



**Battery Powered - Pedestrian Operated - Move Wheeled Loads**



## Company Profile



Tractive Power Ltd is an innovative materials handling company that design, manufacture and supply our own range of electrically controlled pedestrian tractive units.

Our electric vehicles are an excellent solution to manual handling and health and safety issues within the workplace. Battery powered and designed to push, pull and

manoeuvre loads of up to 50 tonnes on rails and 12.5 tonnes on castors our electric tugs ensure you have safe and efficient handling for your operators.

Years of experience within the market together with utilising the latest design software and control systems enables us to offer you some of the most advanced, compact tractive units on the market.

All of our Tractive Power range can be operated by a single user in a safe and efficient way eliminating the need for extra manpower. We also offer a range of services that will ensure you get the exact support you need.



*Slopes and rough surfaces will increase the amount of force required to push and pull a load*

### In House Design

Tractive Power have their own design facility which gives us full control over the products we supply to you, the customer. Our experience in the mechanical engineering industry means, that not only can we customise our range to suit your requirements but also offer bespoke design and manufacture of one off products specifically made to meet your needs.

### Free Consultation and Advice

Our staff have a wealth of experience in the pedestrian operated vehicle market, so if you have a load moving application and you're not sure how to address it, then one of our sales engineers will speak to you and discuss your application. Either give Tractive Power a call or request a site visit. We are here to advise and offer a solution.

### Operator Training

Tractive Power also offer their own operator training on delivery, or refresher training during the service life of the product. Whichever you require we will ensure your employees are competent users and supply training certificates for their records.

### Servicing

Tractive Power offer a range of service options to suit your requirement. We want to ensure you have the after sales support and have the maximum usage from your Tractive Power product once we have delivered. Just enquire for a full list of options.

### Case Study

A company manufacturing prefabricated plant rooms, used a railed lattice system to move the rooms around the manufacturing shop floor. Each plant room could weigh up to 6,000kg which would require 6 employees to move the load. Every time a plant room had to be moved, employees would have to stop the work they were doing to assist. Some employees would complain of bad backs or shoulders due to the physical excursion.

A single Tractive unit was introduced to address the issue. One man could now safely move the load with no physical effort. The company managed to reduce injuries and increase production with the implementation of the Tractive Unit.

### Market Sectors Served

- Aerospace
- Textiles
- Pharmaceutical
- Food industry
- Rail
- Airport
- Supermarket
- Retail
- Automotive
- Engineering manufacturing

### Applications Moving

- Railed bogeys
- Kiln karts
- Stillages
- Wheeled trolleys
- Supermarket trolleys
- Airport trolleys
- Roll cages

## Key Benefits

**Addresses manual handling and Health and safety issues.**

**Streamline production and increase productivity.**

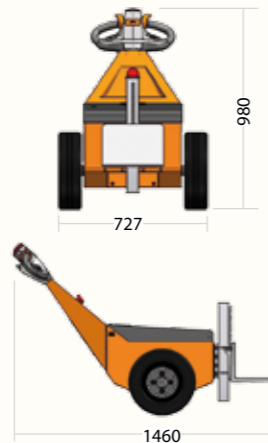
**Battery powered pushers and tugs with no emissions.**

**Single user operation.**

**Pedestrian operated with no license required as mandatory.**

**Designed for all working environments indoors and out.**

# TP250 Specification Sheet



## Wheels and Tyres

Drive Wheel: 12 ply industrial rubber pneumatic (Solid Option)

Rear Castor: Polyurethane castor

## Construction

Mild steel, Tractive Power orange / black powder coat

## Safety

Anti trap emergency reverse

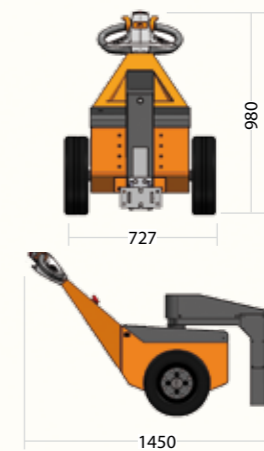
E-stop battery isolator

Electro-magnetic brake - Fail to safe



Steep slopes and rough surfaces will increase the amount of force required to push and pull a load.

# TP500 Specification Sheet



## Power

Gearbox	Transaxle 24V
Motor Power	24V 1500W
Controller	24V 300A AC Control

## Batteries and charging

Battery Capacity	140A/h
Charger Type	onboard auto voltage detect
Output	15 Amp
Input	100-240V
Recharge time:	8hrs

## Towing

Towing Capacity	50 tonnes
Max. Weight Transfer	500Kg
Draw Bar Pull	5000N

## Driving

Max. Speed	6Kph
Turning Circle	1.65m
Steering	Manual

## Safety

Anti trap emergency reverse

E-stop battery isolator

Electro-magnetic brake - Fail to safe

## Wheels and Tyres

Drive Wheel: 12 ply industrial rubber pneumatic (Solid Option)

Rear Castor: Polyurethane castor

## Construction

Mild steel, Tractive Power orange / black powder coat



The risk of injury also increases over longer distances and when the frequency of pushing and pulling does not provide sufficient rest or recovery time

# Application Gallery



Moving I-Section Beams on existing bogie - 4,000 Kg



Pushing a 6,000 Kg prefab plant room



TP500 hydraulic - moving 9,000 Kg transformer



Custom design railed ride-on, moving building materials down a 1 km tunnel.



