



Proven Quality, Safety and Reliability www.flexitruck.com



Flexi Narrow Aisle design, manufacture & market the award-winning Flexi Digital articulated warehouse trucks

30 years of Flexi truck-based development



Since 1976, Flexi Narrow Aisle has been one of the world's leading pioneers of very narrow aisle (VNA) technology design and development. Today our Flexi Digital range is distributed worldwide through a fully supported distributor network from the company's manufacturing plants through hubs in the UK, USA, Taiwan and in over 65 countries worldwide.

Since Narrow Aisle pioneered the Flexi articulated warehouse truck concept in 1990, it has gone on to become the most popular type of truck on the market. The articulated concept we developed has become the global standard as our front-wheel-drive product has many benefits for customers.

Over 10,000 Flexi units have been built and shipped throughout the world, with the many logistics customers in North America and Europe recognising the space-saving benefits early on. The benefits are now recognised globally.

Over the past five years, the Flexi Truck range has been developed significantly and can now lift loads weighing over 2.5 tonnes and to lift heights of over 14 metres with six model types available.

Although Flexi Narrow Aisle's customers are involved in the storage and handling of many different products – from FMCG, foodstuffs and beverages to automotive – they all share at least one common aim: the need to maximize efficiency within their warehousing operation by increasing throughput and making the most of all the space that is available.





The Flexi solution provides a space-efficient storage solution by eliminating dead aisle space required by traditional forklifts or reach trucks. Depending on the building, the Flexi trucks can increase usable storage space between 25% and 50%, and by eliminating double handling make material handling operations significantly more efficient, reducing the cost per pallet stored and truck numbers. Flexi trucks can work in aisles just 1.6M (ISO 1m) or 2.0M (EURO 1.2m) and transfer aisles of less than 3 metres, enabling warehouse layouts to be substantially improved.

The Flexi truck is equally at home working in both the warehouse pallet racks and in loading dock areas. It is able to operate a complete 'road to rack' function, eliminating time-consuming double pallet handling, no need for a separate truck outside the raching or into the back of a semi-trailer, enabling Flexi to cut overall handling costs by up to 50%.



The Flexi range of articulated warehouse trucks are the most efficient on the market

Over 30 years the Flexi Range has developed with the help of our customers; there are now six digital models covering a wide range of logistics and warehouse operations. The Flexi Narrow Aisle Twin front-wheel-drive concept pioneered and developed by Narrow Aisle has become the global industry standard, all-electric forklift products which are on the market have adopted twin front-wheel drive.

The Flexi has been developed specifically to improve storage handling as well as aiding customer order assembly efficiency across manufacturing and logistics. The aisle space-saving potential is demonstrated in the generic specification data based on ISO/Euro pallets 1.2 metres deep into the racks, pallet to pallet aisle width.

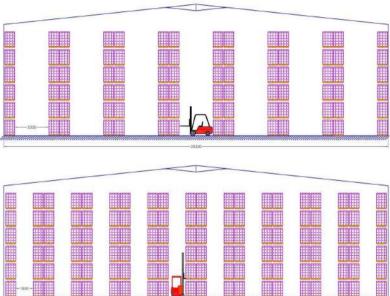
	Flexi Articulated VNA Truck	Guided Combi Man Up or Man Down VNA Truck	Traditional Moving Mast Reach Truck	Conventional Counterbalance Fork Truck	Support Arm Stacker Fork Truck
90° Stacking Aisle	2 metres	1.8 metres (-10%)	3.0 metres (+50%)	3.5 metres (+75%)	2.7 metres (+35%)
Transfer Alsle	2.5 metres	5 metres (+100%)	3.0 metres (+20%)	3.5 metres (+40%)	2.7 metres (+5%)
Maximum Lift Height	15 metres	16 metres	14 metres	7 metres	6 metres
Work Cycle Times (FEM)	30/35 per hour to loading dock	25/30 per hour to alsle end (-15%)	25/30 per hour to loading dock (-15%)	25/30 per hour to loading dock (+15%)	25/30 per hour to loading dock (-30%)



Our Flexi digital trucks are improving warehouse efficiency & profitability

The Flexi range of articulated trucks has been developed specifically to improve storage handling and customer order assembly efficiency in manufacturing and logistics.

