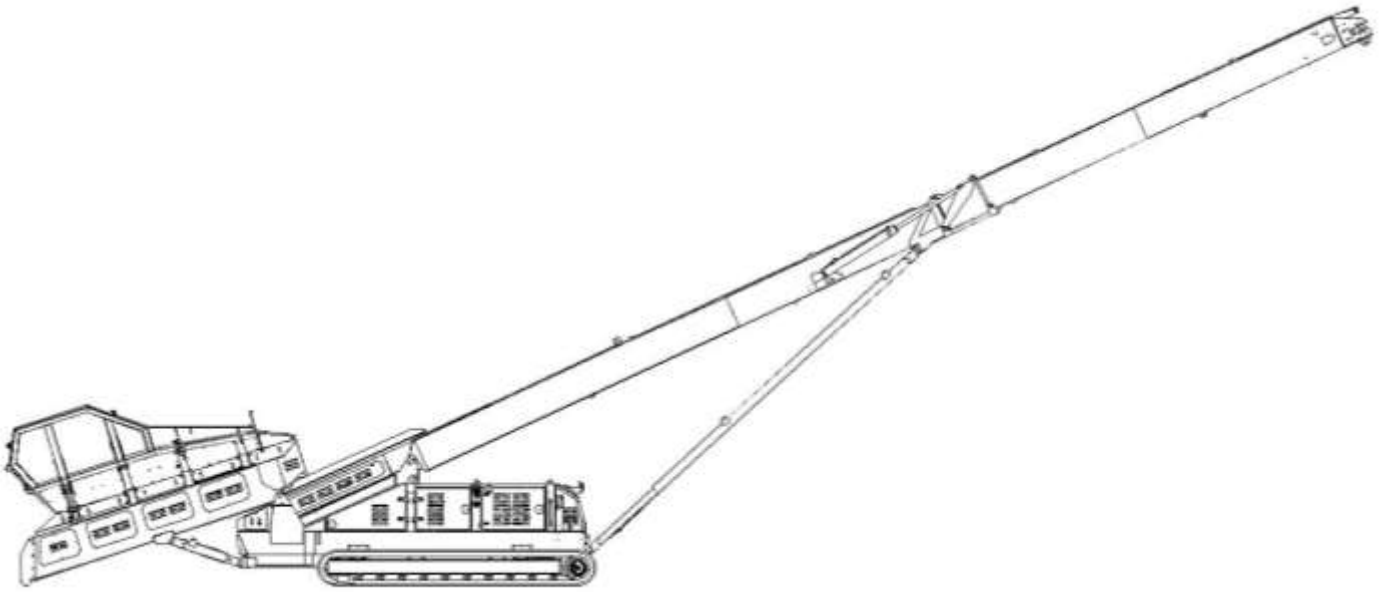


# TECHNICAL SPECIFICATION

LF 520 (48" x 65ft) – LOW FEED HOPPER FEEDER



# LF 520 – LOW FEED HOPPER FEEDER



The LF 520 is a track mounted fully mobile conveyor designed to work at production rates of up to 500tph (550 Ton per hr). Telestacks low feed, hopper feeder range is designed to be loaded directly from wheel loaders, grab cranes, excavators etc. feed auxiliary equipment, reclaim to other conveyors, directly load ships, trucks, rail wagons etc. Since the hopper feeder is track mounted the unit has excellent mobility on site and will eliminate double handling of material, which reduces overall costs for operator.

## LF 520 – TYPICAL APPLICATIONS

- Directly from wheel loaders, grabs and excavators
- Stockpiling from secondary crushers and screens
- Building stockpiles in warehouses
- Loading vessels and barges, directly from wheel loaders or grab cranes
- Feeding auxiliary Telestack equipment
- Feeding fixed equipment
- Reclaiming and discharging onto overland conveyor systems
- Mobile reclaim hopper, feeding onto Stacker/Re-claimer belt

## LF 520 – KEY FEATURES

- High throughput of up to 500 tph (550 Ton / hr)
- Maximum distance between tracks and head drum, for optimum stockpiling capacity
- Maximum lump feed size of up to 150mm (6")
- Front and rear adjustable telescopic to obtain desired discharge or feed in height
- Engine protection shutdown system
- Natural design of the hopper gives integral strength and stability in working position.
- Folding head and telescopic rear for ease of transport
- Paint specification, Cream: RAL 7032, Red: RAL 3001
- Options available

## LF 520 – KEY ADVANTAGES

- Reduces fuel cost by up to 75%
- Reduces operating cost by up to 70%
- Reducing loading shovel movements which reduces operating cost and improves safety.
- Increased safety as no need to stockpile with wheel loaders.
- Reduces screener idle time increasing production.
- Reduces face excavator idle time increasing production.
- Production rates of up to 500 tph (550 Ton / hr)
- Range of hopper capacities depending on application and production rate.
- Hydraulic folding head section allowing for compact road transportation.
- Can be packed into 2x 40ft containers for easy, cost effective transport around the globe.
- Unrivalled mobility and flexibility when in operation.
- High specification machine designed for ease of maintenance commanding an excellent resale value at project conclusion.
- Heavy duty design and manufacture.

