GOUWELEEUW
The power of perfection

www.gouweleeuw.com/en

About Gouweleeuw

Specialized in painting:

- Mobile cranes
- Crawler cranes
- Tower cranes
- Excavators
- Aerial platforms
- Other heavy equipment

We work daily on assignments for leading manufacturers such as:

- Tadano
- Liebherr
- Sany
- Manitowoc
- Kobelco
- Spierings

But of course we also work for importers, dealers and end users (both new and used equipment) such as:

- Global Crane Services
- Allelys Installations Ltd.
- DM Cranes Ltd.
- G. O'Brien Crane Hire Ltd.
- Kavanagh Crane Hire Ltd.
- Osprey Marine Ltd.

Transport service

Have you bought a crane in Europe? First have the crane sprayed in your corporate colours at Gouweleeuw!

If desired, we can take care of the transport of the crane. We arrange international transport as well as transport from the port to Gouweleeuw and back.

Recent project

Phone number
+31 (0) 527 252 307
+31 (0) 6128 436 37

Email address
info@gouweleeuw.com

Visiting address
Ondernemersweg 14
8304 BH Emmeloord

THE POWER TO MOVE

Whan a company's customer magazine is called 1705, few readers would realise that this was the year the company was founded! Memmingham, Germany based heavy duty transport and haulage trailer specialist Goldhofer can trace its history back more than 300 years to when it started as a blacksmith/forge. However, it was not until 1946 and - so the story goes - a meeting in a bar between Alois Goldhofer and local company owner Hans Liebherr who suggested the company start making trailers for Liebherr's new excavators and cranes …and the rest as they say is history.

Alois's development of the first low loader with rear end loading was a key product and opened up new markets. He passed away in 1981 with his wife taking over the company until 2000, when she donated all of her shares to the Goldhofer Foundation. Today, the company is a leading manufacturer of heavy haulage vehicles with payloads from 20 to more than 10,000 tonnes. It has production facilities in Germany, India and the USA along with offices in the UK and United Arab Emirates with most of its products going to Central Europe and North America.

"From the start Goldhofer made the decision to position itself as a premium brand and not to enter the mass market," says Goldhofer's marketing manager, Florian Bischolfberger. "Product quality is very important and while initial equipment costs are slightly higher, it is the whole life costs or TCO that are important."

The company now has an extensive range of trailers, semi-trailers - including flatbed, semi trailers and low loaders - towed and self propelled heavy duty modules as well as a wide range and variety of equipment for special applications including self tracking dollies, a cable drum bridge, along with wind turbine blade and tower movers.

Latest products recently launched include the brand new 250kW E-PowerPack battery, which when used in combination with the hydraulic widening PST/SL-E split Self Propelled Modular Transporter with driven axles, offers a flexible and environmental solution for moving bulky loads having a 45 tonne axle load and a variable width from three metres to 5.1 metres - with the option of widening to 6.8 metres for greater stability. With driven axles the PST/SL-E split requires fewer modules and therefore reduces equipment costs.

The E-PowerPack is a zero emission solution with six to eight hours run time, allowing control of the direct power transmission to position loads to within a millimetre. The new operating system also features a redesigned remote control, ultra-bright LED display and integrated inclinometer.

Goldhofer is well known for its Starline products - TrailStar and StepStar - and claims to be market leader in the heavy duty transport sector. A few years ago a major improvement was the introduction of its Cargo Plus tyre which boosts performance by offering a lower profile - reducing the loading height by 75mm - combined with a high load carrying capability, this can be the difference between being able to pass under a low headroom bridge or tunnel or having to be diverted, causing delays in the equipment arriving on time. The Starline for example has a 790mm load height compared to the normal 855mm with a 10/12 tonne axle. There are different Cargo Plus tyres in the range. The 60 model can manage 10 tonne axle loads and has a speed rating of while the 80 model offers a 12 tonne axled load both with a speed rating of 80kph.

Meanwhile, the StepStar semi-trailer now features forced steering for greater versatility as well as a remote control system for safe loading and unloading. Other products benefiting from the Cargo Plus tyres include the latest Arcus, the Self Tracking and FT Series models. The Arcus

The first StepStar Z in the UK

The HS50 hybrid heavy duty articulated loader crane

A wind turbine tower section transporter

P 5 semi low loader fitted with Cargo Plus tyres has an impressive payload and load height of just 735mm.

A useful software package for heavy goods operators is EasyLoad which can check the load distribution of trailers and whether it is overloaded and calculate the centre of gravity. The certified printout is recognised by most police forces if you are stopped and checked.

TECO ARTICULATED LOADER CRANE

One of many unusual items of equipment on Goldhofer's Bauma stand was the HS850 hybrid heavy duty articulated loader crane from German manufacturer Teco. With a load moment of 850 tonne/metres, the crane is mounted on a levelling outrigger frame and has been specifically developed for lifting and moving heavy loads in confined working spaces. The unit has an 18.4 metre maximum radius and 22 metre lift height. Weighing about 65 tonnes it can be transported to the required location using one of Goldhofer's low loaders, flat frames or four axle SPMTs.

