

# Faster. Safer. Greener. Better.

Just by changing your means of tubular transport, you can cut your crane-lifts in half and significantly improve the safety for your crew - while reducing your CO2 emissions.

Meet

 **TubeLock®**  
Tubular Transport & Running System

**TTRS®**

**GLOBAL  
GRAVITY**







# Reduce offshore crane lifts by half

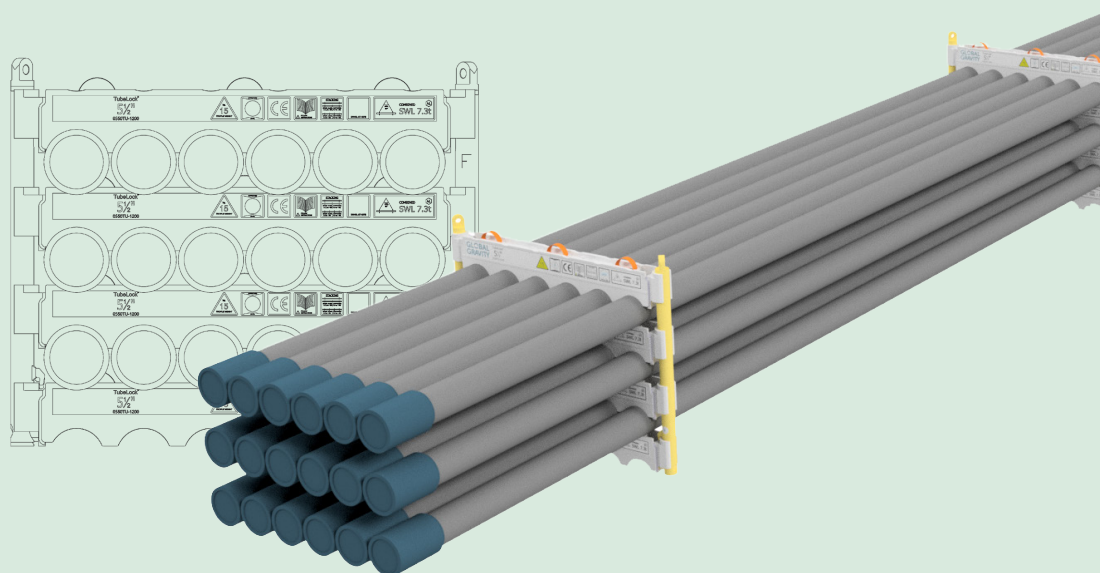
Many incidents that occur in the Oil & Gas industry occur when handling and transporting tubulars to and from the Well Site. According to the BSEE\*, lifting is by far the one thing that causes most incidents offshore every year.

We know that there are great dangers associated with crane lifts and many operations have started looking intensely at improving crane safety, which is paramount. What Global Gravity offers is arguably even better when it comes to safety: cutting the risk in half by severely limiting the number of lifts needed.

Global Gravity invented a tubular transport and running system, TubeLock® TTRS, that allows for pipes to be transported and handled safely – no more staggering around on pipes to get the

wire free for the crane; no more pipes relocating themselves midair, trapping fingers and hands; and no more unnecessary lifts with moving the pipes from boat to main deck and from main deck to pipe deck, as TubeLock® TTRS enables you to move the pipes directly from boat to cantilever, effectively cutting the lifts and thus the risk in half right there.

In today's day and age, there is absolutely no reason for a crew member to be injured or killed during tubular handling – the TubeLock® TTRS system saves money, time and CO2 emissions and can be implemented tomorrow. There is no logical excuse, not to make the switch to ensure a safer environment both onshore and offshore, so everyone can return home safely at the end of their shift.



\*[www.bsee.gov/stats-facts/offshore-incident-statistics](http://www.bsee.gov/stats-facts/offshore-incident-statistics)





## **Transporting and running pipes in TubeLock® TTRS is much faster**

Tubulars delivered in TubeLock® TTRS are individually prenumbered, and the frames are equipped with numbered tarps before shipping. The crew thus avoid crawling around numbering, tallying and drifting the pipes as these tasks can all be done onshore. This significantly reduces the risk of slips, trips and falls – and it heavily increases speed and efficiency.

The large, numbered tarps make it easy for the crew to see which racks to bring up next. There are no long transit slings, and you can transport several pipes at a time. The crew avoid having to lay out pipes and dismantle slugs and bulldog clamps because the pipes are already in the correct running order in the TubeLock® TTRS system.

Our case studies show, that you will save at least 18% of time on your entire pipe handling process – and upwards of 50% of pipe handling time on the boat-to-rig handling alone.



