



Green Pin Tycan® Lifting Chain

As strong as steel, a fraction of the weight



safer
working



improved
efficiency



Material:

Made with 100% Dyneema®; layers of webbing in a Mobius twist with stitching on each side

Safety Factor:

MBL equals 4 x WLL

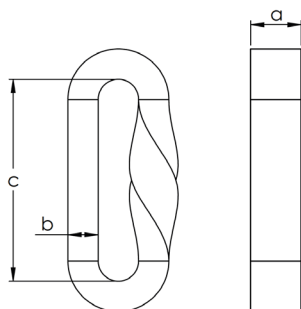
Temperature Range:

-20°C (-4°F) up to +40°C (104°F)

Certification:

2.1 2.2 MTC^b DNV-GL TQ CE

link size	working load limit	width link	thickness link	length inside	links per mtr	weight per mtr
mm	t	a mm	b mm	c mm		kg
15x25	5	25	15	100	10	0.58
inch	t	inch	inch	inch		lbs
19/32 x 1	5	1	19/32	4	10	1.28



FCHLIFT

Green Pin Tycan® has been created from the world's strongest man-made fibre, Dyneema®, and is a link chain that has all the performance and flexibility of steel chain but is a fraction of the weight. It is extremely safe to use, non-corrosive, non-conductive and completely waterproof. In fact, it even floats! The soft touch and light weight makes Green Pin Tycan® easy to use, allows quicker application and greatly reduces the potential of damage to cargo, a critical factor when handling objects with sensitive surfaces. By using Green Pin Tycan® companies achieve greater efficiency and a safer working environment for their staff.

Quality assurance

- Every chain length is proof load tested to 2 times Working Load Limit (WLL).
- Visual inspection is carried out on each chain link to detect possible defects.
- A 5-link sample of every 1000 meters (0.62 miles) produced is tested to fracture to confirm MBL.
- Green Pin Tycan® has a Technical Qualification Certificate DNV-GL.
- Declaration of conformity to the Machinery Directive 2006/42/EC (MD) with relevant CE marking.

Where and how can Green Pin Tycan® Lifting Chain be used

- Green Pin Tycan® Lifting Chain is a general purpose lifting chain that can be used within the limits set in this user manual.
- Green Pin Tycan® Lifting Chain can be used in min/max environmental temperatures within human tolerance, but should not be in contact with objects or components with a temperature that is higher than +40°C (104°F).
- Green Pin Tycan® Lifting Chain is able to lift loads safely only up to the designated WLL.
- Green Pin Tycan® Lifting Chain is able to lift loads safely only when the relevant load reduction factor for the specific lift has been considered and accounted for.
- Green Pin Tycan® Lifting Chain can be used on land, at sea and in a subsea environment.
- Green Pin Tycan® Lifting Chain should be used under static or near-static conditions.

Verification before first use

Before first use of Green Pin Tycan® Lifting Chain it should be ensured that:

- The chain meets the exact requirements specified in the order.
- The valid manufacturer certificate and CE declaration are at hand.
- ID tags are present and in accordance with certificates and local jurisdictions.
- The users of the sling have received appropriate instruction and training.

Verification before each use

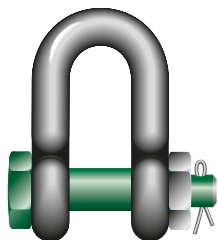
- Check the chain for any damages, defects or missing ID tags prior to each use. Never attempt to use damaged equipment.
- Connect the chain to recommended components as mentioned below or to certified components with a minimum pin diameter of 16mm, a clevis width of 26 0/+5mm and a maximum surface roughness of 5 microns (should feel smooth to your fingers).
- Inspection of the chain is mandatory with respect to discard criteria, prior to use. See discard criteria further below in this manual.
- Ensure that Green Pin Tycan® Lifting Chain is rigged according to the load, the planned lift and according to the boundary conditions set forth in the user manual.
- Ensure load reduction factors are calculated and planned for according to charts and tables further in this manual.
- Assemble Green Pin Tycan® Lifting Chain only with a minimum number of 5 load bearing links per sling.

Recommended products for use with Green Pin Tycan® Lifting Chain

Green Pin® Standard Shackles

G-4153

Dee shackle with safety bolt
GPGDMB19; WLL4.75t*



G-4151

Dee shackle with screw collar pin
GPGDBB19; WLL4.75t*



Green Pin Tycan® Lifting Chain can be connected with the Dee shackle body and the Dee shackle pin.

