

CLARK TRACKSTM

high performance for maximum work life



FOREST MACHINE TRACKS

CATALOGUE AND USER GUIDE

FLOTATION
MULTI-TERRAIN
DEMANDING



MACHINE TRACKS
GRIP + FLOTATION
LEADING UN
BEST MA
MULTI

BUILT WITH PRIDE
ENGINEERED ON EXPERIENCE



Multi-Terrain



Demanding



Flotation

BUILT WITH **PRIDE** ENGINEERED ON **EXPERIENCE**

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CLARK TRACKS™

high performance for maximum work life

Clark Tracks Ltd, part of Nordic Traction Group, specialise in developing and manufacturing forest machine tracks to suit almost all cut-to-length machines and Skidders. Our company can supply tracks in various sizes and designs to suit virtually all terrain, all climates and all machine types.

This brochure has been collated to offer assistance, both in track selection and in the use of our tracks. The information provided will help you to achieve maximum performance as well as trouble free operation throughout the working life of your tracks.

Garry Henderson
Operations Manager



Clark Tracks use of certified quality management system ISO 9001.

Introduction

Clark Tracks are based in Dumfries, in the South West of Scotland. As a manufacturer of forest machinery tracks for over 30 years, we have built a strong reputation for delivering high quality products to the largest forestry machinery manufacturers around the world.

Due to the high demand for our products we have doubled the size of our facilities and workforce over the last few years. This has allowed us to increase our production rate and continue to provide high quality products to all our customers.

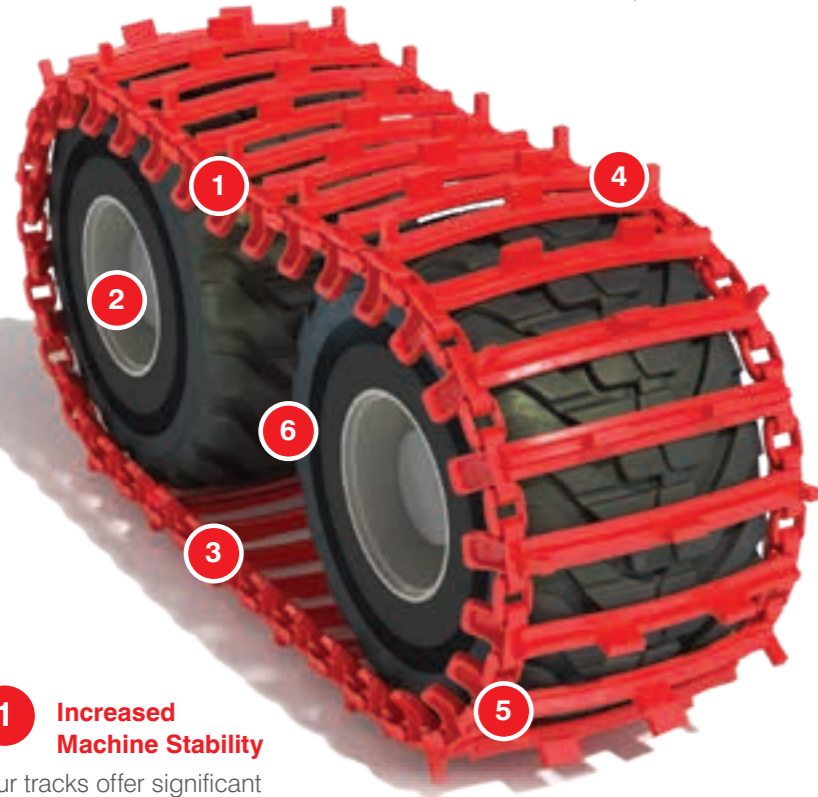
Clark Tracks Ltd.
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Why Choose Clark Tracks?

Every set of Clark Tracks are manufactured from special boron alloy steel. The durability and toughness of the steel is maximised using a specialised induction heating processes.

Specifically designed and manufactured steel sections and forgings are used to give high performance combined with the longest possible working life. Each set of tracks has been manufactured for use with a particular tyre and should only be used as recommended by this handbook.



1 Increased Machine Stability

Our tracks offer significant improvements in the stability of a machine by increasing the traction footprint and lowering the machines centre of gravity. This is particularly advantageous on steep slopes with loader crane movements.

2 Reduce Fuel Consumption

Putting the link system close to the effective rolling radius of the tyre reduces the drag the track adds to the machine / transmission.

3 Reduced Ground Damage

Clark Tracks Lite-Link System combined with our advanced flotation profiles (see tracks in the TXL and TXCL ranges) have been specifically designed to minimise ground disturbance by reducing pressure on sensitive soils and ensuring constant levels of grip and traction.

4 Increased Traction

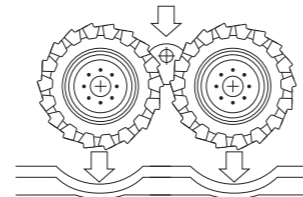
Using our tracks will significantly increase traction over normal tyres. This allows forest machines to climb slopes and negotiate obstacles that would otherwise have been impossible.

5 Reduced Ground Pressure

Using our tracks will increase the overall footprint of the machine and spread its weight over a much bigger ground contact area. This reduces ground pressure by as much as 50% or more over normal tyres and allows machines to be driven in conditions often impassable without tracks.

6 Tyre Protection

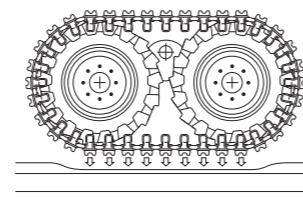
Clark Tracks are compatible with a wide range of tyres, offering protection from punctures and other damage, and in many cases, increasing the overall lifetime of the tyre.



Before

Bare Tyres:

- Increased Ground Pressure
- Less Flotation
- Deep Ruts
- Soil Disturbance and Compaction



After

With Clark Tracks:

- Increased Contact Area
- Lower Ground Pressure
- Increased Flotation
- Greater Machine Stability
- Increased Traction
- Reduced Ground Disturbance

Design & Quality

Our forest machine tracks are designed and manufactured in our own dedicated track production factory by skilled engineers, trained in all aspects of track manufacture. This allows us to react quickly and economically to customer requirements and ensures that we have control of all aspects of manufacture and quality control.

All Clark forest machine tracks go through checking and testing procedures which are well documented and recorded so that we can continue to improve, therefore providing the highest quality to the customer.

Every section of Clark forest machine tracks has identification tags/badges attached which are stamped with a serial number allowing complete traceability. (SEE PAGE 33)

Delivery

Clark Tracks take pride in supplying high quality products and service to every customer, worldwide.



Each set of Clark Tracks are supplied in four quarter sections and comes complete with all necessary joining links. Tracks are normally packed on two open pallets for shipping with two sections rolled per pallet.

Haggis UltraLink

TRACK LIFE EXTENDER

IMPROVED DURABILITY

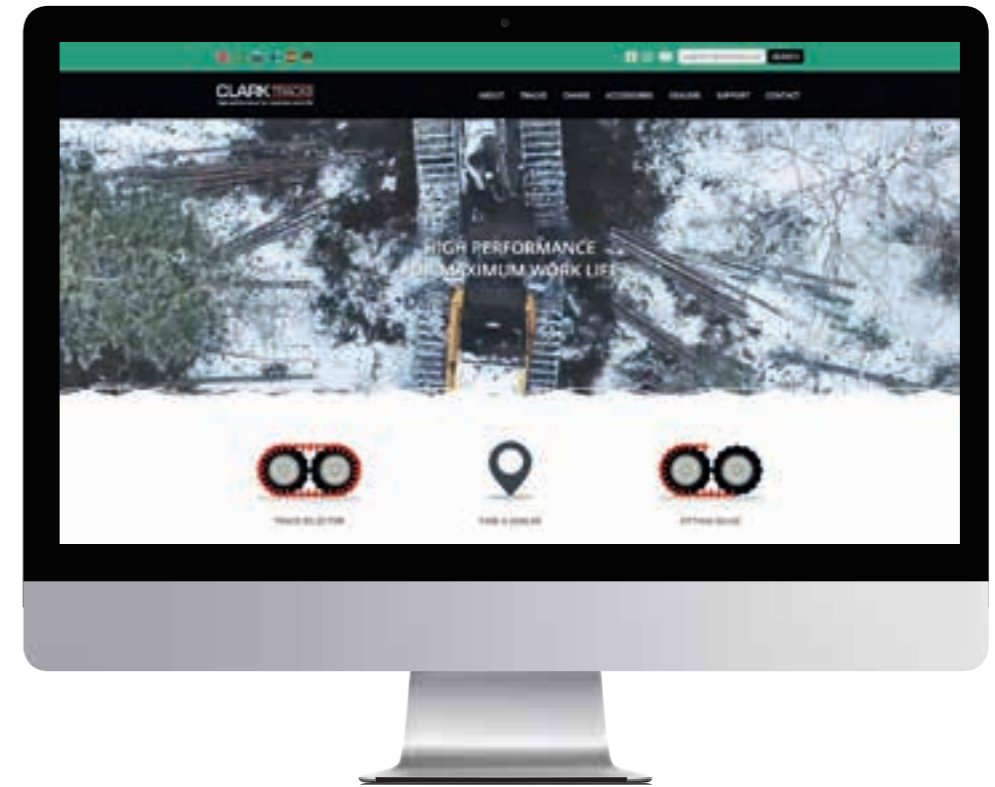
LESS MAINTENANCE AND DOWNTIME



HAGGIS LINK NOW INSTALLED AS STANDARD

BENEFITS

- Maximum contact area
- Reduced contact pressure
- Protects C-Link from premature wear
- Specially designed to inhibit link twisting
- Less re-tensioning and adjustments required
- Bearing surfaces matched
- Reduced wear



www.clarktracks.com

Three levels of selection in order for you to find the best suited track for your machine.

