

8. Materials Handling

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8.1 Beam Products



Telescopic Spreader Beams

Nobles Telescopic Spreader Beams are for users who need a high quality spreader beam with the versatility of telescopic adjustment but not the additional weight and complex instructions required when a centre lug is provided.

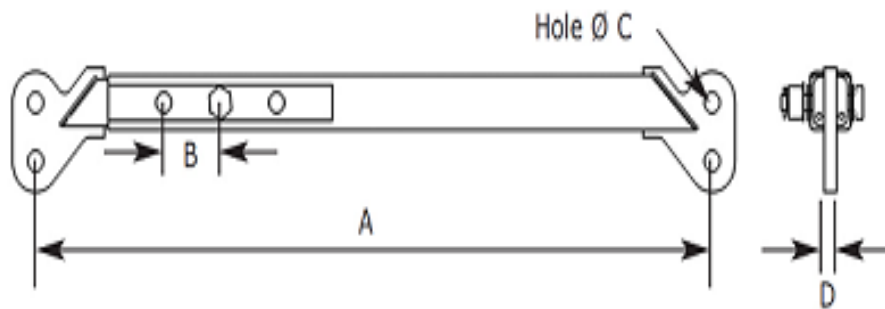
Our beams are given a single load rating for simplicity.

Galvanised Finish

The galvanised surface finish is more durable than either paint or powder coating. Galvanising provides important protection for the outer tube and prevents any internal rust which may cause potential for hidden risk of failure.

Disassembly

Nobles telescopic spreader beams can all be disassembled fully to enable inspection of the complete spreader beam sections. Many designs do not allow for this and pose risk from internal corrosion failure or jamming of the sections.



Product Specifications

Name	ITEM #	WLL at all Lengths (tonnes)	A min (mm)	A max (mm)	B increment (mm)	C (mm)	D (mm)	Max Sling Angle (degrees)	Weight (kg)
Spreader Beam Telescopic 2.5t .9-1.4m (NZ)	26781	2.5	900	1400	100	21	16	90	19
Spreader Beam Telescopic 2.5t .8-1.2m (NZ779)	27294	2.5	800	1200	100	21	16	90	15
Spreader Beam Telescopic 5t 3-5m Drawing #SG045	27113	5	3000	5000	100	25	25	90	190
Spreader Beam Telescopic 5t 1.75-3m	26970	5	1800	3000	100	25	25	90	36
Spreader Beam Telescopic 5t 1.2-1.9m	27319	5	1200	1900	100	25	25	90	45
Spreader Beam Telescopic 6t 4.0-7.0m	27557	5	4000	7000	100	25	25	90	250
Spreader Beam Telescopic 8t 1.8-3m Drawing #SG051	27402	8	1800	3000	100	28	25	90	65
Spreader Beam Telescopic 8t 2.4-4.3m Drawing #SG018	27056	8	2400	4300	100	28	25	90	70
Spreader Beam Telescopic 10t 2-3.2m	26921	10	2000	3200	100	32	32	90	62
2.9-4.8m AS4991-DG 11.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28400	11	2900	4800	100	32	32	90	174
2.3-3.7m AS4991-DG 12.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28483	12	2300	3700	100	34	45	90	120
Spreader Beam Telescopic 12t 2.5-4m NZ898	27304	12	2500	4000	100	34	45	90	118

1.7-2.4m AS4991-DG 15.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28554	15	1700	2400	100	38	45	90	180
3.0-5.0m AS4991-DG 15.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28600	15	3000	5000	100	38	45	90	195
1.8-2.5m AS4991-DG 20.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28193	20	1800	2500	100	43	45	90	315
2.3-3.7m AS4991-DG 20.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28399	20	2300	3700	100	43	45	90	210
Spreader Beam Telescopic 24t 2.5-4.2m Drawing #SG031	27088	24	2500	4200	100	43	40	90	310
Spreader Beam Telescopic 30t 2.4-3.6m	27266	30	2500	3700	100	54	50	90	315
Spreader Beam Telescopic 50t 2.4-3.5m	26842	50	2400	3500	100	68	80	90	410
2.5-3.7m AS4991-DG 50.0t Galvanised Nobles TSB 2 Piece Telescopic Spreader Beam	28378	50	2500	3700	100	66	80	90	465

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Combination Beams

Nobles Combination Beams are available in various styles to provide you with maximum versatility. Combination Beams can be used as either a lifting or spreading beam.

Design

Our design team benefits from 100 years of experience, and all aspects are considered to ensure ease of use, durability and reliability.

Finishes

Our beams are available with a variety of finishes, from galvanised, painted or powder coated. Our finishes are applied while the beam is fully dismantled, ensuring the best possible result.

Adjustment

Our Combination Beams are designed for maximum adjustment and flexibility so your beam can be adjusted to suit your needs on site.



Product Specifications

Name	ITEM #	WLL Spreading (max. tonnes)	WLL Lifting (max. tonnes)	Range (mm)	Weight (kg)
2.1-3.6m AS4991-DG 8.6t Galvanised Nobles 3SB 3 Piece Telescopic Spreader Beam	28371	8.6	1.6	2100 - 3600	85
Spreader Beam 3 Piece Telescopic 10t	26744	10	1.6	2000 - 3200	85
Spreader Beam 3 Piece 2.5-4.5m	26747	25	0	2500 - 4000	380



Container Spreader Beams

Our Container Spreader Beams are designed to survive the demanding conditions of container handling, with attention to quality materials, durable lugs and ease of use.

Designed to suit either 20' or 40' shipping containers, when coupled with our tested sling assemblies and container hooks, our Container Spreader Beams will last the distance.



Product Specifications

Name	ITEM #	WLL (tonnes)	Length (mm)	Weight (kg)
Spreader Beam Container 46t	27336	46	2.8	220
Spreader Beam Container 35.6t Drawing #SG040	27226	35.6	2.8	160
Spreader Beam Container 28.5t Drawing #SG039	26991	28.5	2.8	130
2563mm AS4991-DG 5.2t Galvanised Nobles Standard Fixed Container Spreader	28535	5.2	2.8	



Basic Lifting Beams

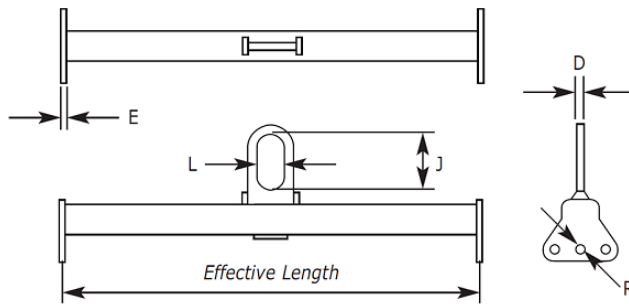
Nobles basic beams are a simple and useful solution to a range of lifting applications. The basic beam can be used to balance sling loads, reduce headroom, protect delicate loads and properly align slings with clamps.

Versatile

Three lug holes on each end allow for both single and double leg slinging from both ends. In addition to the extensive range of standard basic beams, Nobles can design and manufacture to your specific requirements, including a hot dipped galvanised finish.

Rugged

Designed in accordance with AS 4991 for general purpose lifting with a design life of up to 20,000 cycles, with properly slotted and gusseted lugs. Like all Nobles beams, these are individually proof tested and stamped in our accredited test facility



Product Specifications

Name	ITEM #	WLL (tonnes)	Effective Length (mm)	D (mm)	E (mm)	J (mm)	L (mm)	R (mm)	Weight (kg)
Lifting Beam Type SG43 1.5t 1000mm	26968	1.5	1000	20	16	130	63	19	25
Lifting Beam Type SG43 1.5t 3000mm	27204	1.5	3000	20	16	130	63	19	75
Lifting Beam Type SG43 1.5t 4000mm	27380	1.5	4000	20	16	130	63	19	115
Lifting Beam Type SG43 1.5t 2000mm	27037	1.5	2000	20	16	130	63	19	46
Lifting Beam Type SG43 3.5t 3000mm	27134	3.5	3000	25	16	140	70	19	125
Lifting Beam Type SG43 3.5t 1000mm	26966	3.5	1000	25	16	140	70	19	38
4000mm AS4991-DG 3.5t Y14 Yellow Nobles SG43 90Deg 3 Hole End Lug Lifting Beam	28258	3.5	4000	25	16	140	70	19	180
Lifting Beam Type SG43 3.5t 2000mm	26818	3.5	2000	25	16	140	70	19	78
Lifting Beam Type SG43 5.5t 4000mm	26917	5.5	4000	32	20	200	100	22	250
Lifting Beam Type SG43 5.5t 2000mm	26962	5.5	2000	32	20	200	100	22	115
Lifting Beam Type SG43 5.5t 3000mm	27013	5.5	3000	32	20	200	100	22	205
1000mm AS4991-DG 5.5t Y14 Yellow Nobles SG43 90Deg 3 Hole End Lug Lifting Beam	28598	5.5	1000	32	20	200	100	22	55



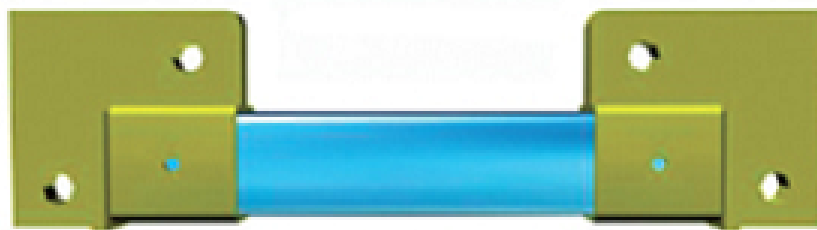
Spreader Beam Ends Caps

Nobles range of Spreader Beam End Caps provide you with a flexible way of spreading a variety of distances without the need to own a range of different beams.

At lower capacities, our NZSPEND range simply requires Grade 350 SHS (AS 1163) cut to the length you need, and Grade C350LO (AS 1163) pipe to suit our PESBEC range of large capacity caps.

Our End Caps are the solution when you need a quick change for one-off lifts without the need of a specially engineered beam, or for when you need to be able to frequently change the spreading distance.

Due to their nature, care and attention does need to be paid when planning a lift using a system like this. Please carefully consult our Care and Use Guide and contact Nobles when in doubt.



Product Specifications

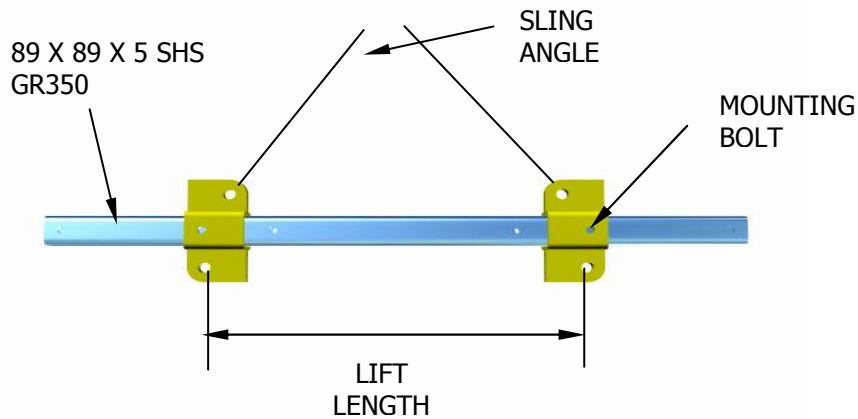
Name	ITEM #	Max. WLL (tonnes)	Max. Beam Length (mm)	Suits Beam Type
Spreader Beam End Caps Size 2 Drawing #SG16	26790	6.5	7000	89 x 89 x 5 SHS
Spreader Beam End Caps Size 1 Drawing #SG11	26727	3.25	3500	65 x 65 x 5 SHS
Spreader Beam End Caps 300 1 Pair Plus Bolts Drawing #SG10	26847	2.1	6000	50 x 50 x 5 SHS

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SIZE 2 SPREADER END LOAD TABLE

LIFT LENGTH (MM)	MAX WLL (KG) @ UP TO 120° SLING ANGLE
0 TO 3000	6500KG
3000 TO 3500	5100KG
3500 TO 4000	4000KG
4000 TO 4500	3200KG
4500 TO 5000	2600KG
5000 TO 5500	2200KG
5500 TO 6000	1800KG
6000 TO 6500	1600KG
6500 TO 7000	1400KG

THIS TABLE APPLIES ONLY IF 89 X 89 X 5 SHS GRADE 350 (OR GRADE 450) IS USED WITH THE SPREADER ENDS - ENDS MUST BE FITTED CORRECTLY TO SHS, FIGURES ARE BASED ON 22MM GRADE S SHACKLES BEING USED WITH A PROPERLY SELECTED SET OF SLINGS. ADJUSTMENT HOLES DRILLED INTO THE BEAM MUST BE DRILLED 22MM DIAMETER ON CENTRELINE OF BEAM. HOLE CENTRES MUST BE NO CLOSER THAN 70MM.



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LOAD TABLE

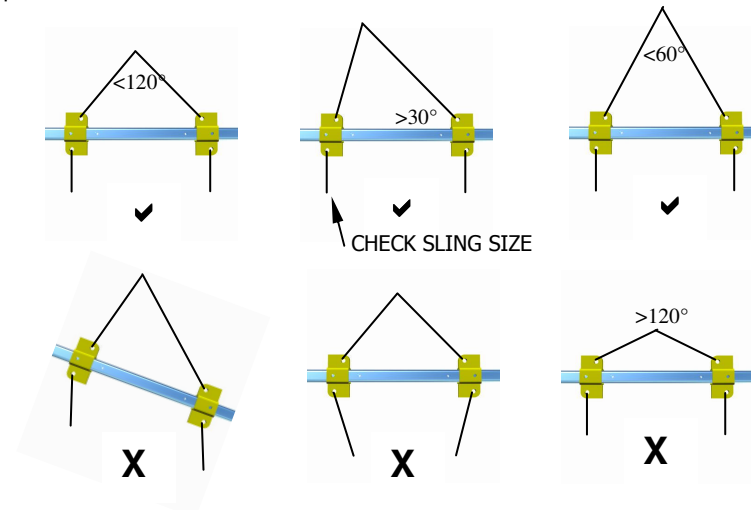
To safely & correctly use Nobles spreader end caps the load table (adjacent) must be obeyed. For each load stated, correctly sized slings must be used. The connection made to the end cap lugs must be via shackles to ensure that the connection is properly loaded & that wear will not be excessive.



- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always check the security of the end cap mounting bolts before each lift.
- Never use beams with kinks or bends.
- Never use old, rusty or otherwise suspect RHS with end caps and always use the correct grade specified in the load table.
- Only use the mounting bolts supplied by the manufacturer.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Spreader ends and RHS beams should always be subject to proof load testing prior to being put into service.

CORRECT LOADING OF END CAP SPREADERS

Correct use of a spreader beam formed from these end caps is vital to safety. Being rated for full capacity at 120° means that end cap spreaders in this size can be asymmetrically loaded to the full extent. When asymmetrically loading spreaders to balance loads the proportion of the load taken by the near end slings will exceed 50% of the total & the sling must be appropriately sized to take the proportion of load that will apply. Spreader beams must never be used when not horizontal.



MAINTAIN & INSPECT YOUR SPREADER BEAM END CAPS

Nobles can provide you with service & support for your spreader beam end caps via our extensive inspection & testing services. Via this service we are able to ensure that records of the inspection & test of this product and your related lifting gear inventory are properly recorded on your own register, or one that we can devise for you.

Under normal service conditions your spreader end caps will not require re-testing or repair for some time. However it is important that they are visually inspected at every lift for obvious signs of defect & are given a thorough visual inspection on a regular basis by a competent person. The frequency of test will depend upon how arduous the duty cycle or work environment is for these devices.

If these devices have been subjected to heavy cycles of use or otherwise harsh environments Nobles can offer NDT inspection & refurbishment. Please contact your local Nobles representative for further information.