Flexi provides a more space-efficient storage solution by eliminating dead aisle space required by counterbalance or reach forklifts. Depending on the building, our product can increase usable storage space between 25% and 50% and eliminate double handling operations. This makes customer warehouses more efficient and reduces the cost of pallet storage significantly.







How to improve warehouse profitability

Flexi can work in aisles just 1.6M (ISO) or 1.8M (EURO 1.2) deep, enabling warehouse cost to be substantially reduced compared with conventional fork trucks.

The Flexi articulated truck is equally at home working outside the pallet racking in loading areas inside or outside.

It is able to operate a complete 'road to rack' function, eliminating time-consuming double pallet handling, plus the need, and cost of separate additional trucks in loading areas, enabling Flexi to cut overall handling costs by up to 50%.

With lift mast that will allow access into an ISO sea container or semi trailor and units with space frame lift masts up to 14 metres & lift capacities from 1.5tonnes to 2.5tonnes. All our trucks have 'HiVIS' lift masts, panoramic operators overhead guard® tested to CE/AMSI standards.

Our unique 'True $^{\text{TM}}$ Radius' safe turn chassis technology and unique independent Digital power steering motor are included on every Flexi truck with no extra customisation cost needed.



The Digital Range of articulated fork trucks has been developed specifically to improve storage handling

Integrated Sideshift

All Flexi's are supplied with a high quality integrated sideshifting fork carriage to promote efficient and safe stackina.

Forward-Facing Seat

Comfortable and high-quality adjustable full-suspension seat with operators lumber support, reduces fatigue and improves productively.

Fixed "Clear Vision" Mast

Operators have excellent forward visibility thanks to our triplex free lift mast, with its side mounted lift cylinders. Safe productive forward pallet pick up and set down.

Front Wheel Drive

Proven safe traction-laden or unladen in all operating conditions. Tough elastic rubber tires all round allow operation on all warehouse floors. No tyre scrubbing, with full differential drive on both wheels when turning.

HiVIS Overhead Guard

The unique Flexi 'HiVIS' Twin Post™ overhead guard combines maximum visibility and complete overhead and roll over protection for the operator. With no front 'posts' to obscure operators vision when stacking.

Easy Battery Access

Fast and safe battery access and changing. Low lift off, fork pockets or optional rollers. Easy battery inspection and topping. No motors, brakes or pumps hidden underneath.

Unique Flexi 220° Over Rotation

More stacking clearance along every aisle. Compact axle designs maximise aisle clearances. Flexi is the proven 'no damage-fast turn' solution.

Model Range

= 1000 (NARROW)

= 1100 (NARROW PLUS)

= 1200 (STANDARD NARROW)

= 1200 (STANDARD)

= 1250 (STANDARD PLUS)

= 1350 (WIDE PLUS)

= 1400 (EXTRA WIDE)

WHL = 1500 (WIDE HIGH LIFT)

= 1000 (VERY NARROW)

Chassis Capacities

= 1500kgs | 3300lbs.

= 1700kgs | 3750lbs. 17

20 = 2000kgs | 4400lbs.

= 2250kgs | 5000lbs.

= 2500kgs | 5500lbs.





Flexi 15 works alongside inductive wire and steel railguided VNA warehouse trucks



- Flexi 15 can work in just 1.6-metre aisles (1.50) or 1.8 metres (Euro Pal)
- Convert existing costly guided very narrow aisle operation, eliminate double handling
- Full 230° over-rotation, maximum aisle clearance and manoeuvrability
- Lifts heights to over 8.0 metres (10.5 metres 15 SN)
- Unique compact front axle Maximum stacking aisle clearance
- Digital brushless motor technology for faster travel and lift reduced power consumption
- Independent 1.8KW power steering motor conserves battery energy, very low noise level and no kickback
- Elastic rubber treaded tyres on all wheels, for use on all floor surfaces with long service life

Unique 230° over-rotation and compact front-drive design

Flexi 15 works in just 1600mm or 1800mm (ISO/Pallet) aisles to GN9 (FEM) safe clearance standards

1500Kg lift capacity and lift heights to 8 metres

Designed to bring Flexi articulated space-saving and handling efficiency to existing guided VNA warehouses

Operational performance

Ultra-narrow 1000mm wide chassis and 230o articulation feature combined with true four-wheel stability for fast, safe operation

Full digital control of drive, lift and steering motors

and four cushion rubber wheels for fast stable operation with ultra-low energy consumption and service cost



