

Safelift Davits

Selection
Specification
Safe Use



RD351

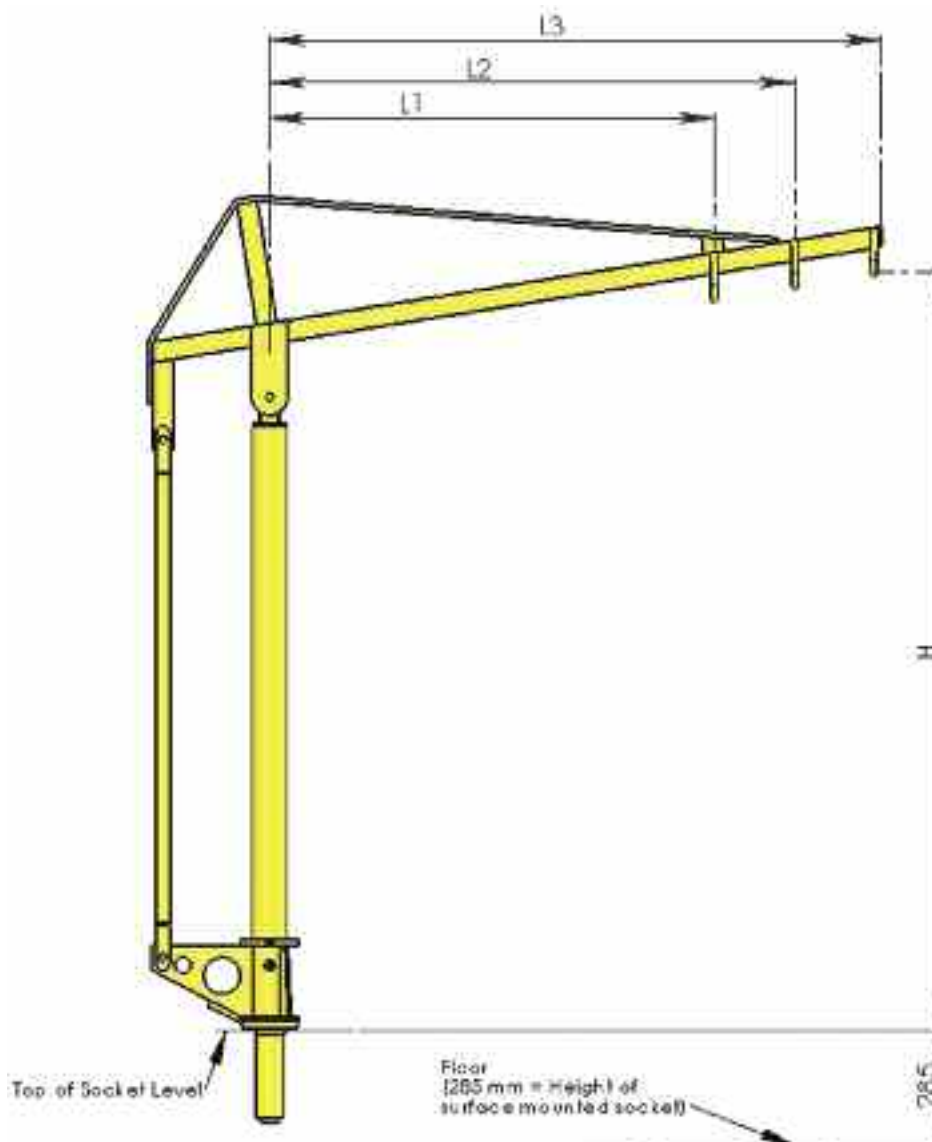
rossendalegroup
LIFTING EQUIPMENT ENGINEERS



