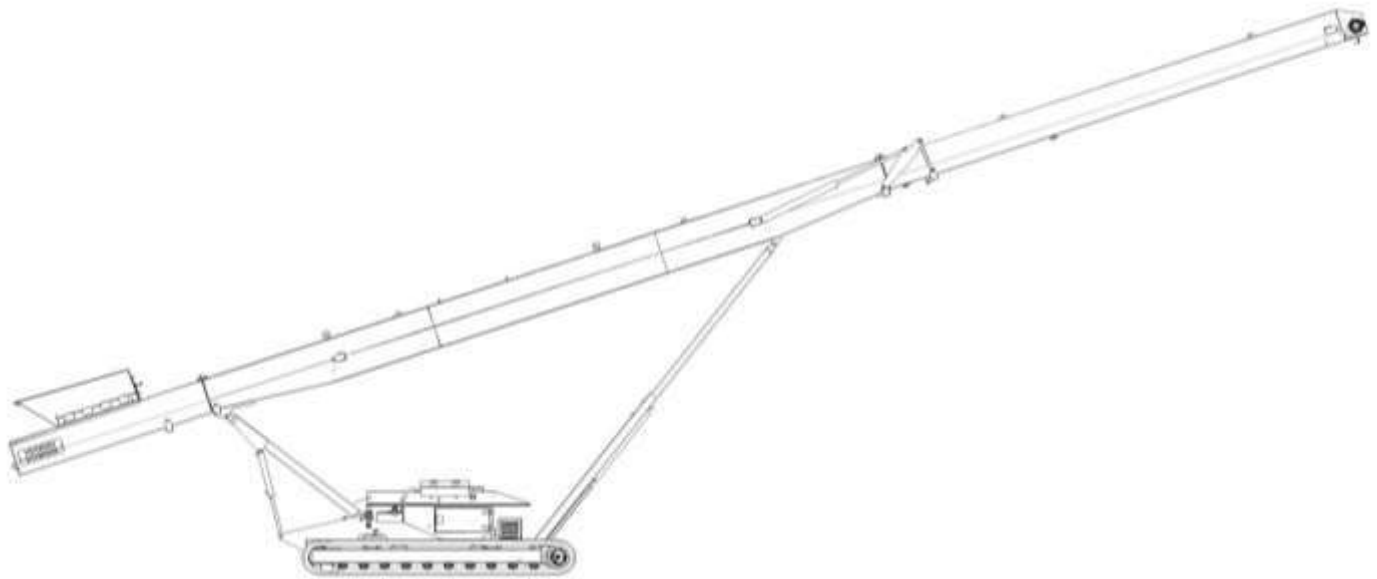


# TECHNICAL SPECIFICATION

TC 624 (42" x 80ft) – TRACKED CONVEYOR



# TC 624 – TRACKED CONVEYOR



The TC 624 is a track mounted fully mobile conveyor designed to work at production rates of up to 600tph. As mobile crushers and screens constantly get larger with increased throughputs, transport restrictions have not allowed for their on board conveyors to increase in size and length to cope with higher tonnages. Track conveyors fulfil this need by providing much larger stockpile capacity and at the same time improve plant mobility by removing material from the processing equipment.

## TC 624 – TYPICAL APPLICATIONS

- Stockpiling from secondary crushers, screens and shredders.
- Stockpiling crushed stone, sand and gravel, mineral ores, mulch, woodchip/biomass.
- 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 and truck loading.

## TC 624 – KEY FEATURES

- High throughput of up to 600 tph (660 Ton / hr)
- Maximum distance between tracks and head drum, for optimum stockpiling capacity
- Maximum lump feed size of up to 250mm (10")
- Front and rear adjustable telescopic to obtain desired discharge or feed in height
- Engine protection shutdown system
- Counter weight built into feed boot area to give integral strength and stability in working position.
- Folding head and tail section for ease of transport
- Paint specification, Cream: RAL 7032, Red: RAL 3001
- Options available

## TC 624 – KEY ADVANTAGES

- Removes the need for a dedicated wheel loader to constantly remove material from the crusher, screen or shredder.
- Reduces fuel cost by up to 75%
- Reduces operating cost by up to 70%
- Removing / reducing loading shovel movements reducing operating cost.
- Reduces screener idle time increasing production.
- Reduces face excavator idle time increasing production.
- Production rates of up to 600tph.
- Hydraulic folding head section allowing for compact road transportation.
- Typical set up time of under 10 minutes.
- Hydraulic tail section height adjustment whilst at the same time maintaining head drum height ensuring maximum stockpile capacity.
- High specification machine designed for ease of maintenance commanding an excellent resale value at project conclusion.