Always take into account; the maximum load of the configuration is limited by the component with the lowest WLL.

* Green Pin® Super shackle SUGHMB16/ SUGHBB16 can be used in bow-bow configuration to use the full 5t WLL of Green Pin Tycan® Lifting Chain. Connection of Green Pin Tycan® Lifting Chain to Green Pin® Super shackle can only be realized by connecting to the pin.

Green Pin® Turnbuckles Jaw – Jaw with safety bolt

G-6323

1" diameter thread; take up 12" and bigger

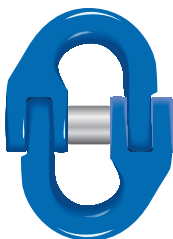


Recommended products for use with Green Pin Tycan® Lifting Chain

EXCEL® Connecting link, grade 10

UMJ13; WLL6.8t

Always take into account; the maximum load of the configuration is limited by the component with the lowest WLL.



Hook for Green Pin Tycan®

HHK20A050; WLL5t

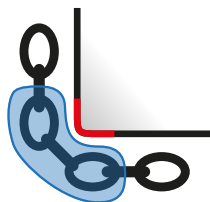


Instructions for use

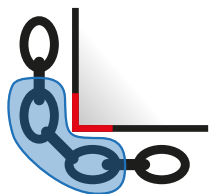
In case of contact between Green Pin Tycan® Lifting Chain and the load or operating material, protective sleeves SLEEVE152530 (30cm length) or SLEEVE152550 (50cm length) must be used when the surface edge is "sharper" than 6mm radius.



Edge radius more than 6mm:
No protective sleeve required **but** recommended

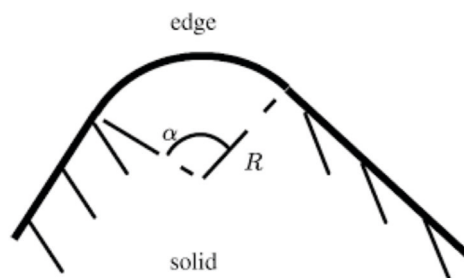


Edge radius less than 6mm:
Protective sleeve **required**

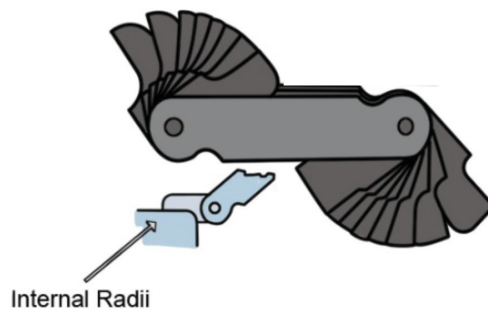


No obvious edge radius or in doubt: Protective sleeve **required**

Edges that are in contact with the chain must be checked for sufficient radius. A radius gauge is a good way to check this. If in doubt, a protective sleeve should always be used to gain that radius.



We recommend the use of a radius gauge.



Limited twist

A limited twist of 0.5 turns per meter (per 3.28 feet) is allowed. When there is no twist in the chain, a clear open link can be seen on every 3rd chain link. For every 0.25 twist this increases by one link, so for 0.5 twist per meter you will only see a clear open link every 5th link. If the chain has obtained a twist of more than 0.5 turn per meter, the "open links" start to disappear and/or can be seen in pairs of two. The links itself will also start to get twisted beyond original shape. If these signs are present the chain should be untwisted before performing the lift, or if in doubt do not perform the lift.