INDIVIDUALLY PROOF TESTED

Nobles have individually proof tested this product to twice it's working load limit to ensure it works properly & is free from defect. Should you require the centre beam sections that you use with these end caps similarly certified we will gladly arrange this for you.

All of our spreader beam products are proof tested. They are all engineer designed by ourselves & manufactured under our ISO 9001 accredited quality system.

Should you have any queries relating to this product, please refer to the test certificate number stamped onto it, from which we can reference our manufacturing records.

OTHER SPREADER BEAM PRODUCTS AVAILABLE:

STANDARD DESIGN FIXED SPREADER BEAMS

SIZE 300 END CAPS FOR LOADS FROM 350kg @ 6M TO 2.1t @ 2M

SIZE 1 END CAPS FOR LOADS FROM 3.25t @ 2M TO 1.8t @ 3.5M

TELESCOPIC AND ADJUSTABLE SPREADER BEAMS

PALLET LIFTING SPREADER ASSYS

SPREADER FRAMES

CUSTOM DESIGNED SPREADER AND LIFTING BEAMS IN ALL SIZES

NOBLES BRANCHES ARE LOCATED IN THESE CITIES:

ADELAIDE (HEAD OFFICE) - MELBOURNE - SYDNEY - PERTH - BRISBANE -
KARRATHA - ROCKHAMPTON - NEWCASTLE - ROXBY DOWNS - WHYALLA
- PT LINCOLN - DARWIN



Size 2 Spreader End Cap Care Advice

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto spreader beams apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your spreader beams regularly inspected by a competent person who may suggest repairs or condemn your spreader beams should anything such as the above be deleterious to the WLL.

Shock loading can greatly increase the actual loads placed on a beam. Extraordinary conditions such as shock loading must be taken into account when selecting products for use in spreader beam systems. The WLL which applies for any Nobles spreader end cap is only for the corresponding effective length listed in the load table. The WLL only applies when properly selected slings are attached to the lug holes in the proper specified manner. Slings a spreader beam using an arrangement other than as specified will render the WLL as stated in the load table void.

Spreader beams must always be correctly selected and fitted for every lift. Attention must be paid to the balance and security of the load.

Never weld any part of a spreader beam without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

IMPORTANT

For maximum safety and efficiency, spreader beam systems must be properly designed, used and maintained. You must understand the use of spreader beam components in a lifting system. These instructions, and the standards to which they refer may use technical words and detailed explanations. IF YOU DO NOT UNDERSTAND ALL WORDS AND DIAGRAMS - DO NOT MAKE ASSUMPTIONS AND GUESSES AND DO NOT USE A SPREADER BEAM SYSTEM. For further assistance and training support contact your nearest Nobles branch.

NOBLES BRANCHES ARE LOCATED IN THESE CITIES:
ADELAIDE (HEAD OFFICE) - MELBOURNE -
SYDNEY - NEWCASTLE - PERTH - BRISBANE -
KARRATHA - ROCKHAMPTON - ROXBY DOWNS

SPREADER BEAMS

Spreader beams are used whenever two or more legs of a lifting sling arrangement need to be spread apart. This is usually done for reasons of load protection or stability. Spreader beams are different to lifting beams in that they are used with a two legged sling on top of the beam which goes out to the ends of the beam (or to a position in line with the lower slings). This puts the spreader beam into compression instead of bending allowing the use of a smaller section size than would otherwise be necessary. The high apex of the top sling set also aids the stability of the lift as compared to other beam arrangements.

A. Noble & Son Ltd. Are Australia's foremost designers of spreader beams. This "End Cap" product helps in the procurement of spreader beams by facilitating the rapid assembly of spreader beams at special lengths. This device, and the load table overleaf have been carefully devised to provide you with a product that will be safe & reliable for years to come. It is vital however that this device is used correctly - users shall read & keep these instructions for future reference. Should replacement instructions be required Nobles will be glad to assist.

OTHER END CAP PRODUCTS

Spreader beam end caps now feature open ends. This enables them to be made into adjustable spreader beams. All end cap sizes can be supplied as a fully made up encapsulated beam kit. Previously end caps had closed ends, some users preferred this style as it did not rely on correct bolt fitment to remain secure under load. These closed end style end caps can still be supplied in size 1 & 2 types where required.



**CLOSED END
STYLE CAPS**

A.B.N. 18 007 513 395



General Information

BEAM PRODUCTS

Lifting Beams & Spreaders

Nobles are at the forefront of lifting and spreader beam design. In addition to our growing range of standard products a large number of the spreader/lifting beams manufactured by Nobles are purpose built.

Cost, Ease of Use, Stability & Headroom

Generally a higher cost beam will result in very good ease of use and long life while the availability of headroom greatly affects the stability of the lift. Nobles engineers have the expertise and experience to provide the best solution for any given lifting/spreader beam application.

Beam Types:



1. Basic Lifting Beam

Has a centre lifting lug at the top to accommodate a crane hook and has a bottom lug at each end for connecting slings or in some instances for hooking directly to the load.



2. Basic Spreader Beam

Literally "spreads" a two legged top sling. A spreader beam has better stability than a lifting beam and a higher potential capacity for a given size of steel section used.



3. Combination Beam

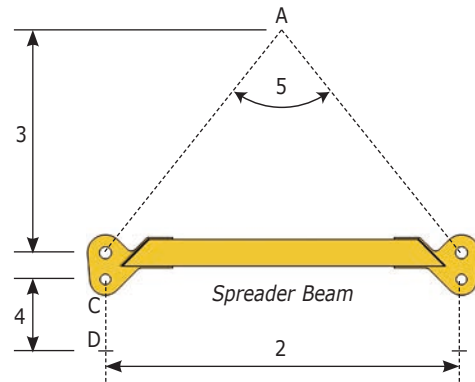
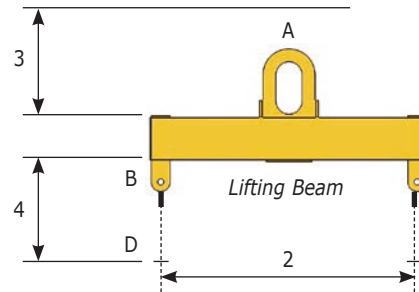
This beam is a combination of (1.) & (2.) and offers the versatility of a dual purpose beam.

Other Types

There are, of course other types of beam, most of which are adjustable versions of the basic three. Other common types worth considering are X-beams, spreader frames and H-beams.

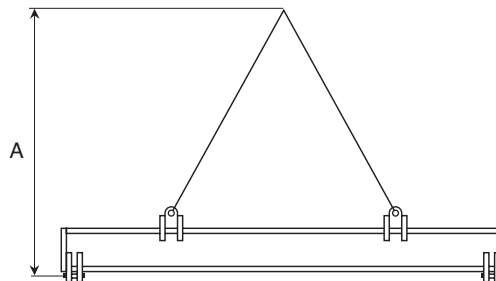
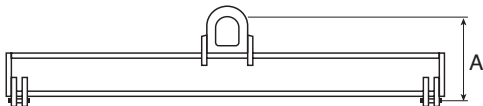
How to Order Lifting & Spreader Beams

1. WLL required	Tonnes or Kg's
2. Centre distance of load or pick up points	mm
3. Headroom	mm
4. Length of sling leg	mm
5. Angle of sling leg	60°, 90° or 120°
6. Type of attachments at A, B, C & D	Oblong Links, Chain Connectors, Shackles, Hooks etc.

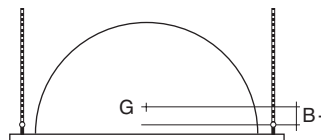
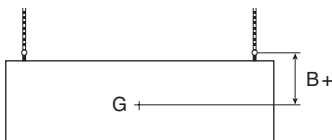


Lifting Stability is a function of:

1. The lifting beam's height (A).

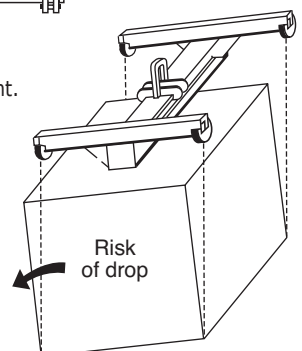


2. The centre of gravity (G) in comparison to the lower hanging points (B).



3. Lower slings as short as possible to avoid movement.

4. The shape of the trapezoid made by the lifting beam, slings and the load.



Where (B) is lower than (G), (A) must be longer than (B)

8.2 Cages



Drop Side Goods Cages

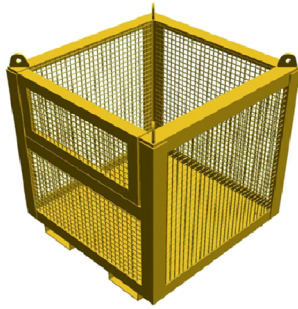
Safely lift goods using either a forklift or crane

Design allows cages to be stacked

Easy gate release

Painted safety yellow with WLL clearly marked

Fully tested and certified for use



Product Specifications

Name	ITEM #	WLL (tonnes)	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
Goods Cage 750kg Drop Side DWG 1784 800x800x800mm	27498	0.75	800	800	870	105
Goods Cage 1000kg 1200x1200x1200mm Drop Side. Drawing #5215	26768	1	1200	1200	1200	180



Goods Cages

Nobles extensive experience in producing lifting devices has seen us design and construct many cages over the years. These latest designs provide an affordable solution for lifting goods, incorporating compliance with AS 4991, rugged, durability and quality construction.

Our stackable tool cage is galvanised, suits standard pallets and is 1m high for easy and safe stacking.

Our cages are available powder coated as standard.

Slings are not included as standard but can be supplied on request.

Dimensions are subject to commercial tolerances and can change without notice.



Product Specifications

Name	ITEM #	WLL (tonnes)	Stackable	Finish	Weight (kg)
Cage Tool Carrying With Door, Stackable. Drawing #SZ015	26803	1	Yes	Galvanised	220

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8.3 Forklift Jibs



Incline Forklift Jib

Excellent general purpose jib well suited to areas with confined clearances

Allows forklift to be easily and safely adapted for lifting tasks. Incline provides additional lifting clearance

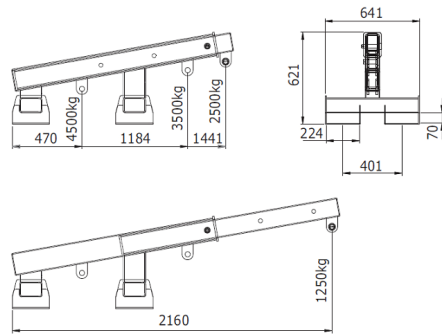
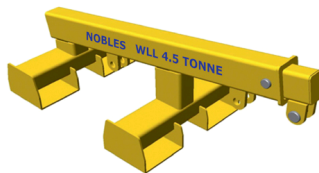
4.5 tonne lifting capacity

Adjustable to 3 different lengths

Simple to fit and easy to use

Painted safety yellow

Fully tested and certified with WLL clearly marked



Product Specifications

Name	ITEM #	Adjustment (mm)	WLL (kg)	Surface Finish	Weight (kg)
4.5t Forklift Jib Adjustable	28026	470 - 2160	4500 - 1250	Yellow Painted	130



Forklift Jib

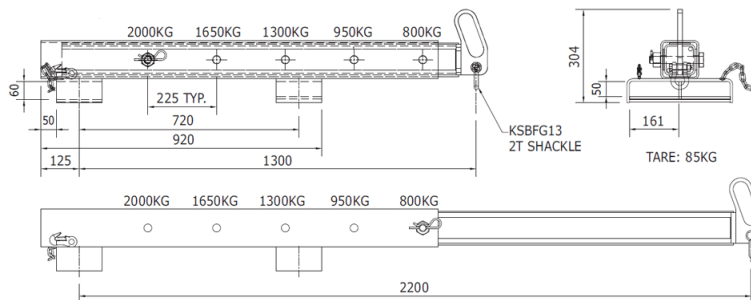
Excellent general purpose jib well suited to areas with confined clearances

Adjustable to 5 different lengths

2 tonne maximum lifting capacity

Simple to fit and easy to use

Fully tested and certified with WLL clearly marked at each extension point



Product Specifications

Name	ITEM #	Adjustment (mm)	WLL (kg)	Surface Finish	Weight (kg)
2T WLL FORKLIFT TELESCOPIC JIB;ATTACHMENT	27459	1300 - 2200	2000 - 800	Galvanised	85



NZFJSL020 FORKLIFT JIB ATTACHMENT CARE & USE ADVICE

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto forklift attachments apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your forklift attachments regularly inspected by a competent person who may suggest repairs or condemn your forklift attachments should anything such as the above cause a reduction in the WLL.

Shock, and or unusual loading can greatly increase the actual loads placed upon lifting gear. Extraordinary conditions and environments must be taken into account when selecting products for use in forklift jib systems. This attachment has been designed for normal lifting environments, the suitability of the attachment for use in special environments such as at sea, in corrosive environments or with machinery other than standard counterbalanced forklift trucks must be assessed by a competent person prior to use.

The WLL which applies for any Nobles forklift attachment applies only for uses compliant with AS2359.1 & AS2359.2. The WLL applies only to the structural integrity of the attachment itself. Use with a specific forklift truck may reduce the useable capacity at some or all of the adjustment positions, please refer to the advice below.

Forklifts, and their attachments must always be correctly selected and fitted for every lift. Attention must be paid to the security of the jib, the load capacity available and the proximity of any hazards.

Never weld any part of a forklift attachment without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

A site and/or job specific hazard & risk assessment is recommended prior to use.

AS2359.1 FORKLIFT JIB ATTACHMENT CONDITIONS OF USE


Operation of this device, the forklift truck and any slings used for lifting requires competent personnel holding relevant high risk licence(s) as required by the regulatory authority. When using a forklift jib it is possible to apply loads to a forklift which exceed its rated capacity. This can compromise the safety of a forklift in terms of its strength and stability resulting in a serious accident. It is therefore important to re-calculate the safe capacity for lifting at each jib position used with reference to the geometry and load chart of the forklift in question. In addition, the Australian standards dictate additional capacity reductions for forklifts used with suspended loads:

- When a suspended load is carried (i.e. a jib attachment is used) the rated capacity calculated for the forklift must be reduced by 20%.
- When two forklifts carry the same load the load applied to each truck shall not exceed 75% of that truck's capacity.

Each of the de-rating factors stated here are cumulative. That is, the lifting capacity at a given load centre is calculated, the self mass of the jib and slings is subtracted from this, then the 20% de-rating for suspended loads is applied, then (if two trucks are used together) the 25% reduction is applied. This may result in a lower than expected lifting capacity for a forklift. Please refer to the example calculation overleaf and the truck's markings which shall be augmented to show the actual capacity with each removable attachment fitted at the manufacturer's authorized lift height(s) and load centre(s).

HOW TO DETERMINE THE WORKING LOAD LIMIT

The ID Plate (shown below) for the NZFJSL020 forklift jib has been devised with an easy to use system of capacity markings and is consistent with the requirements of AS2359.1 and AS2359.6. The “Telescopic Position” shown on the ID plate corresponds with the number stencilled above the relevant bolt position on the jib attachment.