- Machine**
- Climate**
- Terrain**

Choosing Your Tracks

Great care should be taken when selecting tracks as some will perform better than others in specific terrain. Although Clark Tracks cannot make exact recommendations due to the fact

working conditions, machine or tyre limitations and terrain can vary considerably, this handbook aims to help all customers make an informed decision.

Once you are ready to select your tracks, refer to your Clark Tracks dealer for price and availability. Alternatively, you can contact our office.

E: clarktracks@clarktracks.com • T: **+44 (0) 1387 722370**

NOTE: Some tracks are unsuitable for use in heavy snow and some types of sticky mud conditions.

SUITABLE FOR MULTI-TERRAIN

TERRA85 
MULTI-TERRAIN

TERRA95 
MULTI-TERRAIN

FXS 
SUPER DUTY TRACTION







ARCTIC 
SNOW AND ICE

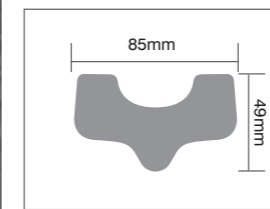
TERRA85 MULTI-TERRAIN

Terra85 is the ultimate all-terrain, all-season track. Featuring a double grouser track plate, grip and flotation are assured. The low profile also means less vibration and a smoother ride.

- Low profile design reduces vibration and results in less operator fatigue
- Arguably the best multi-terrain tracks on the market
- Use all year round
- Special heat treatment for cold weather durability.

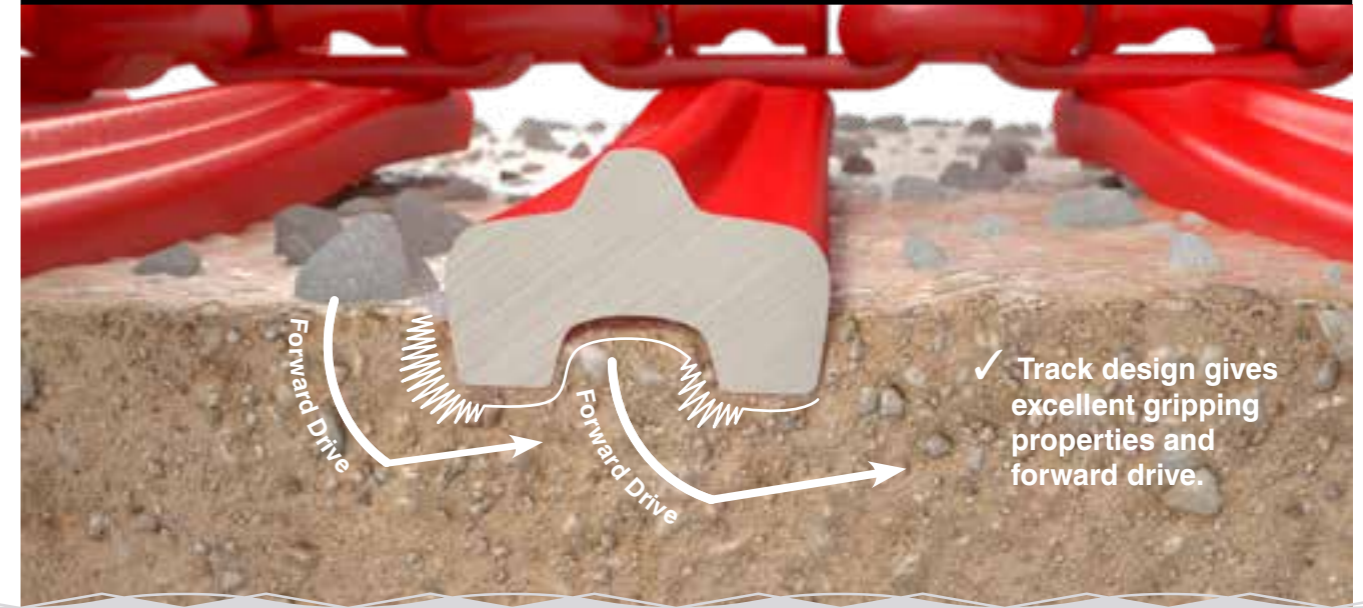


Machine  Climate  Terrain  Grip  Flotation  Link 



The vertical edge of the Terra85 design provides excellent forward drive and control when braking or working on slopes while its wide plate gives great flotation qualities.

Terra85 Gripping Properties



✓ Track design gives excellent gripping properties and forward drive.

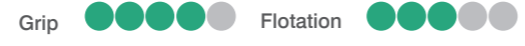


TERRA95

MULTI-TERRAIN

Terra95 is the undisputed class leading heavy duty, all-terrain, all-season track. Heavy plate section and our 28mm Haggis links ensure long service life when fitted to the latest high horsepower, heavy Forwarders and Harvesters.

- Arguably the best multi-terrain tracks on the market
- Particularly suited to medium and large Harvesters and Forwarders, 15t payload upwards
- Low profile design reduces vibration resulting in less operator fatigue
- All-season use; assured Winter and Summer performance
- Durable and hard wearing, even on rocky terrain
- Suitable for Scarifying and Skidder operations.