## LF 520 – 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)
20°	7.54	24' 6"	791	1,034	1,265	1,394
18°	6.98	22' 8"	627	820	1,003	1,106
16°	6.4	20' 10"	483	632	774	853
14°	5.84	19'	367	480	588	648
12°	5.26	17' 1"	268	351	429	473

### Hopper Capacity

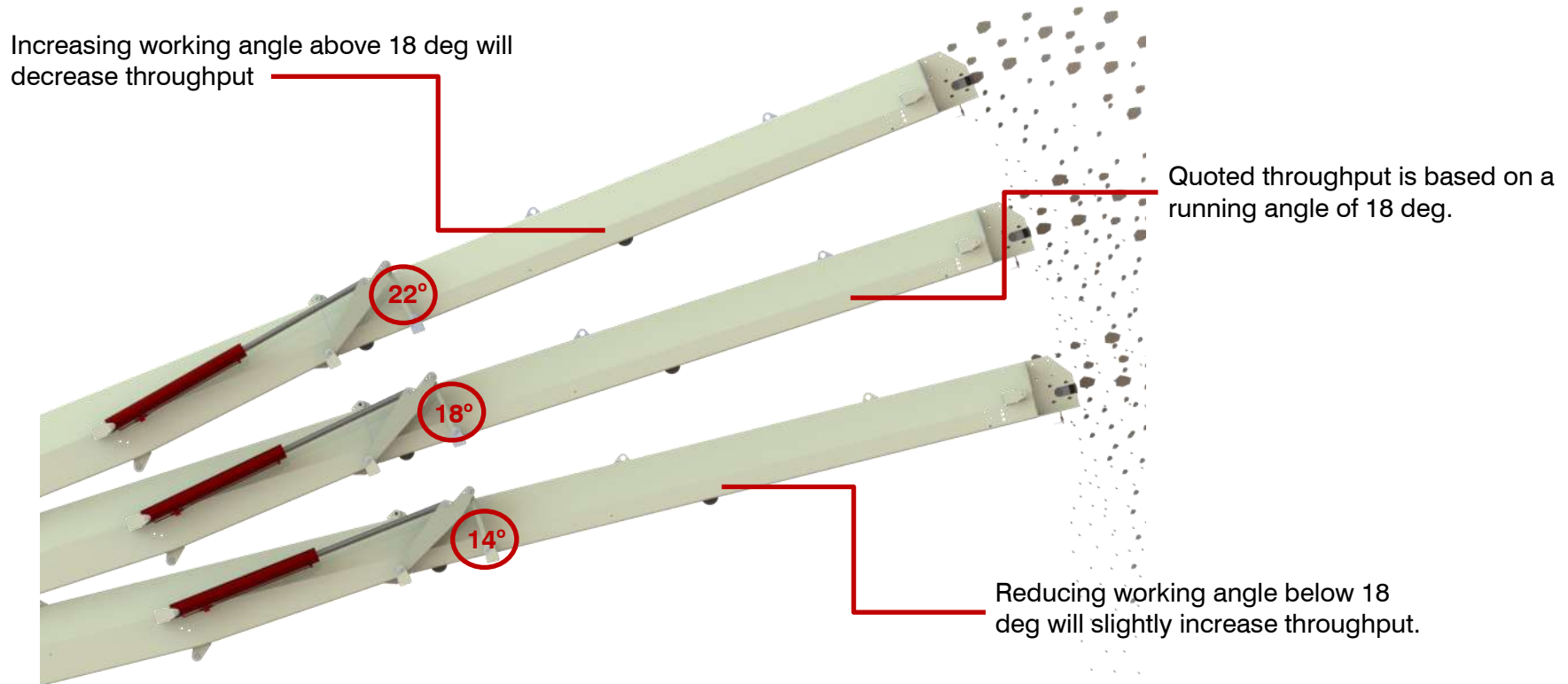
Model	Hopper Capacity Volume	
	Volume	Mass
	(m3)	(yd3)
LF 520	7.1	9.3



Hopper Capacity based on maximum fill from the hopper rear. (Section in red = 7.1m<sup>3</sup> 9.3yd<sup>3</sup>)