The Flexi 17 is designed to provide the maximum level of storage density and efficiency



- Compact easy to drive
- Chassis only 1.0 metre wide
- 220° over-rotation for fast safe turning
- Compact front axle maximum aisle clearance
- Lift heights to over 8.5 metres
- HiViS lift mast standard, clear view of fork tines
- HiViS head guard design tested to EU/US standards
- Four-wheel stability works in all applications
- Handles both the Euro Alliance and ISO pallets
- Optimum acceleration and travel speed lower battery power usage with digital motor technology
- Independent 1.8KW digital power steering motor and pump for maximum energy saving
- No 'kickback', powerful independent hydraulic steering system with a very low noise level
- Only three 'brushless' digital electric motors for long operational life and no servicing costs

Create up to 30% more Warehouse Capacity

Flexi 17 works in just 2.0 metres (EURO) or 1.6 metres (ISO) aisles to GN9 (FEM) standards (Handles Euro Alliance pallets in 2.0 metre aisle to DNN 15185 standard)

Lift Heights to 8.5 Metres

Flexi 17 brings all the space-saving benefits of the Flexi truck concept to medium/high bay warehouse applications, whilst still providing the potential for a full 1000kg lift capacity to 8 metres and all the proven high-quality components from the Flexi Truck range for durability and parts availability, smallest truck heavy-duty components

Stacking Performance

Flexi 17 features a unique 1000mm wide chassis and our original 220° over-rotate feature, plus compact front axle. Additionally, Flexi Digital continuous front wheel is suited to both push back, drive-in racking and block stacking operations

Triplex or Quad Lift Mast

Lift mast options include triplex full free lift or quad full free lift, to suit most warehouse application, under mezzanine floors, back bridge bays or loading semi trailors

Flexible Operation

The Flexi truck does NOT require steel rail or inductive wire guidance in the very narrow aisle, and so can pick up pallets in any goods receiving area inside our outside and put away full pallets received and place them into any VNA locations, overhanging or outsized loads can be accomidated easily and safely

The Flexi 20 features numerous advanced operational and safety features



- Proven reliable design common components across the range
- Our original 220° over-rotation easy stack feature
- Heavy-duty clear vision triple or quad lift mast
- HiViS overhead guard as standard to ANSI and CE
- Lift heights up to 10.5 metres
- Large elastic rubber tyre's all-round (non-marking options)
- Easy cassette battery changing, roll out option
- No components under the battery, no service or corrosion issues
- Twin drive for smooth, precise accurate stacking.
- 'Push Back' drive-in and block stack compatible
- Two chassis widths 1200mm and 1250mm for minimum derate
- Safe travel clearance in aisle no 'snaking' in reverse
- Digital brushless power steering motor for low energy usage and safe operation. No 'kick back'

Create up to 30% more Warehouse Capacity

Flexi 20 works in just 2.9 metres (EURO) or 1.8 metres / 2.0 metres (ISO) aisles to GN9 (FEM) standards

Lift Heights to 10.5 Metres

Designed to bring Flexi space-saving and handling efficiency to users of all pallet and load types in high bay warehouse operations, marshalling and loading areas inside or outside

Stacking Performance

True radius 1200mm wide chassis and our original 220° over-rotate feature allow safe turning, fast pallet put away, in very narrow aisles pallet racking. Best for operator visibility for safe, damage-free load handling

Standard Triplex Mast (Optional Quad)

All lift masts are triplex full free lift, to suit most operating conditions including access doors and pallet rack bridge bays, to allow under mazzanine floors, into semi-trailors and low doors, our 'Quad' stage mast range is available



The Flexi 22 provides faster and heavier load throughput capability for warehouses



- Lift heights to over 11 metres
- Heavy-duty 2.5T articulation system
- Extended shift work due to digital motor technology
- Operator Vision System (CCTV/LCD) options
- Integrated programmable laser lift height selector
- Safe efficient stacking optimises pallet movements
- Heavy-duty Flexi for industrial customers who want to save space and increase pallet throughput
- Loads up to 2.25 tonnes
- Chassis width of 1250mm for optimum aisle way performance
- Clear HiViS heavy-duty 'space frame' lift mast for unbeatable high-level stability and fork visability