## TC 624 – STOCKPLING CAPACITIES

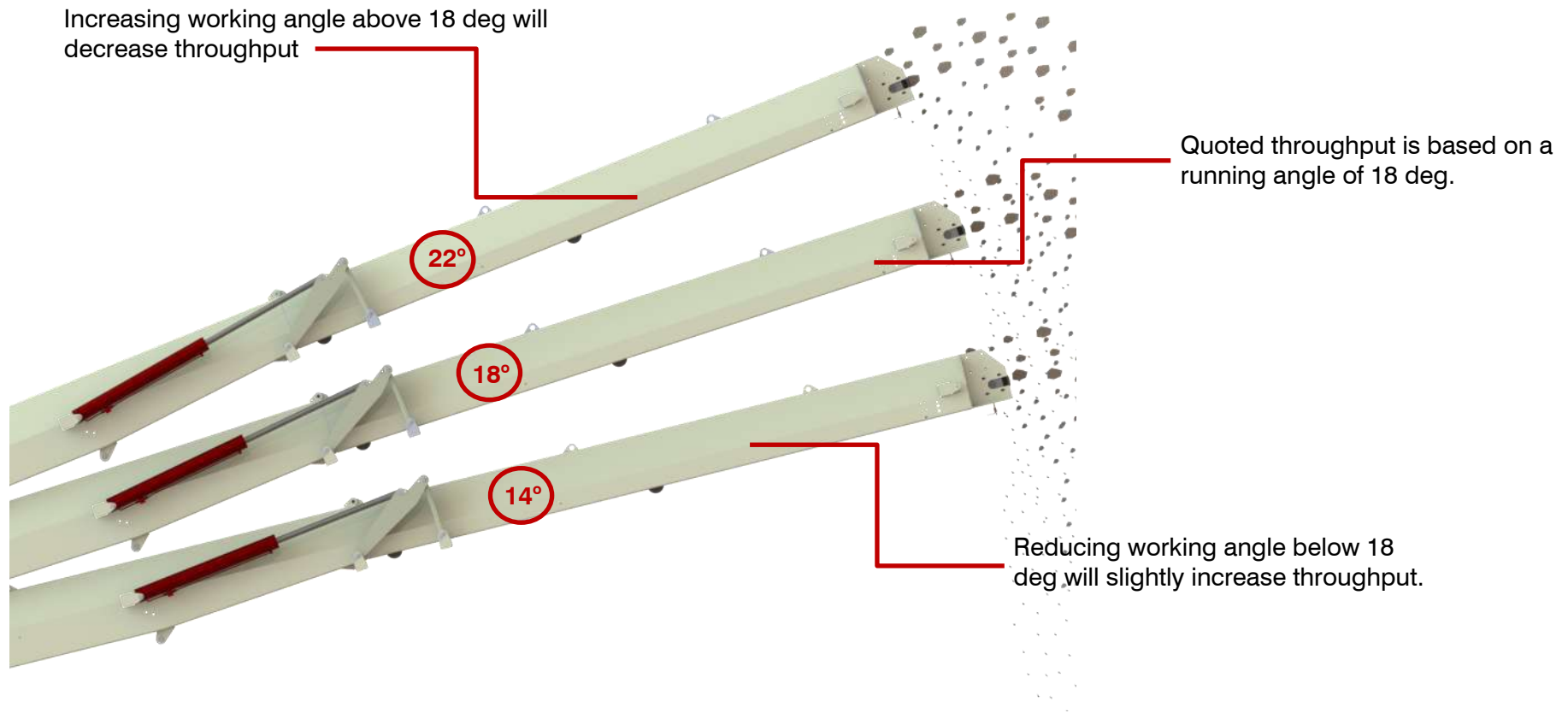
All stockpiling capacities are calculated based on material, with a bulk density of 1.6 tonnes per m<sup>3</sup> (100 lb/ft<sup>3</sup>)  
Stockpile angle of repose 37°

### Conical Stockpile Capacities

Angle of Conveyor Belt (Degrees)	Stockpile Height		Stockpile Capacity (Volume)		Stockpile Capacity (Mass)	
	(m)	(ft)	(m3)	(yd3)	(Tonnes)	(Ton)
26°	11.44	37' 2"	2,761	3,611	4,418	4,870
24°	10.8	35' 1"	2,323	3,039	3,717	4,097
22°	10.16	33'	1,934	2,530	3,095	3,411
20°	9.5	30' 11"	1,581	2,068	2,530	2,789
18°	8.84	28' 9"	1,274	1,666	2,038	2,247
16°	8.16	26' 7"	1,002	1,311	1,603	1,767
14°	7.48	24' 4"	772	1,010	1,235	1,361
12°	6.8	22' 1"	560	758	928	1,023