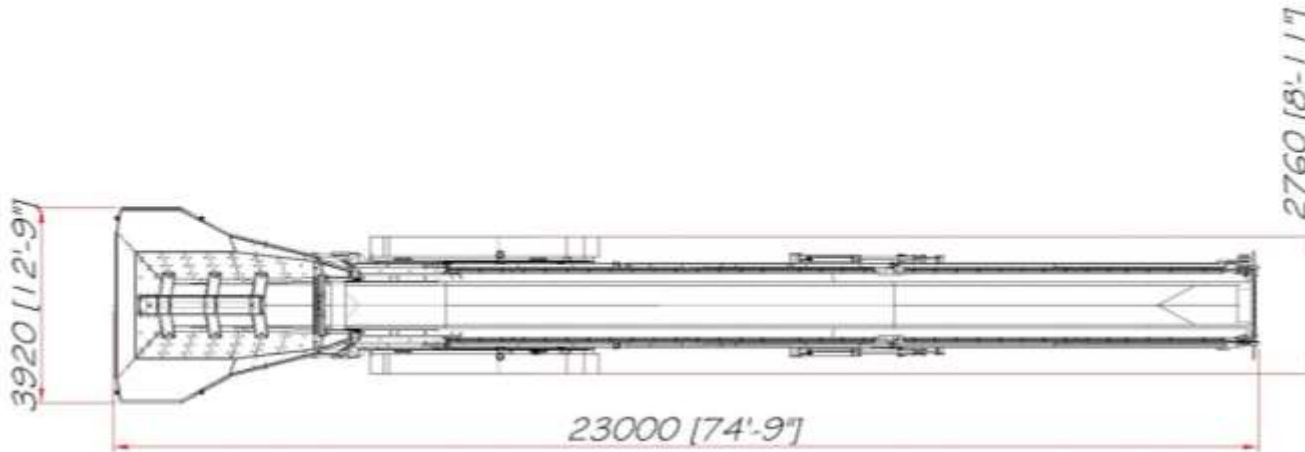
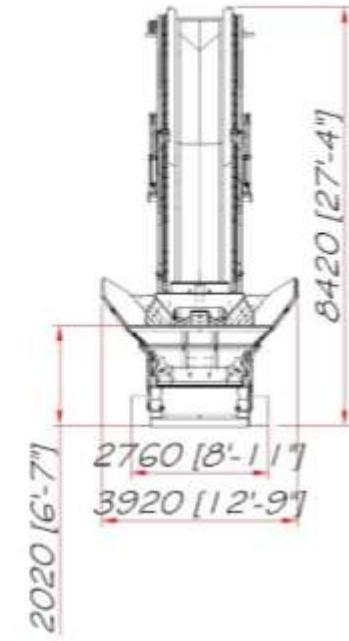
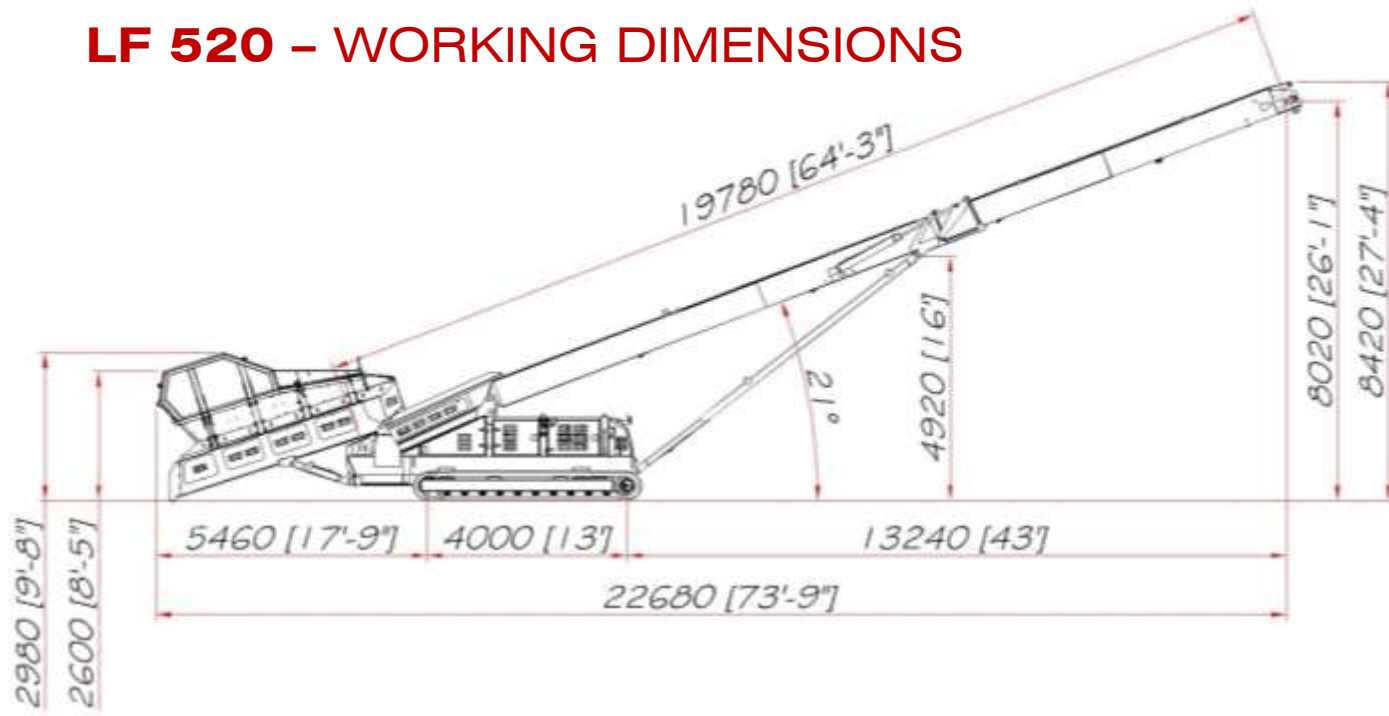
# THROUGHPUT - EXPLAINED

