

RAWCLIFFE

Transport Contractors

Specialist in Abnormal Loads

SPMT

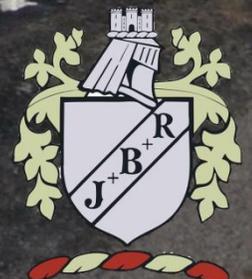
General Haulage

Machinery Handling

Hydraulic Gantry Mega Lift Systems

Jacking, Rigging & Skidding

Storage



www.jbrawcliffe.com

Company Profile



Established over forty five years ago, JB Rawcliffe & Sons Ltd as a whole provides a professional service, covering all aspects of transport, including general cargo and the movement of indivisible and abnormal loads, heavy lifting, installations and removals, jacking, skidding and rigging. All our activities are handled safely by trained personnel using the latest specialised equipment.

100,000kg transformer 6.88m x 3.57m x 4.31m.



JB Rawcliffe & Sons Ltd provides an economical, flexible and tailor-made solution for every enquiry and we are proud of the fact that we invest in technology, systems, training, safety, equipment and our employees. This keeps cost and risk to an absolute minimum, whilst the company is able to adapt to changing circumstances and embrace new challenges with competence and agility.

Oversized flat rack transportation.



As part of the service, a comprehensive package includes route studies, site inspection and comprehensive site surveys by experienced personnel, together with police notifications, liaison with highway authorities, structure owners and escort vehicles provided. Method statements can be produced explaining the procedures undertaken to complete a specific job, with engineering studies, risk assessments, temporary works calculations conducted where necessary.

Specialised Transport & Abnormal Load Consultation



When it comes to unusually heavy or abnormal loads of almost any kind, JB Rawcliffe & Sons Ltd have acquired a solid reputation for getting even the trickiest consignment anywhere, on time and in perfect condition.

63,000kg Boiler 16m x 5.3m x 4.7m.

For example the company's dedicated modern specialised trailers with amazing wafer thick decks running only millimetres from the road surface will move high loads down the motorway, shaving off the vital millimetres needed for clearance below bridges and structures. This in turn means that loads can be delivered more efficiently and safely reducing cost, time and risk.

Abnormal indivisible loads come in all sizes, they can be small, but incredibly heavy or they can be large but light. They often have awkward shapes and geometry that have to be accommodated to allow them to be transported. JB Rawcliffe & Sons Ltd have the unique knowledge and engineering experience to consult and advise customers on the most practical transport solution on how the load is to be loaded and transported, this can include adapting the load to allow it to be carried on a standard route to reduce time and cost. JB Rawcliffe & Sons Ltd can engineer, design and manufacture the special support steelwork to support different loads if required.



60,000kg transition tower 10m x 8m x 12m.

MAYOR OF LONDON
Department for
Transport
Joint Venture
HOCHTIEF MURPHY

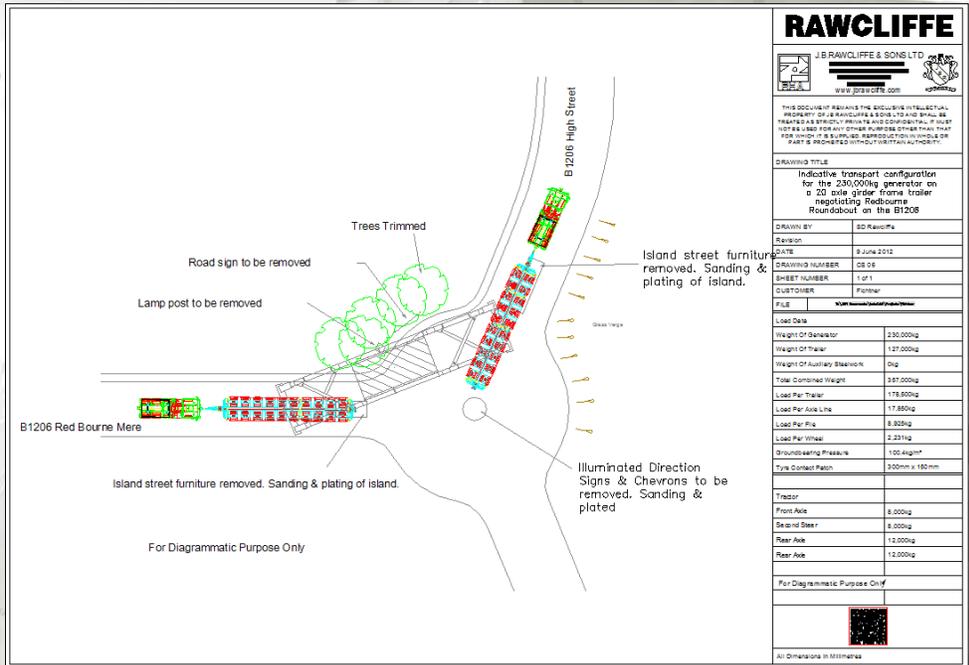
25,000kg vessel 27m x 6m x 6.2m.



