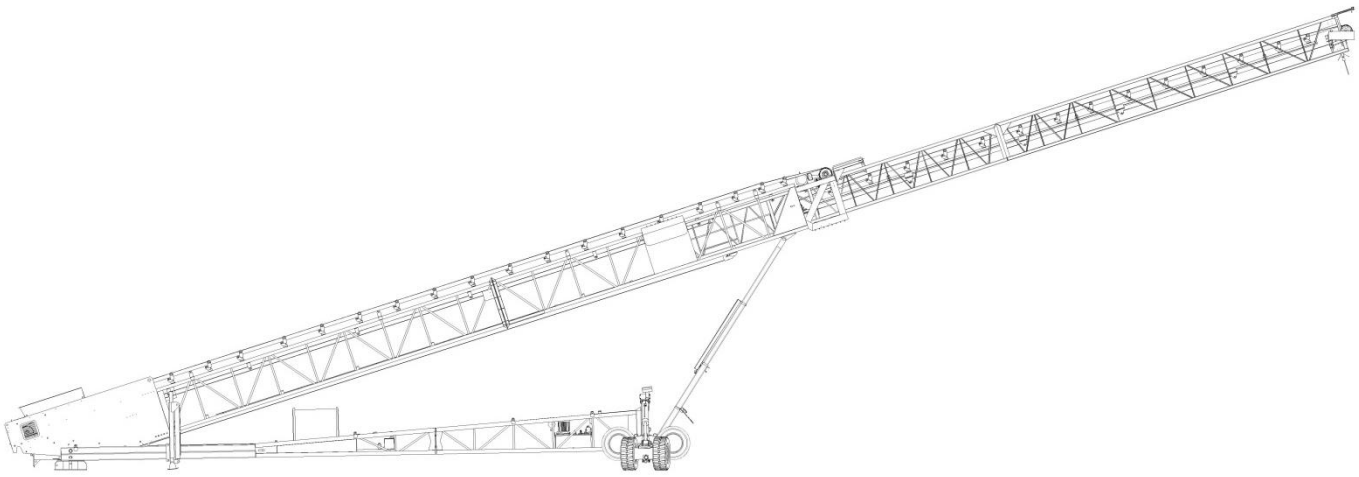
TECHNICAL SPECIFICATION

TS 36-140LT (140ft) RADIAL TELESCOPIC STACKER

Telestack®
AGGREGATES & MINING

TS 36-140 – RADIAL TELESCOPIC STACKER



The TS 36-140 AggStack Radial Telescopic Stacker offers a unique material handling solution for the Quarrying, Mining, Rail Transportation industries and Ports (Ship / Barge Loading and Unloading). The flexibility and efficiency of this equipment means it can be used in many applications long or short term. This versatility also means improved resale value when the project is finished as it is open to many different markets.

TS 36-140 – TYPICAL APPLICATIONS

- Stockpiling (Automatically) from secondary crushers and screens.
- Stockpiling crushed stone, sand and gravel, mineral ores.
- Stockpiling construction and demolition waste, top soil, coal, grain etc.
- Receiving crushed material and stockpiling safely over a quarry face/bench.
- Working as part of a mobile system on short to medium term projects.
- Ship loading directly to vessels.
- Loading directly to trucks or rail wagons.
- Telescopic mobile link conveyor.

TS 36-140 – KEY FEATURES

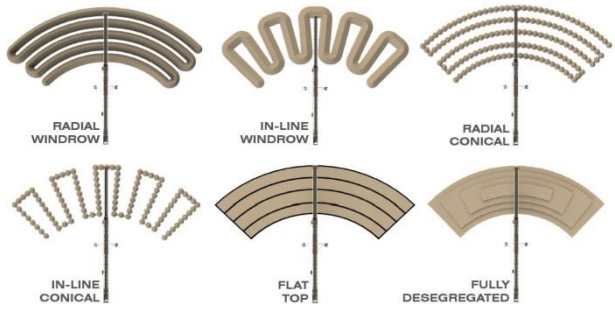
- Can be packed into 40ft containers, which ensures easy and cost effective transport around the globe. On site assembly 1 - 2 week.
- Conveying material reduces dust levels, noise levels and carbon footprint.
- Conveying material eliminates the high cost of dump truck or shovel haulage and is the most cost-efficient and environmentally sound method of material transfer.
- Increased production capacities
- Lower capital investment
- Flexible and reliable mobile material handling equipment
- Reduced labour and operator costs
- Eliminate segregation, degradation, contamination and compaction.
- Minimal civils' and planning permission required as it is mobile equipment.