A. NOBLE & SON LTD.
World Class Lifting Solutions
1300 711 559
www.nobles.com.au
Branches Australia Wide

PRODUCT TYPE: TELESCOPIC FORKLIFT JIB ATTACHMENT			
MODEL No:	NZFJSL020	STOCK CODE:	27459
DESIGN No:	SF002	ATTACHMENT TARE:	90 kg
MANUFACTURED:	/ 20	TEST No:	NA
TELESCOPIC POSITION	LOAD CENTRE DIST. (FROM MOUNTING FACE)	COG DISTANCE (JIB TARE TO MOUNTING FACE)	WLL OF JIB ATTACHMENT
1	1430 mm	665 mm	2000 kg
2	1655 mm	770 mm	1650 kg
3	1880 mm	876 mm	1300 kg
4	2105 mm	982 mm	950 kg
5	2330 mm	1087 mm	800 kg

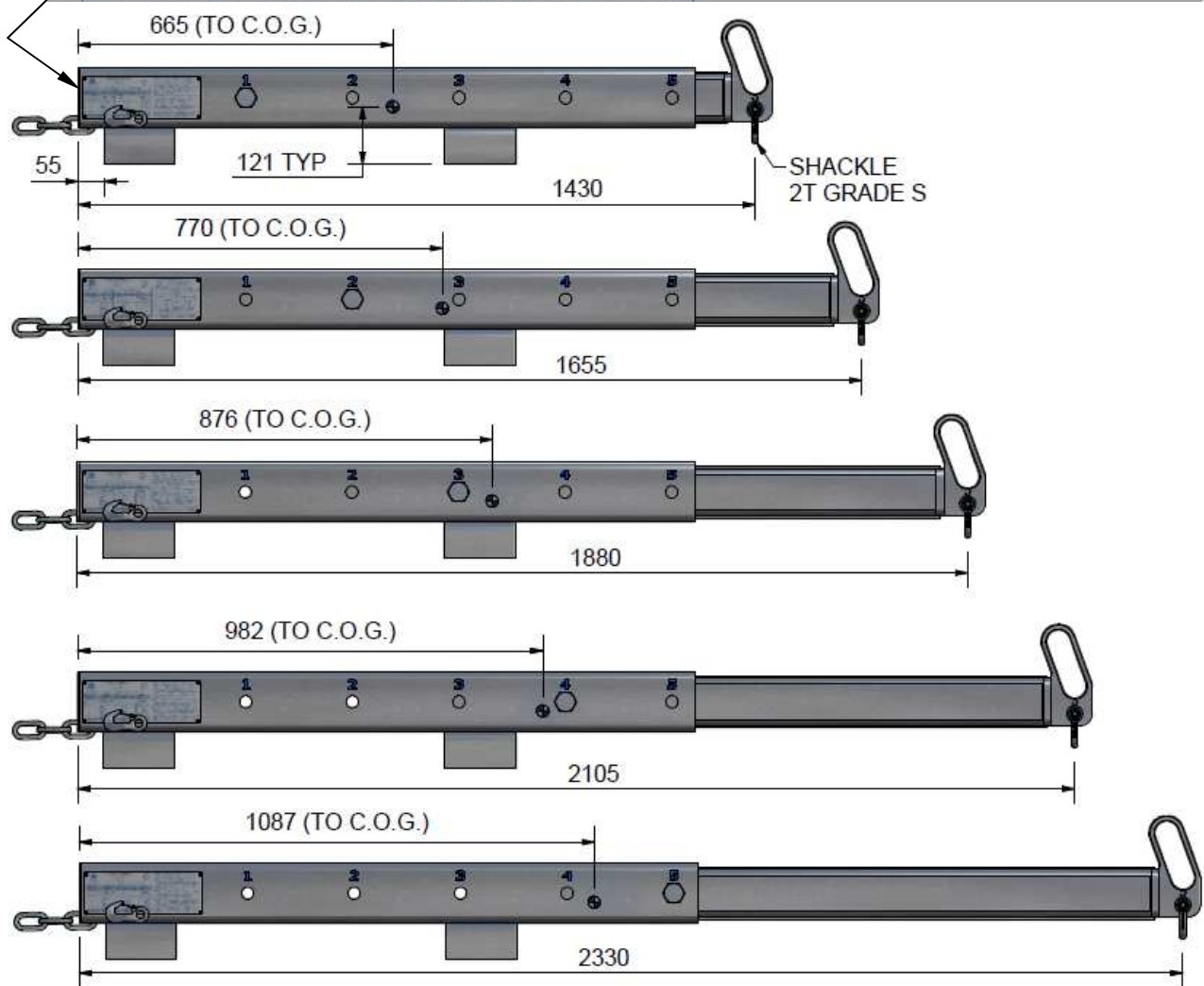
• FOR USE ONLY WITH FORKLIFT TRUCKS WHICH HAVE BEEN ASSESSED AND APPROVED FOR USE WITH THIS JIB ATTACHMENT AND WHICH SHOW A NAMEPLATE WITH THE MODEL OF THIS ATTACHMENT AND THE ACTUAL CAPACITIES OF THE TRUCK AND ATTACHMENT COMBINATION FOR THE VARIOUS LIFTING POSITIONS MATCHING THOSE MARKED ON THIS ATTACHMENT.

• FOR USE ONLY BY PERSONNEL WHICH HAVE BEEN TRAINED AND AUTHORIZED FOR THE USE OF THIS FORKLIFT TRUCK AND ATTACHMENT COMBINATION.

• OPERATORS SHALL ASSESS LOAD WEIGHT, LOAD CENTRE, LOAD HEIGHT AND COMPARE IT WITH THE ACTUAL CAPACITY OF THE FORKLIFT TRUCK AND FITTED ATTACHMENT BEFORE LIFTING THE LOAD.

• THE JIB ATTACHMENT SHALL BE FITTED UP AGAINST THE TRUCK'S VERTICAL FORK MOUNTING FACE, CENTRALLY ABOUT THE TRUCK FORK CARRIAGE.

• THE CAPACITY OF THE TRUCK AND ATTACHMENT COMBINATION SHALL BE COMPLIED WITH. (USE OF THIS JIB WITH FREELY SUSPENDED LOADS MAY REDUCE THE CAPACITY OF THE TRUCK BELOW ITS ORIGINAL MARKINGS)



NOTE - this capacity rating shown on the jib attachment ID Plate applies to the jib itself ONLY. However, as forklift designs and capacities vary, the capacity of the combination of this jib attachment and your particular forklift must be calculated.

Every forklift is required to have its own data plate describing the load rating of the forklift. This is always expressed as a load capacity at a nominated load centre. Usually this is given at a load centre of 600 mm (half pallet width). Sometimes, the load rating for a forklift varies depending upon the height and position of the mast. Sometimes also, an accessory or modification may have been applied to the forklift, resulting in changes to the original load ratings. These changes shall be reflected upon the data plate.

HOW TO DETERMINE THE WORKING LOAD LIMIT (CONTINUED)

Forklifts using this jib attachment must have their own ID plate either replaced or augmented in accordance with AS2359.6-2013 Clause 6.3.1.1(g) to show the “actual capacity with each removable attachment fitted at the manufacturer's authorized lift height(s) and load centre(s), these actual capacities being easily readable by the operator in the normal operating position”. Forklifts must be inspected by competent persons to ensure that their capacity markings are correctly applied.

Selecting a Forklift

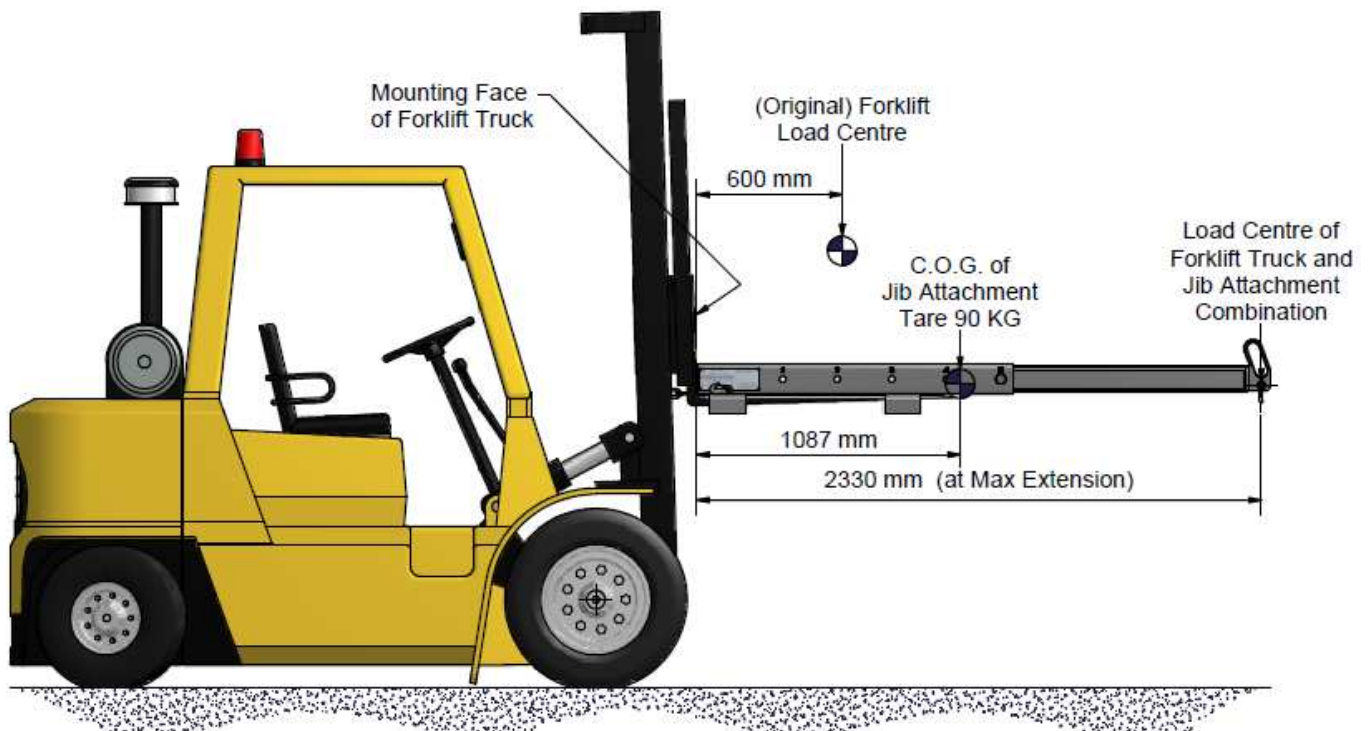
Before selecting a forklift truck for use with this jib attachment and then having the truck ID Plate altered (in accordance with AS2359.6-2013), the simplified example calculation method detailed below may be followed to help ensure that the forklift selected will be of suitable capacity.

Example calculation:

- Consider a forklift truck marked with capacity = 3000 kg at 600 mm load centre in all positions.
- We then check the capacity at whichever load centre we are to use for our lifting job, in this example we'll use 2330 mm. The load capacity at that radius becomes $3000 \text{ kg} \times (600 \text{ mm} / 2330 \text{ mm}) = 772 \text{ kg}$.
- We then reduce this capacity by the self mass of the jib (+ slings if applicable) multiplied by the ratio of the distance between the mounting face and the Centre of Gravity of the jib, to the load centre of the jib. So the lifting capacity becomes $772 \text{ kg} - (90 \text{ kg} \times 1087 \text{ mm} / 2330 \text{ mm}) = 730 \text{ kg}$.
- However, because of the extra loads and risks posed by a swinging/suspended load, we also apply the AS2359.1 de-rating of 20%. Hence, the estimated fork capacity becomes $730 \text{ kg} \times 0.8 = 584 \text{ kg}$ in this configuration (Load Centre 2330 mm from mounting face).
- By following the above example method, forklifts which have a rated capacity greater than 6250 kg at 600mm load centre (or 7450 kg at 500 mm load centre) should* have a capacity which exceeds the structural capacities of the NZFJSL020 forklift.

*Please note:

This example calculation is a simplified method for determining the reduced capacity for a forklift and attachment combination. However there will likely be other factors pertinent to your particular forklift truck (such as lift height and position of the front truck wheel with relation to the load) that will need to be taken into account by the manufacturer prior to the truck's ID Plate being replaced / augmented. When using forklift trucks marked with equal or greater capacity than the jib attachment, the markings upon the forklift jib must be obeyed. When using forklifts marked with lesser capacities than the jib attachment ratings, you must obey the reduced ratings to avoid the forklift truck being overloaded.



USE OF THE FORKLIFT JIB

The Nobles NZFJSL020 forklift jib has been devised with ease of use in mind, however forklift designs can vary considerably. Modifications to these instructions, or the device itself may be required in order to ensure safety. A competent person should be consulted where these instructions are (or appear to be) inappropriate.

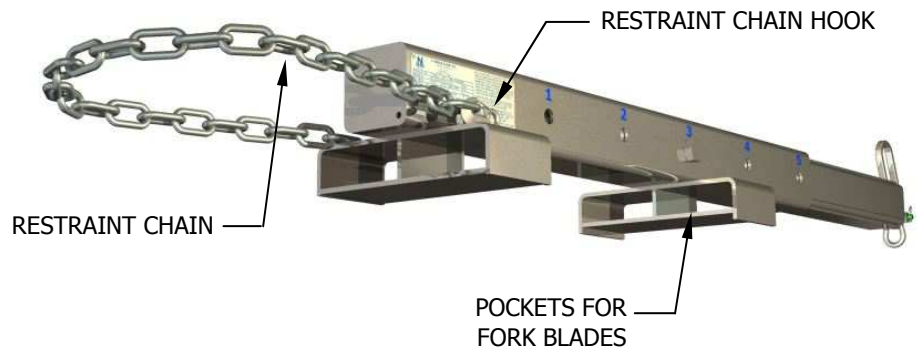
FITMENT TO FORKLIFT

After a suitable forklift is chosen and checked ready for use with this jib, the jib may then be attached. To fit the jib, set the fork blades to a spacing position central to the pockets on the jib. Importantly, the jib must also be placed at the centreline of the forklift. Fitting the jib towards one side may overload parts of the forklift, or compromise stability.



WARNING

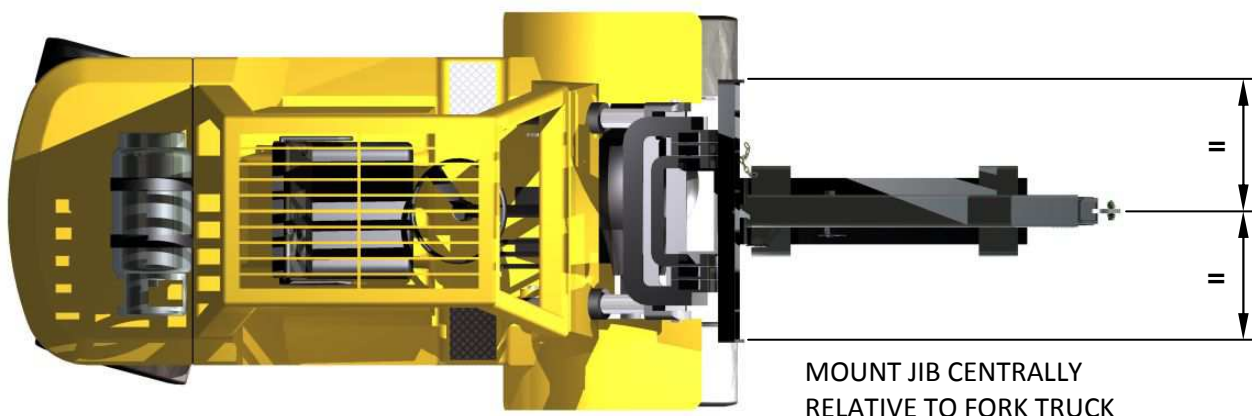
- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Never use in proximity to live equipment.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Slings, and other lifting accessories used must be of the appropriate size and in good condition and safe working order .



When fitting the attachment over the fork blades ensure that the fork blades protrude clear through the forward set of pockets by sufficient amount so as to ensure the jib cannot be dislodged. The attachment can then be secured by wrapping the restraint chain around a strong point on the fork carriage and connecting it back at the restraint chain hook. The chain and hook are specifically chosen for their ability to connect at intermediate links along the chain, permitting adjustment. The chain is suitable for restraint with horizontal blades only. The restraint chains are not for use as lifting slings.