Planning the correct route is extremely important where clearance and structure loading are factors. JB Rawcliffe & Sons Ltd can provide feasibility studies for a wide range of abnormal indivisible load transport projects as well as projects involving the installation of equipment and machinery into areas such as substations and unground facilities.

The feasibility study will assess the impact of transporting and handling the abnormal indivisible load and will highlight issues and pinch points along the routes, quantifying issues and restrictions, and include where necessary CAD format swept path analysis.

Where issues are found with structures to be crossed on route that cannot be bypassed JB Rawcliffe & Sons Ltd can provide a unique range of over-bridge and flyover systems that can be configured for quick and easy installation.



Bridging of a structure.



The over-bridge and flyover systems provide an arrangement that bridges the structure ensuring no loadings are placed on the structure itself. This method can be cost effective where doubt is evident of the structures capacity negating the need to perform a bridge assessment which can be costly especially if several structures are to be crossed on route.

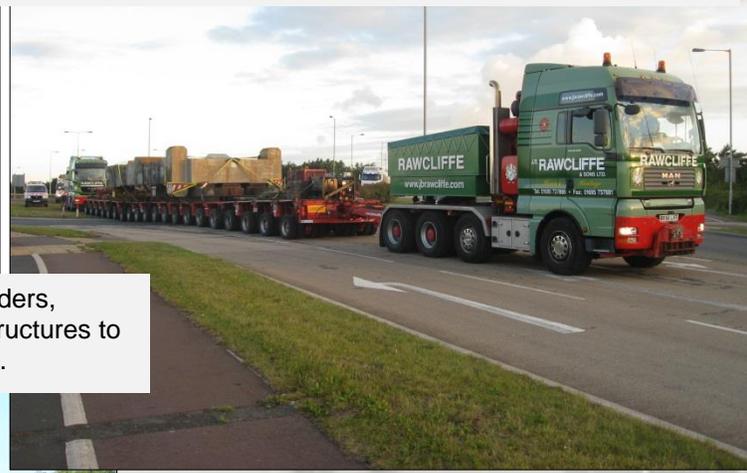
Project: Mill Housings Transport

JB Rawcliffe & Sons Ltd successfully transported two castings from Sheffield Forgemasters International. The mill housings, destined for Venezuela, were transported from Sheffield to the Port of Goole where they were loaded to a barge and shipped to Duisburg Germany.

JB Rawcliffe & Sons Ltd planned the route, organised the special orders, police and council liaison, street furniture removal and bridging of structures to successfully transport the castings without incident and on schedule.

20 Rows of Nicolas MDED axles per casting, specifically designed spreader mats, and two MAN 8x4 ballasted units were utilised for the moves which were conducted during the hours of darkness with complex contra-flows on the motorway network en route to the Port of Goole.

Location: Sheffield to Goole, UK
Project: Transport of two Mill House Castings.
Dimensions: 13m x 4.7m x 2m, 305,000kg each.
Challenge: Weight limits, night time movement, motorway contra flow, bridging of structures.
Equipment: Modular axles, spreader mats, ballasted tractor units, road plates.