Machine    Climate    Terrain   Link 



FXS

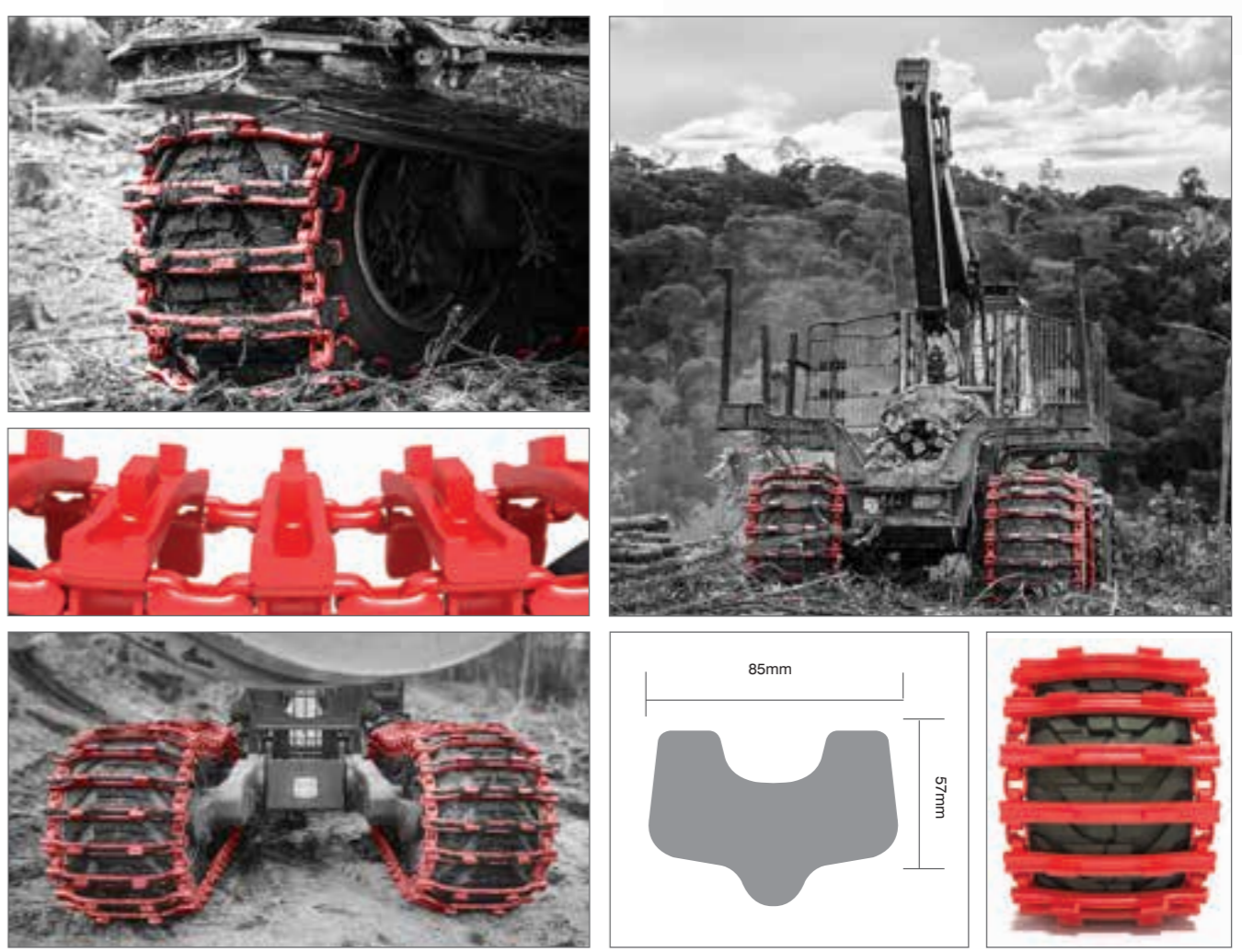
SUPER DUTY TRACTION

FXS is a class leading development of the Terra95 track. Like Terra95 it is built tough and provides extra stability and flotation, each track pad has 25mm extensions on both sides. Huge paddle spikes (100mm wide, 50mm tall) bite into the toughest terrains and provided maximum traction at all times. These are suited to the heaviest Forwarders and six-wheel Skidders working on slopes and arduous terrain. Specially hardened 100mm wide (50mm high) double paddle spikes on each track pad ensure aggressive grip on the most demanding ground conditions.

- Durable design and components for the most arduous terrain
- Confidence with supreme grip and flotation



Machine    Climate    Terrain   Link 





ARCTIC


S N O W A N D I C E



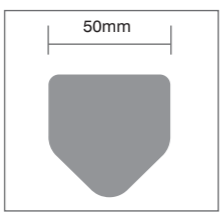

Arctic tracks are great for all-year use on areas with heavy snow during the winter months. Wide spaced square section track plate design prevents mud, dirt and snow from packing between the track plates and the tyre. The design also ensures superior grip and traction to machines working in demanding and varying conditions. Track plates come with 60mm extensions on both sides, widened and bent to offer flotation on soft ground.

- Excellent snow cleaning.
- All-year use thanks to extended track plates
- Square section track plate for optimum traction in rocky terrain
- Excellent climbing ability.
- Different extension options available (symmetric or asymmetric):
60/60, 25/60, 0/60, 25/25 or 0/0




Machine  Climate  Terrain  Grip  Flotation  Link  28mm



50mm

Arctic Extension Options

Ext. 0mm	Ext. 25mm	Ext. 60mm
		


SUITABLE FOR DEMANDING TERRAIN


GROUZER 
DEMANDING TERRAIN



GROUZER HD 
DEMANDING TERRAIN



CX 
CLIMBING XTREME



CX HD 
CLIMBING XTREME






GROUZER

DEMANDING TERRAIN

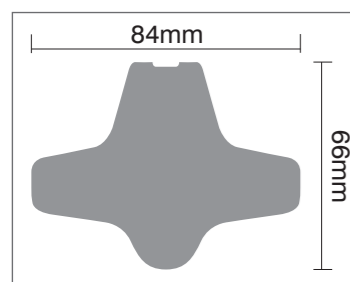


The Grouzer is a popular track with outstanding traction and climbing ability. This track is able to cope with almost any terrain and machine. Clark Tracks, "Grouzers" are the choice of the professional looking to challenge the toughest terrain.

- Single grouser section giving confidence and security in virtually all terrains
- All-season, all-terrain usage
- Exceptional climbing ability.

Grip  Flotation 

Machine  Climate  Terrain  Link 



GROUZER HD

DEMANDING TERRAIN

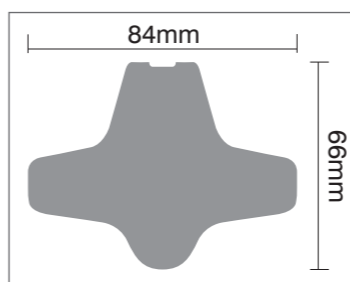


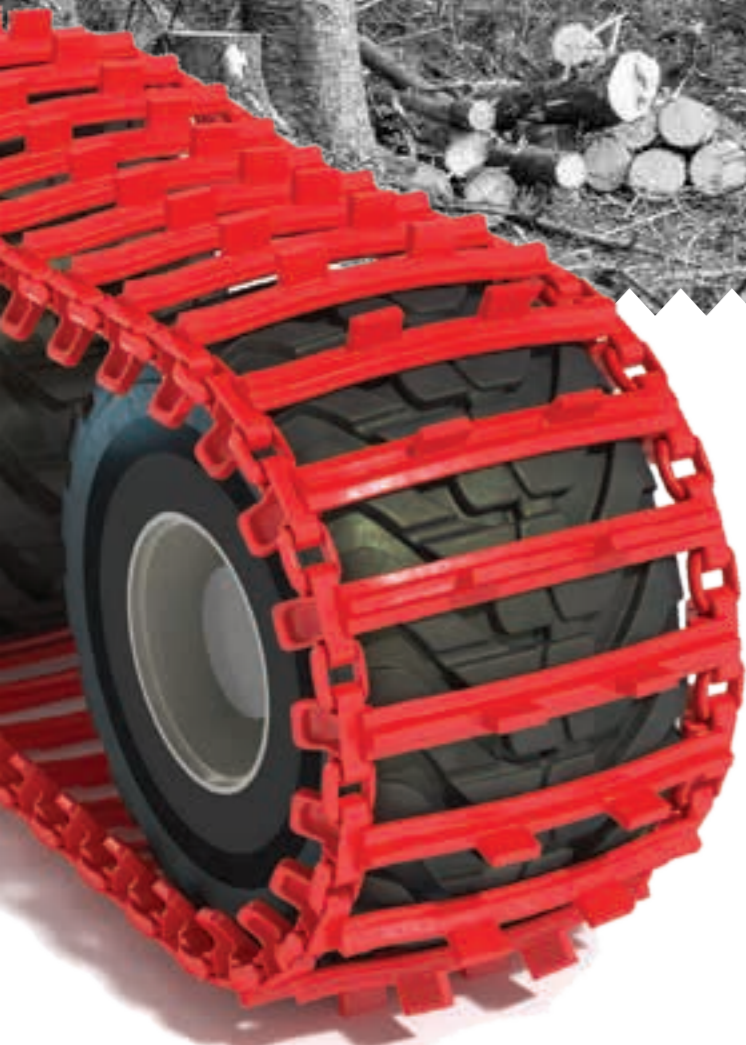
Grouzer HD is the newest addition to the popular Grouzer family. This Heavy Duty development of Grouzer has been designed with all the traction and climbing qualities of the original Grouzer. Grouzer HD has a thicker core to support heavy forwarders and skidders.

- Suitable for tough terrain
- Exceptional choice for large machines looking to climb
- All season use.

Grip  Flotation 

Machine  Climate  Terrain  Link 





CX 
 CLIMBING XTREME

CX is a further Grouzer development, featuring wide paddle spikes, doubled up on each track plate. This track is best suited to Harvesters and medium to heavy Forwarders. They give peak performance for climbing with unsurpassed traction.

- Aggressive spike pattern for climbing
- Maximum traction.



Grip  EXTRA Flotation 





Machine  Climate  Terrain  Link 

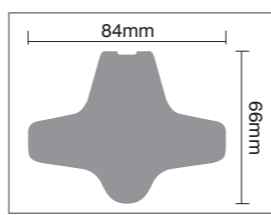
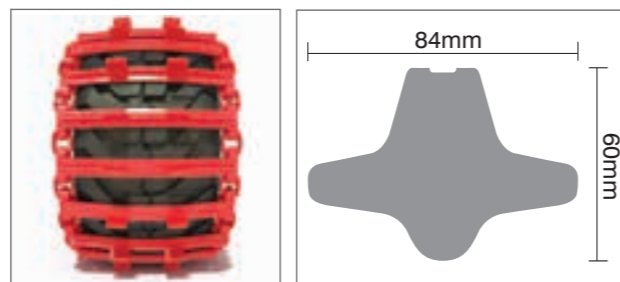
CX HD 
 CLIMBING XTREME

CX HD is a new Heavy Duty development of CX, a member of the Grouzer family. CX HD has a thicker core to support heavy forwarders and skidders. Designed with the same aggressive spike pattern as the original, CX HD provides maximum traction in the most demanding terrain.