Safelift Davit Type LD1

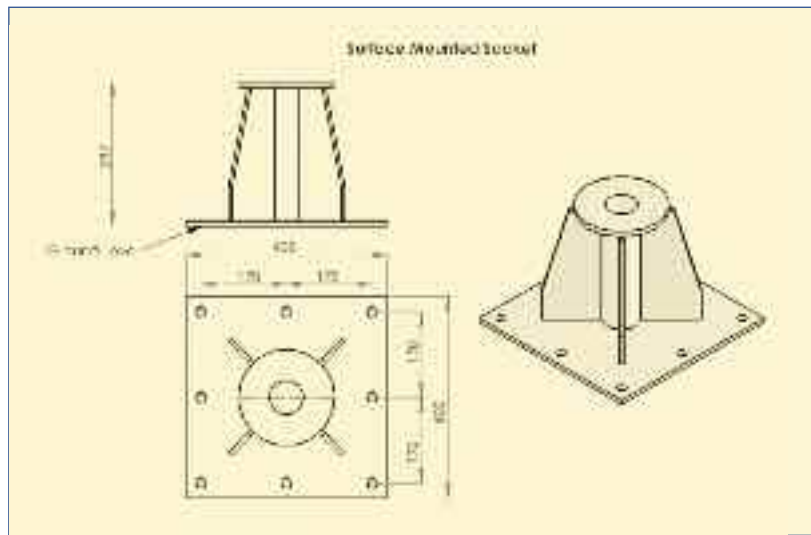
- Standard SWL 500kg
- Standard height (H) 1856mm (plus socket height)
- Standard radius (L) 1100, 1300, 1500mm
- Slew 360°
- All aluminium construction
- Lightweight for safe manual handling – total weight of davit 25kg
- Lifting eyes for chain block and slave chain (supplied separately)
- Ideal for lifting submersible pumps, motors, etc.
- Slews easily with minimum manual force, even when fully loaded

All aluminium –
lightweight construction.
Total weight less than 25kg.



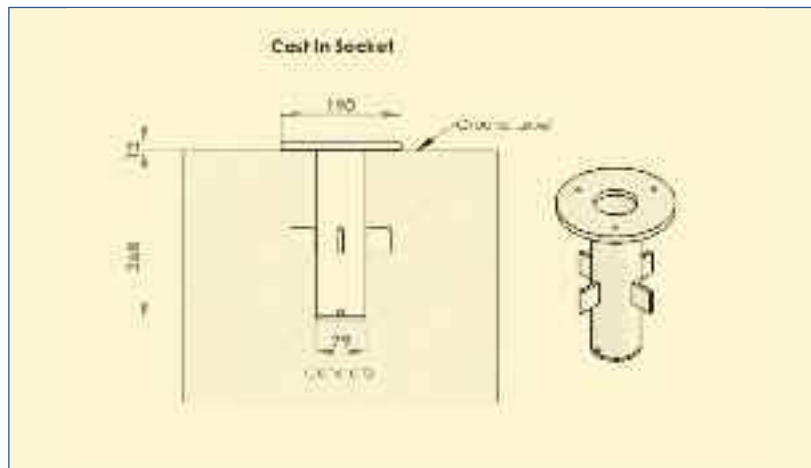
Surface Mounted Socket SS1

- Standard SWL 500kg
- Fits all Safelift LD1 davits
- Allows easy 360° slew of davit
- Steel construction
- Galvanised finish
- Suitable for floor mounting on concrete or steel floors



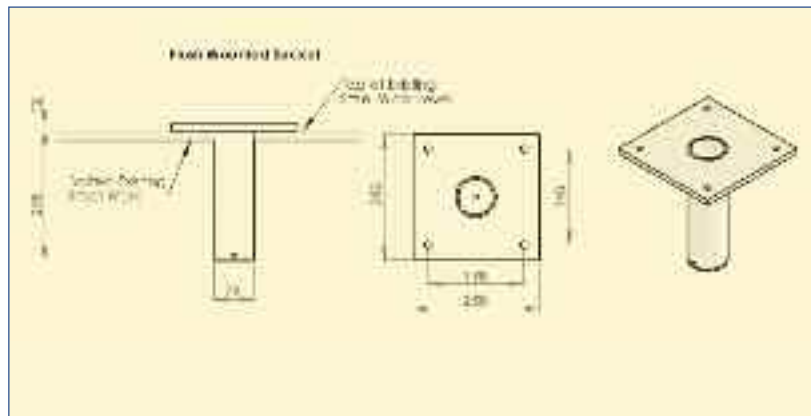
Cast-In Socket SC1

- Standard SWL 500kg
- Fits all Safelift LD1 davits
- Allows easy 360° slew of davit
- Steel construction
- Untreated finish
- Suitable for casting into new concrete floors