## **The safety is unparalleled and manual handling is minimised**

The TubeLock® TTRS modules are easily and securely stacked on top of each other. The crew thus avoid using heavy wooden dunnage. It is easy to pick up the pipes with the pipe handler direct from the TubeLock® TTRS, and the crew do not have to sling the pipes up. Less manual handling means improved safety for the crew.

Another safety feature TubeLock® TTRS offer is, that the pipes cannot get snagged in the man holes on the supply boat offshore when the crane lifts the pipes from boat to rig. This is not to be underestimated, as slings have been known to cause snagging, thus endangering the crew where they are supposed to be safe.





Save up to  
**83%**  
of your offshore  
crane-lifts\*

\*actual calculation made by  
a client in the Middle East





Former offshore crane operator on the Maersk Resolve rig, now Field Supervisor at Global Gravity, Lars Jakobsen.

## FORMER CRANE OPERATOR:

# “TubeLock® makes a monumental difference”

“The best thing about TubeLock® TTRS is that you avoid long transit slings. You avoid bundling, and therefore laying the pipes out, because they are already numbered and ready to grab straight from the TubeLock® TTRS system. This saves a lot of time, and above all it makes the work safer for the people handling the pipes on the rig”, says Field Supervisor Lars Jakobsen from Global Gravity.

A former offshore crane operator, now Field Supervisor at Global Gravity, Lars Jakobsen has handled hundreds of drill pipes, tubing and casing. In most cases the tubulars are handled in a process that is both inefficient and associated with great risk, as the heavy loads are rolled out, stacked and bundled with 10- to 12-metre-long steel wires.

But Lars has also experienced the benefits of the TubeLock® system first hand, which was implemented while he worked on the Maersk Resolve rig.

“As a crane operator, I saw TubeLock® make a monumental difference to the working environment and to our safety,” he said.

“Every day, the crew work in harsh conditions, exposed to wind, cold and noise in a very challenging working space. There is a great risk of injury to people and damage to equipment. It is not far from the walkway to the edge, and bulldog clamps and tools have been dropped on several occasions”, said Lars Jakobsen.



# It's not **just** about safety

Too many operations don't make the necessary adjustments in time, often at the cost of a crew members wellbeing. That is why we made TubeLock® incredibly easy to use. Implementation should never be an argument not to make the choice to improve the working environment - so what excuses are there?

Money? Time? Sustainability? Not at all.

TubeLock® TTRS will - with 100% certainty - improve your efficiency, save you significant rig-time and space, and save you money on your entire pipe-handling. On top of that, using TubeLock® TTRS will reduce your carbon footprint. And that is something every oil & gas corporation will be prioritising.



## **TubeLock® will save you money**

Because TubeLock® TTRS is saving you time and space, it is also saving you money. You can reduce your rig-time, reduce the amount of money spent on fuel for cranes and boats and trucks - even reduce personnel in the pipe yard, because pipe handling with TubeLock® only takes a few people.

As cliché as it may sound, the TubeLock® TTRS system is an investment - an investment in a more sustainable and efficient operation.



## **TubeLock® will save you space**

TubeLock® can be stacked much higher than traditional pipe handling methods and will take up less space on the boat.

The main gain, however, is that pipes in TubeLock® do not need to be loaded onto the main deck on the rig - it should be lifted directly from boat to cantilever deck, ready to run, saving effectively a whole deck worth of space.

On the backload, the frames take almost no space, as they are simply stacked neatly in containers, saving whole truckloads.

# Sustainability that won't break the bank

As we are all aware of, something has to change in the way we live our lives and run our businesses, if we are to contain the damages of the copious amounts of carbon emissions we let out daily.

At Global Gravity, we can, of course, not save the world. But we can help – and so can you.

As you may know from yourself, in order to make lasting sustainable changes, it has to be easy. If you find yourself missing the old ways, eventually you will falter and go back to what was before. We know this too. But making your pipe handling more sustainable, is the easiest reduction in CO<sub>2</sub> emissions that you will make – and it comes with so many other benefits, that you will never look back. Promise.

Our system makes a tangible difference for our customers in helping them reduce their CO<sub>2</sub> emissions. When using TubeLock® TTRS for tubular transportation you effectively cut your pipe handling down substantially. Among other benefits, that means 50% less polluting crane time, fewer boat hours and less truck trips.

Furthermore, TubeLock® TTRS is a use-and-reuse system for rental. The system is highly durable and have impressive longevity, thus saving the environment from unnecessary production and waste.





Using TubeLock® will save you time - in parts because pipes can be prepped at the pipe yard tallying, drifted and fitting with centralisers (if required) prior to load out.

**Time invested onshore = time saved offshore \$\$  
= CO2 reduction**

Our case studies show, that you will save at least 18% of time on your entire pipe handling process - and upwards of 50% of pipe handling time on the boat-to-rig handling alone.