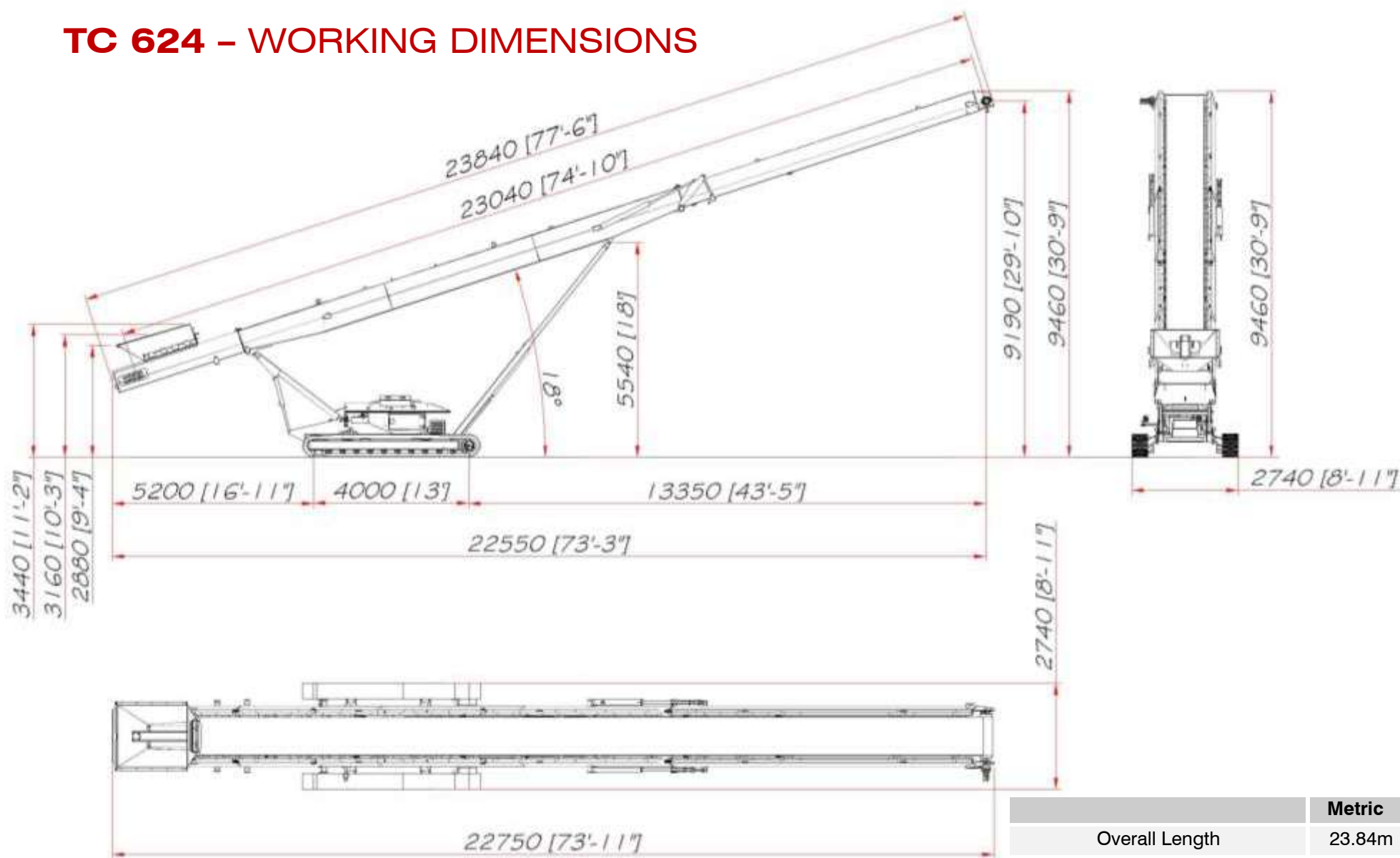
# THROUGHPUT - EXPLAINED

Telestack throughputs are primarily based on a typical running angle of  $18^{\circ}$ . Depending on selected angle of operation throughput will vary.