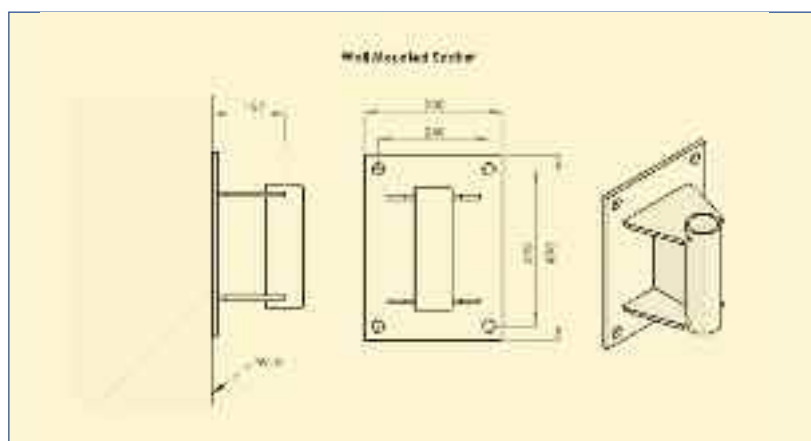
Flush Mounted Socket SF1

- Standard SWL 500kg
- Fits all Safelift LD1 davits
- Allows easy 360° slew of davit
- Steel construction
- Galvanised finish
- Suitable for floor mounting on steel floors



Wall Mounted Socket SW1

- Standard SWL 500kg
- Fits all Safelift LD1 davits
- Allows easy 360° slew of davit
- Steel construction
- Galvanised finish
- Suitable for mounting on concrete or steel walls or columns



Safelift 360 Hand Chain Block

- SWL 500kg for use with Safelift Davit Type LD1.
- Standard height of lift 3m (other heights available to suit the application).
- Standard model is steel construction, grade 8 calibrated steel loadchain.
- Corrosion resistant model is zinc plated steel construction with stainless steel loadchain.
- Lightweight for safe manual handling – total weight of chain block with 3m lift is less than 9kg.
- With our innovative design the Safelift 360 opens up a new world of safety for the operator. The range of applications as well as the operating conditions have been changed by a revolutionary hand chain guide.
- The key to this innovation is the revolutionary 360 degree rotating hand chain guide which allows operation of the hand chain from virtually any position, even in extremely confined areas.
- The Safelift 360 can be operated at the side of the load or from any other position including horizontal pulling. The plane between top and bottom hook must always be in a straight line.
- More flexibility gives greater safety – operators can now work outside of the immediate danger zone reducing the risk of operator injury.
- The special load brake eliminates the conventional 'ratchet and pawl' mechanism used in other manual hoists, resulting in less maintenance.



Unique Design Features

Safelift davits are made entirely from aluminium. This results in an extremely lightweight davit. At under 25kg self-weight, the Safelift davit type LD1 is easily portable and allows compliance with the Manual Handling Regulations.

The Safelift davit type LD1 folds down for easy storage and handling.

The aluminium construction also resists corrosion and so is ideal for wet external environments. The powder coated finish provides further protection.

The davit spigot is anodised to provide a long-lasting finish to the bearing surface.

The sockets are of galvanised steel, ideal for long-term exposure to wet external conditions.

Properly used and maintained, Safelift davits will give long life in arduous industrial environments, and will allow the user to carry out lifting operations efficiently and safely.



Quality Plan

The quality plan is part of the rigorous quality control program applied to the design, manufacture and testing of all Safelift products. The customer is provided with opportunity to apply second and third-party control to all stages of production. Rossendale Group welcomes customer and third-party inspectors and has arrangements with Lloyds Register, DNV and other inspection bodies.

Documentation

Documents issued with Safelift davits include –

- General arrangement drawings in 2D and 3D.
- Design calculation set.
- Report of Thorough Examination under LOLER.
- Declaration of Conformity under the Machinery Regs.
- Pre and Post-test MPI reports and procedures.
- Load test calibration certification, traceable to national standards.
- Welder qualifications and weld procedures.
- Steel and weld consumable certificates.
- Safe Use Instructions for the davits, lifting appliance and slings.

Testing & Certification

Safelift davits are proof load tested to an overload in excess of standard requirements, usually 25% over SWL. By contractual agreement, the test is witnessed and approved by Lloyds Register (or other agreed third-party authority). Test instruments are calibrated to national standards.

All welds are subject to magnetic particle inspection (or other agreed weld NDE) both before and after the proof load test. The NDE is carried out by qualified inspectors working to approved procedures.

Davit deflection is controlled under the design process and is measured to ensure compliance at proof load test. The Safelift davit is not a jib crane is not designed to meet the deflection requirements of BS 7333.



Standard & Regulatory Compliance

As with all Safelift products, Safelift davits comply with the Supply of Machinery (Safety) (Amendment) Regulations 1994 and the EC Machinery Directive 98/37/EC. They are marked with the CE mark and issued with a Declaration of Conformity.

Safelift davits are manufactured in our ISO 9001 approved quality control facilities which cover design, material sourcing, manufacture and testing.