ADJUSTING THE LENGTH

The Nobles NZFJSL020 forklift attachment is simple to adjust. With the jib level, simply remove the adjustment bolt then pull or push the attachment to the required position before re-inserting the bolt into the new location. A handle is provided, however the effort required may be too much for some people, in these cases the jib may be shackled to a solid object and the forklift driven to make the adjustments under power. Nobles' telescopic design comes fully apart so that the internals of the jib can be cleaned and inspected (avoiding risk of hidden damage). However, this does mean that the inner section can drop if extracted too far. By sighting through the adjustment holes the end of the inner section can be viewed so as to avoid this. Care must be exercised when making adjustments so that the section does not drop causing injury. Never insert fingers into the adjustment holes. Always re-secure the adjustment pin with the nut and clip provided.



MOUNT JIB CENTRALLY
RELATIVE TO FORK TRUCK

INSPECTION

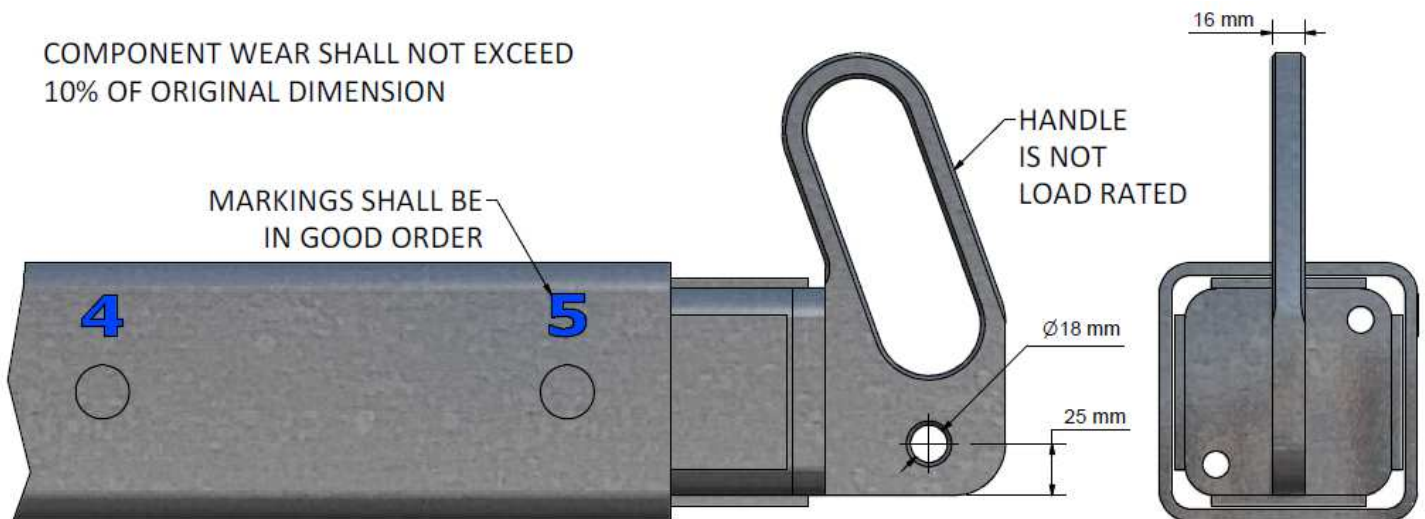
Use of a forklift jib converts a fork truck into a type of crane and the risks associated with lifting via crane apply. Therefore inspection of the equipment is required prior to each job or shift.

The forklift shall be subject to pre-operational checks and maintenance in accordance with AS2359.2. This includes checking all controls and warning devices, fluid levels etc. The fork truck must be removed from service until any faults present are rectified.

Prior to use, the forklift jib shall be inspected for wear and damage. The jib must be straight, the lifting lug must not be excessively worn or burred, the tyne/blade pockets must be in good condition and the restraint chain/devices must function properly. Ensure also that the proper galvanised Grade 8.8 M24 adjusting bolt is fitted and secured.

Where lifting accessories are to be used, including shackles, hooks, chains, slings, chain blocks etc. these must be inspected by a competent person prior to use. Ensure that the driver of the forklift is appropriately licensed and experienced to perform the task and that the selection of lifting gear/accessories is performed by a suitably qualified person (i.e. dogger or rigger). Prior to commencing work also ensure that the work area is tidy and any hazards present identified and addressed.

Periodically, the forklift jib should be disassembled, wiped down and inspected for internal damage. The inner sections may be greased for easier adjustment and corrosion prevention. Ensure no debris or corrosion has built up on the interior of the jib sections.



In accordance with AS2359.6-2013 Clause 6.3.1.1(g), forklift trucks shall be marked with the “actual capacity with each removable attachment fitted at the manufacturer’s authorized lift height(s) and load centre(s), these actual capacities being easily readable by the operator in the normal operating position”.

The completion of the table (below) may assist the manufacturer to determine the new marking requirements for the forklift truck with regards to this jib attachment (NZFJSL020). The table assumes a “lost load centre” of 0 mm.

FORKLIFT I.D. : (FORKLIFT MODEL & TYPE)					
FORKLIFT LOAD RATING(S): (Without Jib Attachment NZFJSL020)	_____ kg @ _____ mm LOAD CENTRE				
POSITION NUMBER: (Distance from C.O.G. Of Jib Attachment to Mounting Face of Forklift Truck)	1 (1430 mm)	2 (1655 mm)	3 (1880 mm)	4 (2105 mm)	5 (2330 mm)
WLL: (of Forklift & Jib Attachment Combination)	_____ kg	_____ kg	_____ kg	_____ kg	_____ kg
SELF WEIGHT OF JIB ATTACHMENT:	90 kg				
EACH POSITION IS MEASURED FROM THE EXTREME INNER END OF THE JIB AND CORRESPONDS WITH THE LOAD CENTRE OF THE LIFT WHEN THE JIB IS FITTED FULLY HOME ONTO THE FORK TYNES (AS CLOSE TO THE DRIVER AS POSSIBLE)					

8.4 Pallet Lifting



Fork Type Pallet Lifter

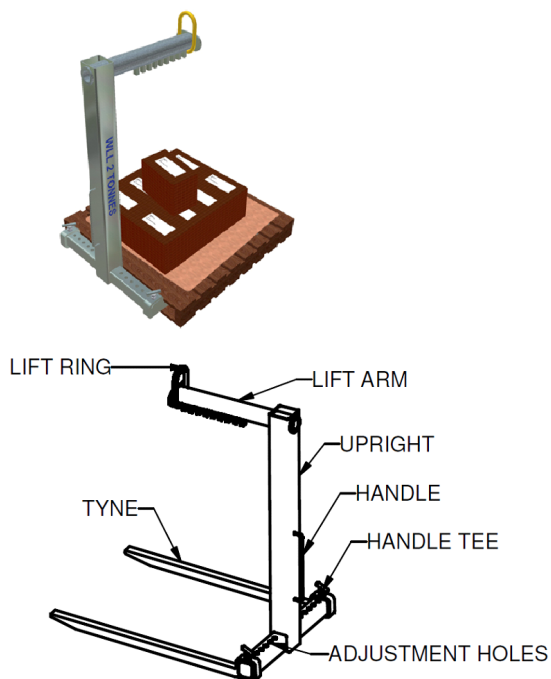
The Fork Type Pallet Lifter is used for transportation of pallets in a manner similar to that of a standard forklift but where forklift access is unavailable. Fork Type Pallet Lifters are typically used on overhead travelling cranes and are particularly useful when quick connection to the load is required such as when moving goods on a warehouse floor or when loading or unloading a flat bed truck under a crane.

Method of Operation

Nobles Fork Type Pallet Lifters have an adjustable position lifting link on the top arm. To move an empty pallet lifter this lug is placed in the rearward position, where empty lifter balance is achieved. Once the lifter is correctly oriented beneath a palletised load the lug is placed in a position to achieve a balanced lift.

Other Uses

Fork type pallet lifters can be used for loads other than pallets such as steel plate, long loads using two lifters, stillages etc. Custom pallet fork type devices can be made in various sizes to suit different applications. In any case care must be taken to ensure that the load is even and balanced and replicates the distributed loading of a pallet upon the tynes of the lifter.

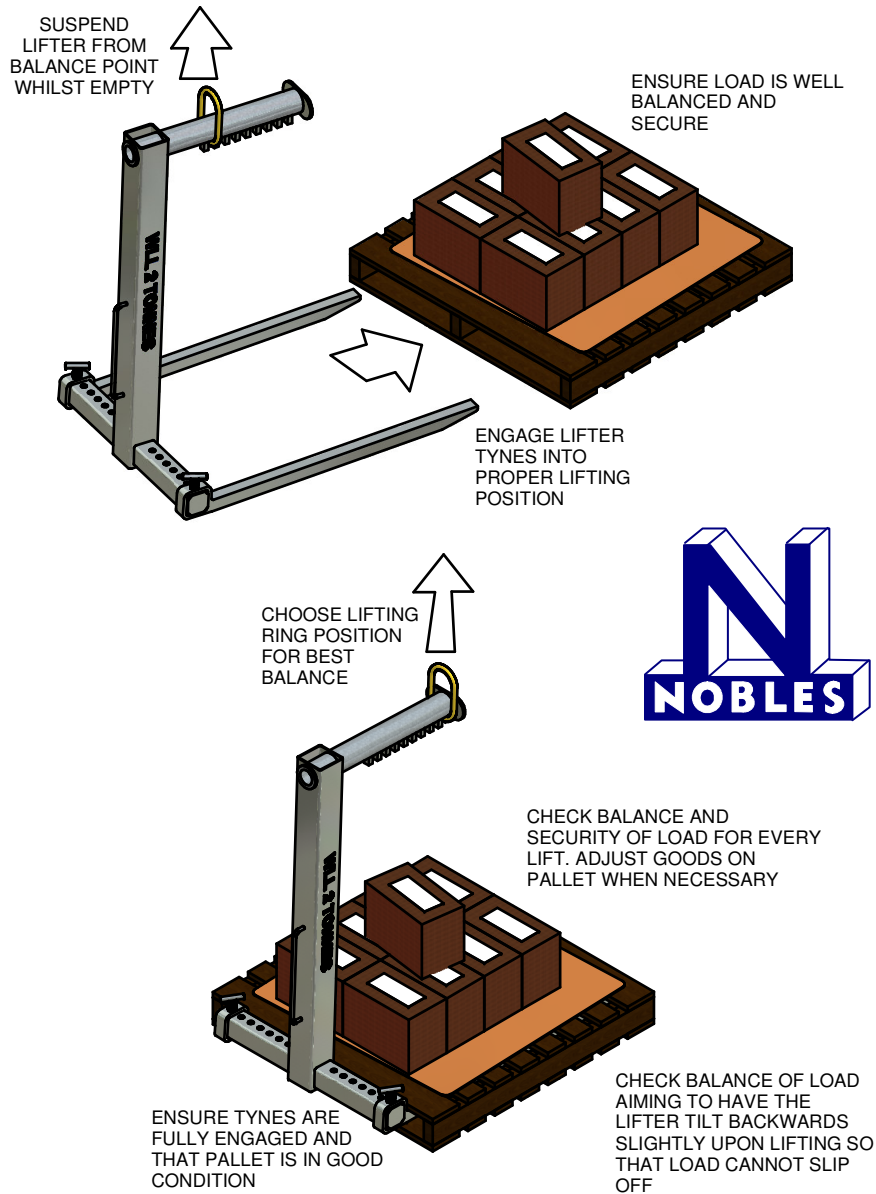


Product Specifications

Name	ITEM #	WLL (tonnes)	Surface Finish	Weight (kg)
Pallet Lifter 2t Galvanised Drawing #SZ002/B	27284	2	Galvanised	138

Uncontrolled version printed 09-Mar-2018 .See www.nobles.com.au for latest up-to-date product information.

Use of Fork Type Pallet Lifter



Fork Type Pallet Lifter

ABOUT PALLET FORKS

Fork type pallet lifters (or "pallet forks" as they are sometimes called) are a valuable tool, they are used for transporting pallets in environments where there is a crane overhead but no forklift available. Frequently in these situations one may wish to shift pallets or load vehicles in the same way that one does with a regular forklift. Nobles Pallet lifters have been designed with durability and versatility in mind but are also amongst the lightest devices of their kind available. This is a valuable consideration when used with equipment such as truck mounted cranes.

There are limitations on the use of pallet forks which users should carefully note. Pallet forks cannot, for example be used to load pallet racking as they must support the load from above. Pallets forks, also must not be used for lifting goods to great height as they do not positively retain the pallet & goods onboard them. Used properly however, they are invaluable tools around the factory or warehouse or for loading and unloading vehicles.

For guidance on proper use of this device please read this entire leaflet and in each situation of use carefully assess the risk of accident.

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto pallet lifters apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your pallet lifters regularly inspected by a competent person who may suggest repairs or condemn your pallet lifters should anything such as the above be deleterious to the WLL.

Shock loading can greatly increase the actual loads placed on a pallet lifter. Extraordinary conditions such as shock loading must be taken into account when selecting products for use in pallet lifting systems.

The WLL which applies for any Nobles pallet lifter is only for the use of the device for lifting standard type goods pallets in accordance with safe practice and Nobles' recommendations. For all uses of fork type pallet lifters a risk assessment should be performed to analyse potential hazards. Where users intend using pallet lifters for unconventional tasks these should be assessed in detail by a competent person. Nobles will be happy to advise you on your special needs concerning this product.

Pallets and the restraints used for securing their loads must always be correctly selected and fitted for every lift. Attention must be paid to the balance and security of the load.

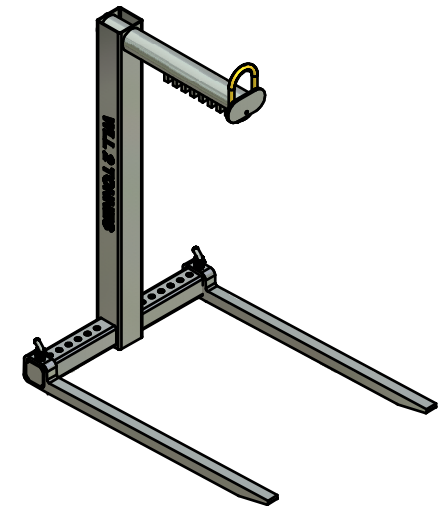
Never weld any part of a pallet lifter without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

IMPORTANT

For maximum safety and efficiency, pallet lifting systems must be properly designed, used and maintained. You must understand the use of pallet lifters in a lifting system. These instructions, and the standards to which they refer may use technical words and detailed explanations. IF YOU DO NOT UNDERSTAND ALL WORDS AND DIAGRAMS - DO NOT MAKE ASSUMPTIONS AND GUESSES AND DO NOT USE A PALLET LIFTER. For further assistance and training support contact your nearest Nobles branch.

NOBLES BRANCHES ARE LOCATED IN THESE CITIES:
ADELAIDE (HEAD OFFICE) - MELBOURNE - SYDNEY - NEWCASTLE - PERTH - BRISBANE - KARRATHA - ROCKHAMPTON - ROXBY DOWNS - WHYALLA - DARWIN - PT LINCOLN

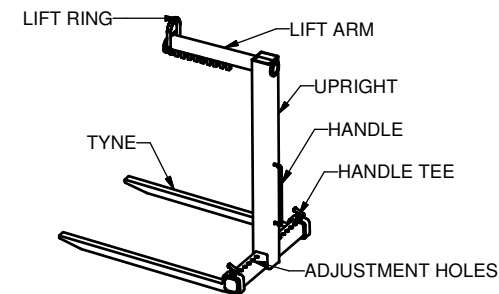
A.B.N. 1800 751 3395



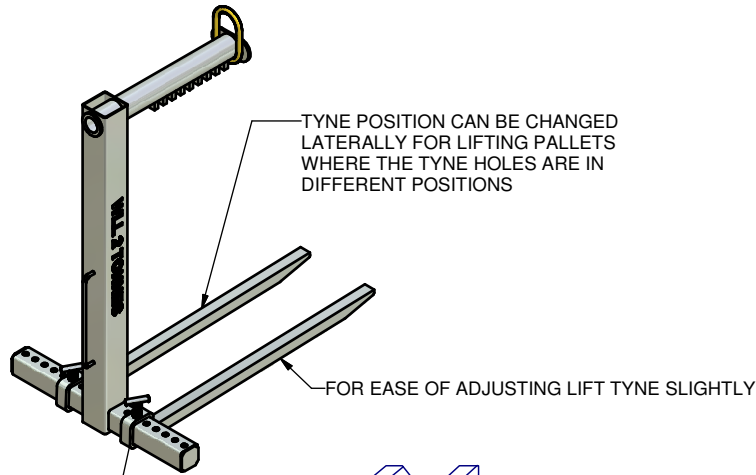
PALLET LIFTER



- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Lift only secure palletised goods with this device.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always check the security of the load before lifting.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- This device (Pallet fork) is not for lifting pallets high off the ground.
- Only use properly made pallets in good condition.