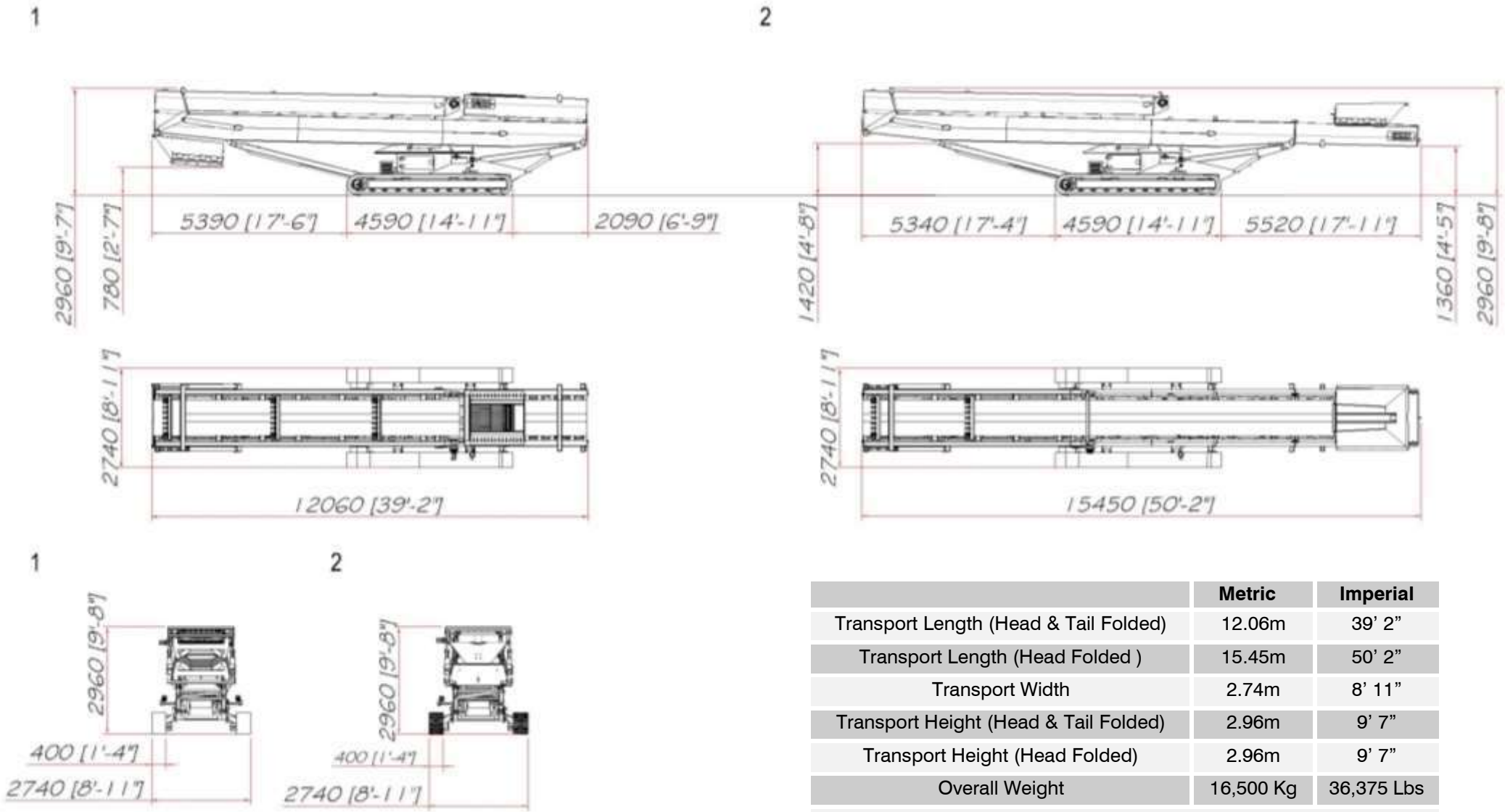
Feed method, material characteristics and environmental conditions can affect throughput, overall performance and maximum working angle.

# TC 624 – WORKING DIMENSIONS



	Metric	Imperial
Overall Length	23.84m	77' 6"
Machine Working Length (18°)	22.75m	73' 11"
Discharge Height (18°)	9.19m	29' 10"
Feed in Height (Rear)	3.16m	10' 3"
Operating Width	2.74m	8' 11"

# TC 624 – TRANSPORT DIMENSIONS



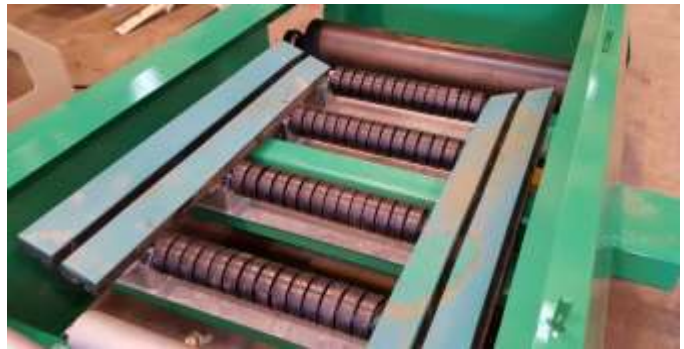
	Metric	Imperial
Transport Length (Head & Tail Folded)	12.06m	39' 2"
Transport Length (Head Folded )	15.45m	50' 2"
Transport Width	2.74m	8' 11"
Transport Height (Head & Tail Folded)	2.96m	9' 7"
Transport Height (Head Folded)	2.96m	9' 7"
Overall Weight	16,500 Kg	36,375 Lbs
Unit can also be transported in a 40' High cube container.		



# TC 624 – MACHINE FEATURES

## Feedboot

- Tapered feed boot design, with large material target area
- 6mm hardened steel liners at standard
- Adjustable rear telescopic for variable feed in height.
- Feed in (Min) - 1.6m (5' 11")
- Feed in (Max) – 3.9m (12' 8")
- Width – 1.6m (5' 1")
- Length – 1.9m (6' 4")
- Steel - 6mm (1/4")
- Combination rubber lagged impact rollers and impact bars
- Bolt in fall break system to stop larger pieces in the material hitting the belt and causing damage to the conveyor.