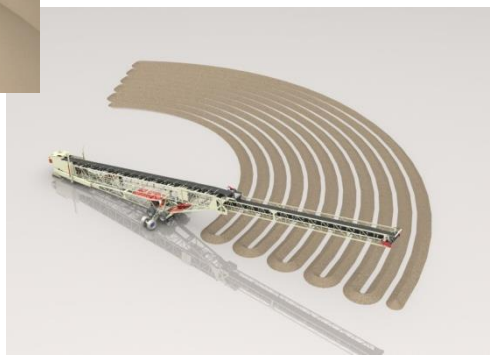
UNDERSTANDING OUR TECHNOLOGY

PLC Automatic Stockpiling System

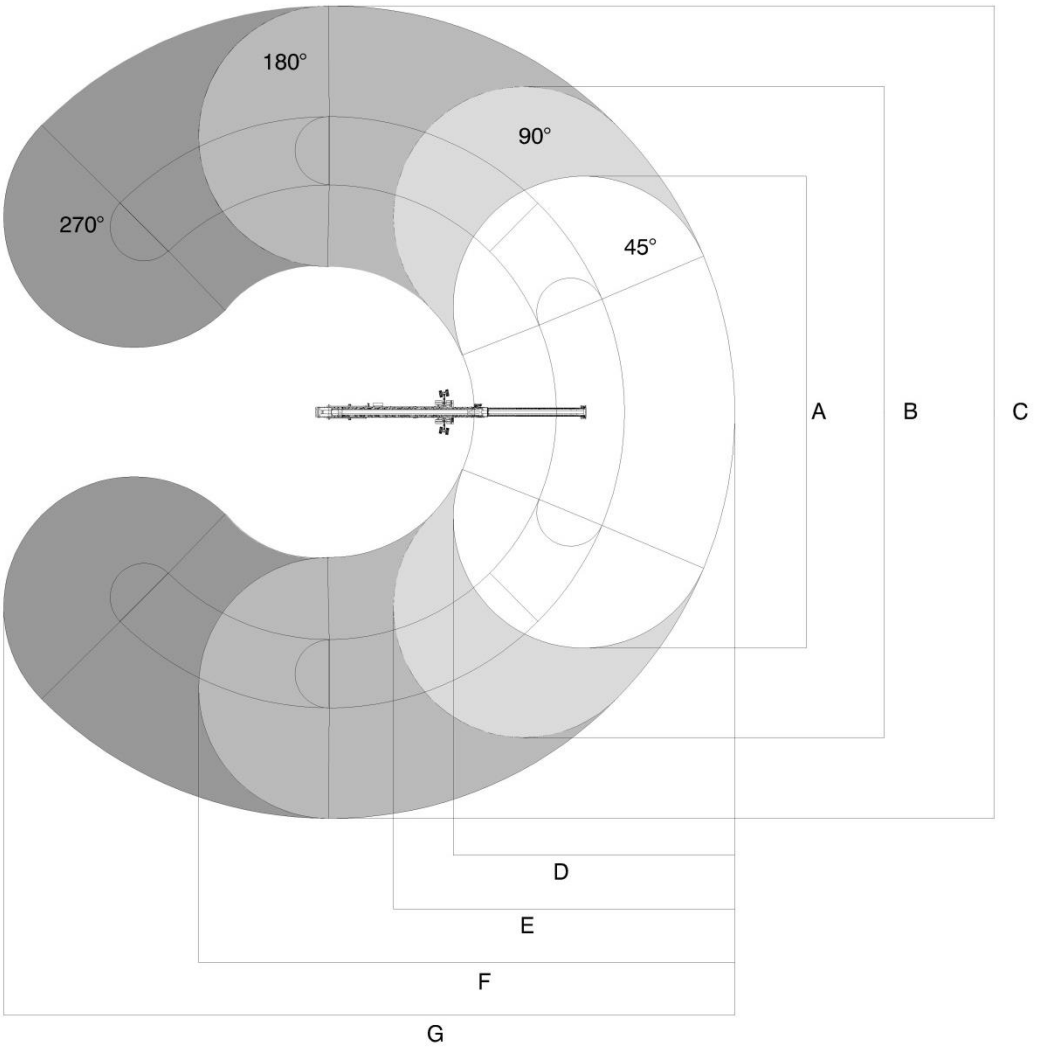
The radial, telescopic and luffing features of the Telestack conveyor range allows the operator full control when stockpiling a range of materials whilst eliminating segregation, degradation, contamination and compaction of material.