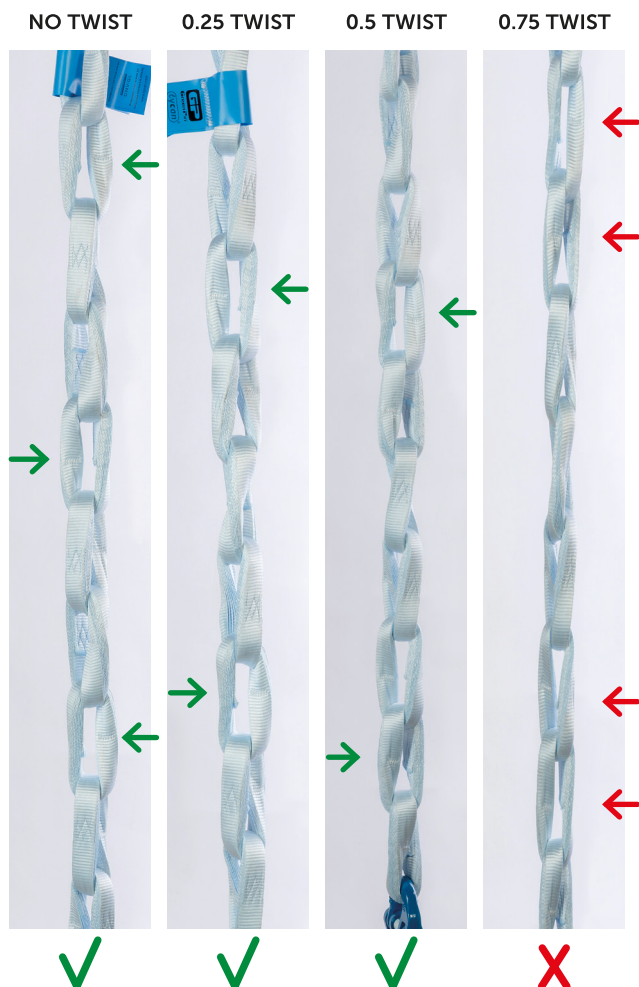
- Keep Green Pin Tycan® Lifting Chain away from sand, mud, ice or any sharp particles, in particular any particles of steel. If sharp particles of steel are present, the chain must be removed for inspection and if necessary such particles should be removed.
- Keep Green Pin Tycan® Lifting Chain away from oxidizing chemicals. It is resistant to any other type of chemicals.
- Green Pin Tycan® Lifting Chain should be kept away from direct heat sources; it will burn slowly if ignited but is self-extinguishing upon removal of the flame.
- Dyneema® fiber is nontoxic to humans and is not known to cause any skin or respiratory implications.
- In case a dynamic loading situation is to be expected, the load or WLL should be adjusted accordingly.



Green Pin Tycan® Lifting Chain



Twist per meter

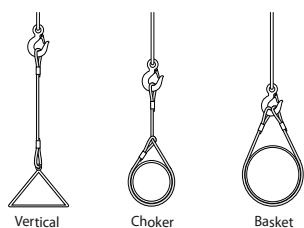


GREEN TO QUALITY

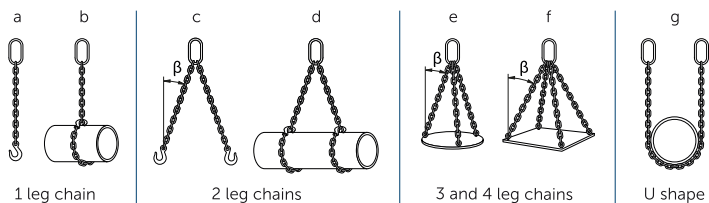
greenpin.com

A VAN BEEST BRAND

Approved lifting hitches for Green Pin Tycan® Lifting Chain



Type of Hitches



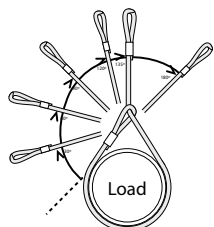
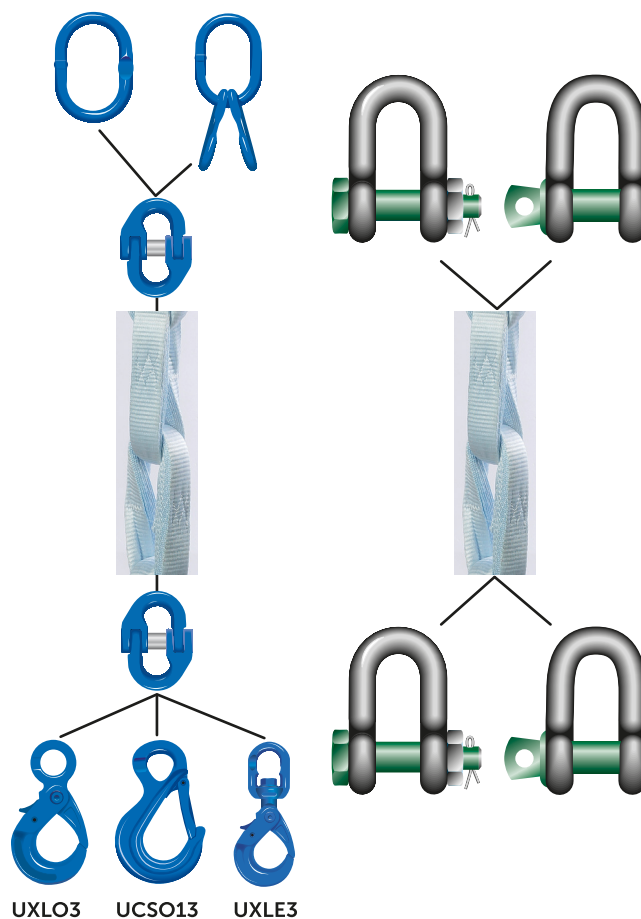
Safety Factor: 1:4