All welds are carried out to Lloyds Register approved welding procedures to EN ISO 15614-1:2004. All welders are qualified by Lloyds Register under BS EN 287-1:2004. All welds are subject to MPI before and after the proof load test. Safelift davits are subject to proof load testing and are certified accordingly.

Testing follows the requirements of the Lifting Operations and Lifting Equipment Regulations 1998 and the Report of Thorough Examination is issued.

Exceptional Hazards

When using Safelift davits in exceptionally hazardous conditions, the degree of hazard should be assessed by a competent person.

Examples of exceptional hazards include lifting of potentially dangerous loads such as molten metals, corrosive materials or fissile material, loads which can move and loads with a high centre of gravity, and certain offshore activities.

Safelift davits are often used at high-risk locations such as vessel walls. Users must be trained in safe working at height practices.

Maintenance Installations

Safelift davits should be examined by a competent person at least every 12 months. This is a legal requirement under LOLER (for full details see 'RD177 – Lifting Equipment and the Law', and 'RD294 – Statutory Inspection' available from your Rossendale Group branch or on-line at rossendalegroup.co.uk).

Once a Safelift davit has been overloaded it should be taken out of service and advice, inspection and repair sought from your Rossendale Group branch.

Rossendale Group offers a full lifting equipment maintenance, examination and testing service.

Safelift davit sockets should be installed and site tested by a competent person.

Rossendale Group can provide detailed installation instructions and offers a full site service including design, installation, testing and after-sales service and inspections.



Safe Use

Overhead lifting presents a very real danger of severe injury or loss of life if equipment is not used properly. Safelift davits should only be used by properly trained and qualified persons who understand equipment selection, inspection and use.

All Safelift lifting equipment is issued with Safe Use Instructions. The Rossendale Group provides Safe Use of Lifting Equipment training courses.

Users of Safelift davits are referred to the following document, available from your Rossendale Group branch or on-line at rossendalegroup.co.uk

RD476 – Instruction for the Safe Use of Davits.

RD469 – Lifting Appliances for General Purposes.

Safelift davit users should read and understand these Safe Use Instructions and take particular note of the following –

- Never load in excess of the rated capacity.
- Always inspect the davit, sockets, lifting device and slings for damage or wear before use.

Qualifications

Rossendale Group operates a quality management system in accordance with ISO 9001 : 2008. The system is audited and approved by Bureau Veritas, certificate number 19317.



Rossendale Group is a full member of the Lifting Equipment Engineers Association, who set, maintain, audit and approve our technical standards and train and qualify our lifting equipment engineers.



Safelift lifting equipment is manufactured by or exclusively for Rossendale Group. It is designed for heavy duty industrial applications and is backed by the 'Safelift Guarantee'.



Safelift lifting equipment complies with the Supply of Machinery (Safety) (Amendment) Regulations 1994 and the EC Machinery Directive 98/37/EC. The equipment is marked with the CE mark and issued with a Declaration of Conformity.



Welding

Welding is carried out to Lloyds Register approved procedures to EN ISO 15614–1. Welders are qualified by Lloyds Register to EN 287–1:2004. Welds are subject to magnetic particle inspection both before and after the proof load test.

Safe Use of Davits

This important safety information should be passed to the user of the equipment.

This document is issued in accordance with the requirements of Section 6 of the Health and Safety at Work etc Act 1974, amended March 1988. It outlines the care and safe use of DAVITS and is based on Section 14 of the LEEA Code of Practice for the Safe Use of Lifting Equipment.* It should be read in conjunction with the requirements for Lifting Appliances for General Purposes, RD469, which form an integral part of these instructions.

This information is of a general nature only covering the main points for the safe use of davits. It may be necessary to supplement this information for specific applications.

Always

- Store and handle davits correctly.
- Inspect the davits, block and accessories before use and before placing into storage.
- Position the davit arm so that the lifting appliance is directly over the load.
- Take the weight of the load gently.
- Ensure the travel path is clear before slewing the davit.
- Push rather than pull the load when slewing the davit arm.

Never

- Shock or side load davits.
- Attempt to drag loads along the ground.
- Allow persons to pass under suspended loads.
- Place ladders or climb on unrestrained davit arms.

Selecting the correct davit

Davits are available in a range of capacities, sizes and design options. Select the davit to be used and plan the lift taking the following into account:

Type of davit and sockets – floor or wall/column mounted.

Capacity, height and length.

Slew – angle of slew, 360°, 180° or other.