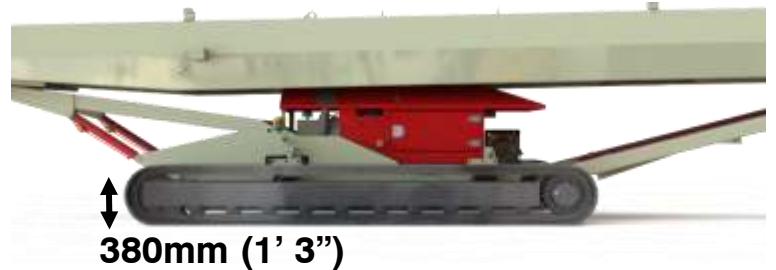
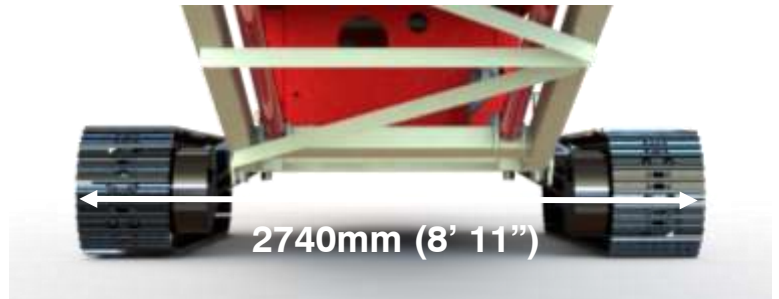
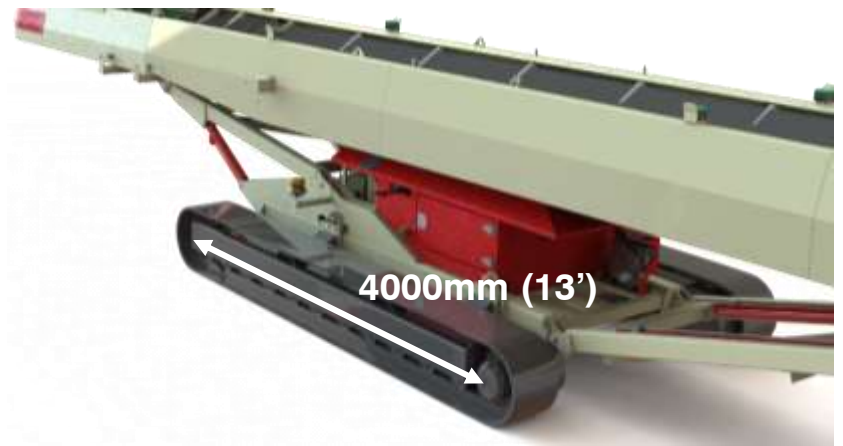
## Incline Conveyor

- Heavy duty ribbed design, Deep mid-section for extra strength
- Folded plate design gives structural strength to conveyor frame
- Hydraulic folding head and manual folding tail section for transport as standard
- Standard 1050mm (42") wide EP 400 3 Ply, 5mm+1.5mm Belting, ran at 1.13 m/s- (222 ft/min)
- 127mm (5") diameter troughing rollers set.
- Wing roller angle adjustable.
- 150mm (6") diameter disc return rollers. Includes profiled steel nip guard as standard
- Twin hydraulic drive motors and gearboxes for increased torque.
- Flow control valve to control conveyor speed



## Chassis

- Heavy Duty FL4 Tracks
- Longitudinal centres: 4000mm (13')
- Track shoe width: 400mm (16")
- Ground Clearance: 380mm (1' 3")
- Drive: Two integral hydraulic motors
- Tensioning: Hydraulic adjuster, grease tension
- Tracking: Push button pendant type (dog lead)
- Speed of tracks: 0.84 kph (0.52 mph)
- Heavy duty structural steel chassis, with integrated webbed plate design for the rear telescopic mountings.
- Large, lockable canopy access doors for ease of operation and maintenance.



## Hydraulics

- Triple pump system
- Easy access for maintenance to all hydraulic components such as pumps, filters, tanks, valves etc
- Steel fabricated hydraulic tank complete with fill level gauge and lockable filler cap.
- Capacity: 250 litre (66 US gallons) depending on the engine selection
- Oil type: Grade 32





# Engine & Control

## EU Stage IIIB/USA Tier 4

- Deutz TD 2.9 L04i, Electronic, 4 Cylinder, 50kW (68Hp) @ 2200 Rpm
- CAT, C2.2 IPU, 50kW (68Hp) @ 2200 Rpm

## Unregulated Countries

- CAT, C2.2 Turbo, 44.7kW (59.9Hp) @ 2200 Rpm
- Start-up system with safety features (fully fused and fault display).
- Engine monitoring and tracking system
- Standard electrical PCB microprocessor technology with led indication.
- Faults are logged on led indicators until resolved.
- LED indicator self-test executed every time unit is switched on.
- One place label using standard symbols.
- Full frequency certified CE, FCC, AU and Japanese remotes systems.
- Panel mounted in secure canopy with lockable doors.

## Diesel Tank

- Steel fabricated fuel tank complete with fill level gauge and lockable filler cap.
- Capacity: 160 litres (42 US gallons) depending on the engine selection



# TC 624 – OPTIONAL EXTRAS

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## Bolt in Feedboot Liners

- **Option 1:** Bolt in 6mm (1/4") steel wear liners.
- **Option 2:** Bolt in Rubber Liners

## Feedboot, Adjustable Feed Gate

- Adjustable feed gate to control the flow of material from the feedboot.
- With this option a front plate along the feedboot is also necessary which means it must be removed to fold the tail section.