Telestack throughputs are primarily based on a typical running angle of 18°. Depending on selected angle of operation throughput will vary.



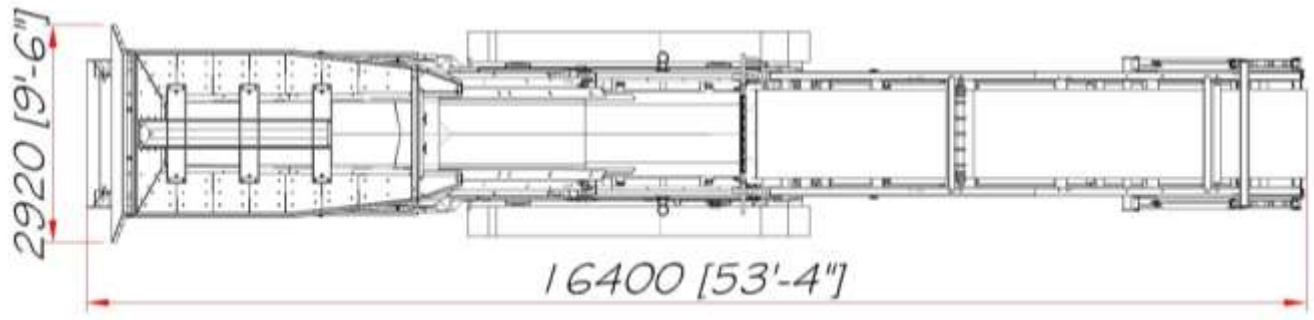
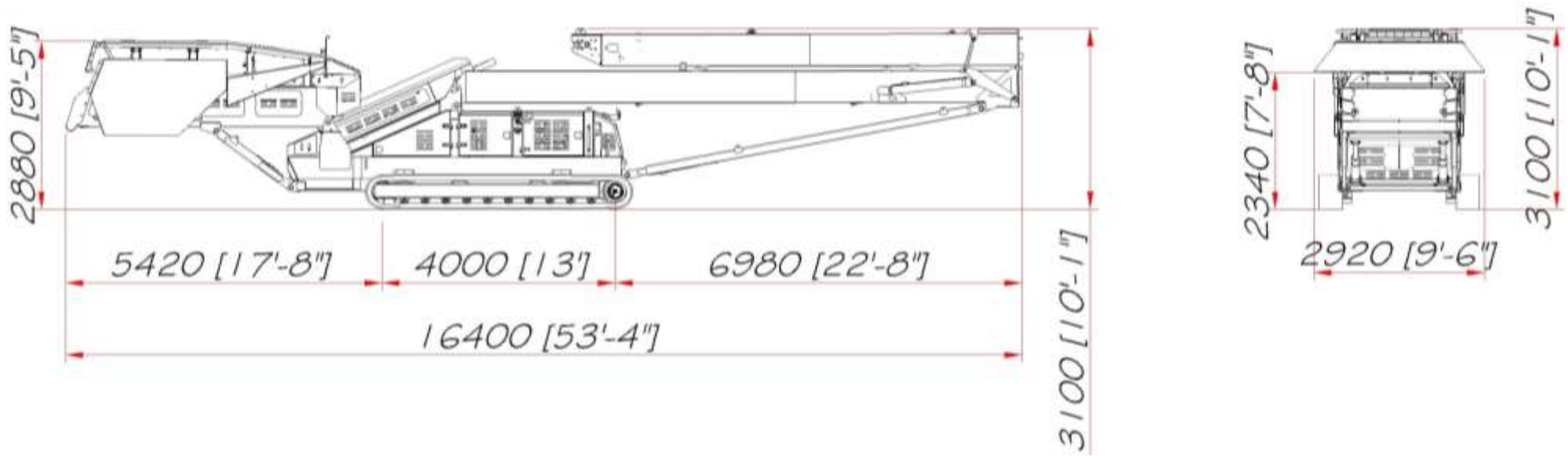
Feed method, material characteristics and environmental conditions can affect throughput, overall performance and maximum working angle.