TubeLock® can be stacked much higher than traditional pipe handling methods and will take up less space on the boat.

**Less space on boat = fewer trips  
= reduction in CO2 emissions**

Pipes in TubeLock® do not need to be loaded onto the main deck on the rig - it should be lifted directly from boat to pipe deck, saving effectively a whole deck worth of space and meaning the release of supply boat much faster.

**Less lifts = Less crane-time and faster boat release  
= reduction in CO2 emissions**

On the backload, the frames take almost no space, as they are stacked neatly in containers, saving whole truckloads.

**Less space on boat = fewer trips  
= reduction in CO2 emissions**

# Certified quality

TubeLock® TTRS has been through very harsh tests to demonstrate the strength and document the certified handling. Our certifications is your safety in knowing you are working with a world-class product from a highly professional supplier.



## DNVGL-ST-0378

### Type Approval Certificate

- Recommended practice DNV-RP-C205: Environmental conditions and environmental loads. October 2010
- DNV-OS-C101: Design of offshore steel structures, general (LRFD method), April 2011
- DNV rules for planning and execution of marine operations: Part 2. Chapter 5: Lifting January 1996
- DNV Standard for certification No. 2.7-1 offshore containers, 2017.



## NORSOK R-002 LIFTING EQUIPMENT

### Type Approval Certificate

This NORSOK standard is valid for technical requirements to lifting appliances and lifting accessories on all fixed and floating installations, mobile offshore units, barges and vessels, as well as on land based plants where petroleum activities are performed.



## DS/EN ISO 9001:2015

### ISO9001 Certificate

ISO 9001 evaluates whether your Quality Management System is appropriate and effective, while forcing you to identify and implement improvements.



**L.O.L.E.R.**

## LOLER

### Meets LOLER rules and guidelines



### CE-Marked



# We welcome comparisons

	Wire sling	Frame	Flat rack	Basket	TubeLock®	Notes
Applicable for tubing	✓	✓	✓	✓	✓	
Applicable for drill pipe	✓	✓	✓	✓	✓	
Applicable for casing	✓	✓	✓	✓	✓	
Manual handling	✓	✗	✗	✗	✓	
Applicable for chrome	✗	✓	✓	✓	✓	
Drifting/measure/tally	✗	✓	✓	✓	✓	Onshore
Applicable for sandscreens	✗	✗	✗	✓	✓	
Applicable for centralizer	✗	✗	✗	✓	✓	Onshore
Calculated and designed for sea transport	✗	✗	✗	✓	✓	Noble Denton
Certified for Pup joints	✗	✗	✗	✓	✓	DNV
Certified for less than full loads	✗	✗	✗	✓	✓	
3rd party certified	✗	✓	✗	✓	✓	DNV 2.22 / DNV 2.7-1
CE marked (EU law)	✗	✗	✗	✗	✓	
Comply with NORSOK R-003	✓	✗	✗	✓	✓	
Applicable for whipline	✓	✓	✗	✗	✓	
Stackable on supply vessel *	✓	✗	✗	✗	✓	*Wire clamps risk getting damaged
Comply API recommendation	✗	✓	✗	✓	✓	
Direct use with pipehandler crane	✗	✗	✗	✗	✓	

## Slings vs. TubeLock® TTRS

		Wire slings					TubeLock®					
Size	Qty/ Well	Jnt/ Bundle	No. of bundles = No. of lifts	No. of bundles/ trucks	No. of trucks	Total no. of lifts	Jnt/rack	No. of racks	No. of racks/ trucks	No. of trucks	Total no. of lifts	
3 - 1/2"	220	15	15	8	2	60	28	8	4	2	32	
4 - 1/2"	420	11	38	8	5	152	24	18	4	5	72	
5"	140	9	16	8	2	64	18	8	4	2	32	
7"	440	5	88	8	11	352	12	37	4	10	148	
9 - 5/8"	162	3	54	8	7	216	8	21	4	6	84	
13 - 3/8"	80	3	27	5	6	108	3	27	6	5	108	
20"	15	1	15	7	3	60	3	5	2	3	20	
						1012						496

# Get up and running right away

We know that time is money and one of the biggest worries big companies have, when switching up the old ways, is that new systems are hard to learn and costly to install - both because of errors in first-use and retraining the crews.

You won't find that problem with the TubeLock® TTRS. Our system is ready to go and easy to use. We have extensive online training videos, showing you and your people how to easily

operate the system and you are guaranteed to save time, even in first-use. We know this because that's the feedback we get from our clients.

Do you still have reservations? Give us a call and we will ease your mind.

This is the easiest safety improvement you will ever make - and you'll gain all the other TubeLock® benefits along the way.

**Get in touch - visit us at [globalgravity.com](https://globalgravity.com)**



**GLOBAL  
GRAVITY**