

Used Equipment Options

TS 331 Radial Telescopic Stacker – 300TPH



DOOLEY QUARRYING SOLUTIONS

TS-331 Radial Telescopic Shiploader

Telestack
PORTS & TERMINALS

CASE STUDY

HIGHLIGHTS

COUNTRY/REGION: Ireland

END USER: Premier Periclase

PRODUCT: TS 331

APPLICATION: Shiploading

MATERIAL TYPE: Sintered Magnesia

TONNAGE: Up to 300 tph

Background

Telestack installed an innovative custom design shiploading system to Premier Periclase, in Drogheda, Co Louth in Ireland. As part of the RHI Group, Premier Periclase produces sintered magnesia from seawater - RHI's basic raw material for the production of high quality refractory products. The Telestack TS331 Radial Telescopic Shiploader is being used to load coaster vessels directly from a plant conveyor. The TS-331 has been fitted with many features with a particular emphasis on controlling fugitive dust, increasing loading rates and improving working conditions - all major reasons for the Telestack investment.

Application

Drogheda is located 45 kilometers north of Dublin, where the mouth of the River Boyne flows into the sea. What makes this location so special also lies in the sea. Founded in 1936 as a cement plant, the site in Drogheda has been producing high-quality sintered magnesia from seawater since 1980. Premier Periclase is an important global provider of seawater-based large crystal sinter magnesia. RHI uses this material to produce bricks for high-temperature kilns in the steel, nonferrous metals, and glass markets. In Drogheda, low-iron material that is very rich in magnesia is extracted from seawater in a special process and fired at 2,300° Celsius in vertical shaft kilns to produce approx. 70,000 tons of sintered magnesia a year.

PREMIER PERICLASE PLANT

Dust extractions filters at transfer points

FEATURES

- Galvanised Dust covers full length of outer conveyor
- Canvas Retractable Telescopic Dust cover on Inner Conveyor
- Side wind plates on inner conveyor
- Fully Enclosed hood at transfer point from outer to inner
- 8.5m Telescopic Cascade chute on discharge c/w radio remote control of all features of shiploader
- Dust extraction system on feed-in and transfer points
- Integrated compressor for dust extraction integrated into undercarriage
- Radio remote-control of all functions

RESULTS

Reduced Dust Emissions

Since the Telestack installation, Premier Periclase has reported a significant reduction of fugitive dust during the shiploading process and improved loading rates. Fitted with fully galvanised dust covers on the full length of the outer conveyor, side wind plates on the inner conveyor, a retractable canvas telescopic dust cover on the inner conveyor, a fully enclosed hood at transfer point, dust extraction system on the feed-in and transfer points and an integrated compressor for dust extraction in the under-carriage, the entire shiploading process is now virtually dust free and simple to operate using the radio remote control.

Prior to the Telestack TS-331 installation, Premier Periclase were using an aging shiploading system that was difficult to manoeuvre and allowed the material to freefall into the hold of the ship. It was

not possible to adjust the loader to the size or position of the ship, and it was operated at a reduced loading rate to slow the movement of material and ensure that a low dust level was maintained. The main concern was to eliminate dust from the shiploading process and the Telestack system has proved invaluable.



Loading prior to the installation of the Telestack system

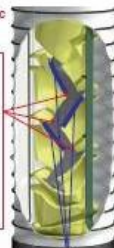
Continuous Loading from One Feed-in Point

As demonstrated in the picture below the Telestack TS-331 Radial Telescopic Conveyor allows the Operator to load the vessel from one fixed feed-in point. The radial telescopic features ensures that the vessel can be loaded without the

need to stop and re-position the shiploading system resulting in less downtime when trimming the vessel. This translates into an increase in the production rate as well as a significant reduction in the loading time. In addition the Cleveland cascade chute with its angled cones (which slows the trajectory of material into the vessel) also allows for added dust control as well as a fully controlled manner of discharge.

Cascade Telescopic Chute

The chute design eliminates material freefall due to the cone angles and spacing. Because material falls on to material, degradation and impact abrasion are greatly reduced.



Low velocity of material in mass-flow reduces slide abrasion and minimizes dust emissions.

"We are delighted with the Telestack shiploading system and it has proven invaluable in solving the dust emission problems that we were experiencing. I would recommend Telestack without hesitation."

**Mr Carl Griffin
Engineering Manager
Premier Periclase**



Telestack Range of Shiploading Equipment

Telestack specialise in the complete design, manufacture, installation and commissioning of mobile, bulk material handling systems for the inland ports and terminals, aggregates and mining sectors.

Their range of Port equipment encompasses radial telescopic shiploaders, shiploading direct from trucks, direct feed shiploaders, rail mounted shiploaders, cambered boom shiploaders and dockside unloading hoppers.

To complement your particular application, Telestack also offer an extensive range of options so that your shiploading units are specific to your needs.

