types of fibre or synthetic rope, bungee cord and plastic coated cables producing a flash free pressing and utilise special swages. These ferrules are designed to give a slim profile without sharp or obstructive projections and giving reasonable strength

The SYNCRIMP™ ferrules are available in many different sizes (see table below) and can be ordered in other lengths but the lengths below are standard. You can swage up to SYNCRIMP 10 in our 20 ton swager and up to SYNCRIMP 16 in our 40 ton swager.

Art no.	Size (mm)	Length(mm)	Dia. after swaging (mm)	Swaging dies article no.
SYNCRIMP 08/24	08	24	14	A, B1, C (SYN 08)
SYNCRIMP 10/28	10	28	16	A, B1, C (SYN 10)
SYNCRIMP 12/36	12	36	20	A, B1, C (SYN 12)
SYNCRIMP 14/42	14	42	22	A, B1, C (SYN 14)
SYNCRIMP 16/48	16	48	24	A, B1, C (SYN 16)



## Opened and closed ferrules - Aluminium

GC-KF, GC-KE, GCxx-RE and GCxx-RF

Two designs. Four products. Endless possibilities.

Our new "fork" and "eye" connectors is now available for both chain and traditional combination rope.

Compatible with GC16-RMU/RSP rope and 6mm DIN766 shortlink A4 (stainless steel) chain.

The same die is used for both rope and chain versions.



Art no.	Max load approx	Required pressure
GC-KF	10kN	500kN
GC-KE	10kN	500kN
GC16-RE	10kN	500kN
GC16-RF	10kN	500kN
GC18-RE	10kN	500kN
GC18-RF	10kN	500kN



The new design requires less material and less swaging capacity than the previous rope version. The swaging dies for these ferrules are rounded on one side to ensure a smooth transition between the swaged and eye/fork area.

# **Clamping products** - Aluminium TALUNET C-type clamp

The Gerro Combi C-type Clamp makes tricky parallell connections between ropes a thing of the past. The C-Clamp even gives you the option together, making transitions from 16 to 18 mm much easier.

Art no.	Press die to be used	Recommended swager
TN-C 16/15	B1 TNC16	P 0130T 1S/KW-BPP-130-38
TN-C 16/20	B1 TNC16	P 0130T 1S/KW-BPP-130-38
TN-C 18/20	B1 TNH18	P 0130T 1S/KW-BPP-130-38
TN-C 18/30	B1 TNH18	P 0130T 1S /KW-BPP-130-38

### **TALUNET H-type clamp**

Our new H-clamp is optimized for construction of pilot ladders and similar systems.

Strength and cost efficiency have been our highest priorities in development of this product.

Art no.	Press die to be used	Recommended swager
TN-H 20/15	B1 TNH20	P 0130T 1S/KW-BPP-130-38
TN-H 20/19	B1 TNH20	P 0130T 1S/KW-BPP-130-38
TN-H 20/30	B1 TNH20	P 0130T 1S/KW-BPP-130-38





### **Other terminations**

### When there is a will there is a way!

GERRO™ COMBI has a large field of application. If you have an idea, our in house engineering department and factory equipped with modern technology can design and test your product, giving you a safe and efficient product ready to use.



The following ferrules are example of custom fit products.



## **Combination rope**

GERRO™ COMBI Combination Rope is a combination of steel and fibre rope. The rope is preformed with right regular lay. It is also UV protected, which aids the colours from fading. Available in diameters 16, 18 and 20 mm.





- Right hand regular lay Preformed.
- Steel wire strands covered with PP multi fibres/PP split film.
- Galvanized.
- Tensile strength: 1570 N/mm2

Code no.	Dia. mm	Construction	Steel area mm²	Approx. weight	Min. breaking load (kN)
GC16-RMU_	16,0	6x8	18,5	0,26	32,4
GC18-RMU_	18,0	6x8	24,1	0,34	42,2
GC20-RMU_	20,0	6x8	30,5	0,43	51,0

\_ = Colors: Y = Yellow,B = Blue,S = Black,R = Red,G = Green,1 = Mix

Code no.	Dia. mm	Construction	Steel area mm <sup>2</sup>	Approx. weight	Min. breaking load (kN)
GC16-RSP_	16,0	6x8	18,5	0,27	44,1
GC18-RSP_	18,0	6x8	24,1	0,35	54,0
GC20-RSP_	20,0	6x8	30,5	0,44	67,7
_				37	317

= Colors: C = Beige, N = Navy Flex, A = Blue w/ white marking yarn, Y = Yellow, S = Black, B = Blue



### Suitable machines

(there are more swagers in different sizes available)

#### P 0005T - cross joint swager

The P 0005T portable swager has a maximum swaging capacity of 5 ton (50 kN). It has a single pillar open throat design, making swaging easy. The Swager can be used either vertically, bench mounted, free standing or hanging. The main purpose of this machine is for special applications with narrow space (e.g. net making).

The swager is easy to use in the field due to its low weight and easy operation.

A stabilizing plate and a lifting eye are included. P 0005T is suitable for swaging GERRO $^{\text{TM}}$  COMBI Cross-joints and also our TALUNET C-type and H-type clamps. Using special press dies it's possible to swage T ferrules up to size 3 as well as R, RCU and TCU up to size 2,5. As standard we recommend the high-pressure compact power unit (HAGG 0,55/700).