Maximum lift capacity is 200 tonnes at about two metres, but it can lift 40 tonnes at 17 metre horizontal reach and 60 tonnes at a height of over 21 metres. Overall length is 13.3 metres, width is 2.42 metres and height is 2.55 metres - compact enough to be moved through tunnels or factory halls. Its outriggers can lift it to a height of 1.1 metres to allow it to self-load onto a transport trailer.

WIND POWER

The company also has a full range of equipment to transport wind turbine components - turbines, tower sections and blades - and has recently revamped its transport system for wind turbine tower sections including its RA series of tower adapters with payloads up to 180 tonnes. Its latest is the RA 3-100 (4+7) tower adapter with a maximum capacity of 100 tonnes and a stroke of two metres.

Its 2.95 metre chassis width provides greater lateral stability, which can be helpful when negotiating tight bends along the route. Features include air suspension axles and a four point load pick-up system with adjustable clamps allowing one-man loading and unloading without the use of a crane.

"We can carry towers up to six metres in diameter and clear obstacles up to about 3.5 metres," says Bischofberg. "A typical turbine tower weighs about 450 tonnes - 200 tonnes for the tower, 180 tonnes for the turbine and 20 to 25 tonnes for the blades."

The FTV range is designed for transporting extra long blades. The FTV 850 has a load moment of 850 tonne metres and the latest and larger FTV 930 has been designed for the next generation of longer and heavier blades.

CHANGING REGULATIONS

According to Bischofberger regulations for Heavy Duty modules and wind trailers are fairly consistent across Europe and North America, however semi trailers in North America are totally different which is why they are produced regionally.

New regulations for tyre pressure monitoring are due to be introduced in the coming year or two. Although not yet mandatory most Goldhofer trailers have them already fitted, and while they are easy to instal on new trailers retrofitting them is considerably more complicated.

CURRENT MARKETS?

"Construction is not that good at the moment although the logistics sector is solid and we have a good order pipeline, so it is looking good for the company," he says. "Refurbishment and the used market are however buoyant as trailers can last for decades." ■

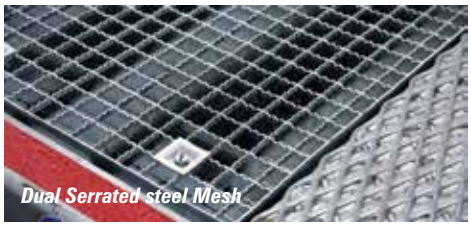
A STERLING JOB

Sterling GP - a leading supplier of aerial lift specification beavertail bodies on rigid trucks - has introduced Dual Serrated steel Mesh (DSM) decking which it claims is an improvement over fibreboard gridlock decking which can wear and degrade over time. Galvanised steel grating has been used for many years and has greater longevity but traditionally can be slippery when wet - particularly when moving platforms with small smooth wheels. Sterling says the DSM material offers operators the benefit of more grip - including lateral grip as the serration runs in both directions - when loading combined with a longer working life.

Powered slide out walkway

Sterling has two other products which comply with the more stringent UK Driver and Vehicles Standards Agency's latest 'Securing loads on HGVs and goods vehicles'. Easiload is aimed at those solely moving aerial work platforms ensuring that the spacing between lashing rings on the side raves cannot exceed 700mm. This has led to greater awareness ensuring load securing items such as straps and chains are properly held when not in use. Sterling's 'Chain-lok' bars, initially developed for UK rental company GT Access, enables chain binder hooks to fully enclose over the bar. The requirement that wheel chocks or timbers may also be required when transporting equipment on vehicles has resulted in its wheel chock stowage system.

One of its more recent innovations is the powered slide-out walkway section specified by rental companies including Sunbelt and GAP Group which has clear benefits of safety, ease of use and time saving.



Dual Serrated steel Mesh

Chain-lok bar

THE NEXT GEN LOW LOADERS

Nooteboom Trailers has launched the Euro-PX3, its 3rd generation of Euro-PX low loaders with pendulum (swing) axles and significant improvements in increased payload, a wider trough providing more space and flexibility for oversized loads, a bigger steering angle for better maneuverability and control, a new steering system to reduce tyre wear and a lightweight chassis.

Available with two or three axle lines, the Euro-PX3 has a load capacity of 12 or 14 tonnes per axle at 80 kph. It is available in vehicle widths of 2.54, 2.74 or 2.84 metres, axle distances of 1.36 or 1.51 metres and 245/70R17.5 or 285/70R19.5 tyres. The axle bogie has new bearings, simplifying maintenance and reducing long-term costs.

Nooteboom has been producing low loader trailers since 1953 and launched

the original Euro-PX in 2005. This year the PX range has been redesigned with hydraulically steered swing axles. Combination options in the near future include Jeep dolly and Interdolly configurations for extra load capacity.