Exceptional Lateral Stability

2.5 tonne, twin deck articulation, combined with heavy-duty 320mm diameter slewing ring bearing provide exceptional lateral stability high lift and long reliable service life

Engineered for High Lift Capability

1250mm 2.25 tonne chassis, plus elastic rubber treaded rear tyres, delivers exceptional load rating and stability up to 11 metres of lift

Heavy-Duty Mast Construction

Heavy-duty mast sections in the strengthened front frame, mounted in 2.5 tonne articulation unity, increases lift capacity and long term reliable operation

High Definition LCD CCTV System

Allows operator to stack safely to over 11 metres with minimum fatigue. Available with programmable laser lift height selector both integrated into the digital CAN bus system

The Flexi 25 provides heavy-lift capability for high bay warehouses



- Lift heights to over 13 metres
- Heavy-duty 2.5T articulation system
- Extended shift work from high capacity batteries and digital motor technology
- Operator Vision System (CCTV/LCD) options
- Integrated laser lift height selector
- Safe efficient stacking optimises pallet movements
- Heavy-duty Flexi for industrial customers who want to save space and increase pallet throughput
- Loads up to 2.5 tonnes
- Chassis widths of 1350mm and 1400mm for optimum aisle way performance
- Clear HiViS heavy-duty space frame lift for unbeatable high-level stability

Exceptional Lateral Stability

2.5 tonne, twin deck articulation, combined with heavy-duty 320mm diameter slewing ring bearing, provide exceptional lateral stability and full 220° overrotation in aisle

Engineered for High Lift Capability

1350mm or 1400mm wide 2.5 tonne chassis, plus elastic rubber treaded rear tyres, delivers extra load rating and stability to over 13 matres on any warehouse floor surface, noo guidance system required

Heavy-duty Mast

Heavy-duty mast 'space frame' in strengthened front frame increases lift capacity, longterm reliable service life

High Definition LCD CCTV System

Allows operator to stack safely to over 11.5 metres with minimum fatigue. Available with programmable lift height selector both integrated into the digital CAN bus system



Flexi MAX 22/25 - S+/W/EW/WHL

Flexi MAX 22/25 features chassis options to provide extra lift heights and load capacities



- Lifts heights to over 15 metres
- Heavy-duty fixed space frame lift mast for unbeatable high-level stability
- Tilting side shifting forks means special flat floors not required
- HIVIS overheads guard exceeds all EU/US safety standards
- CCTV/LCD HiDEF operator vision system hard-wired
- Heavy-duty 2.5T articulation design
- Integrated Laser lift height selector system
- Four compact chassis widths 1250mm, 1350mm, 1400mm and 1500mm for optimum aisle way performance
- Independent digital power steering motor for maximum energy saving
- Adds 30% more ground level picking locations, compared to moving mast reach trucks
- End of aisle transfer in only 3 metre aisle adds 10% more pallet location compared to Man Up Combi

Engineered for high lift capability

Four chassis widths, plus elastic rubber treaded rear tyres, delivers excellent load rating and stability up to 14.5 metres

Heavy-duty fixed mast

Heavy-duty mast sections fixed in a double-deck front frame give maximum load stability

High-quality tilting carriage

Integrated tilting and side shifting fork carriage developed to eliminate mast deflection at high lifts. Lift mast stays vertical, only the forks and load move

High Definition LCD CCTV system

Allows operator to stack safely to up to 15 metres with minimum fatigue, integrated programmable shelf height selector

Flexi StorMAX 22 creates up to 50% more warehouse capacity than traditional Reach Trucks



- 'Max Out' pallet capacity of building
- Warehouse management system controlled
- Store two pallets deep, only one very narrow aisle
- 50% mare pallets stored compared to reach truck
- Unique Flexi Stability Control System (SCS)
- Lift heights to over 11 metres, two deep
- Hi DEF Operator Vision System (CCTV/LCD) safe stacking •
- Fast hydraulic two deep telescopic forks

- 30% faster throughput than shuttle cars
- No waiting for shuttle storage systems
- Hugely Improved access to loads compared to drive-in racking
- Lower capital investment costs, use existing buildings, floors and pallet racks
- No bottom rack beams required unlike traditional installators

Create up to 50% more Warehouse Capacity

Flexi StorMAX works by placing one pallet behind another from a very narrow aisle. This format maximises the storage capacity of any building. The control offered by modern warehouse management systems allows highly efficient pallet movement with minimal housekeeping