## Feedboot, Flared Extensions

- Flared steel feedboot extensions to increase the target area and capacity of the feedboot

## Feedboot, Straight Extensions

- Straight steel feedboot extensions to increase the target area and capacity of the feedboot.

## Anti-Roll Back

- 4 x sets of anti roll back can be fitted to the incline conveyor to prevent material from rolling back down the belt when a steep inclines.

## Belt Weigher

- Integrated belt weighing system, with control panel.
- Optional USB data logger.

## Dust Suppression System

- Dust suppression system is used with materials that are likely to create a lot of dust.
- The system has dust covers running the full length of the conveyor and a head chute with rubber sock.

## All Electric Conveyor

- An electric motor and control panel can be mounted on the machine to run using electric power

## Belting Upgrade

- 1050mm (42") 3 ply EP500 x 8 + 2mm
- Belt Speed 1.13 m/s- (222 ft/min)

## Hydraulic Folding Tail Section

- Hydraulic folding tail section for ease of transportation.
- Feedboot does not need to be removed to fold tail section.

## Overband Magnet

- An Overband magnet sits over the belt of the conveyor, removing harmful metallic contaminants from the main material

## Conveyor Side Skirting

- Bolt on rubber side skirting up the length of the conveyor to avoid material spillage.

## Remote Control

- **Option 1:** Radio remote control to start/stop incline and operate tracks.
  - **Option 2:** Radio remote control to start/stop incline, operate tracks and to raise/lower head and tail section.
-

# TC 624 – TRANSPORT INFORMATION

## Options

The TC 624 can be transported in a number of ways :

- Unit on 1 x low loader / Ro Ro (with head section folded over)
- Unit on 1 x Low Loader / Ro Ro (with head section & tail section folded over)
- Unit in 1 x Euro Liner (with head section & tail section folded, tracks removed)
- Unit in 1 x 40' High Cube Container (with head section & tail section folded, tracks removed)



## Containerisation

- The Conveyor is transported in a 40'ft High Cube Container (Inside Dimensions Length-12.m, Height-2.597m, Width-2.340m).
- Conveyor must have head and tail section folded over.
- Conveyor goes into container without tracks fitted. (The tracks are transported in the same container)

On arrival to destination the customer must do the following

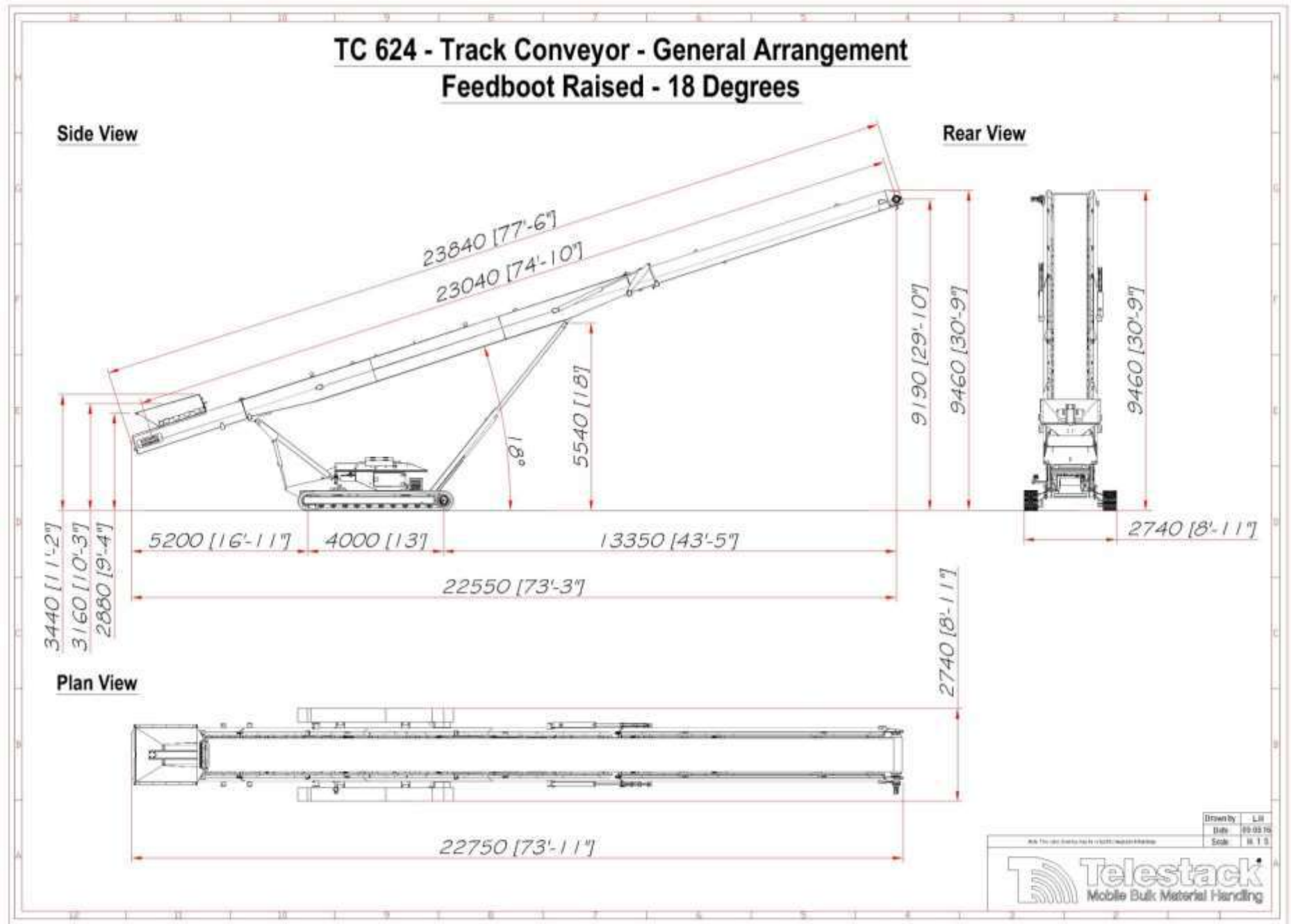
- Remove the conveyor from the container.
- Remove the tracks from the container.
- Raise the conveyor of the ground by 320mm in order to fit the tracks.
- Attach the tracks.
- Attach the hydraulic pipes for the tracks. These will be colour coded.