Type of hoisting mechanism – chain block, integrated winch.

Storing and handling davits

- When installed but not in use, davits should be positioned so as not to present a hazard to persons, goods, vehicles etc that may be in the area. It may be necessary to secure the davit arm to prevent movement taking place as the result of winds etc.
- If the davit is not in regular use it is advisable to remove the davit and the lifting appliance for separate storage. Where this is not possible or desirable the appliance should be parked where it will not present a hazard.

Installation and Commissioning

The erection procedure will vary with the equipment and should be carried out in accordance with the supplier's instructions paying attention to the following matters:

- Prior to installation inspect the equipment to ensure no damage has occurred in store or transit.
- Ensure the support structure is adequate for the full loads that will be imposed, is tested and marked with the SWL.
- The overall stability and safety of a davit depends on its foundation or supports. When erecting to an existing structure it is important that the superimposed forces are assessed by a qualified engineer and written approval obtained.
- Trip hazards must be avoided when sockets installation is planned.

Using davits safely

- Never attempt lifting operations unless you have been trained in the use of the equipment and slinging procedures.
- Do not use defective davits, blocks or accessories.
- Position the davit arm carefully. The block hook must be directly over the centre of gravity of the load. Do not use the davit arm or appliance to drag loads along.
- Take the load gently and avoid shock loads. Similar care is needed when lowering loads as sudden loading/unloading may cause the davit arm to whip.
- Before moving the davit arm or suspended load ensure you have a clear view of the travel path and that this is free of any obstructions etc.
- Avoid swinging loads. Push rather than pull on suspended loads.
- Do not allow anyone to pass under or ride upon the load.
- Never leave suspended loads unattended. In an emergency ensure the area is cordoned off and kept clear.
- Never lift/lower more than the marked SWL. In the case of manual equipment if abnormally high effort is required, or if the load slips this is an indication of too high a load or a fault – check the load and the appliance.
- Do not use the chain/wire rope to sling the load, ie do not wrap it round the load, back hook or choke hitch.
- Do not lift on the point of the hook or overcrowd the hook with fittings.

In-Service Inspection and Maintenance

- The maintenance requirements may be combined with those of the lifting appliance.
- Lubricate the sockets and davit pin/spigot in accordance with manufacturer's instructions.
- Bolts and fixings on davit sockets should be checked to ensure they are tight and if necessary re-torqued.
- Regularly inspect the davit and sockets and, in the event of the following defects, refer the davit to a Competent Person for thorough examination: structural defects, damage, distortion or cracked welds; loose or missing bolts; difficulty in slewing or davit arm slews on its own; any other visible defects or operational difficulties.
- The Provision and Use of Work Equipment Regulations 1998 and the Lifting Operations and Lifting Equipment Regulations 1998 both require that lifting equipment is properly maintained.
- This is an ongoing duty that falls on the user and a planned routine maintenance programme will be necessary.
- In addition to the statutory thorough examinations by a Competent Person, regular in-service inspections should be made to find any faults and damage that might arise. If any are found they should be referred to the Competent Person.
- The maintenance programme must meet the requirements of the manufacturer's instructions and any special requirements due to the conditions of service. This may be combined with maintenance of other equipment used in association with the appliance.

Further information is given in:

The Code of Practice for the Safe Use of Lifting Equipment, published by: Lifting Equipment Engineers Association

HSE Guidance Note GS39 –

Training of Crane Drivers and Slingers.

Copies available from your Rossendale Group branch or our web site: www.rossendalegroup.co.uk

Lifting Appliances for General Purposes

This important safety information should be passed to the user of the equipment.

The following information is based on Section 1 – Appendix 1.6 of the Code of Practice for the Safe Use of Lifting Equipment* and should be read in conjunction with the instructions for safe use of the specific lifting equipment, of which it forms an integral part and with any specific instructions issued by the supplier.

This information is of a general nature only covering the main points for the safe use of manual and power operated blocks.

Always

- Ensure suspension points and anchorages are adequate for the full imposed load.
- Check the load chain/wire rope is hanging freely and is not twisted or knotted.
- Position the hook over the centre of gravity of the load.
- Check the operation of the brake before making the lift.
- Ensure the slings are secure and load is free to be lifted.
- Check the travel path is clear.
- Ensure the landing area is properly prepared.

Never

- Exceed the marked SWL.
- Use the load chain/wire rope as a sling.
- Shock load the block or other equipment.
- Lift on the point of the hook.
- Overcrowd the hook with fittings.
- Permit the load to swing out of control.
- Leave suspended loads unattended.