# LF 520 - WORKING DIMENSIONS



	Metric	Imperial
Conveyor Length	19.78m	64' 3"
Machine Working Length (21°)	23m	74' 9"
Discharge Height (21°)	8.02m	26' 1"
Feed in Height (Rear)	2.02m	6' 7"
Operating Width	3.92m	12' 9"

# LF 520 – TRANSPORT DIMENSIONS



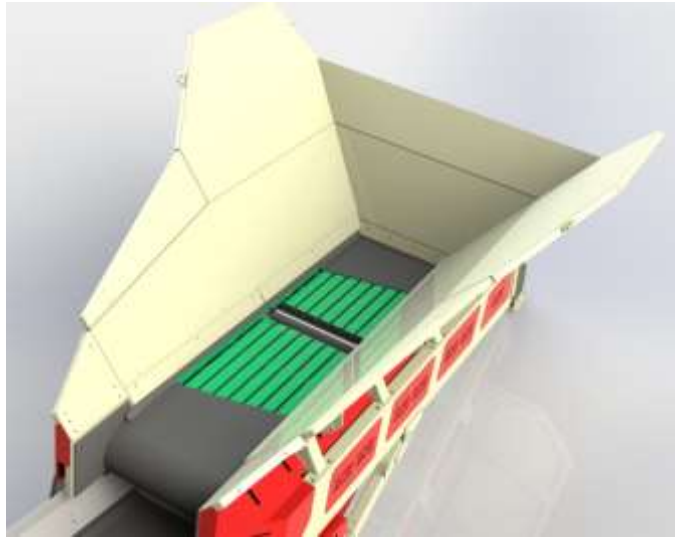
	Metric	Imperial
Transport Length (Head Folded)	16.4m	53' 4"
Transport Width	2.92m	9' 6"
Transport Height (Head Folded)	3.1m	10' 1"
Overall Weight	20,500 Kg	45,195 lbs

Unit can also be transported in 2 x 40' High cube containers.

# LF 520 – MACHINE FEATURES

## Hopper Feeder

- Adjustable rear telescopic for variable feeder height.
- Drum Centres 4.0m (13' 3")
- Feeder Length 4.8m (15' 9")
- Width (Rear) 3.9m (12' 9")
- Feed in Height 2.02m (6' 7")
- Combination impact roller and impact bars, Impact rollers.
- Impact bars along sides to eliminate material spillage.
- 150mm (6") diameter disc return rollers.
- 1200mm (48") wide EP 500 3 ply, 5 + 1.5mm feeder belting, feeding onto 1200mm (48") incline belt.
- Large hopper opening for maximum unrestricted throughput from feeder to incline (Feedboot Liners and Hopper door are Optional)
- Dual Internal planetary drive motors for high torque output, with flow control valve mounted in power unit to regulate feeder belt speed.
- Manual folding hopper sides for compact transport position (Hydraulic option available)



## Incline Conveyor

- Heavy duty 20m (65ft) folded plate design incline conveyor to give structural strength to the conveyor frame.
- Primary spring mounted poly blade face scraper, to clear excess material of the belt
- The LF 520 features a hydraulic folding head section allowing for compact road transportation.
- 1200mm (48") wide EP 400 3 ply, 4 +2mm belting ran at 2.26 m/s- (445 ft/min)
- 102mm (4") dia Troughing rollers set
- 150mm (6") diameter disc return rollers.
- Single internal hydraulic drive, located at the head of the conveyor. (Optional twin drive)



## Hydraulics

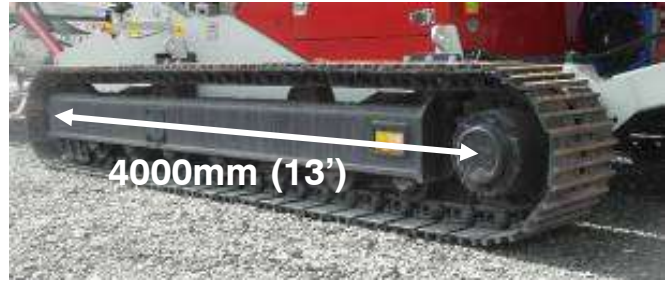
- Triple cast Iron pump mounted on the flywheel to operate functions.
- Additional pump mounted on PTO.
- Easy access for maintenance to all hydraulic components such as pumps, filters, tanks, valves etc
- Steel fabricated hydraulic tank complete with fill level gauge and lockable filler cap.
- Capacity: 406 litre (107 US gallon)
- Oil type: Grade 32