Type of hitch	a	b	c	c	d	d	e f	e f	g
Angle of inclination	-	- *	0°-45°	45°-60°	0°-45°	45°-60°	0°-45°	45°-60°	- **
Load factor	1	0.8	1.4	1	1.12	0.8	2.1	1.5	1.5
Working load limit	5.0	4.0	7.0	5.0	5.6	4.0	10.5	7.5	7.5

* See below capacity reduction table of angles of choke less than 120°.

** See below capacity reduction table for non-vertical chain sling legs.

Configuration examples



Angle of Choke	Rated load % of single leg chain sling	Rated load (t) of single leg chain sling
120°-180°	80%	4.00t
90°-119°	65%	3.25t
60°-89°	55%	2.75t
30°-59°	40%	2.00t

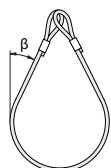
In a choker configuration you can use two different choker connections;



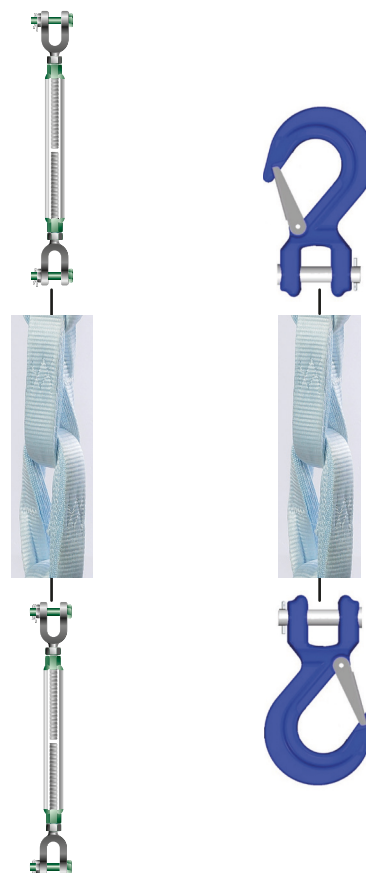
The hook attached to a link, called anchored basket hitch.



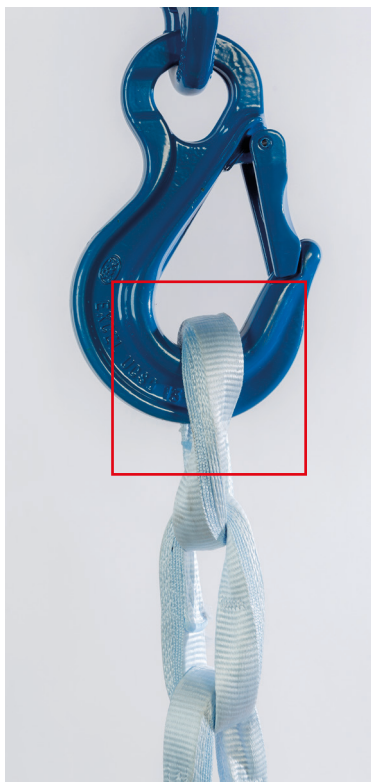
The hook around link, called traditional choker hitch.



Angle β	Rated load %	Min Dia.	Rated load (t)
0°- 5°	150%	120mm	7.50t
6°-30°	135%	120mm	6.75t
31°-45°	120%	120mm	6.00t
46°-60°	100%	120mm	5.00t



Connecting Green Pin Tycan® Lifting Chain **directly** with the hook is **not acceptable**.



X

Always be sure the idle link is not wedged in between the loaded link and the shackle pin.