Industrial Handling - Jacking, Skidding, Skating & Rigging



Our industrial division specialises in industrial handling, installation and removals of equipment and plant. We have a comprehensive array of fully tested and certified equipment which can be adapted to the most challenging project such as turn tables, machine skates, air skates and our in house designed and manufactured hydraulic skid system.

We are able to provide our own fork lift trucks with an operator as part of our installations and removals equipment. Where customers do not have the equipment to handle the loads on their premises, likewise loads being delivered into their premises then JB Rawcliffe & Sons Ltd can provide the appropriate fork truck with the appropriate attachments to provide the service of offloading/loading and handling on site. Our fork trucks range in capacity with diesel and electric available.

Installation of 75,000kg boiler on air skates.



Hydraulic skidding of a 109,000kg transformer.



All aspects of machinery installations are undertaken to give a complete turnkey operation to the customer be it power transformer, generator transformers, stators, generators, gearboxes, gas turbines, steam turbines or switch rooms. The gangs can shift the heaviest objects and load them on site, equally unloading them on delivery.

Project: Generator Transformer Relocation



JB Rawcliffe & Sons Ltd completed successfully a high profile move of a 166,000kg generator transformer from an oil fired power station to a nuclear power station. The project involved the skidding, utilising our hydraulic skid system of the transformer from inside a building, out of the building and into the roadway where it was loaded to a girder trailer.



The transformer then travelled at night down the West coast of Scotland under full police escort.



The transformer was offloaded to a storage plinth as a spare for the nuclear power station which involved rotating the transformer 90° to access the storage building.



The complex project was a complete success and completed well within project parameters.



Location: West Coast of Scotland, UK
Project: Relocation from oil fired power station to nuclear power station.
Dimensions: 5700mm x 4400mm x 4900mm, 166,000kg.
Challenge: Ground conditions, night time movement, time scale.
Equipment: Runway beams, hydraulic skidding system, hydraulic jacks, turntable, girder trailer.

Hydraulic Gantry Mega Lift Systems

JB Rawcliffe & Sons Ltd are able to offer hydraulic gantry lift systems from the simplest to the most complicated gantry lifting operations with its highly trained and experienced staff.

A hydraulic gantry mega lift system is a lifting solution for lifting operations in confined areas however, the system also has the advantage against a crane of similar capacity due to its compactness and operational costs.

Lifting plans, 3D modelling and engineering studies can be produced as part of the method statements and risk assessments for the project.



240,000kg turbine



59,000kg generator.

The systems can be utilised from a 'simple' lift in a low headroom building to lifting and carrying of large loads using a variety of track options. JB Rawcliffe & Sons Ltd can combine heavy turntables, skid systems, strand jacks and side shift capabilities for advanced and precise handling during innovative lifting operations with the integration of our industrial handling department. The systems are easily transported and quickly rigged and can be containerised and shipped anywhere in the world.

The systems are powered by either electric or LPG engines for a clean and quiet self-contained operation. Safety in lifting operations is foremost and therefore weight, pressure and height can be monitored for each tower on the control panel by the operator with safety alarm systems in place.

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360,000kg stator.

Rotation of a 100,000kg casting.



The lift cylinders are multi stage telescopic and double acting. Our 500Ton capacity system cylinders are encased by the square telescopic boom which is raised as the cylinder rises. The heavy steel walls of the boom overlap to ensure that the lift cylinders are not imposed to any side loading forces and are protected at all times whereas our 300Ton capacity system is open cylinder and thus lighter and smaller in operation.

The header beam is either a structural fabricated box section or heavy section universal column which is placed on the header plates of the towers. From the header beams lift links are used to provide points of attachment between the header beams and the rigging attached to the load.

The four towers are located on tracks that are an assembly consisting of two parallel beams tied together at regular intervals. The wide flange beams are fitted with one structural element that guides the tower wheels.