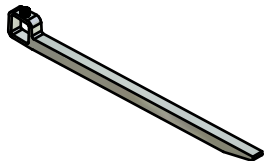
Adjusting Tyne Positions



UNDO HANDLE TEE TO ALLOW ADJUSTMENT. ENSURE TEES ARE SCREWED FULLY DOWN INTO HOLES BEFORE USE.



Service Parts



PALLET LIFTER TYNE



HANDLE TEE



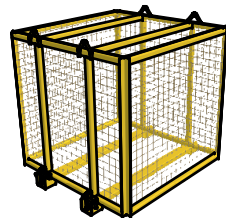
GMLLS13
13MM LARGE
SERIES
OBLONG LINK

Other Products

Nobles can supply a number of other products for handling pallets including:

- Pallet Lift Tower - for moving pallets between floors.
- Pallet bars - for moving pallets with slings
- Pallet frame & bar assys - for lifting fully loaded pallets using wire rope slings
- Pallet cages - for lifting loads high in the air, near personnel or with loads that may cause injury if they fall off the pallet like bricks.
- Height adjustable pallet forks
- Custom designed pallet forks for any load size or weight requirement.

Please talk to a Nobles representative about your special pallet lifting needs.

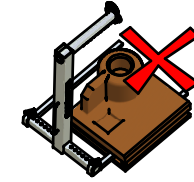


NOBLES PALLET CAGE FOR LIFTING ON CONSTRUCTION SITES, PALLETS OF BRICKS, REFRACTORY ETC.

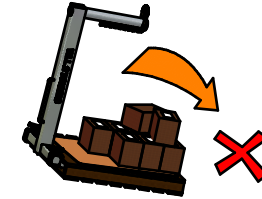


Care & Use Diagrams

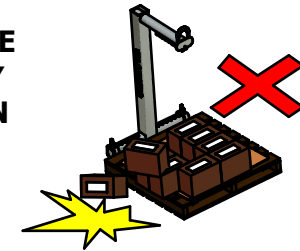
NEVER LOAD ONLY ONE TYNE!



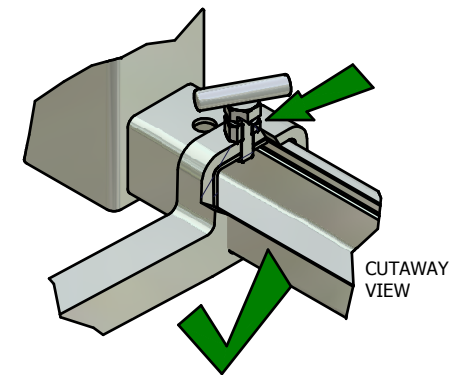
NEVER BALANCE LOAD FORWARD!



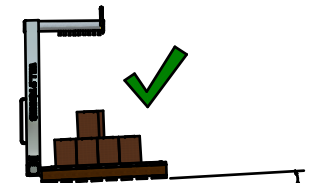
ALWAYS SECURE LOOSE LOADS & ENSURE THEY ARE WELL CENTRED ON THE PALLET!



ALWAYS ENSURE THAT TYNES ARE SECURELY RETAINED IN ADJUSTING HOLES WITH SCREWS PROVIDED.



LIFTS BALANCED FOR SLIGHT BACKWARD RAKE PREFERRED.

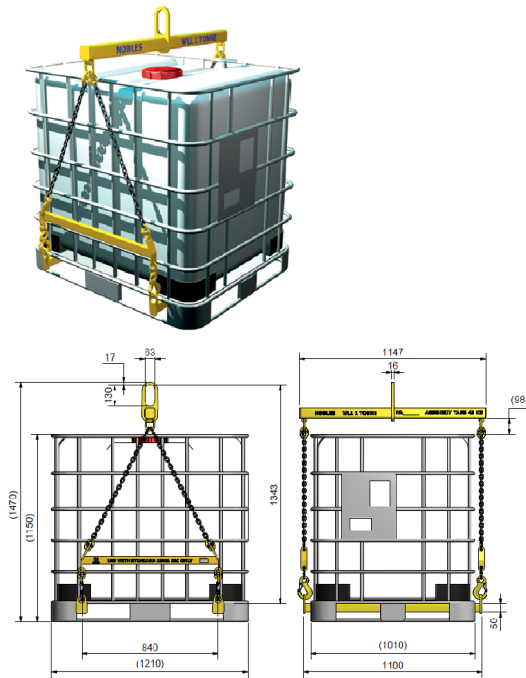




IBC Lifters

This device is used to transport IBC containers by crane where a more secure method than a fork-type pallet lifter is required. This lifter is also well suited where space is a premium. These lifters can be custom manufactured to suit specific applications on request.

Includes all chain, safety hooks and connectors, and is fully tested as a complete unit.



Product Specifications

Name	ITEM #	WLL (tonnes)	Suits	Surface Finish	Weight (kg)
1 TONNE "IBC" LIFTING ASSEMBLY;DWG NZ1037/A	27502	1	For 1000l IBC	Yellow Painted	40
1000L AS4991-DG 2.0t Y14 Yellow Nobles IBC Lifting Beam Set C/W Chains	28316	2	For 1000l IBC	Yellow Painted	45



Pallet Bars

Pallet Bars are available separately for general lifting and have a WLL of 2 tonne per pair. Care should be taken to ensure bars are secure when used for lifting without the top frame. For stability, end hooks are provided to keep the bars spread apart. Other methods of spreading the bars may not be sufficiently secure to ensure safety. In such cases an alternative pallet bar arrangement may be required.

Bars without stabilising hooks can be supplied for tasks where alternative methods of ensuring security are provided.

Suitability

Standard bars for use without frame are intended for standard pallets which have outer frames of nominal size 49 x 99 x 1165mm. This should include most major brand name pallets.

Other Products

Pallet bars for special environments (e.g. offshore use), and products which work like pallet bars for lifting loads other than pallets can also be supplied.

Minimum Load Width

Pallet bars are designed for lifting pallets which distribute the load on the bars. This allows the use of smaller sections that are easier to handle and fit a wider variety of pallet openings. It is important that a point load (or a load that is too narrow) is not applied to the bars, as this will cause failure. To guard against this, our pallet bars are stamped with a specified "minimum load width". The minimum load width for standard pallet bars and frame or standard pallet bars only is 900mm.

Galvanised finish is available if required. Slings are not included as standard but can be supplied on request.



Product Specifications

Name	ITEM #	WLL per pair (tonnes)	Surface Finish	Weight per bar (kg)
Pallet Bars 2t Drawing #SZ003/A	26961	2	Y14 Yellow Painted	10

PALLET BARS ONLY

Pallet bars are only for use by competent persons!

Care should be taken to ensure bars are secure when used for lifting without a top spreader frame or beam assy. For stability, end hooks (Stabilisers) Refer Fig 1. are provided to keep the bars spread apart when a four legged sling is used. Other methods of spreading the bars may not be sufficiently secure to ensure safety. In such cases an alternative pallet bar arrangement may be required.

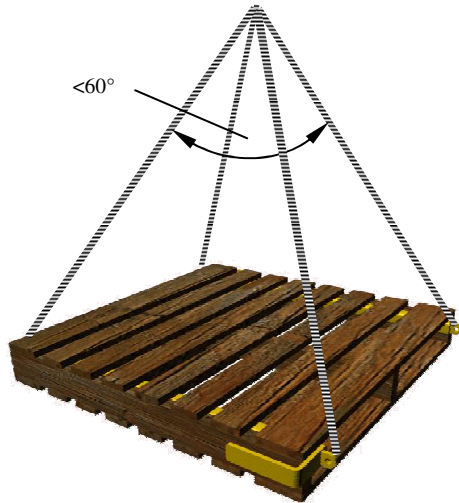
Bars without stabilising hooks can be supplied for tasks where alternative methods of ensuring security are provided.

SUITABILITY

Standard bars for use without frame are intended for standard pallets which have outer frames of nominal size 49 x 99 x 1165mm. This includes most major brand name pallets. The stabiliser bars must be used when a four legged sling is used. Where a four legged sling is used the slings should have as small a sling included angle as possible and an included angle that is no greater than 60° (Refer Fig 2). It is recommended that the stabiliser hooks be fitted in opposed directions as shown (Refer Fig 2).

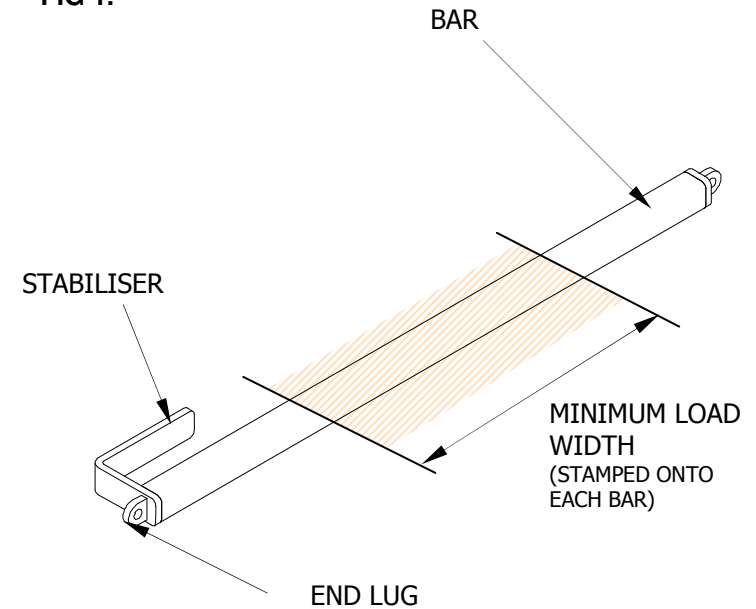
Pallet bars are designed for lifting pallets which distribute the load on the bars. This allows the use of smaller sections which are easier to handle and fit a wider variety of pallet openings. It is important that a point load (or a load that is too narrow) is not applied to the bars as this will cause failure. To guard against this, our pallet bars are stamped with a specified "minimum load width" (Refer Fig 1). Please note however that with narrower load widths the stabiliser hooks may not properly engage, in which case an alternative method of securing (spreading) the bars must be used.

FIG 2.



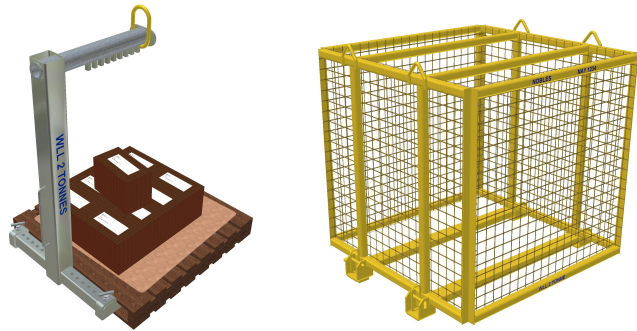
A.B.N. 18 007 513 395

FIG 1.



WARNING

- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always ensure that pallet bars and their stabiliser hooks are secure before lifting.
- Always use well made pallets in good condition that are structurally sound.
- Always secure the load and never lift loose loads near personnel or to significant heights.
- Never lift loads narrower than the minimum load width.
- Only lift loads that are well balanced and centred.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!



OTHER PALLET LIFTING PRODUCTS AVAILABLE:

Pallet bars for special environments (e.g. offshore use), and products which work like pallet bars for lifting loads other than pallets can also be supplied.

FORK TYPE PALLET LIFTERS

PALLET CAGES (WHEN LOAD SECURITY MUST BE ASSURED)

CUSTOM MADE DEVICES

IMPORTANT

For maximum safety and efficiency, pallet lifting systems must be properly designed, used and maintained. You must understand the use of pallet lifting components in a lifting system. These instructions, and the standards to which they refer may use technical words and detailed explanations. IF YOU DO NOT UNDERSTAND ALL WORDS AND DIAGRAMS - DO NOT MAKE ASSUMPTIONS AND GUESSES AND DO NOT USE A PALLET LIFTING SYSTEM. For further assistance and training support contact your nearest Nobles branch.

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KARRATHA - ROCKHAMPTON - ROXBY DOWNS - WHYALLA -
PT LINCOLN**

CURRENT AS OF 22-01-07

CARE ADVICE – READ BEFORE USE & KEEP



**A NOBLE & SON LTD
PALLET BARS ONLY
CARE ADVICE**



GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto pallet bars apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your pallet bars regularly inspected by a competent person who may suggest repairs or condemn your pallet bars should anything such as the above be deleterious to the WLL.

Shock loading can greatly increase the actual loads placed on a pallet lifting arrangement. Extraordinary conditions such as shock loading must be taken into account when selecting products for use in pallet lifting systems.

The WLL which applies to this Nobles pallet bar is only for the specified sling angle. The WLL only applies when properly selected slings are attached to the lug holes in a proper manner. Slings a pallet bar using an arrangement other than as specified will render the WLL as stamped on the beam void.

Pallet bars must always be correctly selected and fitted for every lift. Attention must be paid to the balance and security of the load.

Never weld any part of a pallet bar without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

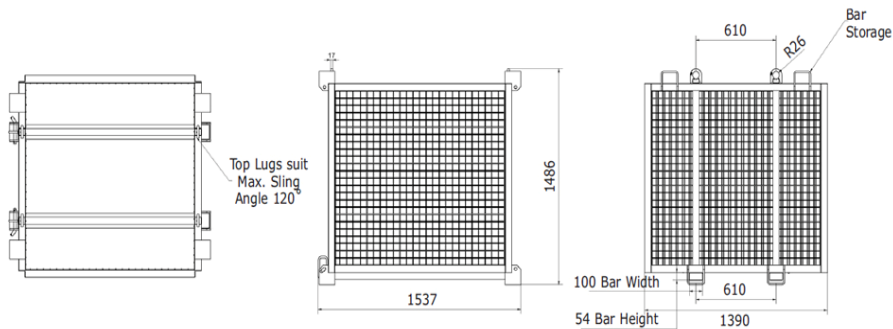


Pallet Cages

Our Pallet Cage NZPLC020 is designed to safely and easily lift palletised loads that are not securely wrapped or enclosed.

Pallet Loads of materials or goods such as bricks can be quickly lifted with our Pallet Cage by simply removing the tynes, sliding the cage over the load, then installing and securing the tynes at the base.

Designed with high quality adjustable lifting lugs, lockable tynes and clever storage, our Pallet Cage will help you lift more often, quickly, and with greater safety.