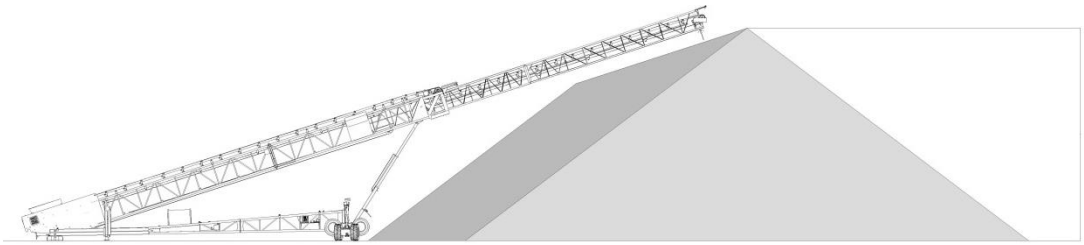
- Telestacks fully automated stockpiling software, provides a high quality solution in the prevention of material segregation and degradation.
- The fully programmable PLC controller provides this clever solution with a versatile, ergonomic and reliable stockpiling system.
- The stockpiling system comes with an innovative, easy to use Human machine Interface (HMI), so the user can efficiently select and stockpile the windrow programme of choice as standard.
- Allen Bradley Automated Windrow Stockpile Programme including software, height level & material sensor and limit switches.
- Significantly reduces stockpile segregation, degradation and contamination with windrow stockpiling. Automates the entire stockpiling process which greatly reduces labour costs.
- Multiple program options available. 6 x programs and 1 x manual operation.
- 20m of cable with machine to allow for radial movement.