Equipment required for unloading and assembling the TC 624

- A Telescopic Handler to remove the conveyor from the container. The conveyor will be sitting on skids and using the Telescopic Handler the conveyor is to be pulled from the container.
- Two 10 Tonne bottle jacks. Use the Telescopic handler to lift the conveyor so to fit the bottle jacks underneath. The conveyor needs to be raised 320mm of the ground in order to fit the tracks.

# TC 624 - GENERAL ARRANGEMENT

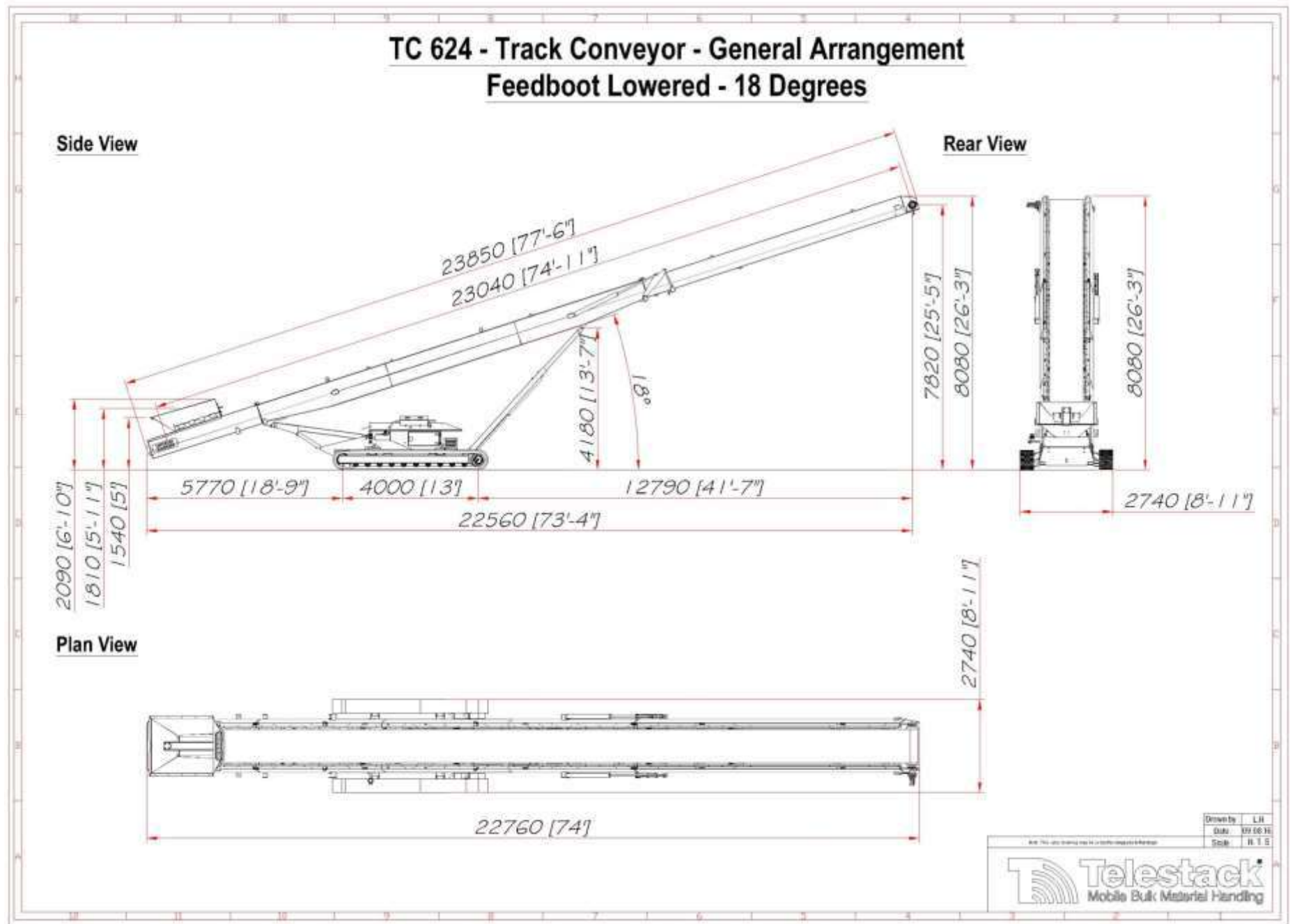