Product Specifications

Name	ITEM #	WLL (tonnes)	Weight (kg)
Std Pallet AS4991-DG 2.0t Y14 Yellow Nobles Brick Cage Type Pallet Lifter	28534	2	192

8.5 Gas Bottle Handling

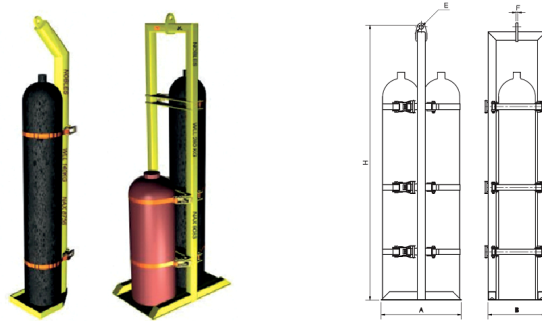


Gas Bottle Lifters

Gas bottles frequently require transport around work sites. They are amongst the most dangerous cargoes that can be lifted and may be securely transported with Nobles cylinder lifters. Bottles are required to be separately lashed to the lifting device and this is achieved using 250 kg webbing tie down straps or an integrated frame.

Oxy bottle lifters can be made in a variety of configurations including fully caged types and types for the transport of more than two cylinders or cylinders and other tools.

Standard finish is painted yellow but hot dip galvanised finish is also available.



Product Specifications

Name	ITEM #	WLL (tonnes)	Bottle Qty	Bottle Type 1	Bottle Type 2	A (mm)	B (mm)	E (mm)	F (mm)	H (mm)	Weight (kg)
Lifting Frame Oxy Bottle - Single	27383	0.15	1	Oxygen G		329	287	38	13.5	1885	15
Lifting Frame Oxy / Acetylene	27154	0.26	2	Oxygen G	Acetylene G	650	420	24	12	1706	43
Lifting Frame Acetylene Bottle - Single	27264	0.14	1	Acetylene G		375	330	38	13.5	1295	20
DOUBLE SIZE G OXY/AIR LIFTER; TO DWG SZ020	27541	0.26	2	Oxygen G	Oxygen G	500	360	24	12	1706	32



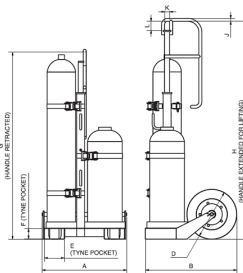
Gas Bottle Trolleys

Nobles Oxy and Acetylene Trolleys are designed for versatility with the needs of boilermakers in mind. The trolleys have provision for handling by crane or forklift and have handles positioned for easy manoeuvring.

Each cylinder is retained via a 35mm, 1500kg webbing tie down strap or an integrated frame and is held at the base within steel rings to prevent any slippage.

The NZOATR and NZOPTR trolleys feature a telescopic lift point. The telescopic lift point enables the crane hook to clear delicate gas regulators and fittings when the trolley is suspended. When the trolley is not suspended the lift point is lower and integral to the handle. This prevents the risk of facial injury when tilting and pushing.

Standard finish is painted yellow but hot dip galvanised finish is also available.



Product Specifications

Name	ITEM #	WLL (tonnes)	Bottle Type 1	Bottle Type 2	A (mm)	B (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	J (mm)	K (mm)	L (mm)	Weight (kg)
Trolley Oxy Bottle SZ0123/A	27124	0.25	Oxygen -G	Acetylene -G	682	736	400	160	83	1506	1754	24	40	73	55
Trolley LPG - S / OXY - G Suit 45kg Gas Bottles Drawing #SZ013	27234	0.25	Oxygen -G	LPG-5	742	790	400	160	83	1476	1954	24	40	73	65



Nobles Gas Bottle Lifter



Nobles Gas Bottle Lifter

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto lifters apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your lifters regularly inspected by a competent person who may suggest repairs or condemn your swivels should anything such as the above be deleterious to the WLL.

Shock loading can greatly increase the actual loads placed on a bottle lifter. Extraordinary conditions such as shock loading must be taken into account when selecting products for use in bottle lifter systems.

The WLL which applies for any Nobles lifter is only for the corresponding correctly sized bottle. The WLL only applies when properly selected slings are attached to the top lug.

Bottles must always be correctly selected and fitted for every lift. Attention must be paid to the balance and security of the load.

Never weld any part of a lifter without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

Nobles shall not be liable for any modifications performed to this device whatsoever without our express written authority for each instance.

IMPORTANT

For maximum safety and efficiency, bottle lifting systems must be properly designed, used and maintained. You must understand the use of bottle lifters in a lifting system. These instructions, and the standards to which they refer may use technical words and detailed explanations. IF YOU DO NOT UNDERSTAND ALL WORDS AND DIAGRAMS - DO NOT MAKE ASSUMPTIONS AND GUESSES AND DO NOT USE A GAS BOTTLE LIFTER. For further assistance and training support contact your nearest Nobles branch.

NOBLES BRANCHES ARE LOCATED IN THESE CITIES:
ADELAIDE (HEAD OFFICE) - MELBOURNE - SYDNEY
- NEWCASTLE - PERTH - BRISBANE - KARRATHA -
ROCKHAMPTON - ROXBY DOWNS PT HEDLAND -
WHYALLA - PT LINCOLN - MCKAY

A.B.N. 18 007 513 395

GAS STORAGE SAFETY

Stored gases, and their containers are dangerous! Instruction must be sought as to the special handling and storage requirements for each gas and container. This document does not cover gas storage and handling safety. The requirements for this must be assessed by a competent person for each site and task involving the use of this lifting product. The standard Nobles bottle lifter is not intended to provide security in storage for gas bottles. This must be separately provided by either securing the lifter and bottle complete within a secure area (to prevent toppling and tampering etc.) or by removing the bottles from this product and using other approved storage equipment and methods. Storage of Gases must be in accordance with applicable local regulations.

SAFE LIFTING

Please refer to the further advice overleaf and heed the cautions below.



- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always check the security and condition of the bottle restraint straps.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Containers lifted with Nobles Gas bottle lifters must be of the appropriate size and in good, safe working order and condition.
- Always ensure that the load is properly supported by the hook. Never support loads by the hook tip or latch.

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto lifters apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your lifters regularly inspected by a competent person who may suggest repairs or condemn your swivels should anything such as the above be deleterious to the WLL.

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Nobles shall not be liable for any modifications performed to this device whatsoever without our express written authority for each instance.

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- Never exceed the working load limit.
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- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always check the security and condition of the bottle restraint straps.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Containers lifted with Nobles Gas bottle lifters must be of the appropriate size and in good, safe working order and condition.
- Always ensure that the load is properly supported by the hook. Never support loads by the hook tip or latch.

BOTTLE LIFTERS

Bottle lifters are available for many standard sizes of gas bottle. The most common types suit size G oxygen and/or Acetylene bottles.

WARNING

- Regularly inspect your lifter for signs of wear. Particular attention is to be paid to the straps and their mounts and the lifting lug.
- Inspections shall be carried out by a competent person who may condemn or recommend repairs to a lifter based on condition of the lifter.
- Spare straps must be of the correct type and size, replacement parts can be supplied by Nobles.

SPECIAL APPLICATIONS

Properly cared for, a Nobles Gas Bottle Lifter swivel will give reliable service for many lifts in a general purpose environment. Standard units are designed and manufactured to conform to the requirements of AS4991-2004 for "Duty General" application.

Nobles can supply lifters for special purpose applications for harsh operating or duty environments.

Nobles Standard lifters of the open type do not afford collision protection to bottles and are not intended for rough handling environments. Proper lifting practices must be maintained so as to avoid risk of collision.

USING THE LIFTER

To install bottles into the lifter first fully release all of the relevant straps by pulling the release plate in the ratchet back and fully extracting the strap tail.

Then, with care, and adherence to appropriate manual handling procedures carefully shift the bottle onto the base plate of the lifter.

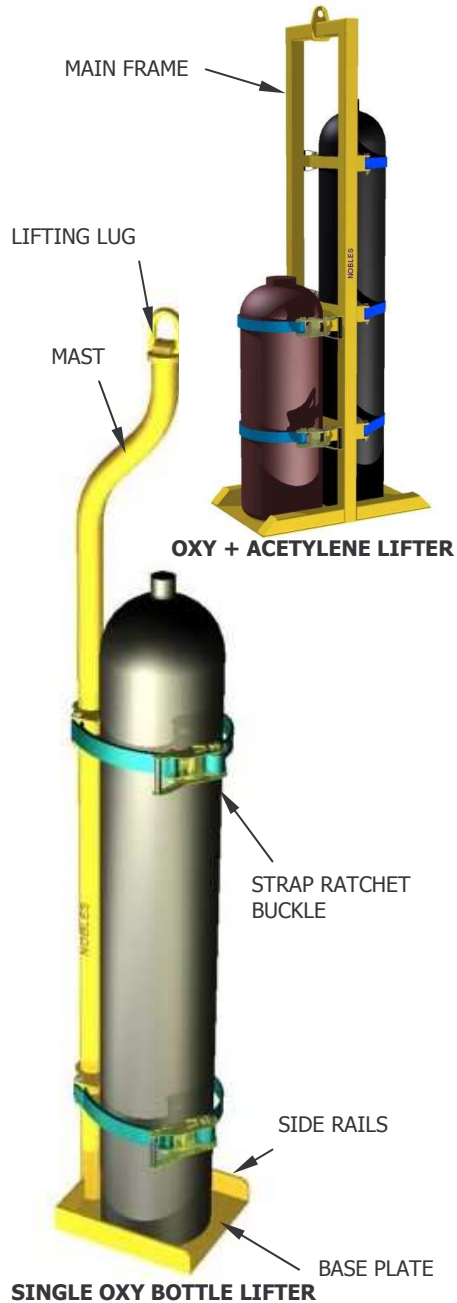
The bottle is properly seated into the lifter when it rests against the back stops (attached to the main frame or mast) and sits neatly within the side rails of the base. If a bottle does not fit within the side rails or is unable to be positioned against the back stops this is indicative of an odd-shaped or wrong size bottle, and the bottle must not be used with the lifter.

Once the bottle(s) are placed correctly, thread each strap tail through its corresponding ratchet buckle. Ensure there are no twisted or crossed over straps. Each strap must then be tightened until the bottles are held firmly in position.

Carefully inspect each strap to ensure it is in good condition and neatly secured.

Throughout the operation, and until the lifter is connected to the crane take care that the lifter is on level ground and not in danger of being toppled.

When lifting, ensure that no crane parts or rigging becomes snagged upon any gas bottle componentry or the securing straps.



BOTTLE LIFTERS

Bottle lifters are available for many standard sizes of gas bottle. The most common types suit size G oxygen and/or Acetylene bottles.

WARNING

- Regularly inspect your lifter for signs of wear. Particular attention is to be paid to the straps and their mounts and the lifting lug.
- Inspections shall be carried out by a competent person who may condemn or recommend repairs to a lifter based on condition of the lifter.
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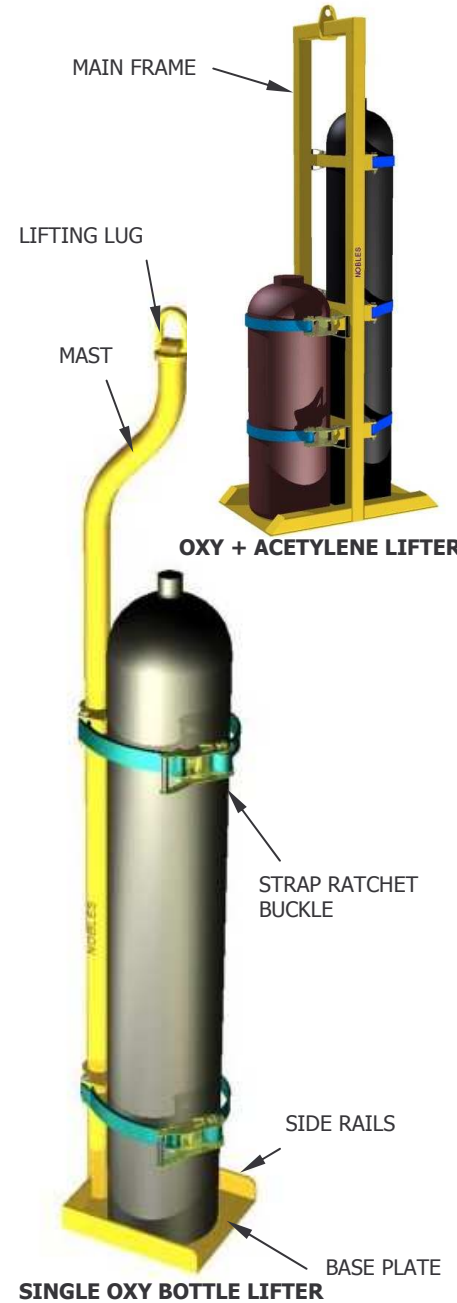
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When lifting, ensure that no crane parts or rigging becomes snagged upon any gas bottle componentry or the securing straps.



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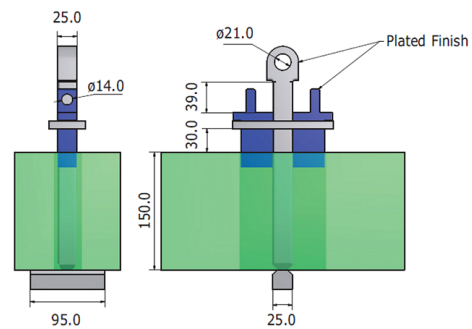
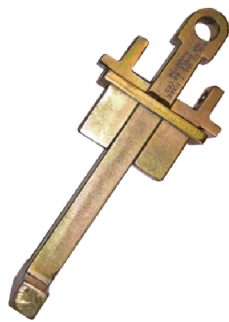
8.6 Concrete Pipe Lifting



Concrete Slab Lifter

Nobles Concrete Slab Lifters allow users to lift pieces of concrete safely, quickly and more easily than ever before. Most slab lifters require an additional lifting or spreader beam to ensure the lifters are perfectly straight, requiring extra time on site.

The Nobles Concrete Slab Lifter is engineered with users in mind, able to be side loaded up to a 60° included angle. The lifters also have tabs at the sides that prevent rotation when positioned in the cutout, making them safer and easier to use than ever before.