TS 36-140 – STOCKPILING CAPABILITIES





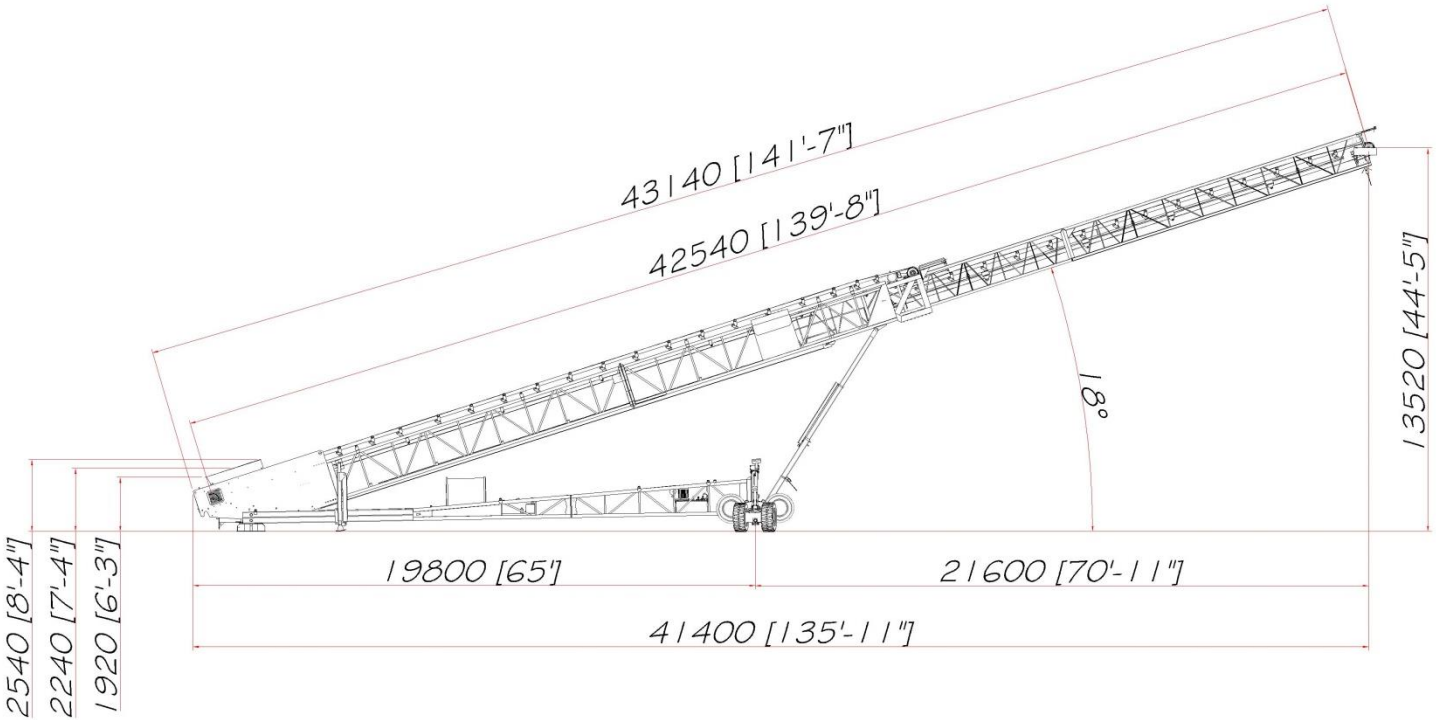
Using the Telescopic feature enables the user to stockpile up to **30%** more than conventional fixed boom radial stacking conveyors.

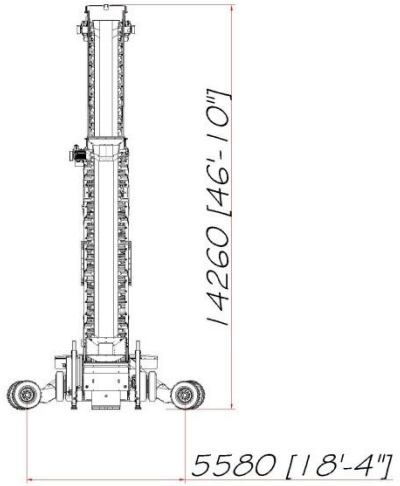
All stockpiling capacities are calculated based on material, with a bulk density of 1.6 tonnes per m3 (100 lb/ft3)
Stockpile angle of repose 37°

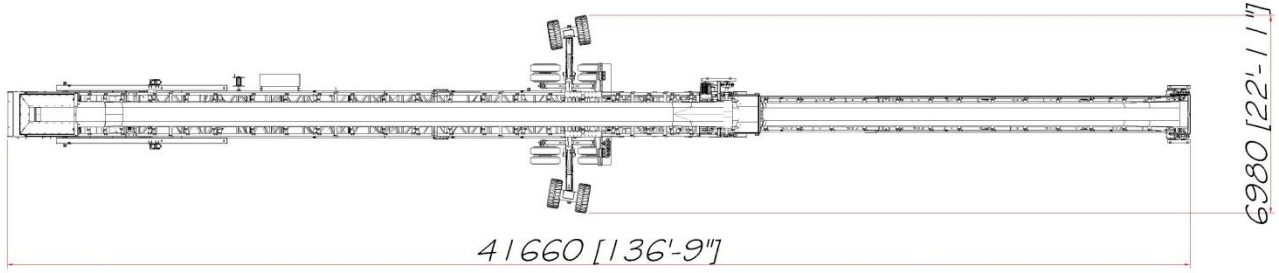
Detail	Stockpile Dimensions	
	Metric	Imperial
A	72.68m	238’ 7”
B	100.24m	329’ 2”
C	125.14m	410’ 10”
D	43.40m	142’ 6”
E	52.60m	172’ 9”
F	82.58m	271’ 2”
G	112.68m	370’
H	12.90m	42’ 4”