Lift Heights up to 11 Metres

Every pallet load can be 1000 kgs or more. Even in the backspace. Lift heights to 11 metres allow high bay buildings of up to 15 metres to be fully utilised

Integrated Sideshifting and Telescopic Function with SCS and CCTV Vision System

With unique Stability Control System (SCS), maximises safe storage capacity of back pallets throughout the system. Integrated safe storage operator vision system and programmable shelf height selector make stacking very efficient and safe

Modern Warehouse Management Systems (WMS)

Control the placement of loads in 'First In Last Out' (FILO) order to maximise handling efficiency, direct operators to next pallet location and control stock levels accurately.

Fast Work Cycles

With only 50% of loads in back locations, all the front-loads are immediately available. This means 30% more pallets per hour per Flexi StorMAX truck, than 'Drive-In' racks / Shuttle Car Systems



Flexi StorMAX 25 - W/EW/WHL

1350/1400/1500

Flexi StorMAX 25 creates up to 50% more warehouse capacity than traditional Reach Trucks

- Max Out' pallet capacity of building using a warehouse management system
- Store two pallets deep, only one aisle
- 50% mare pallets stored compared to reach truck
- Unique Stability Control System (SCS)
- Lift heights to over 11 metres, two deep
- Very narrow aisles (VNA) save space
- Hi DEF Operator Vision System (CCTV/LCD) safe stacking
- Fast hydraulic two deep forks
- No waiting for shuttle cars
- 30% faster than shuttle cars
- Hugely Improved access to loads compared to drive-in racking
- Minimum 50% lower investment costs, use existing buildings and floors
- No bottom rack beams required



Create up to 50% more Warehouse Capacity

Flexi StorMAX works by placing one pallet behind another from a very narrow aisle. This format maximises the storage capacity of any building.

Lift Heights up to 11 Metres

Every pallet load can be 1000 kgs or more. Even in the backspace.

Integrated Sideshifting and Telescopic Function with SCS and CCTV Vision System

With unique Stability Control System (SCS), maximises safe storage capacity of back pallets throughout the system. Integrated safe storage operator vision system.

Use Modern Warehouse Management Systems (WMS)

(WMS) to control the placement of loads in FILO order to maximise handling efficiency, direct operators to next pallet location and control stock levels accurately.

Fast Work Cycles

With only 50% of loads in back locations means 30% more pallets per hour per truck, than 'Drive-In' racks / Shuttle Car Systems. Bottom pallets on floor for easy picking with PPT.

Improving efficiency. Improving profitability. The Flexi range goes from strength to strength



The Flexi articulated range is now available with lithium-ion power

Why is lithium-ion battery power becoming so popular?

- Maintenance and emission-free
- Low operational cost, High system efficiency
- Directly replaces IC engine-powered trucks (LPG/Diesel)Clean, no noise and user-friendly
- A high degree of vehicle availability, 24/7 operation without IC engine or lead-acid changing

The Flexi LiTHiON range now features heavy-duty Lithium-Ion batteries that can be fully charged within one or two hours depending on the power supply. Allowing 24-hour operation without spare batteries or changing facilities.

Thanks to the developments in lithium-ion battery technology, Flexi LiTHION Range trucks require zero battery maintenance, which can offer many advantages to Flexi truck users.

- The Lithium Ion battery delivers more energy density each hour than a regular lead powered one, and it can be replenished much faster
- Can be fully charged within one or two hours depending on the battery level of discharge at the time and power supply
- The short recharge time for the battery (90 minutes to charge from 80%) allows for multiple charges throughout the day over short periods, making multi-shift availability possible to achieve without battery changes
- Distributes a power level output that is consistent right until the end, whereas with lead the power reduces noticeably between 60-80%
- Offers a reliably long battery service life, no maintenance costs and significantly reduced battery downtime on multi-shift availability sites

These articulated warehouse trucks improve customer order assembly efficiency in manufacturing and logistics.