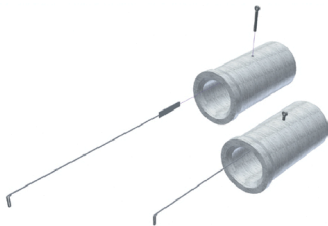
Product Specifications

Name	ITEM #	WLL (tonnes)	Max Included Angle (degrees)	Weight (kg)
Concrete Slab Lifters 2t	26837	2.0 (pair)/ 1.0 (single)	60	12



Pipe Lifting Eyebolt

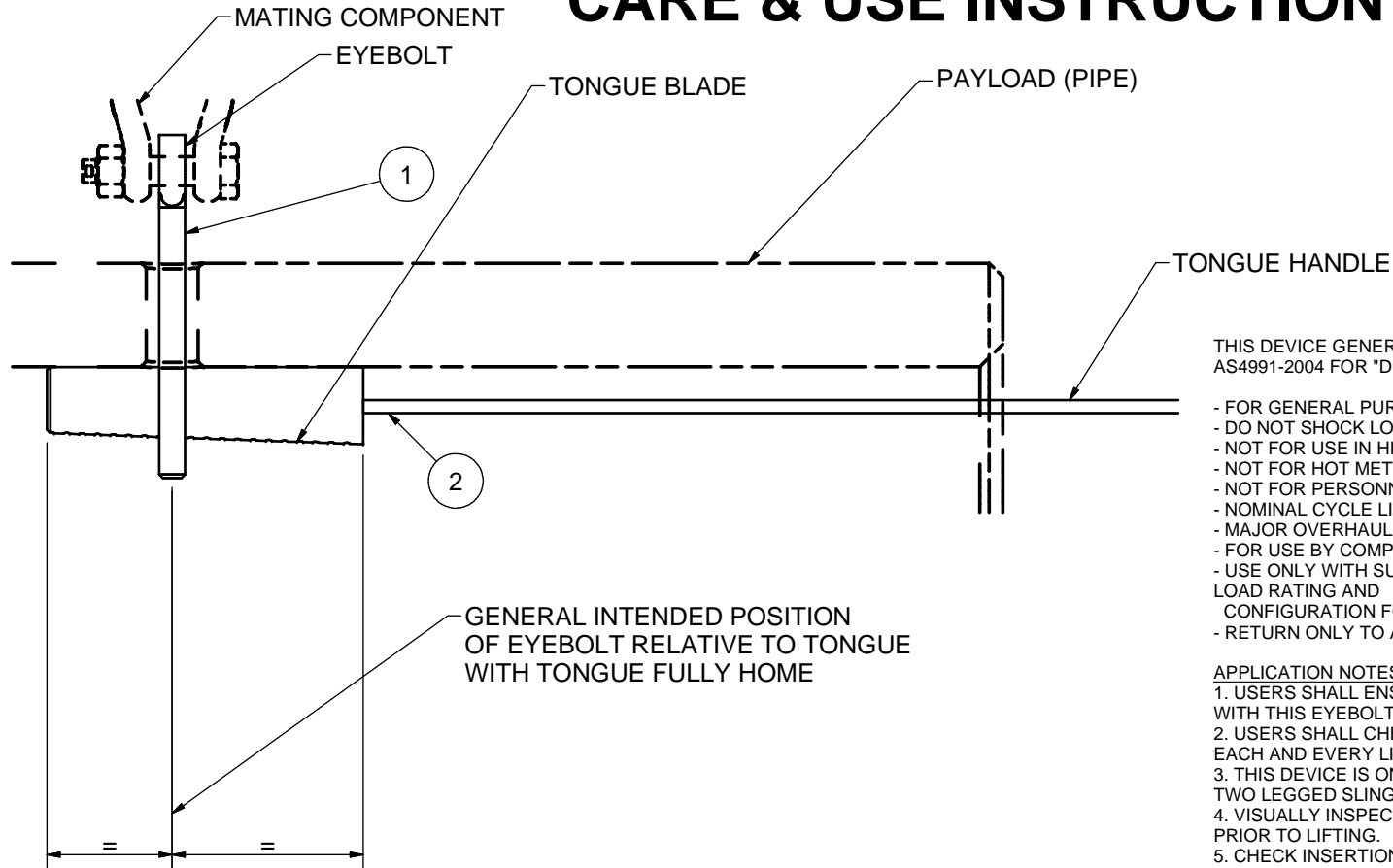
Nobles Pipe Lifting Eyebolt is designed for the lifting of concrete pipes via holes in the pipe walls. The eye is fed down through a hole in the pipe wall and the tongue is positioned through the eye inside the pipe to secure the connection. As with all pipe lifting operations users must ensure the adequacy of the pipe to be lifted.



Product Specifications

Name	ITEM #	WLL (tonnes)	Handle Length (mm)	Internal Eye Diameter (mm)	Eye Width (mm)	Weight (kg)
PIPE LIFTER TONGUE;	27439	5	1828			3.4
5T PIPE LIFTING EYEBOLT ONLY;	27481	5		28	25	2

CARE & USE INSTRUCTION



INDICATIVE USE ARRGT.
(1 : 5)

THIS DEVICE GENERALLY BUILT TO CONFORM TO:
AS4991-2004 FOR "DUTY GENERAL" USE.

- FOR GENERAL PURPOSE USE EQUIVALENT TO 'M3' CLASS.
- DO NOT SHOCK LOAD.
- NOT FOR USE IN HIGH DUTY CYCLE ENVIRONMENT.
- NOT FOR HOT METAL OR OTHER DANGEROUS GOODS HANDLING.
- NOT FOR PERSONNEL CARRYING.
- NOMINAL CYCLE LIFE 20,000 CYCLES.
- MAJOR OVERHAUL AND RE-TEST RECOMMENDED AT 10,000 CYCLES
- FOR USE BY COMPETENT PERSONNEL ONLY.
- USE ONLY WITH SUITABLE ARRANGEMENT OF MATING COMPONENTS OF ADEQUATE LOAD RATING AND CONFIGURATION FOR STABILITY AND SECURITY OF LIFT.
- RETURN ONLY TO A. NOBLE & SON LTD. FOR REPAIR. DO NOT WELD!



APPLICATION NOTES:

1. USERS SHALL ENSURE THAT THE PAYLOAD IS OF SUITABLE STRENGTH FOR LIFTING WITH THIS EYEBOLT.
2. USERS SHALL CHECK THE INTEGRITY AND CONDITION OF THE PAYLOAD PRIOR TO EACH AND EVERY LIFT.
3. THIS DEVICE IS ONLY FOR USE IN VERTICAL LOADING. SHALL NEVER BE USED WITH A TWO LEGGED SLING ARRANGMENT.
4. VISUALLY INSPECT EYEBOLT AND TONGUE FOR DISTORTIONS, WEAR AND CRACKS PRIOR TO LIFTING.
5. CHECK INSERTION OF TONGUE INTO EYEBOLT SLOT PRIOR TO INSTALLING INTO PAYLOAD.
6. INSERT TONGUE WITH NOTCHED EDGE POINTING DOWN INTO EYEBOLT, CHECK THAT TONGUE IS FULLY HOME AND APPROXIMATELY CENTRAL PRIOR TO LIFTING. CHECK THAT TONGUE IS NOT LOOSE IN THE SLOT BEFORE TAKING UP THE LOAD.
7. DO NOT LIFT ABOVE OR CLOSE TO PERSONNEL
8. NOT FOR LIFTING PAYLOADS TO HEIGHTS GREATER THAN 3M.
9. NOTE: THIS IS NOT A GENERAL PURPOSE LIFTING TOOL - A RISK ASSESSMENT SHOULD BE PERFORMED FOR EACH INTENDED APPLICATION OF THIS DEVICE.

FOR FURTHER TECHNICAL SUPPORT CONTACT A. NOBLE & SON LTD.

MADE IN AUSTRALIA.

ITEM	PART NUMBER	DESCRIPTION	MASS
2	NE018-TONGUE	5 TONNE PIPE LIFTING EYEBOLT TONGUE	3.4 kg
1	NE018-EYE BOLT	5 TONNE PIPE LIFTING EYEBOLT	2.0 kg
PARTS LIST			

IF IN DOUBT - ASK!		DO NOT SCALE!	
	2012 © A. NOBLE & SON LIMITED THIS DRAWING IS PROTECTED UNDER THE AUSTRALIAN COPYRIGHT ACT AND THE COPYRIGHT REMAINS WITH A. NOBLE & SON LIMITED UNLESS OTHERWISE SPECIFICALLY STATED. UNAUTHORISED COPYING IS PROHIBITED, THIS DOCUMENT SHALL NOT BE TRANSMITTED IN WHOLE OR IN PART TO UNAUTHORISED PARTIES WITHOUT THE WRITTEN PERMISSION OF A. NOBLE & SON LIMITED.		5 TONNE PIPE LIFTING EYEBOLT & TONGUE
	NE018		REV. 1 SHEET 1 / 1

8.7 Materials Handling

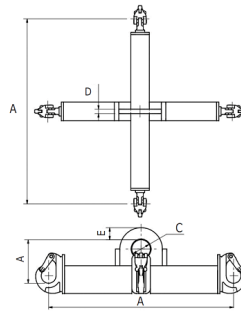
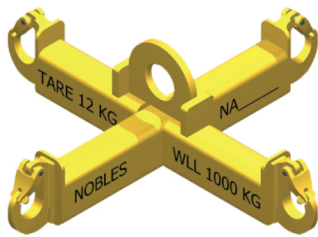


Bulk Bag Lifters

Robust - Nobles fabrication design standards ensure our Bulk Bag Lifters are designed with proper leg redundancy as if they were multi leg slings.

Proof Tested - We proof test 100% of bulk bag lifters we design and manufacture to twice the working load limit.

Proven - Nobles bulk bag lifters have seen service across Australian industry for many years. We produce lifters covering all sizes and connection preference and custom make as required if the standard range is not suitable.



Product Specifications

Name	ITEM #	WLL (tonnes)	A (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Weight (kg)
1000mm AS4991-DG 0.5t Y14 Yellow Nobles Bucket Hook Bulk Bag Lifter	28187	0.5	1000	50	12	32.5	118	21
900mm AS4991-DG 1.0t Y14 Yellow Nobles Bucket Hook Bulk Bag Lifter	28202	1	900	50	12	32.5	118	19
1200mm AS4991-DG 1.0t Y14 Yellow Nobles Bucket Hook Bulk Bag Lifter	28359	1	1200	60	12	32.5	143	24
Bulk Bag Lifter Bucket Hook Type 1t 1000x1000mm	27179	1	1000	50	12	32.5	118	21
Bulk Bag Lifter Bucket Hook Type 1.5t 1000x1000mm Drawing #SG9	27339	1.5	1000	50	12	32.5	143	25
Bulk Bag Lifter Bucket Hook Type 2t 1000x1000mm	27166	2	1000	50	12	32.5	132	30
Bulk Bag Lifter Bucket Hook Type 2.5t 1000x1000mm	27068	2.5	1000	50	16	27.5	148	37
Bulk Bag Lifter 3t	27147	3	1000	60	16	27.5	148	41

A NOBLE & SON LTD

BULK BAG LIFTER CARE & USE ADVICE (BUCKET HOOK TYPE)

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto bulk bag lifters apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your bulk bag lifters regularly inspected by a competent person who may suggest repairs or condemn your bulk bag lifters should anything such as the above cause a reduction in the WLL.

Shock, and/or unusual loading can greatly increase the actual loads placed upon lifting gear. Extraordinary conditions and environments must be taken into account when selecting products for use in bulk bag lifting systems. This device has been designed for normal lifting environments, the suitability of the attachment for use in special environments such as at sea, in corrosive environments or at extreme temperatures must be assessed by a competent person prior to use.

The WLL which applies for any

Nobles bulk bag lifter applies only for uses compliant with AS4991-2004. The WLL applies only to the structural integrity of the lifter itself. Use with some payloads and/or slings may reduce the device's capacity.

Bulk bag lifters, must always be correctly selected and fitted for every lift. Attention must be paid to the security of the hooks, the load capacity available and the proximity of any hazards.

Never weld any part of a bulk bag lifter without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

A site and/or job specific hazard & risk assessment is recommended prior to use.



BULK BAG LIFTER CONDITIONS OF USE

When using bulk bag lifters the safety and stability of the load is of utmost importance. The payload to be lifted must be of a known mass and have a centre of gravity about the geometric centre.

A bulk bag lifter is only as good as the integrity of its payload. The bag (or payload) to be lifted must have sufficient strength to be able to be lifted by the region contacting the hook. This bulk bag lifter is generally suitable for common bulk bag types however:

- Other objects may be lifted provided that they are securely slung with correctly rated slings and that the centre of gravity of these objects lies below the lowest rigid point of their lifting lugs.
- Standard bulk bag types may not be suitable for lifting under all circumstances. The special risks involved with lifting over certain things or to great height (such as during high-rise construction) may render standard bulk bags unsuitable.
- Certain payloads (bag contents) may not be suitable for lifting with this device under all circumstances. The special risks involved with lifting certain payloads may render standard bulk bags unsuitable for lifting with this device.
- Users must examine the condition of each and every payload prior to lifting.

Any special requirements specific to a particular site or jurisdiction should be checked prior to use.

The load distribution taken into account during payload selection and/or the sling arrangement used with these bulk bag lifters is critical, please refer overleaf.

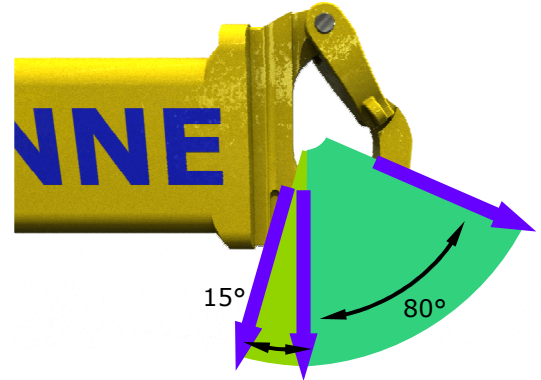
A NOBLE & SON LTD

BULK BAG LIFTER CARE & USE ADVICE (BUCKET HOOK TYPE)

USE OF THE END HOOKS

The Nobles bulk bag lifters have been devised with a wide mouth so as to accept a variety of payloads however bag loop designs can vary considerably. Modifications to these instructions, or the device itself may be required in order to ensure safety and/or correct fitment. A competent person should be consulted where these instructions are (or appear to be) unclear or inappropriate.

END HOOK LOADING RANGE



WARNING

- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Never use in proximity to live equipment.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Slings, and other lifting accessories used must be of the appropriate size and in good, safe working order and condition.
- Always ensure that payloads are properly and securely fitted prior to use.
- Always ensure the suitability of the payload prior to lifting.
- Always ensure that the payload is set down into a secure position, unable to roll or slide out of place.
- Always ensure that personnel are properly trained and competent for use of these devices. Keep personnel clear during lifting.

Modifications to these instructions, or the device itself may be required in order to ensure safety and/or correct fitment. A competent person should be consulted where these instructions are (or appear to be) unclear or inappropriate.

FITMENT TO BAG LOOPS

Bag loops vary between brands. The end hooks fitted to Nobles bulk bag lifters are sized so that the majority of bag loops will fit for matching capacity bag types. Some bags may have loops or end fittings which are not a good fit. It is important to ensure that the bags to be lifted have loops which fit fully inside the lifter hooks such that they are properly seated within the hooks and the safety catches close properly.

It is not always possible to specify a lifter with an exact size match for the bag and its contents. The angle of loading from bag loops can be slightly outwards provided that the nett loading is within the range specified above (refer diagram). Inwardly angled loading is also permitted up to 15° from vertical provided that the bag loops are at no risk of rubbing or chafing on the lifter end features.

SLING LOADS BENEATH THE LIFTER

Rigid "X" shaped lifting beams such as the Nobles bulk bag lifter do not equalise the load share between the lifting loads acting downwards. When slings (instead of direct coupling to a flexible bulk bag) are suspended from a bulk bag lifter these must be rated so that the entire payload can be supported upon two legs only. Nobles bulk bag lifters are designed with a structure suitable for the two legged load share requirements of Australian standard sling codes however bulk bags must be lifted with evenly loaded connections to all four corners of suspended bags.

LOAD SHARE OF LOWER LEGS



MAINTENANCE INSPECTIONS

Bulk bag lifters shall be regularly checked for signs of wear or overloading. The frames of the lifter should be checked for deformation with a straight edge. The inside corners should be checked for signs of cracking and the lug hole should also be checked for wear or stretch (wear limit 10% of original dimension). The end hooks and catches should be checked for signs of overloading. An increase in hook opening dimensions or any deformation which disrupts normal safety catch function indicates overloading and is cause to withdraw the lifter from service.

For service and enquiries regarding your bulk bag lifter, please quote the test certificate number and contact A. Noble & Son Ltd. On 1300 711 559 (within Australia) or (+61)8 8260 6688 worldwide.



Drum Lifter

For use on standard 215-225 litre (44 gallon) drums with or without lids. Clamp is of a lightweight design and features a handle on the spine for steering the clamp and the suspended drum. The handle at the top clicks into place as the clamp is fitted to the drum keeping it in place to aid slinging. Finished in zinc plating making them resistant to scratches and corrosion and come complete with detailed care in use instructions.



Product Specifications

Name	ITEM #	WLL (tonnes)	Surface Finish	Weight (kg)
DRUM LIFTER 500 KG-DRG SC1;	27465	0.5	Zinc Plated	15

Uncontrolled version printed 09-Mar-2018 .See www.nobles.com.au for latest up-to-date product information.

DRUM LIFTER

THIS DRUM LIFTER MUST ONLY BE USED ON STANDARD TYPE 215-225 LITRE (44 GALLON) DRUMS. THE CLAMP IS ABLE TO BE USED ON DRUMS WITH A LIP AT THE TOP RIM, WITH OR WITHOUT LIDS.