	Stockpile Capacity (Volume)		Stockpile Capacity (Mass)	
	m^3	yd^3	Tonnes	Ton
0°	4,617	6,039	7,387	8,126
45°	13,102	17,137	20,963	23,060
90°	21,586	28,233	34,538	37,991
180°	38,555	50,428	61,688	67,857
270°	55,524	72,623	88,838	97,722

TS 36-140 – WORKING DIMENSIONS

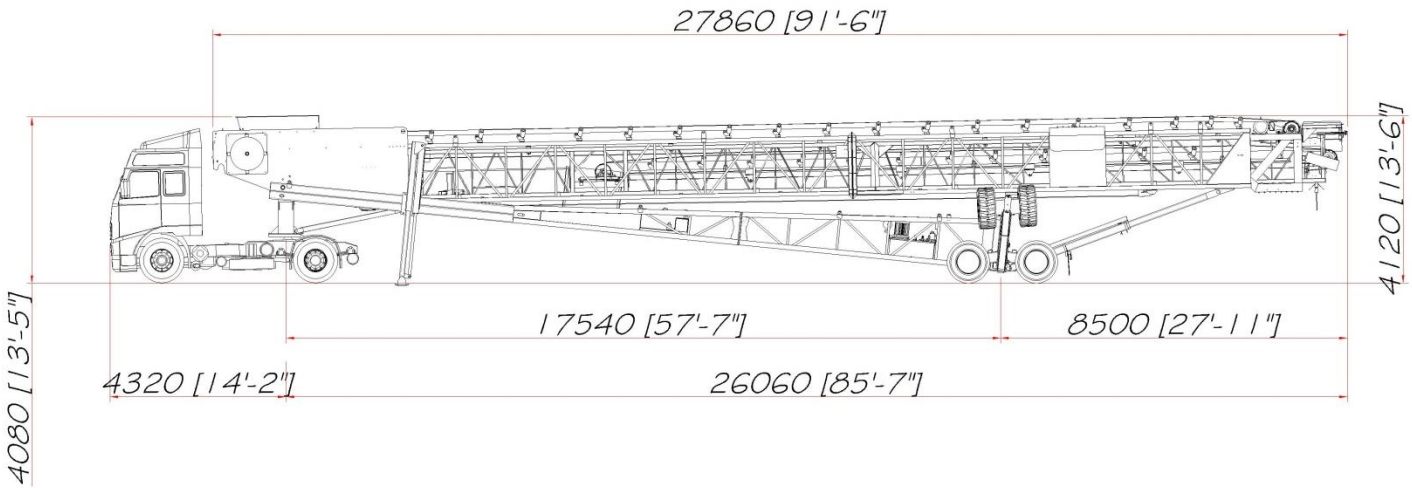


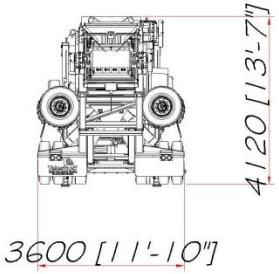


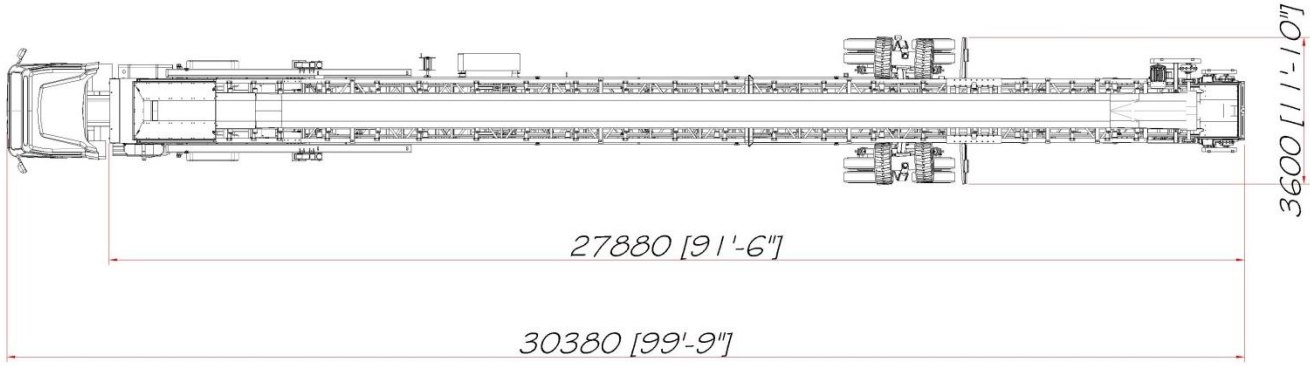


	Metric	Imperial
Overall Length (Conveyor)	43.14m	141’ 7”