## Chassis

- Heavy Duty FL4 Tracks
- Longitudinal centres: 4000mm (13')
- Track shoe width: 400mm (16")
- Drive: Two integral hydraulic motors
- Tensioning: Hydraulic adjuster, grease tension
- Tracking: Push button pendant type (dog lead)
- Speed of tracks: 1.05 kph (0.65 mph)
- Heavy duty structural steel chassis, with integrated webbed plate design for the rear telescopic mountings.
- All moving joints have incorporated heavy duty bosses for increased strength and wear characteristics
- Multiple large, lockable doors for easy access to engine, hydraulics, fuel tank etc.



# Engine & Control

## Standard

- EU Stage IIIA/Tier 3 - CAT C4.4 Mechanical, Water Cooled, Power: 75Kw (100Hp) @ 2200 Rpm

## EU Stage IIIB/Tier 4 Upgrade

- EU Stage IIIB/Tier 4 - CAT C4.4 ACERT, Water Cooled, Power: 96.6Kw (130Hp) @ 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.
- Steel fabricated fuel tank complete with fill level gauge and lockable filler cap.
- Capacity: 200 litres (52 US gallons)



# LF 520 – OPTIONAL EXTRAS

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## Bolt in Feedboot Liners

- **Option 1:** 6mm (1/4") mild steel liners.
- **Option 2:** 6mm (1/4") abrasive resistant hardened steel 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, Fall break System

- Integrated, Bolt in fall break system to stop larger pieces in the material hitting the belt and causing damage to the conveyor.

## 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.

## Twin Drives

- Twin Drives on the Incline Conveyor

## All Electric Conveyor

- The standard hydraulic motor can be replaced by an electric motor with directly mounted gearbox. The diesel engine is still required to power the tracks, fold out the head section etc. When the machine is in the working position the engine can be disengaged and the machine switched to electrical power.

## Dual Power

- Dual power. Machine upgraded to dual power. Can be powered by on-board diesel engine or can switch to local electrical supply. Panel upgraded to include AC and DC Electrics.
- Flange mounted electric motor mounted in the Powerunit .

## Oil Upgrade

- **Option 1:** Type 46 hydraulic Oil
- **Option 2:** Type 68 Hydraulic Oil

## Belting Upgrade

- 1200mm (48") 4 ply EP 630 x 6 + 2mm
- 1200m (48") 3 ply EP 500 5+ 1.5mm
- Chevron belt

## Conveyor Side Skirting

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

## Remote

- **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.

## Drum Upgrade

- Feed conveyor drive drum upgraded to ceramic lagging

## Guide Rollers

- Guide rollers at head and tail section of incline conveyor to restrict belt wander (Recommended if working at low angles)