- Unsurpassed traction for heavy machines.
- Peak climbing performance.

Grip  EXTRA Flotation 

Machine  Climate  Terrain  Link 





SUITABLE FOR FLOTATION

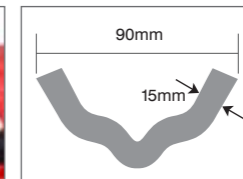


ALL-TERRAIN FLOTATION

Designed for use in wet marshy conditions and also snow and ice. An advanced design is used to enable better cleaning and ejection of snow and mud. Wide and upturned edges give flotation whilst a pinched mid-section generates traction.

- Wet, marshy, snow and ice performance
- Broad, upturned edges for flotation and easy steering.

Grip ●●●●● Flotation ●●●●●
 Machine Climate Terrain Link






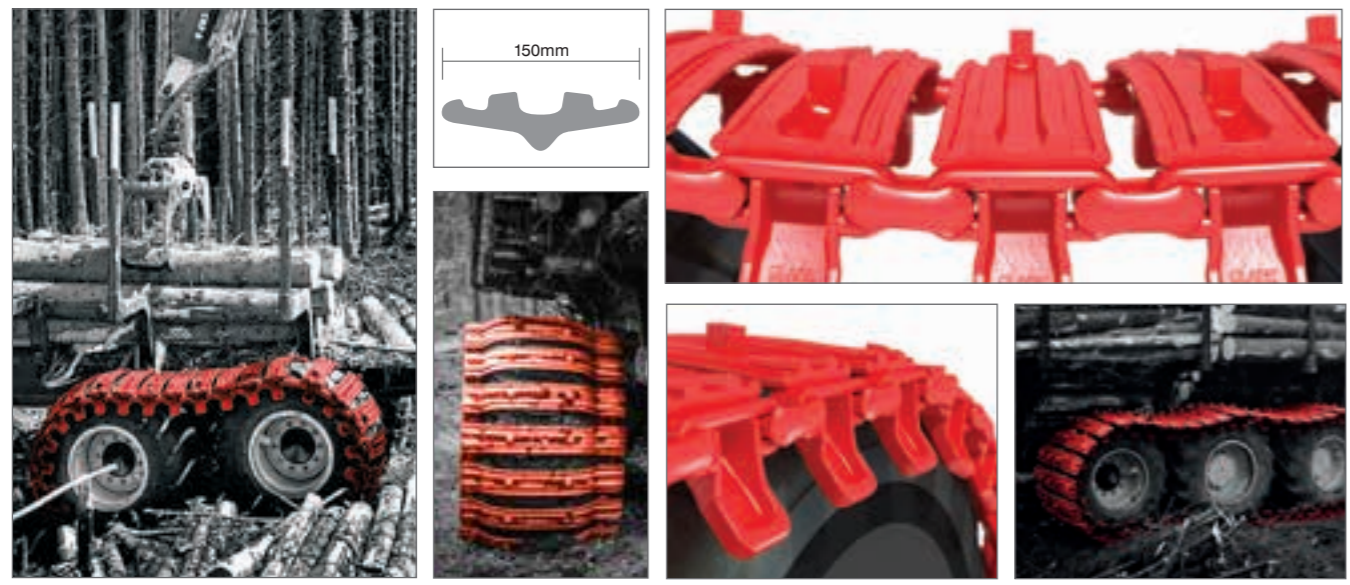
TXL

ULTIMATE FLOTATION

TXL tracks are in a class all of their own when it comes to ULTRA FLOTATION. Numerous studies have proven that TXL offers the best traction and lowest ground pressure of any track. This places them in a whole new class of flotation tracks. The flexibility of our production enables many options. Typically Asymmetric and Symmetrical extensions are available in any width required by our customer thus enabling operations on the softest and most sensitive soils with minimal ground disturbance. TXL is offered as standard width, 930mm and 1000mm from our regular track range. Both 930mm and 1000mm are available in symmetrical or asymmetrical designs. Please consult your dealer or Clark Track technical department for further details.

- Advanced flotation track that offers excellent traction
- Close spaced, extra wide tracks for maximum flotation
- Suitable for all weights of machines
- Suitable for forest roads (without side slip spikes) and sensitive soils
- Available with extra width where machine design permits
- Clark Tracks lowest ground pressure track
- 930mm - 1000mm std (see next page).

Machine    Climate  Terrain  Grip  Flotation  Link  28mm

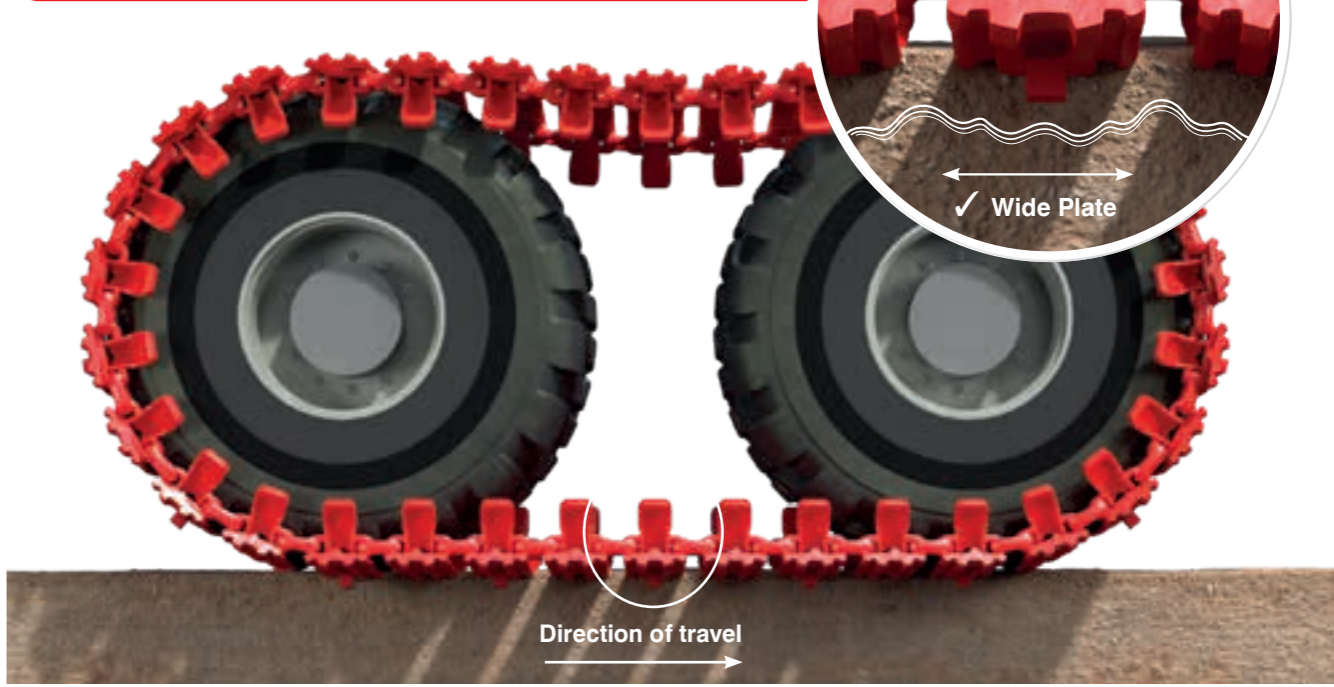


TXL Gripping Properties



TXL is the Ultra-Flotation track designed for the forest.
 The 4 grousers provide better traction than any other professional use flotation track ensuring you can keep moving forwards. Inside, a high single grouser provides good grip between the track and tyre, even in wet and boggy conditions. TXL can be specified in a variety of widths, typically 930mm or 1000mm for 710/45-26.5 Tyres. Extended width TXL can be specified as either Symmetrical or, where clearances are tight, asymmetrical is possible.

TXL Flotation Properties



Standard Extended Versions

Standard Extended Specification for TXL

For Asymmetrical tracks, standard configuration is to have inside extension approximately (as wide as paw or 25mm).

The inside link dimension varies with tyre size and tyre model.

Outside extension is the remainder of material to make either 930mm or 1000mm - the two standard pad widths.

Diagrams show typical configurations of TXL available with a 710/45-26.5 tyre.

Current price list has in and out extension sizes to current build standard.

Not to scale, for illustration purposes only.

Other tyre sizes may appear different or may not be available compared to diagrams.

For customised width options, please see page 30.