Machine Working Length (18º)	41.66m	136’ 9”
Discharge Height (18º)	13.52m	44’ 5”
Feed in Height (Rear)	2.24m	7’ 4”
Operating Width	6.98m	22’ 11”

TS 36-140 – TRANSPORT DIMENSIONS





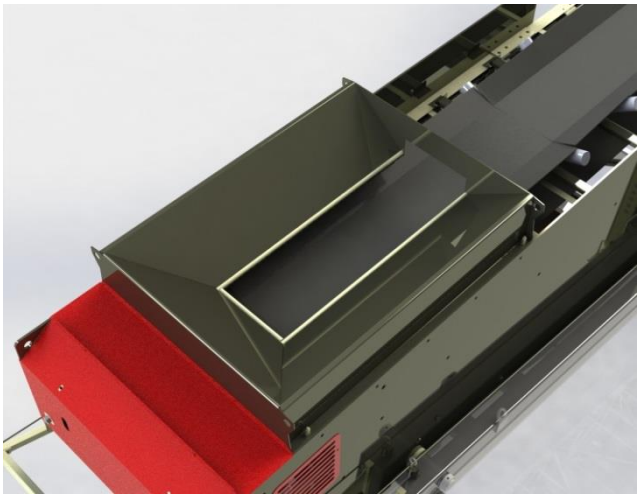


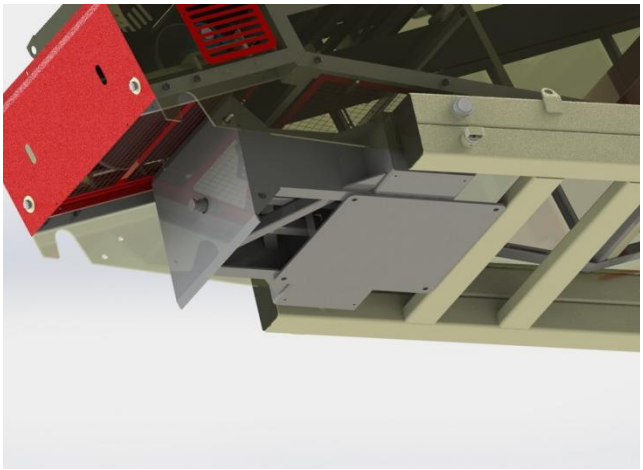
	Metric	Imperial
Transport Length	27.86m	91’ 6”
Transport Width	3.60m	11’ 10”
Transport Height	4.12m	13’ 7”
Overall Weight	26,000 Kg	57,320 Lbs

Unit can also be transported in a 40' High cube container.