Strand Jack System

JB Rawcliffe & Sons Ltd can provide strand jack systems which are a hydraulic lifting device with multiple strand wires to lift loads. Each wire is individually clamped by two gripping heads. The lower and the upper gripping head guarantees a mechanical locking on the wires at all times during lifting. By means of the cylinder and the opening and/or closing of one of the heads the load can be lifted or lowered. The strand jack systems which are simple to install and operate are ideal for lifting heavy loads in restricted areas.

JB Rawcliffe & Sons Ltd has strand jack units with a capacity of 100 tonnes each and are all operated, monitored and controlled with a computer for safe, accurate and precise operations.

141,000kg generator in Kenya, Africa.



Strand Jack Lifting



Project: London, SW1



JB Rawcliffe & Sons Ltd successfully transported and placed two transformers into Central London. The complex project was to transport and place two 86,000kg transformers and associated ancillary parts into a brand new UKPN basement substation 11m beneath ground level. This project took place in the middle of the redevelopment of the former Kingsgate House on Victoria Street, SW1, as part of its transformation of Victoria.

As the new substation was located beneath the new development of The Zig-Zag Building, JB Rawcliffe & Sons Ltd were approached and contracted to solve the challenge of getting the power transformers into the construction site and down the allocated substation hatches with the least amount of disruption.



Several constraints had to be overcome which included ground loadings, restricted room on site, time restraints and access to site. Consultation with Transport for London, Westminster Council, The Highways Agency and The Metropolitan Police were undertaken to achieve permission for the delivery of the transformers.



With strategic planning with Transport for London the delivery vehicle reversed into site from Victoria Street and using our 300Ton capacity lift system the transformers were offloaded from our modular trailers, travelled over the hatches and lower down 11m to the plinth.



Location: Kingsgate House, Victoria Street, London SW1
Project: Transport & installation of two transformers.
Dimensions: 7m x 3.7m x 3.8m, 86,000kg each.
Challenge: Central London, access restrictions, time sensitive, ground loading, pavement crossing, restricted site, contraflow of Victoria Street
Equipment: Modular axles, road plates, jacking and skidding equipment, hydraulic lift system.

SPMT Operations

250,000kg cable reel.



The company has 28 lines of self propelled modular transporters (SPMT) available for the transportation of large and heavy cargoes giving a capacity of over 1000tonne. With modular construction the SPMT transporters can be coupled side to side and end to end, or remote units can be operated as a single transporter.

The steering is controlled by electro-hydraulic motors where each wheel bogie is independently controlled and monitored by the computerised control system.

80,000kg transformer.



100,000kg bridge beams.



Each wheel bogie able to swing through 260° (+130°) and with nine steering programs available this gives amazing manoeuvrability. The SPMT and power packs are controlled by a single operator by means of the hand operated remote console.

Cargo Handling

Loading of a cable reel to flat rack.



JB Rawcliffe & Sons Ltd are widely recognised as the break bulk, bulk cargo, heavy lift and container stuffing/destuffing specialists coming up with innovative loading and unloading solutions for our customers. No matter what size or shape of the consignment, JB Rawcliffe & Sons Ltd always find the most cost effective way to handle the goods.

On our 12 acre facility in Skelmersdale, Lancashire we have several internal gantry cranes with capacity up to 20,000kg which give us the protection from the weather when handling sensitive equipment. A complete range of handling equipment is available to load and unload cargo including an 80,000kg capacity crane and several fork lift trucks from 3500kg to 40,000kg capacity.

Utilising the latest certified and approved methods of securing JB Rawcliffe & Sons Ltd can offer cost effective lashing of loads for the safe and damage free transport of cargos. JB Rawcliffe & Sons Ltd can calculate and design the ideal securing system for the cargo to shipping standards. Our teams can travel to manufacturers' premises nationwide to load/stuff and secure cargo.

Using our own transport fleet we can collect import containers/flat racks from the quayside and transport them to our facility to unload/destuff goods for collection or alternatively we can arrange distribution to their final destination. Short/long term internal/external storage is also available.