OPERATIONAL - FEEDBOOT RAISED





# TC 624 – GENERAL ARRANGEMENT

OPERATIONAL – FEEDBOOT LOWERED

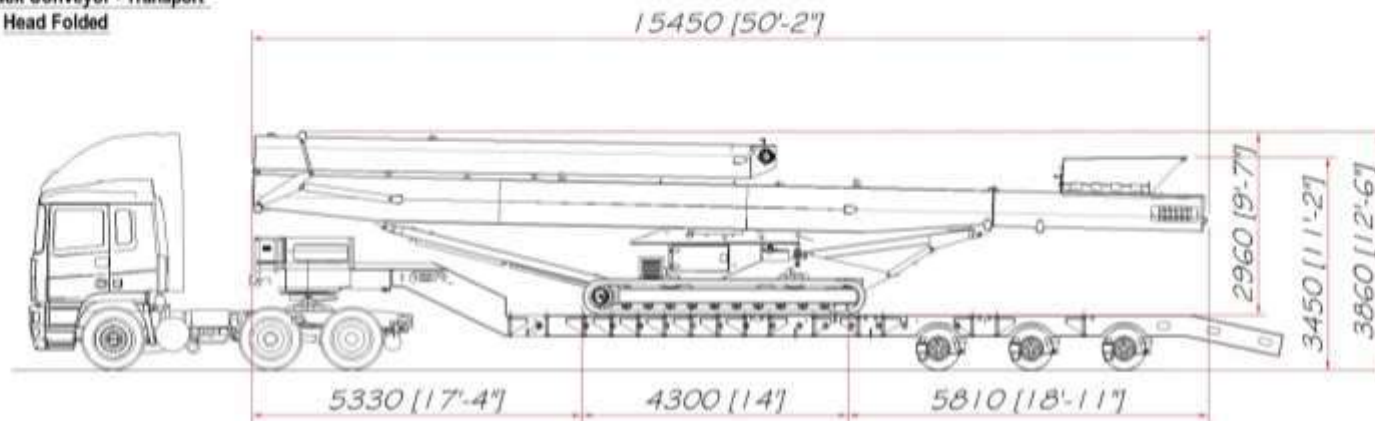


# TC 624 – GENERAL ARRANGEMENT

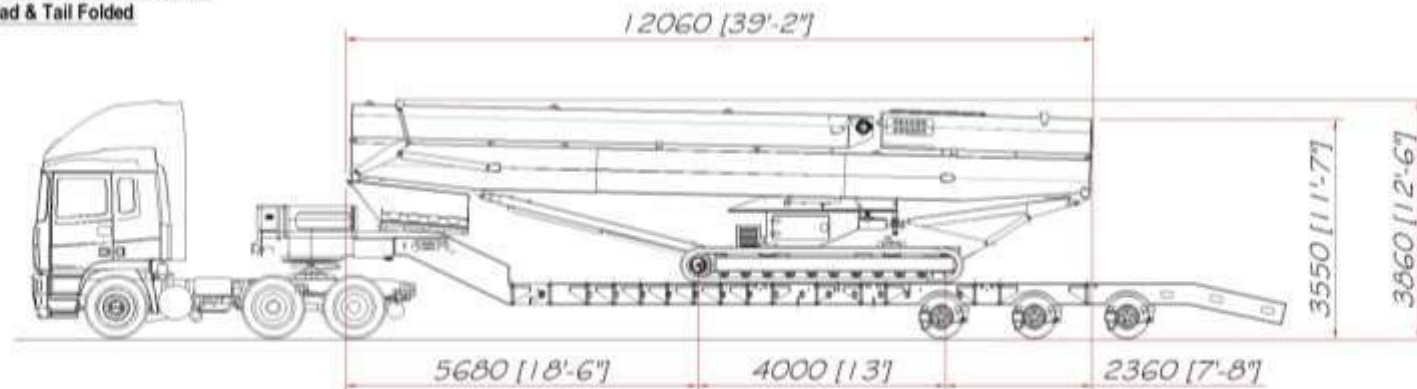
## TRANSPORT VIEWS

### TC 624 - Tracked Conveyor - Transport Views

TC 424 - Track Conveyor - Transport  
Head Folded



TC 424 - Track Conveyor - Transport  
Head & Tail Folded



Drawn by	L.H.
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