• Symmetrical 1000mm



• Symmetrical 930mm



• Asymmetrical 1000mm



• Asymmetrical 930mm

Upgrade

Half-on-link option for Asymmetrical tracks

To save space where space is tight, i.e. against the cab or engine cover, half-on-link is an option.



TXCL 

MULTI-TERRAIN FLOTATION



Machine  Climate 

Terrain  Link 

Grip  Flotation 

TXCL takes advantage of the legendary TXL and combines them with the traction of the Terra85 track. This gives better climbing effort than the standard TXL. TXCL tracks are the leaders in mixed; soft terrain and moderate slopes.

- Improved traction and climbing compared to TXL
- Better cleaning when used in some mud and snow conditions (caution advised to be aware for snow or mud packing).





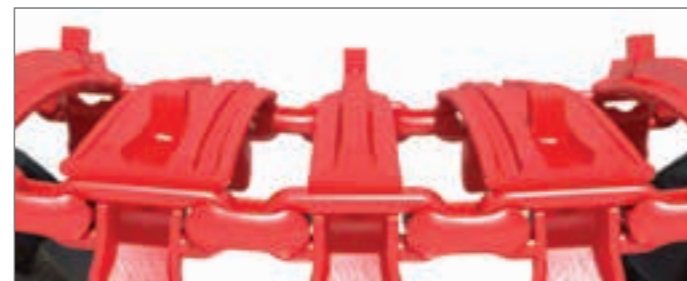
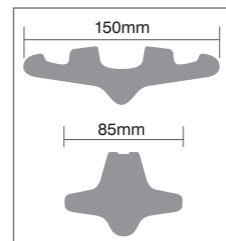
TXGL

DEMANDING FLOTATION



TXGL is the best of TXL and Grouzer combined to get forest machines through the wettest and marshiest ground and then climb demanding slopes with ease.

- Maximised traction and climbing compared to TXL alone
- Better cleaning when used in some mud and snow conditions (caution advised to be aware for snow or mud packing).



SINGLE WHEEL TRACKS



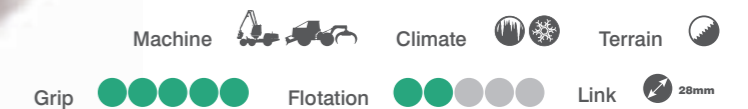
GSG

ULTIMATE CLIMBING



Grouzer Super Grip (GSG) is the single wheel track that delivers maximum climbing capability for 6-wheeled machines. GSG's give exceptional traction and require less maintenance than tyre chains.

- Maximum grip and low maintenance.



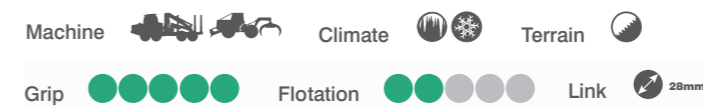
GSG HD

ULTIMATE CLIMBING



GSG HD is the single wheel track that delivers maximum climbing capability for Heavy 6-wheeled machines. GSG HD's give exceptional traction and require less maintenance than tyre chains.

- Maximum grip and low maintenance.



TXSG

SUPER GRIP FLOTATION

TXSG is the solution for 6 wheeled Harvesters looking to maximise productivity on the safest and most sensitive forest areas. TXSG increases the machine footprint and reduces ground pressure considerably.

- Additional Flotation on soft or sensitive soils.



Clark Tracks carry a large stock of spare parts and can ship anywhere in the world at short notice.
e: clarktracks@clarktracks.com • t: +44 (0) 1387 722370 • w: www.clarktracks.com



Track End Plate Links

Available to suit Clark 24mm or 28mm track repair links, end links can be welded onto the tracks of any make or model during refurbishment.



Track Joining Links

Available for 24mm and 28mm link systems and Long and Short lengths. Clark Tracks Joining Links are designed for ease of use. Forged from heat treated boron alloy steel for maximum hardness and strength, these links combine m14 bolt locking with smooth tyre friendly profiles.

The 24mm and 28mm Links combine bolt head locking, for single spanner tightening, and a new tapered locking tongue design.



Fitting Staples

Fitting staples make track tensioning even easier. Used in line with the Quickie Track Tensioner, these devices hold the track in the correct position for fitting to the machine.



Repair Links

Forged links and track plate end links are available in a range of sizes for the repair of all types and sizes of tracks. They are manufactured from heat treated boron alloy steel for strength and hardness, resulting in a durable, hard wearing link.



Quickie Track Tensioner Tool QTT400

For fast, easy tensioning this tool fits most types of forest tracks. Adjustment is via a 3/4" drive ratchet and 38mm socket onto the end nut (not supplied).



Track Tensioner Tool QTT401

The QTT401 is a specially extended variant of the robust QTT400. The extended fork legs allow the tensioner to be engaged on the inside of the track links. This is beneficial where a QTT400 is not able to be used due to space constraints or where the track plates have been extended (e.g. TXL).



Track Tensioner Tool QTT402

For single wheel tracks (GSG tracks) the QTT402 features high strength pins to engage the tracks and tension with ease.



QTT415 Universal Track Tensioner

The Universal Track Tensioner is installed between the track end links. The tracks are then tensioned one side at a time, using a battery operated ratchet gun, ratchet wrench or other wrench.

CUSTOMISATION & BENEFITS



Lateral Traction

Tracks in our DEMANDING and MULTI-TERRAIN class can either have standard width plates (ends on the C-Link) or extended for additional traction and flotation. In most cases these are finished with a square edge to reduce side slippage on icy forest roads or when traversing moderate slopes (traversing slopes should be avoided if possible to eliminate risk of machine roll-over).

Tracks for FLOTATION (sensitive and soft ground) are available with extended plate widths, for example; TXL and ATF. These tracks feature upturned edges to reduce soil damage whilst steering and reduce root or brash cutting, making them particularly suited to thinning operations.

CLARK TRACKS Lateral on-hill traction ✓

- ✓ No slippage off hill
- ✓ Cut edge generates Lateral grip
- ✓ No lost time on job
- ✓ Profits kept to a maximum
- ✓ No driver frustration
- ✓ Two edges gripping laterally
- ✓ Additional spikes can be specified to most tracks to increase forward and lateral grip (see next page)



Anti-Skid Spikes

Anti-Skid spikes are designed to stop the forest machine sliding sideways when crossing side slopes. They are normally between 40mm and 50mm in height, depending on track model, one spike per plate alternating left and right from track plate to track plate.

Spikes are available in a range of sizes for welding to forest tracks. Manufactured from heat treated boron alloy steel which is easily welded, these spikes combine hardness with strength.

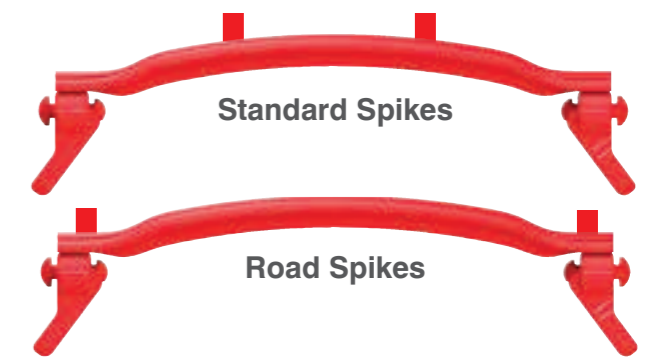
Welding instructions are available on page 41 or at www.clarktracks.com

Depending on track model and expected usage, the following options may be available.

- No spikes at all – for level ground and forest roads
- Two spikes per plate (one each side)
- Higher and lower height spikes (40mm, 50mm and 60mm in stock)
- Spikes welded to different position on track plate
- Paddle Spikes – 100mm wide by 50mm high – for ultimate climbing
- Road Spike – where the spike is at the outside of the plate, above the link.

Clark Tracks technical department will advise options and possibilities

Clark Tracks Ltd. Head Office
 Irongray Park, Dumfries, DG2 0HT, Scotland, UK
Email: clarktracks@clarktracks.com
Tel: +44 (0) 1387 722370



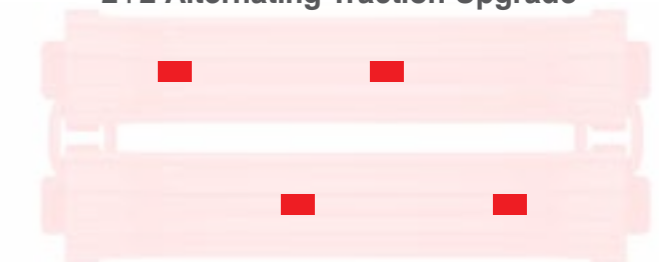
1+1 Standard



2+2 Traction Upgrade



2+2 Alternating Traction Upgrade



2+3 Traction Upgrade*



*refer to Clark Tracks for availability.