Feedboot/Counterweight

- Tapered Dead box style feed boot for handling of material.
- Low tail style design for lower feed in heights
- Feedboot rollers: 102mm (4”) troughing roller sets
- Rubber skirting to prevent material spillage.
- King pin, counterweight and side plate assemblies are designed to allow ample turning clearance for most 5th wheel tractors.
- Safety guards at all pinch points are standard.
- Standard turn table to be bolted/secured to firm base on site. Slung on side of counterweight for easy transport.
- Standard healed chain hooks, to enable the unit to be towed by wheel loaders or similar equipment on site
- Includes hydraulic rams attached to landing legs and gas power pack to power rams.
- Enables support legs to deploy when there is no available external power source.





Outer Conveyor

- Lattice frame design gives structural strength to the conveyor frame
- Standard 900mm (36”) wide EP 400 3 Ply, 4mm+2mm Belting
- 102mm (4”) diameter troughing rollers set.
- Wing roller angle adjustable.
- 150mm (6") diameter disc return rollers. Includes profiled steel nip guard as standard

- 30 HP motor, V-belt driven shaft mounted gearbox – 10:1 ratio, 109 RPM using recommended pulleys
- Spring tension Primary face scraper cleaning belt. 900mm (36") incline belt.
- Plough Scraper located at tail drum to clear inside of belt of any material.
- Drop pin system to stop inner conveyor from retracting unintentionally in the unlikely event of a winch rope failure.

Inner Conveyor

- Lattice frame design gives structural strength to the conveyor frame
- Standard 900mm (36”) wide EP 400 3 Ply, 4mm+2mm Belting
- 102mm (4”) diameter troughing rollers set.
- Wing roller angle adjustable.
- 150mm (6") diameter disc return rollers. Includes profiled steel nip guard as standard
- 2 x 10 HP motor, V-belt driven shaft mounted gearbox – 10:1 ratio, 116 RPM using recommended pulleys
- Spring tension Primary face scraper cleaning belt. 900mm (36") incline belt.
- Plough Scraper located at tail drum to clear inside of belt of any material.

Telescopic Winch

- The telescopic conveyor is extended and retraced using a wire rope and winch system.
- Electric Drive Motors, IP 66 Rated as standard and IE3 Efficiency as Standard.
- Emergency rope break system built into every conveyor as standard, which will activate in the unlikely event of a wire rope break scenario
- The winch has a 3.3 kW (4.4 HP) motor.
- Heavy duty wire rope used with 13mm (1/2") diameter.

Undercarriage

- The front support frame of the undercarriage is manufactured from Rectangular Hollow Section (RHS).
- The rear of the undercarriage is constructed of heavy duty structural angle.
- The rear of the undercarriage is hydraulically raised and lowered to transfer between radial and transport mode.

Hydraulics

- **Gull Wing Configuration:** 11 kW (15 HP)
- **Non-Gull Wing Configuration:** 7.5kW (10Hp)
- 3 station hydraulic power pack with 125 litres (5 Gallon) reservoir.
- Electro-hydraulic power pack with 50-200 litre oil reservoirs
- This power pack operates all hydraulic functions – Raise/Lower conveyor, radial left and right, raise/lower under-carriage and any other hydraulic functions

Radial Arms

- Heavy duty structural steel, hydraulic folding, gull wing style radial arms for radial travel.
- Held in place by a tie bar.
- Internal hydraulic wheel drive for increased torque over uneven or soft ground.
- 4 x 385 / 65 / 22.5 super single tyre on 10 stud hubs.

TS 36-140 – PAINT OPTIONS & SPECIFICATION

PRE-PAINT PREPARATION

- All steel work Degreased/Cleansed
- Shot blasted in accordance with standard SA 2.5
- Steel shot blasted with synthetic mineral silicate using a grain size of 0.2 – 1.5mm, to give a high cleaning rate and etch acceptable for coatings.