Loading of stone to a shipping container.

Removal of an engine from a shipping container.



Additionally to container de-vanning, containerisation, consolidation and distribution we are also able to provide the recovery, transport and de-vanning of damaged containers and/or goods contained within the container which have been damaged during transport or shipping. With facilities for the operations to be witnessed by appointed people, the careful removal of damaged goods can be witnessed by insurance and customer representatives.

Storage



JB Rawcliffe & Sons Ltd can provide industrial storage in our onsite insulated secure storage hall. The storage hall with 1400m² of floor space has a 20,000kg overhead crane with 7750mm underneath the hook and pulling points located in several locations for the skating of heavier pieces.

Outside secure storage is also available with an 80,000kg capacity crane at hand. Internally and externally the company has the capabilities to off load and place heavier pieces into storage with our own industrial handling teams.

The company's 12 acre site is fully secure with 24 hour security with Red Care cover and monitored CCTV.

With the facilities available at our premises the company is able to handle various containers, be it oversized, open-top, flat racks and purpose built, the containers can be transhipped and placed either into storage or to another vehicle for onward travel.

Storage of a generator container.



Stooling of cable reels at customer premises.

We are confident that our warehousing and storage capabilities are flexible enough to accommodate our customer's needs, and we are only a phone call away to discuss your requirements.

Site Facilities



Located on the 12 acre site close to the M58 motorway, the company has extensive purpose built modern workshop facilities with heavy engineering, fabrication, maintenance and trailer refurbishment.

Our workshops are equipped with all the latest tools to inspect and service commercial vehicles including all forms of trailers including specialist and bespoke trailers. With a full team of well trained, educated and experienced staff all forms of jobs can be assessed and undertaken.

Facilities include: 20m fabricated pits with fitted pit jacks, the latest brake testers which conform to test inspectorate standards, vehicle emission extractors and overhead crane to name a few. As well as the on site facilities we are also able to provide break down assistance which include vehicles that are unable to be recovered due to the loads that are being transported.

Within the onsite fabrication department we are able to offer specialist design and alterations. This can be basic vehicle chassis modification work to chassis rebuilds with major alteration and additional equipment fitting.



Trailer alterations can also be undertaken, repair of damaged trailers, specific customer alterations and the redesign to facilitate a trailer for a specific project. Within this department we are also able to provide the design and manufacture of equipment to carry/support the load in question, for example a tilt frame to reduce the width of a load for transport.

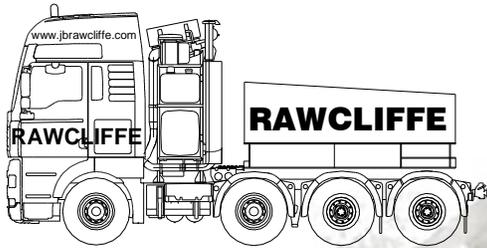
Vehicle chassis modification can also be undertaken where we are able to offer the design, manufacture and fitting of additional equipment, for example: aluminium fuel / hydraulic tanks, sub frames & 5th wheels.

Additional axle installations are an effective means of increasing the carrying capacity of a vehicle where we specialise in fitting these axles into the tightest positions to keep the overall wheelbase short and therefore keeping vehicle manoeuvrability to an optimum.

Fleet

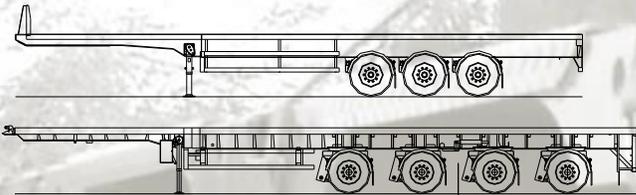
The company has a considerable collection of specialised equipment to provide a dedicated service for the handling & transport of indivisible and abnormal loads, general haulage and machinery handling, removal and installation with endless configuration possibilities which is all maintained to the highest of standards and continually updated, this dedicated equipment can be adapted to the needs of our customer and the transport needs in question.