Customised Tracks

Although we offer a wide range of products at Clark Tracks, we understand that there are a number of variables that affect your selection, such as ground and working conditions or machine type.

If you find that none of the tracks shown meet your needs fully, we can customise our existing track products to suit customer requirements or, where viable, will consider the design and manufacture of a specialist track.

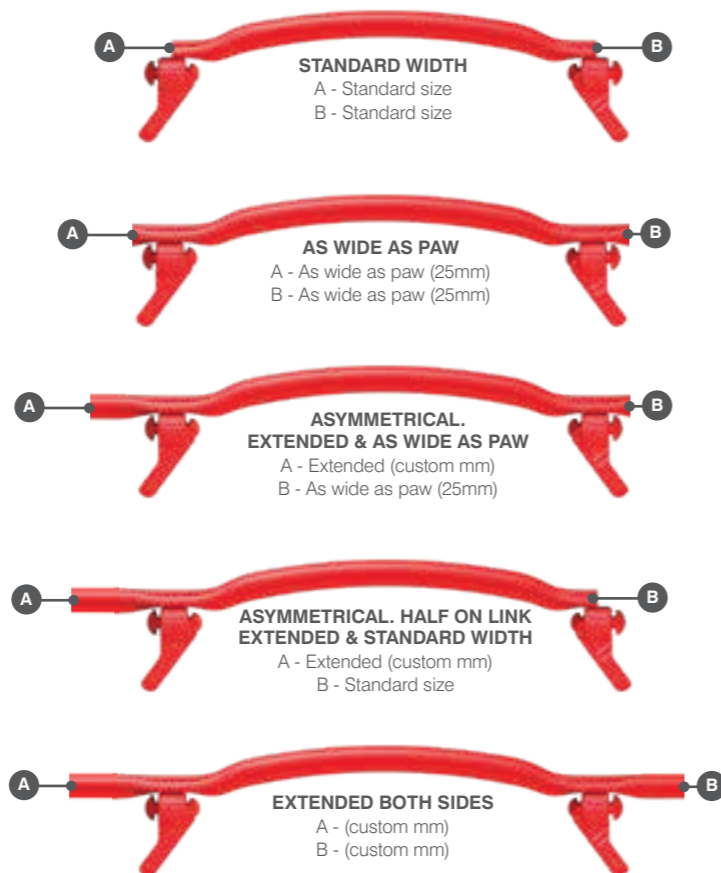
Extra Track Plate Width

It is often possible for us to increase the overall width of the track by simply increasing the length of the track plate during manufacture. We therefore offer the following track plate options:

- Extended both sides
- Extended more on one side than the other. Often done where there is little clearance between machine bodywork and tyre side wall
- Folded down track plate ends. It should be noted that this is not always possible.

Extra width options are limited by track model and tooling constraints. Please email Clark Tracks technical department to discuss options and availability.

Asymmetrical A & B width sizes can be manufactured to suit you needs.



Track Interaction with Tyre

Through in-depth research and development, Clark Tracks have designed tracks which achieve a fine balance – reduced track on tyre slippage while preventing severe tyre damage.

Every track plate has been manufactured to have an underside grouser bar, used to grip the tyre surface. Where this grouser bar is lubricated - as when driving in wet peat or clay conditions - or worn due to old age, slippage between track and tyre can occur. Tyre slippage can also be a problem on very large, high horsepower machines

which are heavily loaded and working on steep, wet ground. Where the bar is too sharp or aggressive, tyre damage will occur. As standard there is a 5 - 10mm gap between the paw and tyre (design range is between 2 and 20mm depending upon track design and tyre condition).

Tyre Suitability

Almost every tyre can be fitted with tracks, some are more suitable than others.

- Tyres should be designed for use with tracks
- The ideal tyre has a smooth, less aggressive tread pattern, with slightly rounded shoulders
- The tyre should have steel reinforcement within the carcass and be of heavy ply rating
- The tyre must be fitted to the correct steel reinforced wheel rim for forestry use
- The tyre must be fitted with the correct recommended inner tube, where applicable
- Radial tyres are generally unsuitable for tracks, the notable exception being the NOKIAN Forest Rider range of tyres
- Some tyre rubber compounds are not suited to steel tracks - if in doubt, please consult the tyre manufacturer
- Tracks can only be fitted to machines with fixed wheel centre bogeys
- Tracks cannot be fitted to machines with independent wheel suspension as found on some models of dump trucks.

For further information on the Nokian and Trelleborg tyres, and their suitability with our products, please download the Tyre Suitability Guide from our website.



Tyre Pressure

Visit our website www.clarktracks.com for more information about tyre pressure.



INSTALLATION GUIDE

Track Identification / General Rules



Date of manufacture

Serial code stamp

Tyre size

Tyre tread pattern

It is essential that the correct track is used for each tyre type.

As a general rule, close spaced tracks with wide plates are better suited to soft terrain. Wider spaced tracks with narrower plates are better suited to harder terrain and steeper slopes, offering greater climbing ability. However, it should be noted that tracks with close spaced plates are not suited to use in heavy snow conditions or some types of sticky mud conditions. This is due to the potential of material being unable

to escape between the track plates and building up between track and tyre which can, in extreme cases, cause machine bogey transmission problems. Each set of tracks carries identification badges giving the exact tyre size and tread pattern for which the track was designed. Also included here is date of manufacture and serial number.



FITTING GUIDE



This task should only be carried out by a trained operative. Please carry out a risk assessment to ensure safety for yourself and others.



The tracks will be supplied in four sections, with two joined sections required for each side of the machine. Tracks are manufactured in standard lengths for each tyre size and may be too long, requiring the removal of one full track plate section prior to fitting in order to obtain the correct tension. This is dependent upon whether the track is fitted to new or worn tyres and can also vary due to machine type and bogey design.

STAGE 1

Lay out the Track

Lay out the track with the track paws face down.

Use a good quality strong rope, such as nylon with a Ø20mm, and attach it to the centre of the last track plate.

Feed over the middle of the bogey tyres, and place the excess rope under the second tyre as shown in the diagram below.

The rope should be jammed tightly in place.

STAGE 2

Drive the machine forward

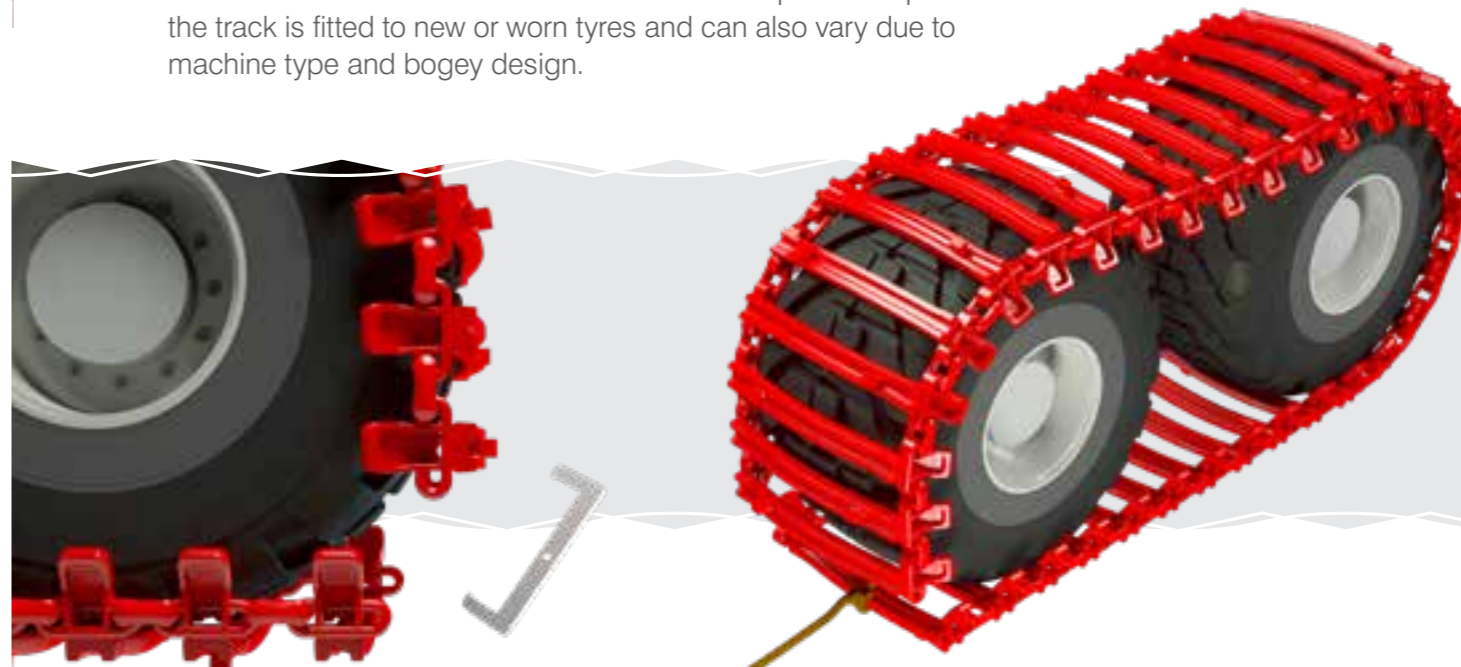
Drive the machine forward so that the wheels bite down on the rope trapped underneath, as shown in the diagram above. This will haul the tracks onto the rear tyres.