How to Contact Us

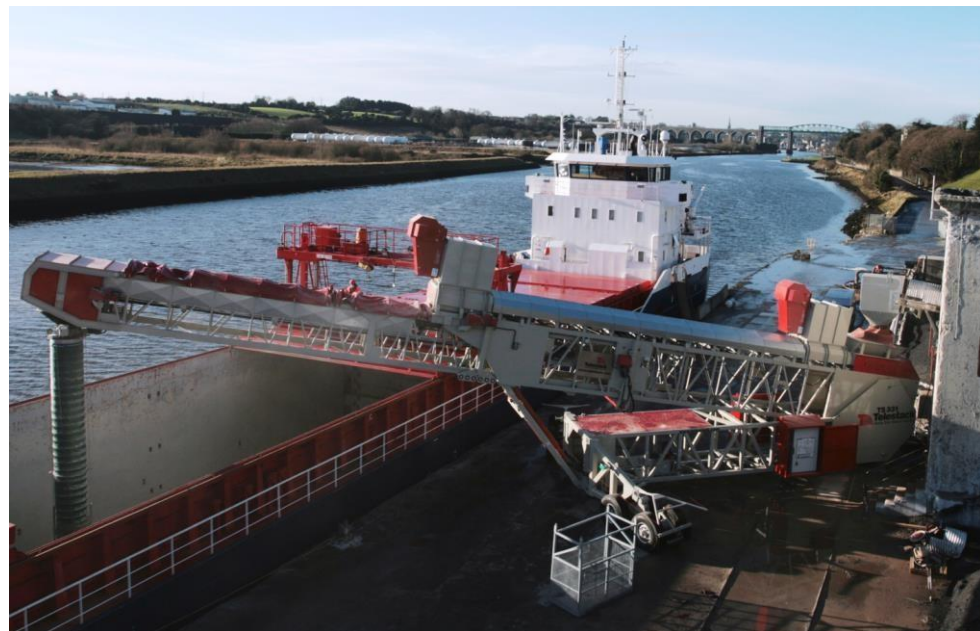
Telestack are renowned throughout the globe for their personalised service. The team of engineering and sales specialists work very closely with you throughout each stage of the process from pre-sales and pre-engineering to ensure that the equipment is specific to your project. Our product portfolio is vast as is our application knowledge.

Our experienced sales personnel will happily discuss your project with you and we have a range of global reference sites in multiple applications to tell you about. Call us on +44 2882 251100 or email sales@telestack.com for a preliminary consultation about your project.

#WeHaveTonnesToTellYouAbout



THE POWER TO MOVE MATERIALS



TS 331 RADIAL TELESCOPIC SHIP/ BARGE LOADER

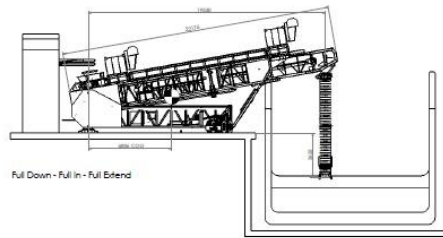
Brief Specification

- 31 m x 300 tonnes (@ 01.6T/m³) per hour
- Overall Weight 45 Tonnes
- 900mm wide belting – EP 500 3 ply 5mm top cover 1.5mm bottom
- 127mm x 900mm wide (Variable Trough Rollers)
- Primary and Secondary Belt Scrapers
- 1 x 11kw motors on outer conveyor, 1 x 9.2kw on inner conveyor
- 3kw Winch motor
- IP 65 Control Panel c/w Variable Speed Drive on both Conveyors
- 11kw Hydraulic Power pack
- 4 X 425/65 R22.5 Supersingle Tyres for radial movement c/w 2 x internal radial wheel drives
- Hydraulic Luffing Rams with range from 10- 23 Degrees

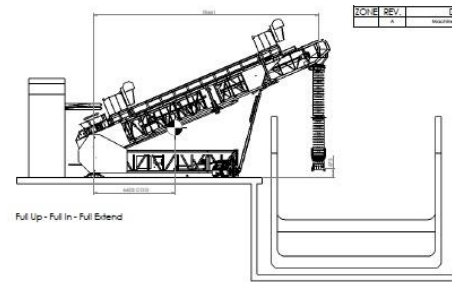
TS 331 RADIAL TELESCOPIC SHIP/ BARGE LOADER

Optional Extras

- Marine Spec Paint Finish ADFT of 250 Micron
- Galvanised Dust Covers on outer
- Canvas Telescopic Covers on inner
- 2 x Dust extraction units including compressor and wiring (Donaldson Dalamatic DLMV 18/15 F K7 AD reverse jet filter)
- 8.5metre Cascade Chute
- Radio Remote Control (All functions of shiploader and cascade chute)
- TSRM and Plug and Socket to interlink auxiliary Equipment (include for 20 metres of communication cable)
- The unit can ship either in large sections or 3 x 40 Ft shipping Containers/ Euroliner.
- Price on Application.