Types of blocks

A wide range of manual and power operated blocks is available. This section of the instruction is concerned with matters which are common to the safe use of the following listed equipment when used to lift in a vertical plane only. Pulley blocks for fibre or wire rope used with winches, hand chain blocks, chain lever hoists, power operated wire rope blocks and power operated chain blocks. The use of trolleys is often associated with blocks and these may be built in with the trolley as an integral part of the appliance, or independent with the block hung on.

Operative Training

Lifting appliances should only be used by trained operatives who understand their use and that of the associated equipment used in the lift.

Installation and Commissioning

The erection procedure will vary with the equipment and should be carried out in accordance with the suppliers instructions paying attention to the following matters:

- Prior to installation inspect the equipment to ensure no damage has occurred in store or transit.
- Ensure the support structure is adequate for the full loads that will be imposed, is tested and marked with the SWL.
- When erecting trolleys ensure they are correctly set for the beam width and that the track is fitted with end stops and remains level at all loads up to the maximum.
- When suspending appliances by a top hook ensure the support fits freely into the seat of the hook.
- After erection ensure that the chain/wire rope hangs freely and is not twisted or knotted.
- With power operated blocks the supply should be connected by a suitably Qualified Person taking account of any statutory or technical requirements (eg Electricity at Work Regulations, Pressure Systems and Transportable Gas Containers Regulations).
- Test run to ensure the free and correct movement of the chain/rope.

- Check the operation of the brake. Check direction of control command, position and operation of travel limits and safety devices.

Safe Use of Blocks

The basic objectives of any lifting operation are to move the load to the desired location and land it safely, efficiently and without damage to the load, the equipment used or the surrounding buildings, plant etc. In addition to any specific instructions relating to the block the following general points must be observed:

- Never attempt lifting operations unless you have been trained in the use of the equipment and slinging procedures.
- Position the hook directly over the centre of gravity so that the line of pull is vertical.
- Do not use the chain/wire rope to sling the load, ie do not wrap it round the load, back hook or choke hitch.
- Do not lift on the point of the hook or overcrowd the hook with fittings.
- Never lift/lower more than the marked SWL. In the case of manual equipment if abnormally high effort is required, and with power operated appliances they fail to lift the load, or if the load slips this is an indication of too high a load or a fault – check the load and the appliance.
- Avoid unnecessary inching of power operated appliances and do not impose sudden or shock loads.
- Push rather than pull loads suspended from appliances with push/pull trolleys and if un-laden pull on the bottom hook. Never pull an appliance by the pendant control, supply cable or hose.
- Avoid sudden movement of travel motion or undue effort in pushing the load which can cause the load to swing.
- Avoid excessive or intentional use of motion limits unless they are additional limits intended for that purpose. Avoid running appliances against end stops.
- Do not allow anyone to pass under or ride upon the load. Never leave suspended loads unattended. In an emergency ensure the area is cordoned off and kept clear.
- Do not remove guards, protective covers, weather proof covers, heat shields etc without the authority of a Competent Person.

In-Service Inspection and Maintenance

The Provision and Use of Work Equipment Regulations 1998 and the Lifting Operations and Lifting Equipment Regulations 1998 both require that lifting equipment is properly maintained. This is an ongoing duty that falls on the user and a planned routine maintenance programme will be necessary.

In addition to the statutory thorough examinations by a Competent Person, regular in-service inspections should be made to find any faults and damage that might arise. If any are found they should be referred to the Competent Person.

The maintenance programme must meet the requirements of the manufacturer's instructions and any special requirements due to the conditions of service. This may be combined with maintenance of other equipment used in association with the appliance, eg power feed system. Check the block and its associated equipment daily for obvious faults and signs of damage.

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Further information is given in:

The Code of Practice for the Safe Use of Lifting Equipment, published by: Lifting Equipment Engineers Association
HSE Guidance Note GS39 - Training of Crane Drivers and Slinger
Copies available from your Rossendale Group branch or our web site: www.rossendalegroup.co.uk

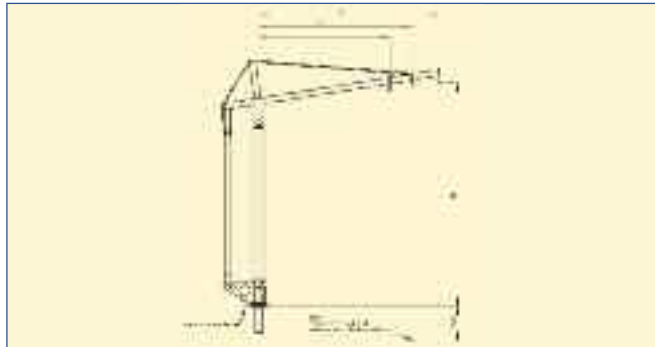
RD342/LD Safelift Davit Type LD1 GA and Sales Input Sheet

Complete as many of the yellow boxes as you can and return to Rossendale Group for a quotation, drawings and specifications.