X



✓

Maintenance

- Green Pin Tycan® Lifting Chain is designed to be maintenance-free. It is recommended to clean after use for improved service life. Green Pin Tycan® Lifting Chain can be washed in an industrial washing machine, limited to a maximum temperature of 90 degrees Celsius (194°F).
- There are no known limitations to the type of cleaning detergents that can be used.

Storage

- Storage area should be clean and away from sunlight, preferably dark.
- Storage temperature should be no more than +70 degrees Celsius (158°F). for short term storage (less than one week) and no more than +30 degrees Celsius (86°F). for long term storage.

Shortening Green Pin Tycan® Lifting Chain

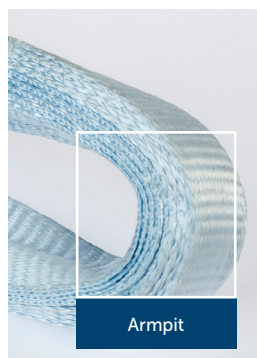
Shortening Green Pin Tycan® Lifting Chain can be done with a Dee shackle (GPGDBB19/ GPGDMB19); WLL4.75t;



The D-shackle must be assembled with a few links of chain (at least 5) to the master link with a connecting link (UMJ13). Do not connect two Tycan® Lifting Chain ends into one connecting link (UMJ13).

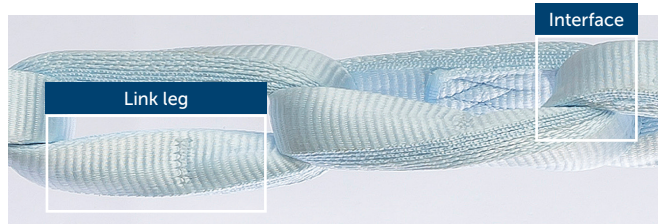
Inspection and discard criteria

Inspect the chain thoroughly after each use for any wear, tear, cuts or other damage which might affect the performance of Green Pin Tycan® Lifting Chain.



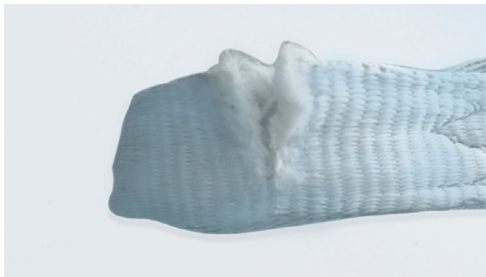
These areas of the chain link are most likely to be affected by wear:

No wear/tear damage allowed in the armpit area.
No folding or spreading out of layers allowed in the armpit area.
Minor damage allowed in interface area.
Moderate damage allowed on link leg.



Details wear/tear damage

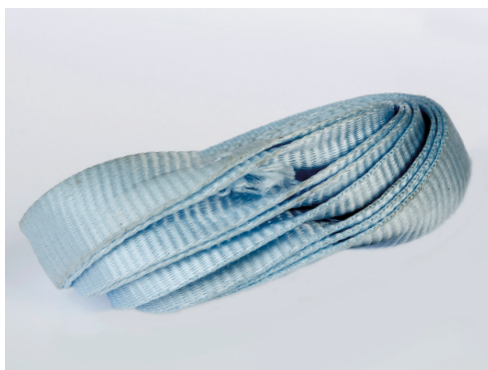
If one or more layers of the link leg are torn, cut or abraded, the chain must be removed from service immediately and should be discarded.



If there are visible cuts or abrasion of more than 1 mm on the side of the link leg, Green Pin Tycan® Lifting Chain must be removed from service immediately and should be discarded.



If stitching is torn/abraded, and there is a risk the layers of webbing can unravel, the chain must be removed from service immediately and should be discarded.



If Green Pin Tycan® Lifting Chain has been exposed to temperatures over 110° C (230°F), the chain must be discarded.
If Green Pin Tycan® Lifting Chain has been in contact with oxidizing chemicals, it must be discarded.
If Green Pin Tycan® Lifting Chain has met or has been exposed to the limits of the mentioned discard criteria, it should be discarded.
If the ID tag has been removed, lost or is no longer legible, Green Pin Tycan® Lifting Chain should be removed from service until proper ID marking has been verified and new ID tags have been added to Green Pin Tycan® Lifting Chain.

Green Pin Tycan® Lifting Chain



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