- Next-Generation Digital power brushless technology
- High-speed stable travel with balanced digital traction technology
- Up to 230° of Articulation Safe independent digital power steering, no kickback
- Easy to drive, smooth control at all times
- Stacking aisles down to 1.6 metres
- Lift heights up to 14 metres
- Load capacity 1.3, 1.7, 2.0 & 2.5 tonnes



As the market leader, we have developed ten models in the range covering a wide range of logistics and warehouse operations:

Flexi 15 - VN/SN | Flexi 17 - N/N+ | Flexi 20 - S/S+ | Flexi 22 - S+ | Flexi 25 - W/EW Flexi MAX 22/25 - S+/W/EW/WHL | Flexi StorMAX 22 - S+ | Flexi StorMAX 25 - W/EW/WHL



Every aspect of the specification is identical to the new Flexi Digital range product, with low carbon footprint



A Cost-effective Flexi Solution

Flexi ECO Digital is our remanufactured product that reuses over 30% of all raw materials at the end of a truck's economic life, providing significant cost savings compared to an equivalent new truck. But with a full 21st-century specification and all the latest new high-quality components.



Save Money - Save Resources

The integrity and high quality of the original design enable Flexi to be remanufactured under our 'ECO' programme and offer cost savings of up to 30% compared to a new truck, whilst saving the carbon required to make valuable heavy structural components and castings.



Environmentally Sensitive

All steel and iron components are recovered, tested, upgraded and repainted. Additionally, all other components are removed and recycled for use elsewhere or disposed of in an environmentally sensitive manner



Looks Brand New - Performs Brand New

Each Flexi ECO is built to the latest digital 'brushless motor' technical specification and includes all-new motive and hydraulic components. A 'state of art' Zapi control system is installed and on completion, the truck looks and performs as the latest new Flexi digital model would - guaranteed. Identical warranty to brand new product. 12 months parts and labour, 5 years/5000 hours. Parts only.



Environmentally Sensitive

All components that are removed and replaced are recycled in an environmentally sensitive manner and - at 30 per cent cheaper than a new truck - cost friendly too. Because the heavy steel and cast-iron parts used in their construction are recycled, the trucks deliver obvious environmental benefits



Zapi Digital Technology

The latest Flexi range Zapi digital control system invertors, and electric motors are installed. They provide 'state-of-the-art' low energy consumption and long service life



High-Quality New Battery

Completely new Super DIN heavy duty traction battery. New tank fab and auto fill pipe system installed. New low energy usage three phase charger supplied



Latest Hydraulics

All hydraulic components, pipes and hoses are replaced with the latest type. All lift components are the latest specification



Low Carbon

All heavy cast iron and steel fabrication components are removed, inspected, upgraded and repainted saving over 30% of raw material costs and all the carbon emissions associated with their manufacture



New Elastic Rubber Treaded Tyres

New high quality treaded elastic rubber tyres allow operation on standard warehouse floors or the outside yard. Their advancement design ensures they are resistant to damage and have a long service life



The Complete Solution from start to finish...

The Flexi Truck package does not just include the most comprehensive range of articulated VNA warehouse truck solutions. Our customers have available a full range of project planning services, free site surveys, warehouse layout planning and design services. We provide a range of easy and comprehensive operator training courses, and we offer our authorised distributors Flexi technical training including SE installation and commissioning services.

Our aftersales support is excellent with parts and service cover across the UK and through our distributor network in over 60 countries globally. Our global authorised distributor network is committed to providing first-class spare parts warranty and service support to Flexi customer across the whole demanding intralogistics sector.

Flexi Parts

A brand-new website Flexi Parts is your one-stop-shop for all things Flexi. Get your Flexi Parts Next Day, order online, pay with a major credit card or add to your account.



global support

Our Flexi Authorised Distributors globally stock Flexi spare parts and service consumables to ensure long term high Flexi uptime. Their service standards and response are the best in our industry.

The Flexi ACiON Range has a long-standing reputation for reliability and long term low maintenance costs. All Flexi trucks are built with the same high-quality drive and hydraulic components which are sourced from tier one suppliers and then fitted into every Flexi truck built. The Flexi Range is designed with a large proportion of common components and parts. This means the holding and provision of spare parts is made much easier for our central parts operation and our global authorised distributors.

is policy of components standardisation and high-quality suppliers allows the Flexi range of articulated warehouse reach trucks to be delivered with a market-leading Five Year /5000-hour parts warranty (conditions apply), to give complete peace of mind.

To find your nearest authorised distributor/service provider, please contact our customer team on 0121 557 6242.



Great Western Way, Great Bridge, Tipton, West Midlands DY4 7AU T: 0121 557 6242 E: info@flexi.co.uk www.flexitruck.com