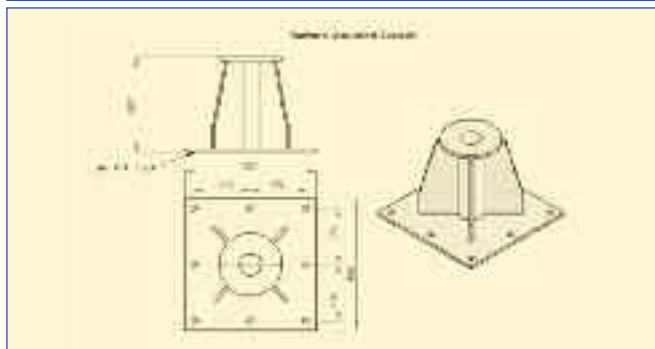
**Fax to your Rossendale Group branch or
Email to sales@rossendalegroup.co.uk**

Client
Client Address
Branch
Job No

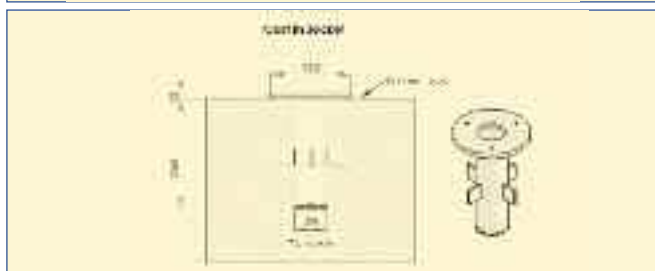
Client Contact
Client Ref
Location
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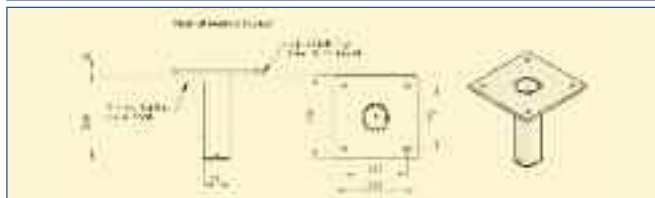
DAVIT Type LD1	
WLL:	500 kg
Max Radius:	1500 mm
Max Height:	1856 mm (plus socket height)
Slew:	360 Degrees
Overall Davit Weight:	25 Kgs



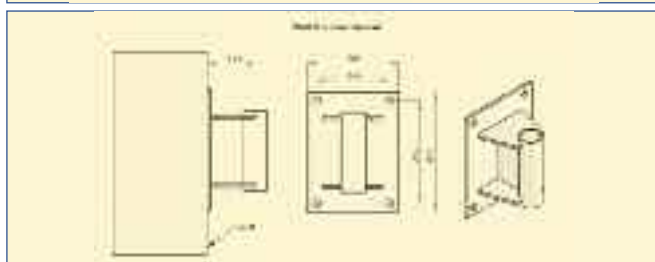
The following information is required to specify this product –	
SWL (Max 500kg):	kg
Radius (Max 1500 mm):	mm
Height (Max 1856 mm):	mm
Quantity of davits required:	



SURFACE MOUNTED SOCKET type SS1	
SWL (Max 500kg):	
Quantity of sockets type SS1 required:	



CAST-IN SOCKET type SC1	
SWL (Max 500kg):	
Quantity of sockets type SC1 required:	



FLUSH MOUNTED SOCKET type SF1	
SWL (Max 500kg):	
Quantity of sockets type SF1 required:	

WALL-MOUNTED SOCKET type SW1	
SWL (Max 500kg):	
Quantity of sockets type SW1 required:	

SAFELIFT 360 CHAIN BLOCK	
SWL (Max 500kg):	
Height of lift required:	
Quantity of Safelift 360 chain blocks required:	
Standard or Corrosion Resistant required:	



Above
Special Design Lifting Beam



Above
Safelift overhead crane



Top to bottom
Industrial process Safelift
underslung cranes

Safelift top running crane
and gantry

Safelift spreader beams
carrying out a 220t lift

TESTING & SITE SERVICES



LOLER Examinations

- Carried out on your site or at our test house.
- Examinations carried out in accordance with the Lifting Operations & Lifting Equipment Regulations 1998, Reg 9.
- Where applicable, Defect Reports issued under LOLER Reg 10.
- Report of Thorough Examination issued under LOLER Reg 11.
- Examiners trained and qualified by LEEA.
- Complete after examination repair and test service.
- Full compliance with LOLER inspection and certification.