Prime Movers



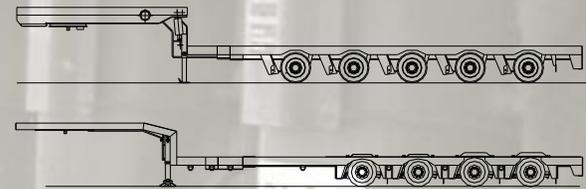
The company currently has 20 prime movers operating on the roads of the UK. These prime movers range from 44,000kg to the impressive 250,000kg tractor units, and operate in a number of configurations including rigid vehicles with fitted cranes.

Platform Trailers



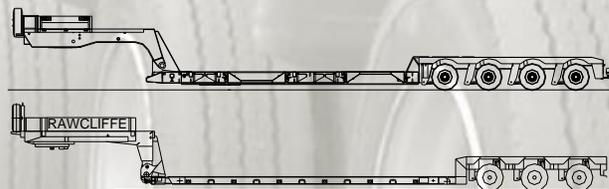
In excess of 60 platform trailers in a variety of sizes, load bearing capabilities and manoeuvrability including single, double and triple extenders, the company has the specific platform trailer to suit the needs of the customer.

Semi Low Loaders



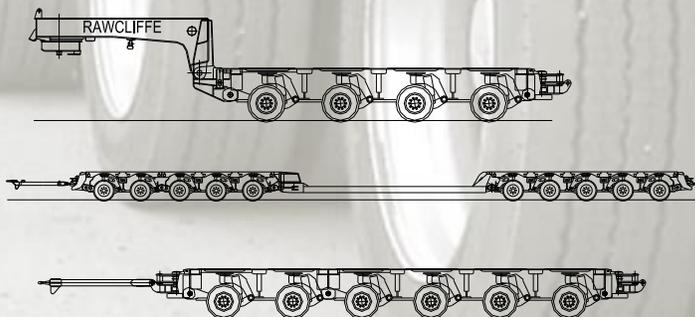
JB Rawcliffe & Sons Ltd maintains a fleet of semi low loaders, which vary considerably in sizes, load bearing capabilities and manoeuvrability. Dependant on the load these semi low loaders are available with air or hydraulic suspension. For example there are semi low loaders, which can achieve a running height of 700mm, for loads where the overall height and the manoeuvrability is an issue.

Low Loaders



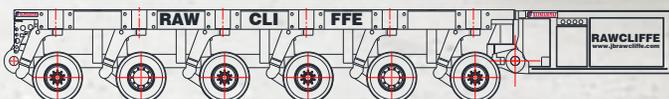
The fleet of low loaders that are operated range in size and load bearing capability. Specific low loaders also have the facilities by which to steer, extend and also widen to accommodate the specific load to be carried. The company currently operates extendable low loaders with a deck thickness of 220mm which can be operated only millimetres from the ground meaning high loads can be easily transported using the motorway system saving the customer time and money.

Modular Equipment



The company has an impressive array of specialised hydraulic modular equipment which can be configured into a multitude of trailer set-ups. The modular equipment makes it possible to set up the most economical solution for any transport project where the modular equipment can be literally built around the load to be transported and will compensate for uneven ground conditions such as ramps. The company has in excess of 50 lines of axles and a variety of decks and beams which can be set up in various lengths with extendable options. Vessel decks are also available which have the capabilities to extend outwards giving endless possibilities for the transportation of loads.

SPMT Equipment



The company has 28 lines of self propelled modular transporters (SPMT) available for the transportation of large and heavy cargoes giving a capacity of over 1000tonne. With modular construction the SPMT transporters can be coupled side to side and end to end, or remote units can be operated as a single transporter. The steering is controlled by electro-hydraulic motors were each wheel bogie is independently controlled and monitored by the computerised control system. Each wheel bogie able to swing through 260° (+130°) and with nine steering programs available this gives amazing manoeuvrability. The SPMT and power packs are controlled by a single operator by means of the hand operated remote console.



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REAR STEER >>

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H0H

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