TP500 hydraulic with 5th wheel for moving 6,000 Kg train transformers.



Hydraulic lift on our 5th wheel arm



Pushing 3 tonne paper rolls.

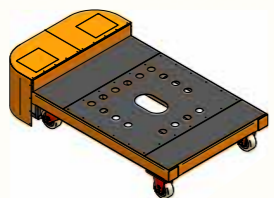
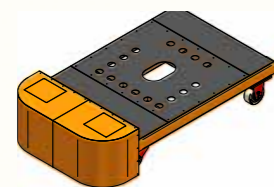
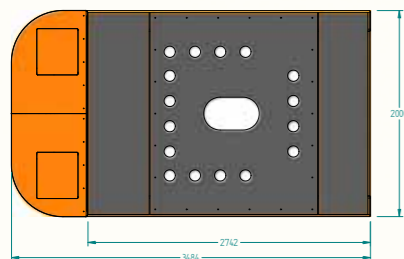
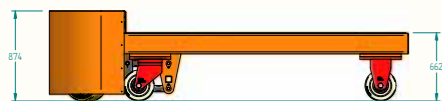


Quick Latch Coupling for 5th wheel hydraulic arm.



Quick Latch Coupling on fixed arm.

# TBC30 - Tractive Burden Carrier



## Wheels and Tyres

Drive Wheel: Vulcalan  
 Castor: Nylon or Polyurethane

## Construction

Mild steel, Tractive Power orange / black powder coat

## Safety

E-stop, Battery Isolator, Electro-magnetic brake  
 Fail to safe



Research shows that operations which exceed the guideline figures for manually pushing/pulling of 20kgs for men and 16kgs for women by more than a factor of two may represent a serious risk of injury.

## Power

Gearbox	1 x Planetary
Motor Power	48V 6000W
Controller	400A AC Control Dual Drive

## Batteries and charging

Battery Capacity	320A/h
Charger Type	Floor Mount
Output	40Amp
Input	240V
Recharge time:	8hrs

## Towing

Towing Capacity	30 tonnes
Max. Weight Transfer	5000Kg
Draw Bar Pull	15000N

## Driving

Max. Speed	6Kph
Turning Circle	7m
Steering	Manual



# Pedestrian Stackers

Pedestrian stackers are widely used in many applications today. From a simple small warehouse with infrequent use to highly advanced distribution centres with high duty cycles and 24 hour use. Depending on your application, you will need your stacker to be individually specified for you.

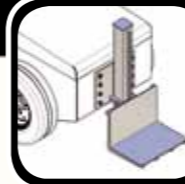
Tractive Power offers a wide range of powered pedestrian stackers, with lifting capacities from 1000kg to 1600kg. With choices of pedestrian or ride on models our stackers also boast lift heights of up to 5.4m.

Options of fork over, straddle stackers or reach stackers are available with numerous options to allow us to tailor our stackers to match your requirement. Reliable, versatile and ergonomically designed, our stackers come with the upmost quality to ensure you get maximum usage with minimum downtime.



**i** 11% of manual handling accidents investigated by HSE were reported to involve pushing or pulling

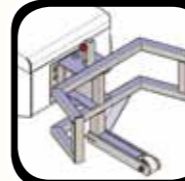
# Additional Couplings



## 1 ADJUSTABLE HEIGHT PUSHPAD

Generally used for pushing loads in a straight line.

Applications include train bogies and railed trolleys



## 2 ROLL CAGE COUPLING

For pushing nested roll cages.

The TP500 will move up to 250 roll cages in one go



## 3 FIFTH WHEEL CHANNEL COUPLING

Used for moving wheeled or semi-wheeled loads, this coupling can lift one end of the trolley to steer the load on its rear wheels - used on A-frames, food processing machinery and stillages.



## 4 FIFTH WHEEL QUICK LATCH

Our standard male female configuration.

Use our female quick latch to fix to your wheeled loads and standardise the connection point for all your wheeled loads.



## 5 PAPER ROLL COUPLING

Used to move paper rolls or cable drums.

This coupling is used for pushing the drum or roll on its circumference

Our Tractive units provide the power to move the load but have to be attached by a simple coupling interface to get your product from A to B. Pushing and pulling in a straight line uses a fixed coupling system secured to the front of the Tractive unit. Steering requires our 5th wheel arm arrangement that allows the Tractive unit to steer 90 degrees left or right.

Pivoting 360 degrees on the spot through the differential gearbox means the Tractive Pusher is extremely manoeuvrable, and negotiates the most difficult routes. Tractive Power manufactures a range of standard couplings as shown below. However, if your application requires something more unique, Tractive Power can design a coupling to your specific requirements.

**i** Manual handling around obstacles can create risks by the worker trying to avoid collision. Large amounts of effort are required to start or stop loads moving or even to keep it moving.

## Distributor Network

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