Proof Load Testing

- Carried out on your site or at our test house using calibrated load measuring equipment.
- Standard testing facilities up to 400t capacity.



For further information on examination and testing of lifting equipment see our document 'RD177 – Lifting Equipment & the Law' available from your Rossendale Group branch or at www.rossendalegroup.co.uk

Crane & Hoist Servicing

- Carried out by trained, qualified engineers on all makes of overhead cranes & hoists.
- Site reports include full details of work carried out, parts used and recommendation for future safety improvements and cost savings.
- Routine servicing contracts.
- Breakdown and 24-hour service available. Call-out numbers at www.rossendalegroup.co.uk



Site Installations

- Carried out by trained and qualified installation engineers.
- All work risk assessed and method statements produced.
- Rossendale Group employs a full-time SHE Officer and an Appointed Person for all lift planning.
- Full post-installation test service available.
- Rossendale Group installs overhead cranes, jib cranes, runway beams, davits and portal frame steel structures.

HIRE & TRAINING SERVICES

Lifting & Height Safety Equipment for Hire

Rossendale Group aims to provide lifting equipment users with the highest quality lifting equipment hire service available. We offer compliance with LOLER, PUWER and other Regulations by providing the customer with -

- Thorough examination of all equipment by competent, trained & qualified examiners.
- Issue of a LOLER report of thorough examination with all hired lifting equipment.
- Clean, safe, quality, lightweight gear, in "As-New" condition.
- Free safety advice on-site if required.
- "Safe Use" instructions issued with all hire equipment.
- Associated breakdown, repair and testing services.
- Delivery and collection service.

Certification

All lifting equipment issued on hire by Rossendale Group is issued with a LOLER 'Report of Thorough Examination of Lifting Equipment'. Lifting equipment is stripped down, cleaned, examined, repaired as required, reassembled and tested by a qualified and approved Lifting Equipment Engineer, before every hire. Records are kept of all tests and examinations.

Safe Use Instructions

The employer of a user of lifting equipment has responsibilities under the Lifting Operations & Lifting Equipment Regs 1998, the Provision & Use of Work Equipment Regs and the Management of Health & Safety at Work Regs 1999 to provide instructions to the operator regarding the safe use of the equipment. Rossendale Group helps the employer to fulfill those requirements by issuing safe use instructions with every piece of hire equipment issued.

Lightweight Equipment

Equipment in the Rossendale Group hire fleet is of the highest quality, manufactured either by ourselves or by leading manufacturers. All equipment selected is appropriate to the task and of modern lightweight construction. Our objective is to make your lifting job safer and easier.



'Safe Use of Lifting Equipment' Training Courses

We can train you to lift more safely and make your work-place safer. We aim to cover the type of equipment you use. Our 'Safe Use of Lifting Equipment' courses target -

Responsibilities

The employee has responsibilities too. An understanding and acceptance of these responsibilities by equipment users will result in less equipment damage and a safer workplace.

Avoiding Misuse

Misuse due to ignorance is a major cause of accidents. The correct way to use each type of equipment is taught.

Fault Finding

Worn or damaged equipment is another major cause of accidents. The ability of the user to identify such faults can save accidents from happening. The syllabus includes THE LAW, TYPES OF LIFTING EQUIPMENT, CAUSES OF ACCIDENTS, ASSESSING THE LOAD, and SAFE USE OF LIFTING GEAR including PRACTICAL DEMONSTRATIONS.

Course Materials

Lecture and discussion / Video films / Overhead slides / Samples of damaged and worn equipment.

Your Place or Ours?

We have training centres at our branches. Alternatively we can come to your site and carry out exactly the same training program. We offer morning and afternoon classes and provide lunch when the classes are at our training centre.

User's Pocket Guide

Each attendee is given a personal copy of the 'Lifting Equipment User's Pocket Guide', produced by Rossendale Group and LEEA, to help users continue to conduct safe lifting practices.

Attendee Certification

Following an assessment test, each attendee is provided with a certificate of training, with a duplicate copy for the employer.



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Above
Safelift davit type LD1,
all aluminium construction