#### **OPTIONAL**

- hand pump
- high pressure compact power unit



EQUIPMENT	STANDARD
Type of ferrules examples	GC16-C, GC18 C, GC20-C
Dies for cross joints	5T GC16-C, 5T GC18-C, 5T GC20-C
Power HAGG 0,55/700	0,55 kW
Weight (kg)	approx. 10

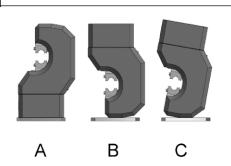


## TALURIT®

#### P 0130T 1S/1W

The 130T swager has a single pillar open throat design. It can be mounted either in upright position or upside down in a flat or tilted position (the different mounting positions is shown below). It offers total flexibility. This swager is easy to use and the open design allows easy access to the dies.

The 130T swager is a complete machine, either bench mounted (1S) or on a wagon (1W) with the HAGG 130T. The powerful 130T swager can swage all 16 and 18 mm ferrules in this folder. Swaging dies are type B1 and B2. Max. swaging force: 1300 kN. Despite its high capacity it is still very easy to use and move around when needed.



130T 1W swager mounted in position A.



This hydraulic swager comes with an efficient 4 kW hydraulic unit with great features such as hold position, automatic return and shut down as well as a stroke limiter. The 130T swager is a given choice in the playground.

EQUIPMENT	STANDARD	OPTIONS
Die holder	FIX B1	-
Spring loaded fastening nut *	-	B1 ECC
Dies	B1 and B2	-
Power	4 kW	-
Electrical pressure gauge	MA 130T	-
Different mounting positions for press head	С	A or B

<sup>\*</sup> Add the spring loaded fastening nut B1 ECC to convert the die holder into a system suitable for swaging flemish eye sleeves and terminals.

#### P 0250T 1S

The 250T swager is a machine with a well-proven track record. It is equipped with a powerful two-stage hydraulic unit and has a safe design according to proven standards.

The operation of the machine is extremely easy since an electrical foot pedal permits the operator to use both hands when swaging.

The swager body is manufactured from one single block construction that ensures strength, long service life and a minimum of maintenance. Swaging dies are type C and C1. With the insert die holder (VIN B1/C1) smaller dies size B/B1 can be used. Max. swaging force: 2500 kN.

Optional SILENCER 250T with extra insulation can reduce the noise level to less than 68 dB(A).

EQUIPMENT	STANDARD	OPTIONS
Die holder	FIX C1 250T	FIX 2,5"x5"
Insert die holders	VIN C/C1	VIN B1/C1 VIN 2"x3,5"/2,5"x5"
Dies	C and C1	B1 2"x3,5"
Power	4 kW	-
Electrical pressure gauge	MA 250T	-
Noise Level	approx. 70 dB(A)	Silencer 250T (approx. 68 dB(A))





### Other machines

Talurit can also offer a wide range of other machines for cutting, swaging and coiling. Contact our sales department for more info!

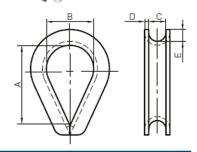


Accessories suitable for GERRO™ COMBI playground systems

#### Thimble AISI 316

#### Stainless steel thimbles

Part Code	C(mm)	B(mm)
S037SS14	16	34
S037SS16	18	40
S037SS18	20	45



### **DIN580 Eyebolts**

#### Galvanised

Part Code	C(mm)	Working load limit (T)
XNEB582M10	25	0,23
XNEB582M12	30	0,34
XNEB582M16	35	0,7

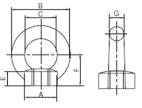


### **DIN582 Eyenuts**

#### Galvanised

Part Code	C(mm)	Working load limit (T)
XNEN582M10	25	0,23
XNEN582M12	30	0,34
XNEN582M16	35	0,7





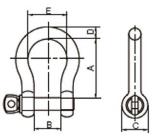


### **Commercial Bow Shackles**

#### Galvanised

Part Code	D (mm)	A (mm)	B (mm)	E (mm)
XNCBS10MM	10	40	20	30
XNCBS11MM	11	44	22	34
XNCBS12MM	12	48	24	36

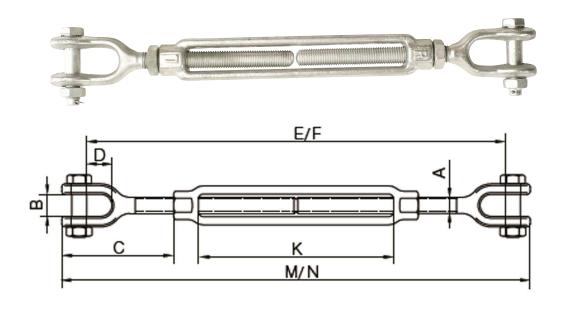




### Forged Jaw/Jaw Turnbuckles

US Federal Specification, Hot Dipped Galvanised Complete with Fitted Lock Nuts

Part Code	Working load limit (T)	B(mm)	D(mm)	M/N(mm)
XNTBJJ10	1,6	0,79	1,31	40,13/23,88
XNTBJJ11	2,3	0,94	1,5	24,1/16,6
XNTBJJ12	2,3	0,94	1,5	30,1/19,6





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