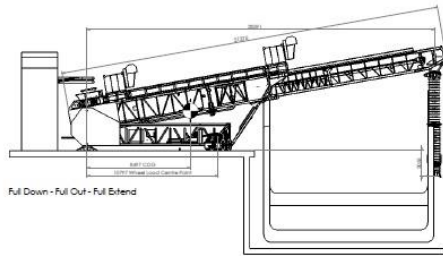


Full Down - Full In - Full Extend

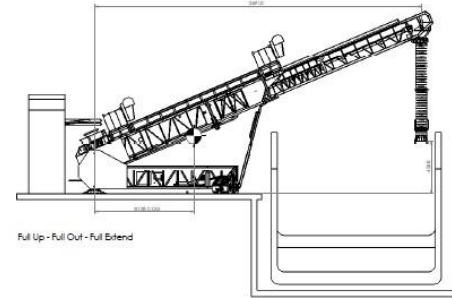


Full Up - Full In - Full Extend

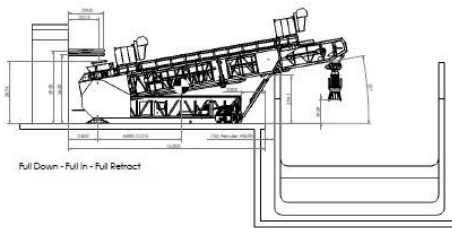
NO.	REV.	DESCRIPTION	DATE	APPROV.
1	1	ISSUED FOR CONSTRUCTION	07/01/2011	



Full Down - Full Out - Full Extend

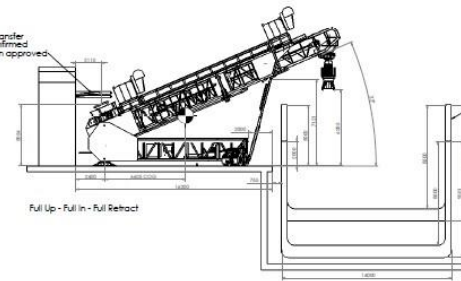


Full Up - Full Out - Full Extend



Full Down - Full In - Full Retract

Final conveyor and transfer point detail to be confirmed when machine design approved.



Full Up - Full In - Full Retract

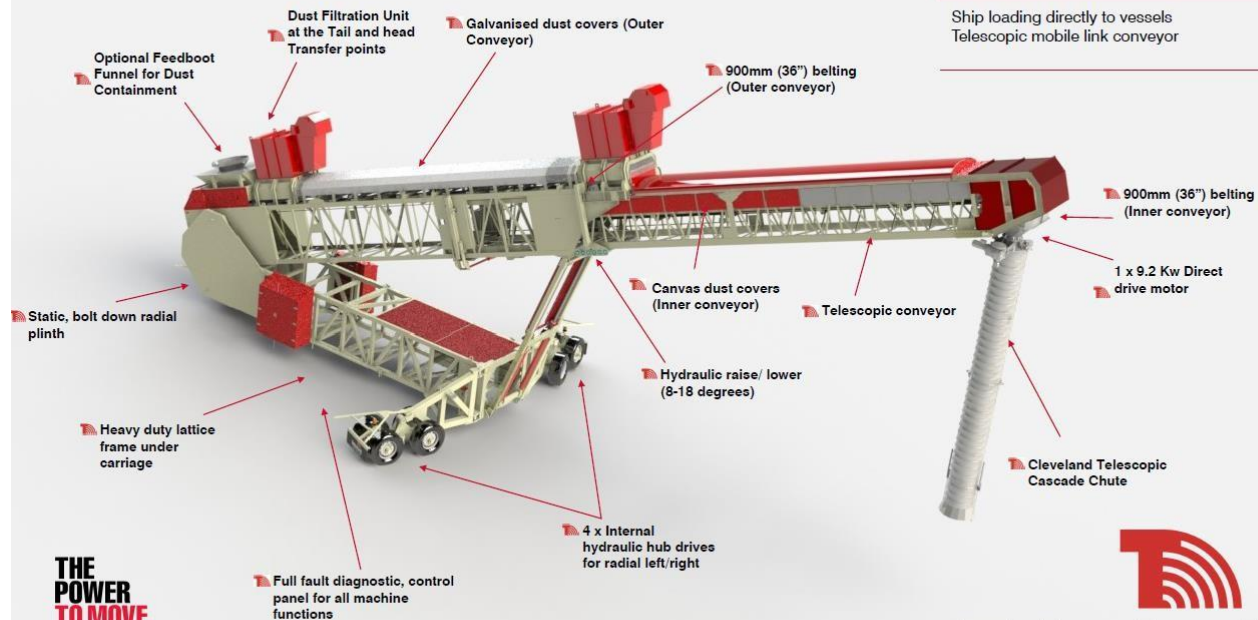
- Vessel details to be confirmed
- Vessel size
 - Freeboard dimensions for both high and low tide with/without ballast
 - Fender dimension

NOTE:



TS 331

Radial Telescopic Conveyor



APPLICATIONS

Radial telescopic stockpiling (Automatically) from mobile crusher/screener

Stockpiling directly from fixed conveyor system

Ship loading directly to vessels
Telescopic mobile link conveyor

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