# LF 520 – TRANSPORT INFORMATION

## Options

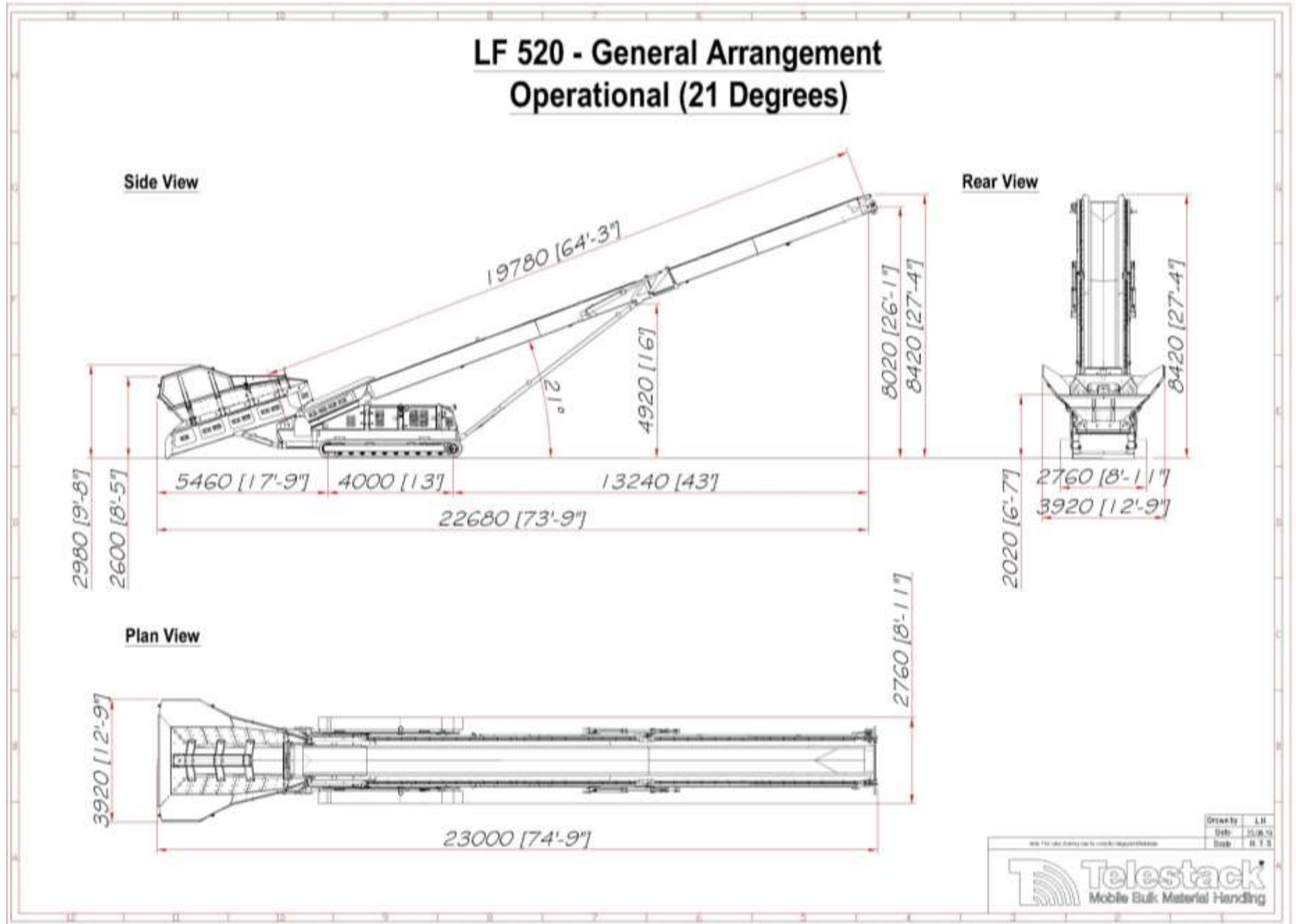
The LF 520 can be transported in a number of ways:

1. Machine can be transported via low loader trailer (As shown) with all features folded into transport position
2. Machine can also be transported in 2 x 40' High Cube containers for global distribution