Option ID	Micron Finish	Coats					Finish range DFT (µm)
		1	2	3	4	5	
Telestack P1 (Standard)	**140**	K3	PU	PU (Flash)	N/A	N/A	120µm - 155µm
Telestack P2 (Marine)	**250**	Zinc	K3	PU	PU (Flash)	N/A	250µm - 300µm
Telestack P3 (Special)	**300**	Zinc	K3	K3	PU	PU (Flash)	275µm - 325µm

- **A – K3 – High Build Two-Pack Epoxy Primer -** A high performance two-pack epoxy primer designed to meet the exacting requirements of the agricultural and construction equipment markets, used in all applications.
- **B – Zinc Rich Epoxy Primer –** Zinc based epoxy primer with capability for high build application, used in Marine and very abrasive applications.
- **C – PU - High Solids Two-Pack Polyurethane Finish –** High performance Two-pack polyurethane designed to meet the exacting requirements of the ACE and materials handlings market, can be used in all applications.

COLOUR

- RAL - 7032– Telestack Cream
- RAL - 3001 - Telestack Red

All steel work fully painted, including inside edges of holes/cut-outs, along edges and underneath/hidden faces not normally viewed.

**(All externally purchased items shall have a nominal DFT of 50-100 µm, as delivered to Telestack. If additional paint is required this must be discussed up front with the sales team.)*

TS 36-140 – OPTIONAL EXTRAS

Control/Electrical

- Radio remote control 8 Station (All Function)
- Automatic PLC Stockpiling program (Touch Screen Alan Bradley)
- Tail shaft rotation monitors and plug & socket to interlink auxiliary equipment. (Includes 20m cable)
- Grab Wires fitted to under-carriage (Push E-Stops as standard)
- Isolators fitted to all drive motors
- Upgrade to 500 metric Tonnes per hour (1 x 22 kw on Outer and 2 x 7.5 Kw on inner)

Feed Boot and Liners

- Upgrade for Radial tapered type feed-boot (Mild steel liners as standard)
- Upgrade to 6mm Abbro liners fitted to feed-boot and transfer point

Dust Containment and Suppression

- Spray bar at Discharge point (Inner Conveyor)

Tracks

- **3.0 metre Tracked Dolly Unit -** Diesel Engine driven (Duetz 3 cylinder Air cooled) c/w control panel and doglead Tier 3. NOTE : 1 X Extra 20ft Container is required
- **3.0 metre Tracked Dolly Unit -** Diesel Engine driven (Duetz 4 cylinder Water cooled) c/w control panel and doglead Tier 4 NOTE : 1 X Extra 20ft Container is required

TS 36-140 – TRANSPORT & INSTALLATION

Containerisation

- Telestack units can be packed into 3 40ft (12m) High Cube containers for efficient and economic global travel
- The equipment is designed, manufactured, built and fully tested in the factory before dispatch
- The client can inspect the completed unit during the testing procedure in the Telestack for approval if required

'Ro-Ro'

- Units shipped fully assembled

Flat-Bed/Trailer Transportation

- Shipped in 2/3 large pre-assembled sections for quick setup on site

Assembly

- Typically assembly time is approximately 3-4 days for a typical Ship-loader
- All sections are bolted together so no welding is required on site
- All units are pre-wired with each unit using plug-&-socket technology for interlinking the sections and auxiliary equipment, eliminating complex electrical work on site
- The units include fully built and tested hydraulic systems, eliminating complex assembly on site

Testing & Training

- All units are fully assembled, quality checked, tested and broken down before they left the factory significantly reduce commissioning time on site
- Telestack can supply(If required) an installation engineer to oversee the process, dry/wet commission the unit an provide detailed training for the operators

Telestack Limited
Bankmore Way East
Omagh, Co.Tyrone
Northern Ireland
BT79 0NZ

Tel: +44 (0) 2882 251100
Fax: +44 (0) 2882 252211
Web: www.telestack.com
Email: Sales@telestack.com

THE
POWER
TO MOVE
MATERIALS