COMPLEX STATOR TRANSPORTATION

Careful planning and collaboration with local authorities were required by UK based heavy transport provider Collett and Sons to successfully complete the 92 mile transportation of a 234 tonne stator from Heysham Port to Gretna Grid Stability Facility, Scotland.

At the port the stator - measuring 9.1 metres long, 4.2 metres wide and 3.9 metres high - was loaded onto a 12 axle modular flattop trailer to shunt it within the port for temporary storage. To facilitate self-loading, Collett's 24 axle 350 tonne capacity Scheuerle girder bridge trailer was built around the stator ensuring efficient loading operations.

The stator - accompanied by Collett's escort fleet and Lancashire police - set off from the port but due to the length and weight of the girder bridge trailer several complex manoeuvres and strategic adjustments were required. One included temporarily stopping motorway traffic to turn the trucks around and contraflow a joining slip road to avoid a weak bridge structure.

After 88 miles the load reached the transition point at Longtown and was self off-loaded onto temporary stools and the girder bridge demobilised. At this stage a 16 axle Self-Propelled Modular Trailer (SPMT) was driven under the stator to lift it off the stools eliminating the need for a large mobile crane. The SPMT provides 360 degree steering and vertical lifting or lowering of the load over shorter distances where route access is limited such as the various bridges that had to be navigated. The load was safely chained down for the final four mile leg of the journey to the Gretna Grid Stability Facility, driven at a two kph walking pace.

To ensure clear passage on the route, trees had to be trimmed and some street furniture removed. Additionally, a thorough structural report was made to ensure that two bridges dating back to the late 1800s, could support the combined weight of the SPMT and stator.

Upon arrival, limited space at the facility meant the stator was temporarily off-loaded onto stools and the SPMT was reconfigured to 11 axles enabling the trailer to make a 90 degree turn for unloading inside the building.

The Gretna Grid Stability Facility, featuring a 60 MVA synchronous condenser, will boost grid stability by providing short-circuit and inertia power, as well as reactive power compensation to support distribution networks with a high share of renewable energy.

The 234t stator

The stator being transferred to the SPMT for the final part of the journey

RELOCATION OF CRUSHER PARTS

Mining equipment is never permanent as once an area is exhausted, equipment must be moved to a new location to continue operations. Chile's state owned copper mining company Codelco has mines near the city of Calama in the north of the country and sought guidance from heavy lift and transport specialist Mammoet on the best method to move massive key crusher parts - the largest weighing 1,300 tonnes - 4.5km from one site to another.

In all, 16 components - including six of the largest making up the crusher system - had to be moved. Mammoet proposed a series of different extraction methods to allow the key components to relocate as whole units, reducing cost and resulting in the project finishing earlier than expected.

One of Mammoet's biggest challenges was sourcing and mobilising all the equipment and personnel for the huge project. To bolster the equipment that was already available in Chile, additional SPMTs were brought in from Malaysia, skidding systems from the US, and other equipment was sourced from Colombia.

There were six key components to relocate, and the method for removal and transporting was different for each. Most were lifted using climbing jacks and then relocated with SPMTs fitted with support beams. The drive system used the same approach but with the addition of a skidding system used to slide the component twelve meters before it could be jacked down into its final position.

The two heaviest items were the 1,100 tonne silo and the 1,300 tonne crusher - the latter being the most complex of the six cargo movements. The crusher was extracted from its housing using skid tracks and skid shoes before being lifted into the air high enough for SPMTs to move underneath. Lashing was used to add additional support and hold everything in position during the 4.5km journey.

Once at the installation site, the earlier process was repeated in reverse, with SPMT trailers lowering the cargo onto skid tracks to slide it back into its new position. The operation was completed in just over a month - less time than was expected due to crusher parts being removed as complete units - and included a team of 70 people, 160 axle lines of SPMT, eight 500 tonne skid shoes, eight 400 tonne jacking systems as well as support beams, rails, and lashings.

GMK5150XLe
THE FUTURE IS NOW.

HVO

The new Grove plug-in hybrid all-terrain crane GMK5150XLe was presented for the first time at this year's bauma in Munich, Germany. With its 68,7 m long main boom and electrically powered superstructure, this five-axle crane combines outstanding reach and minimal emissions.

- New and innovative plug-in hybrid all-terrain crane with the option to work locally emission-free.
- It provides maximum efficiency without compromising on performance.
- As the battery can be charged while driving, crane operators do not have to worry about the charging infrastructure on the construction site or in their yard.
- E-Boost - electric drive assistance can be selected.

NEW GMK5150XLe

- Capacity: 150 t
- Main boom: 68,7 m
- Maximum jib: 24,2 m
- Maximum tip height: 93 m
- Engine: Mercedes-Benz, 390 kW EUROMOT 5/Tier 4 final
- Generator: 170 kW
- Battery: 180 kWh

GROVE® CONNECT™

www.manitowoc.com