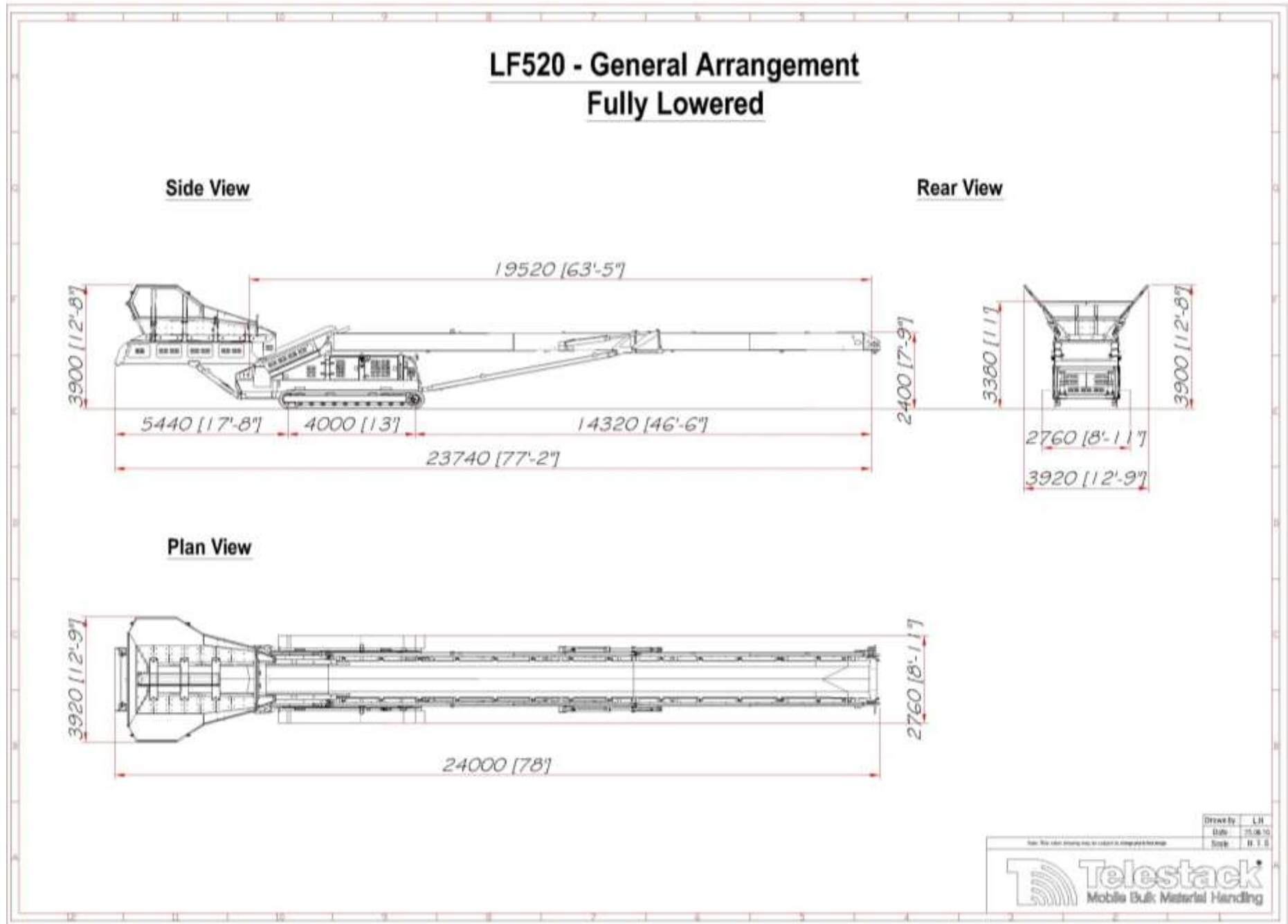
# LF 520 - GENERAL ARRANGEMENT

OPERATIONAL



# LF 520 - GENERAL ARRANGEMENT

FULLY LOWERED

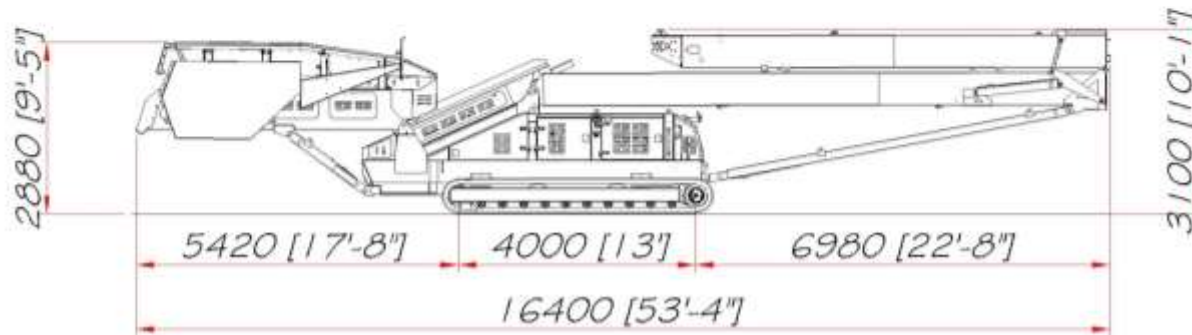


# LF 520 - GENERAL ARRANGEMENT

## TRANSPORT

### LF520 - General Arrangement Transport (Feeder Raised)

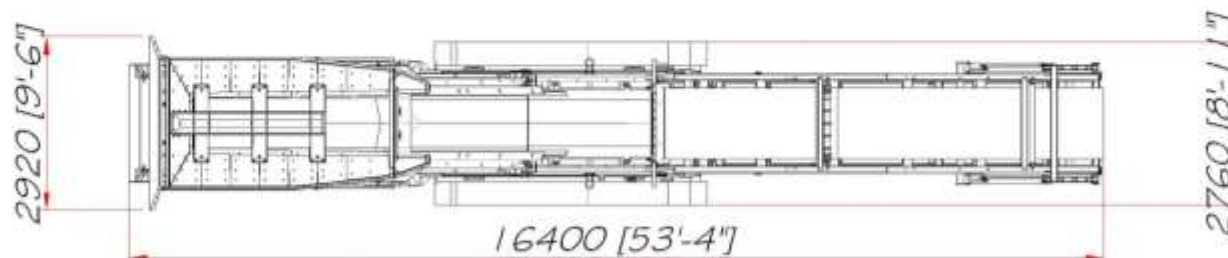
Side View



Rear View



Plan View



**Overall Weight -  
20,000kg (44,093 lbs)**

Drawn by	LR
Date	15.06.15
Scale	N.T.S.

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**THE  
POWER  
TO MOVE  
MATERIALS**

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