Fitting Your Tracks (Double Wheel)

STAGE 3

Insert the two fitting staples

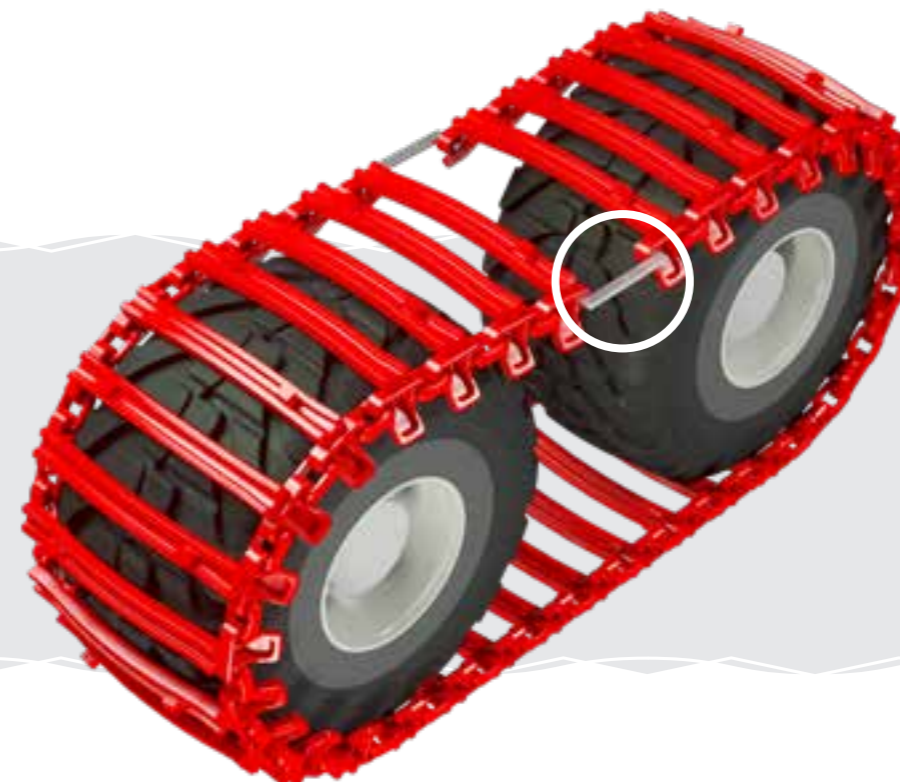
When the track is sitting fully on the machine as shown in the diagram, the two fitting staples (supplied with the track) can be inserted to hold the ends together. The rope should now be removed. Each section of track has been manufactured to a standard length so plates might need to be removed in order to achieve the correct tension. This is dependent upon whether the track is fitted to new or worn tyres and can also vary due to machine type and bogey design.



STAGE 4

Drive the machine forward again

Drive the machine forward so that the stapled section is in the centre of the bogey.

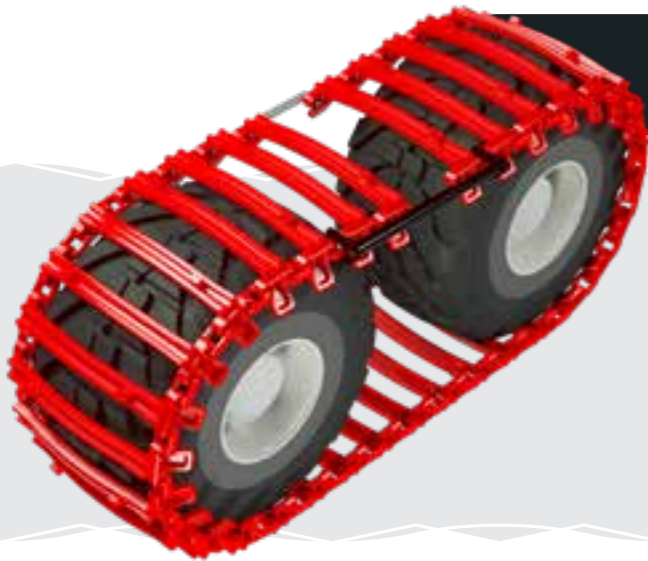


STAGE 5

Place the Track Tensioner

The track Tensioner should then be placed on either end of the track, on either the right or left side, and a ratchet used to tighten the track. The staple should then be replaced by the track joining link. This process is then repeated on the other side of the track.

NOTE: A 3/4" drive ratchet spanner and 38mm socket are required to operate the Tensioner. Ensure the Tensioner is correctly and safely fitted to the tracks prior to use.



STAGE 6

Fitting of track joining links

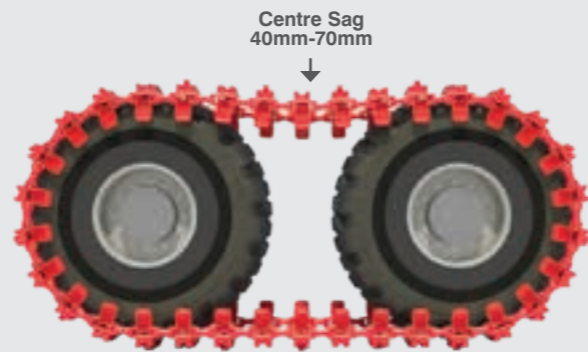
These links must be fitted with the smooth surface of the link facing towards the tyre, with the end plate fitted to the outside. Fitting these links the wrong way round can result in tyre damage with the link pins contacting the tyre side wall.



STAGE 7

Ensure correct track tension

Where tracks are run too slack, with excessive amount of centre sag, there are potential problems with tracks falling off. There is also a danger of tracks hitting and rubbing on bogey drive boxes and in extremely neglected cases, wearing grooves and holes in the drive box.



This task should only be carried out by a trained operative. Please carry out a risk assessment to ensure safety for yourself and others.

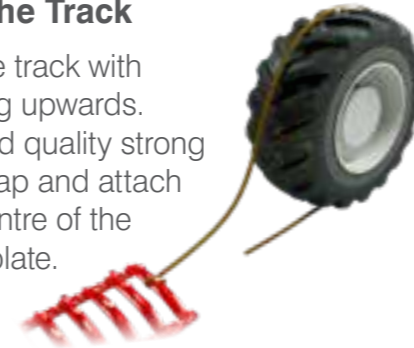


Each track will be supplied on 2 pallets. Check the serial number, tyre size and tread pattern found on the identification badges. It is essential for the correct tracks to be used with your tyre type.

STAGE 1

Lay out the Track

Lay out the track with plate facing upwards. Use a good quality strong rope or strap and attach it to the centre of the last track plate.



STAGE 2

Drive the machine forward

Place the rope or strap over the middle of tyre; place the excess under the tyre jamming tightly in place.

Drive the machine forward so that the wheel bites down on the rope or strap, trapping it underneath and hauling the track onto the tyre.



TRACK TENSION: The removal of one full track plate may be required to obtain the correct tension. This may be dependent upon whether the track is fitted to new or worn tyre.

CHOOSE YOUR TENSIONER

SEE PAGE 25 for more track info



TXSG
SUPER GRIP FLOTATION

QTT401

For TXSG tracks that has extended legs and can fit over the track extensions fitting on the link system between the track plates.



GSG
ULTIMATE CLIMBING

QTT402

For Grouzer Super Grip tracks which has pins to fit into the link system.

At this point the rope or strap can be removed.



STAGE 3

Insert Staples Tools

When the track is on the tyre add staples.



STAGE 4

Insert the Two Track Tensioner Tools

Staple can now be removed. Leaving the last track plate free to move.



NOTE: A 3/4" drive ratchet spanner and 38mm socket are required to operate the Tensioner. Ensure the tensioner is correctly and safely fitted to the tracks prior to use. Where lynch pins are provided, these must be fitted to tensioner first to prevent dislodging during fitting.

STAGE 5

Fitting Of Track Joining Links

! These links must be fitted opposite from that of a band track with the end plate facing towards the tyre, and the male part fitting from the outside. !



Correct Tension & Tyre Pressure

Where tracks are run too slack there is potential for track to falling off.



NOTE: Fitting these links the wrong way round can result in tyre damage. Tyres MUST be run at correct pressure, check manufactures recommendations.

DRIVING WITH YOUR TRACKS



Driving with Tracks

Tracks increase machine stability, offer increased traction and flotation. However, in order to obtain maximum advantages from using tracks, the following points should be duly observed:

- The correct track must be selected for each task, considering terrain, machine size and type, tyre type and size to which the tracks will be fitted, driver experience and working practices
- Tracks must be correctly fitted and tensioned
- Tracks should not hit or foul the machine bodywork
- Special note should be made of tracks which have worn anti-skid spikes. These spikes prevent lateral sliding of tracks, particularly on side slopes and should be replaced when worn
- Tyres must be inflated to correct working pressure - usually maximum permitted tyre pressure. **(See website for more details)**



Driving Speeds

The maximum driving speed with tracks should never exceed 12km/hr. This applies even on flat smooth surfaces or forest roads. Speeds should be considerably reduced in the forest and reduced further with a loaded Forwarder and when operating on extreme terrain.

WELDING INSTRUCTIONS

The lifespan of spikes, primarily depends on the ground conditions. On hard rocky ground, the life can be as little as 6 months, and on soft ground they can last for many years.

Spike re-welding is a delicate balance between getting enough penetration on the joint and **NOT** overheating the track pad. We strongly recommend following the procedures for best results:

Preparation

- Take the track into the workshop **24 hours** before welding on spikes.
- Clean the area where the spike is to be welded, removing dirt, rust and debris, and make sure there is no moisture on the track.
- Preheat this area to **150°C** with a gas torch.

It is vitally important that the tracks are clean and dry to reduce the possibility of hydrogen embrittlement which can be **FATAL** to a track.

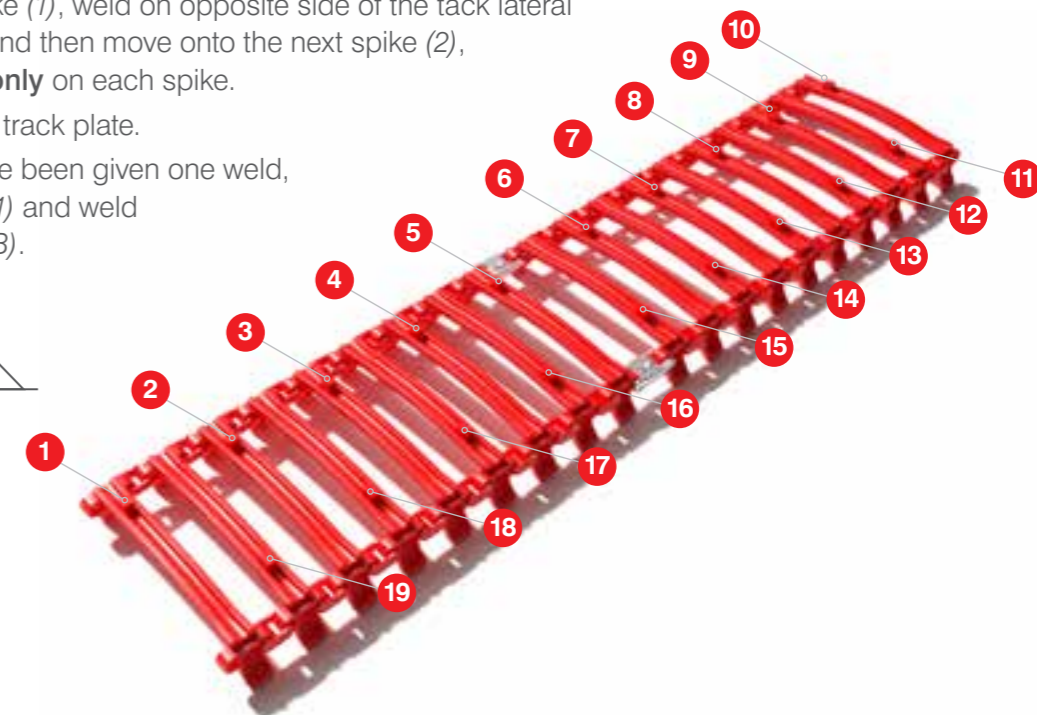
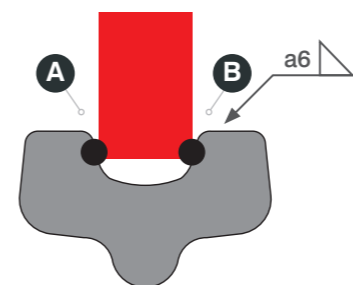
	Esab OK Autrod 12.50		Esab OK 48.00
Diameter, mm	1.0mm wire	1.2 mm wire	3.2mm electrode
Arc voltage, V	22v-25v	24v-28v	23v
Welding current, A	200A-220A	260A-300A	115A

MIG wire electrode:
ESAB AUTROD 12.50 (or similar)

Welding electrode:
ESAB OK74.78 (or similar)

Welding Process

- Place spikes into position and tack onto the track.
- Starting at the first spike (1), weld on opposite side of the tack lateral to the track plate (A), and then move onto the next spike (2), completing one weld **only** on each spike.
- Never weld across the track plate.
- After all the spikes have been given one weld, start at the first spike (1) and weld on the opposite side (B).



CARE AND SUPPORT

Machine Clearance

In order to avoid tracks hitting or fouling the machine bunk or bodywork (which can in extreme cases cause transmission problems), a minimum clearance gap of 50mm between track and machine should exist. The tracks should be properly tensioned at all times.

This clearance gap should be measured with:

- The track pushed on the tyres towards the machine
- The bogey at maximum tilt angle – the worst possible scenario.

Without this clearance there is a possibility of track/machine fouling when tracks wear, become slack or are run at faster than normal speeds.



PLEASE NOTE...

Many 8 wheel drive machines have less clearance at the front of the machine for tracks than at the back. When tracks are fitted to the front of the machine, ensure there is adequate clearance between tracks and machine bodywork such as:

- Clearance from doors
- Air intakes
- Front blades
- Cab ladders

This should be tested at all bogey tilt angles with tracks pushed towards the machine on the tyres.

When tracks are fitted to the rear of the machine, clearance is required between the tracks and the bunk frame. When bunk frames are repositioned, e.g. for different timber lengths, this can change track to frame clearances and must also be checked.

Some machines are fitted with hydraulic bogey lifting rams and may be unsuitable for use with tracks due to inadequate clearances.

Checks must be made prior to fitting tracks.

When space is restricted using the QTT400 tensioner, the QTT401 may provide a safe alternative.

Re-tensioning of Tracks

When tracks are new, they will quickly slacken off over the first few days of use and will require re-tensioning. Re-tensioning involves the replacement of long track links with short track links and then the removal of one full track plate in order to maintain correct tension. This process should be done using the Clark Track “Quickie Tensioner” as shown in the Spare Parts section of this hand book and described in our fitting instructions.

This slackening of new tracks is not any form of material stretching, but simply a “bedding in” process due to the numerous components in the track link system.

It can be expected that the track will require re-tensioning frequently during the first week of work, with this task becoming less frequent as the tracks bed in. It can also be expected to have to remove one complete track plate within the first three or four weeks of work and perhaps a second track plate after three to six months of work. The amount of wear experienced by the track link system over its working life is dependent upon the abrasiveness of the terrain together with the load and tension experienced by the tracks - over-tensioned tracks will wear more quickly.

Tracks should be run with as low a tension possible providing that:

- The tyres are not slipping and spinning inside the track
- The track is not falling off the tyres
- The track is not hitting the bodywork or any part of the machine
- The track is not causing any damage to the tyres.

Tracks which are over-tensioned unnecessarily will stress axles and hub bearings as well as increase tyre and track wear.

Repair & Support

Please consult Clark Tracks Technical Support Department prior to commencing repairs.

We pride ourselves on the level of technical support and backup we can offer our dealers and customers both through information contained in

this unique handbook and in the technical ability of our staff to solve problems.

We are also willing to talk directly with customers who require technical assistance even out of office hours. We are only a phone call away.

FOR WELDING SUPPORT - SEE WELDING GUIDE ON PAGE 41

WARRANTY

For further information on our warranty terms and conditions, please contact us via email or telephone.

CLARK TRACKS

high performance for maximum work life



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www.clarktracks.com

***Usage Note:** User discretion should be taken as Clark Tracks cannot make exact recommendations due to the fact that working conditions, machine or tyre limitations and terrain can vary considerably. The ultimate decision of suitability of a track type for a specific application must lie with the owner/user of the machine. Our aim is to help customers make an informed decision. © Clark Tracks 2024

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