NOTE: DRUMS DO EXIST WITH UNUSUAL LIDS AND RIMS OR THAT HAVE BEEN DAMAGED OR MODIFIED. FOR THIS REASON USERS MUST CHECK THAT THE CLAMP IS SECURE FOR EACH LIFT.

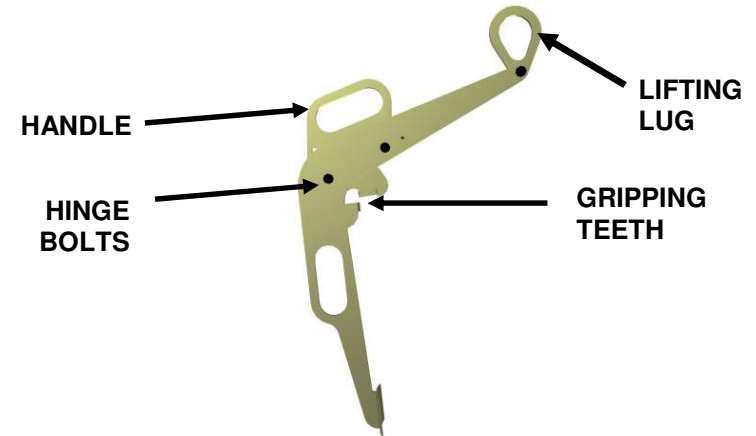
THE HANDLE PROVIDES FACILITY TO HOLD THE CLAMP IN PLACE WITHOUT LOADING. THE HANDLE DOES NOT SUPPORT THE LOAD AND MAY UNLATCH ONCE THE DRUM IS SUSPENDED.

BEWARE OF HAND INJURY – ALWAYS USE THE HANDLES PROVIDED AND KEEP HANDS WELL CLEAR WHEN TAKING UP LOAD AND LIFTING.



**CORRECT
FITMENT
TO DRUM**

A.B.N. 18 007 513 395



WARNING

- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Always check the security of the hinge bolts before each lift.
- Never use clamps with kinks or bends.
- Never use old, rusty or otherwise suspect drums for lifting loads.
- Only use the hinge bolts supplied by the manufacturer.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!

OTHER LIFTING CLAMP PRODUCTS AVAILABLE:

PIPE HOOKS

CLAMPS FOR CONCRETE MANHOLES

HORIZONTAL PLATE GRABS & CLAMPS

RAIL CLAMPS

COIL BORE CLAMPS

AUTOMATIC CLAMPS

CUSTOM SCISSOR CLAMPS IN ALL SIZES

IMPORTANT

For maximum safety and efficiency, lifting clamp systems must be properly designed, used and maintained. You must understand the use of lifting clamp components in a lifting system. These instructions, and the standards to which they refer may use technical words and detailed explanations. IF YOU DO NOT UNDERSTAND ALL WORDS AND DIAGRAMS - DO NOT MAKE ASSUMPTIONS AND GUESSES AND DO NOT USE A LIFTING CLAMP!. For further assistance and training support contact your nearest Nobles branch.

NOBLES BRANCHES ARE LOCATED IN THESE CITIES:

**ADELAIDE (HEAD OFFICE) - MELBOURNE -
SYDNEY - PERTH - BRISBANE - KARRATHA -
ROCKHAMPTON - ROXBY DOWNS - WHYALLA - -
- NEWCASTLE - PT LINCOLN - DARWIN**



**A NOBLE & SON LTD
500KG DRUM LIFTER CARE ADVICE**

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto clamps apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your clamps regularly inspected by a competent person who may suggest repairs or condemn your clamps should anything such as the above be deleterious to the WLL.

Shock loading can greatly increase the actual loads placed on a clamp. Extraordinary conditions such as shock loading must be taken into account when selecting products for use in lifting clamp systems.

The WLL which applies for any Nobles drum clamp is only for the corresponding correctly rated drum. The WLL only applies when properly selected slings are attached to the top lug.

Clamps must always be correctly selected and fitted for every lift. Attention must be paid to the balance and security of the load.

Never weld any part of a clamp without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

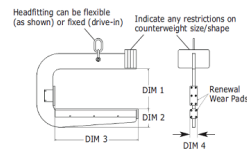
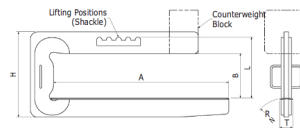
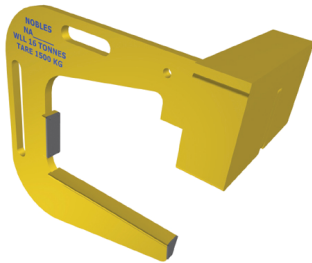


C Hooks

Nobles offer a range of C-Hooks to suit a variety of needs, designed with the experience that comes from 100 years of being in the business.

You can select from a number of existing designs, or we can manufacture to suit your specific site or process requirements. Custom designs can take into account the specific types, sizes and dimensions of your coils, any restrictions on space and headroom, and what sort of adjustment may be needed.

No matter the design, all Nobles C-Hooks are designed, manufactured and tested in Australia to the highest standards, giving you peace of mind, and are made with attention to detail that is unmatched.





Horizontal Pipe Hooks

Nobles Horizontal Pipe Hooks are designed for lifting pipes using a 2 legged sling. The hooks are designed so that at the correct sling angle the forces generated keep the hooks in place.

The hooks are available with several optional extras including:

Handle on the rear for easy fitment.

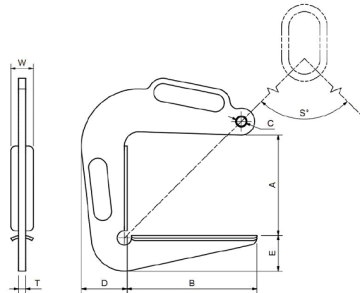
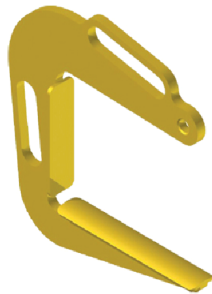
Varying pad configuration depending on the type and pipe diameter to be lifted.

Urethane or rubber pads for delicate loads such as threaded pipe.

Varying surface finishes, we recommend hot dip galvanising or zinc plating but yellow painted or plain black finish are available.

Varying openings or depth sizes.

Positive clamping arrangements for when loads may flex or sling angles vary.



Product Specifications

Name	ITEM #	WLL (tonnes)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	T (mm)	W (mm)	Included Angle	Handle Position	Weight (kg)
Pipe Hooks Pair 6t	27016	6	85	122	24	146	90	25	50	60-90	Top	12
Pipe Hooks Pair 4.6t 85mm Opening	26846	4.6	87	126	24	126	96	20	50	60-90		10
Pipe Hooks Pair 2t 200mm Opening	27372	2	225	290	21	102	80	16	50	60-90		9
Pipe Hooks Pair 1.5t 45mm Opening	27118	1.5	56	92	21	60	72	12	12	60-90	Top	1.9
Pipe Hooks Pair .75t 45mm Opening	27240	0.75	56	92	19	60	72	8	12	60-90	Top	1.3



A NOBLE & SON LTD

NZHPH020P PIPE HOOK CARE & USE ADVICE

GENERAL CAUTIONS

Ratings or Working Load Limits (WLL) shown in Nobles literature and stamped onto pipe hooks apply only to new or as new condition products. The working load limit can be affected by intentional alterations, damage, corrosion, misuse and special conditions of use. Always have your pipe hooks regularly inspected by a competent person who may suggest repairs or condemn your pipe hooks should anything such as the above cause a reduction in the WLL.

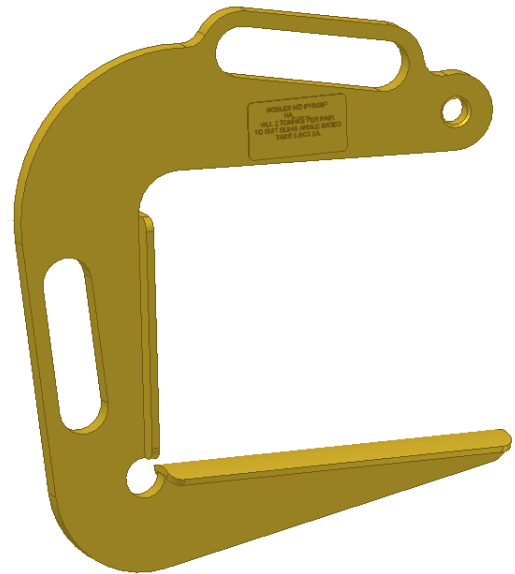
Shock, and/or unusual loading can greatly increase the actual loads placed upon lifting gear. Extraordinary conditions and environments must be taken into account when selecting products for use in pipe hook systems. This hook has been designed for normal lifting environments, the suitability of the attachment for use in special environments such as at sea, in corrosive environments or at extreme temperatures must be assessed by a competent person prior to use.

The WLL which applies for any Nobles pipe hook applies only for uses compliant with AS4991-2004. The WLL applies only to the structural integrity of the hook itself. Use with a some payloads and/or slings may reduce the hooks' capacity.

Pipe hooks, must always be correctly selected and fitted for every lift. Attention must be paid to the security of the hook, the load capacity available and the proximity of any hazards.

Never weld any part of a pipe hook without consulting the manufacturer. Special steels are commonly used and special welding procedures and precautions may be necessary.

A site and/or job specific hazard & risk assessment is recommended prior to use.



PIPE HOOK CONDITIONS OF USE

When using pipe hooks the safety and stability of the load is of utmost importance. The pipe section to be lifted must be of a known mass and have a centre of gravity about the geometric centre.

A pair of pipe hooks is only as good as the integrity of it's payload. The pipe to be lifted must have sufficient strength to be able to be lifted by the region contacting the hook. This pipe hook is generally suitable for concrete pipes however:

- Other pipe-like objects may be lifted provided that the hooks are secure and that the wall thickness is generally no less than 38mm (1.5 "). An excessively thin walled pipe may jam in the hook heel and overstress the hooks.
- Pipes with delicate end features may be damaged by these hooks. The use of packing materials may disturb the geometry of the lift and are not recommended.
- Pipes which are damaged need to be assessed as suitable for lifting. The hooks cannot be used upon damaged sections of pipe.

Any special requirements specific to a particular site or jurisdiction should be checked prior to use.

Generally, the use of open pipe hooks requires that the hooks are maintained in position as the load is taken up. Additional personnel may be required. These personnel shall be adequately trained and licensed for this work and must stand clear of the load before it is lifted off its supporting surface(s).

When landing pipes using pipe hooks, the payload becomes free generally as soon as the load is set down. Users shall ensure that the pipe is placed onto chocks or similar, and upon level ground so that the pipe does not shift as it is set down which may cause a dangerous situation. Once set down, ensure that the payload is secure and unable to roll or slide out of position.

The sling arrangement used with these hooks is critical, please refer overleaf.

Contact Us on 1300 711 559 from anywhere in Australia
or (+61)8 8260 6688 worldwide
www.nobles.com.au

USE OF THE PIPE HOOKS

The Nobles NZHPH020P pipe hooks have been devised with a wide mouth so as to accept a variety of payloads however pipe designs can vary considerably. Modifications to these instructions, or the device itself may be required in order to ensure safety. A competent person should be consulted where these instructions are (or appear to be) inappropriate.



WARNING

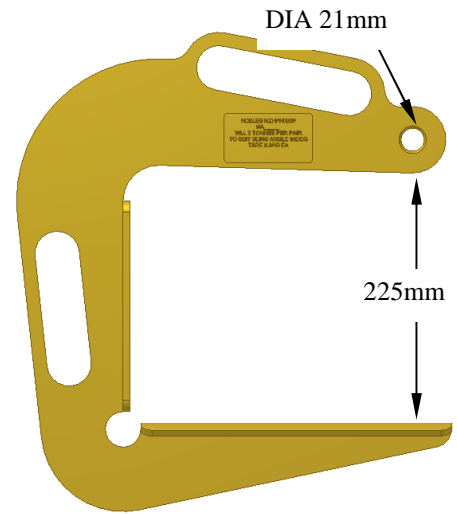
- Improper use of this product could result in death or serious injury.
- Never exceed the working load limit.
- Never hoist loads over or near people.
- Always operate, inspect and maintain this equipment in accordance with relevant safety standards.
- Never use in proximity to live equipment.
- If you are ever in doubt how to safely use this product contact your Nobles branch for advice - Don't Guess!
- Slings, and other lifting accessories used must be of the appropriate size and in good, safe working order and condition.
- Always ensure that the pipe hooks are properly and securely fitted prior to use.
- Always ensure the suitability of the payload prior to lifting.
- Always ensure that the payload is set down into a secure position, unable to roll or slide out of place.
- Always ensure that personnel are properly trained and competent for use of these devices. Keep personnel clear during lifting.

FITMENT TO SLINGS

Once the pipe suitability has been determined. Slings must be chosen. These hooks are intended only to be used in pairs.

In order to accommodate the wide hook opening these hooks are designed to suit a particular sling angle (90 degrees included angle between sling legs, +0 deg/-15deg).

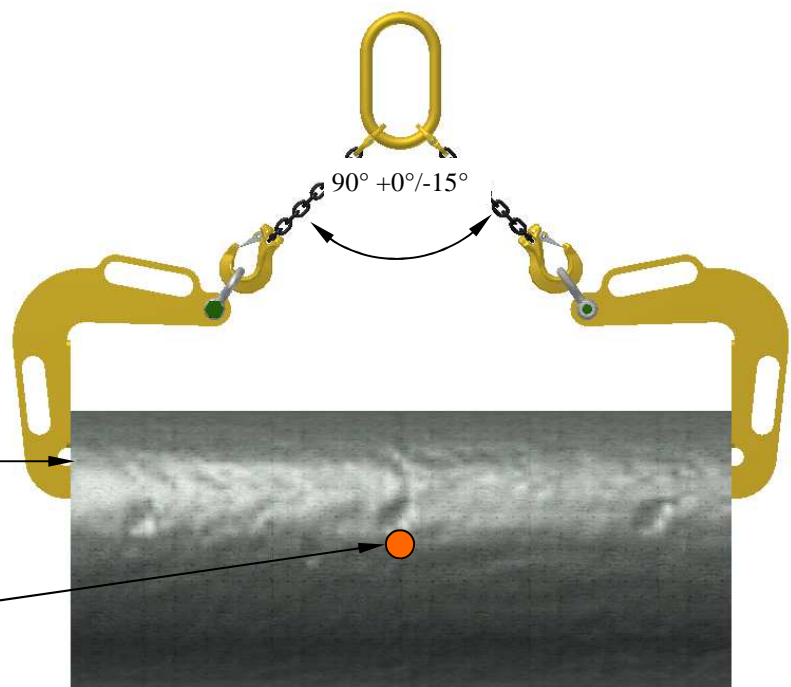
Use of a sling angle which is too large (slings sit low) may result in the hooks flipping out—an unsafe condition.



Use of a sling angle which is too narrow (slings stand tall) may result in the hooks tilting backwards so that the hook tips are point loaded. This may overstress the hooks and cause instability or damage to the hooks. Always ensure that the hooks are properly seated, with the lower arm of the hooks horizontal once the load is taken up.

Hooks shall be regularly checked for signs of wear or overloading. The body of the hook should be checked for deformation with a straight edge. The inside corners should be checked for signs of cracking and the lug hole should also be checked for wear or stretch (wear limit 10% of original dimension). The hook opening dimension should be checked for signs of overloading. An increase in this dimension indicates overloading and is cause to withdraw the hook from service. Please refer diagram above.

For service and enquiries regarding your hook, please quote the test certificate number and contact A. Noble & Son Ltd. On 1300 711 559 (within Australia) or (+61)8 8260 6688 worldwide.



ENSURE LOWER ARM IS HORIZONTAL WHEN LIFTING

PIPE CENTRE OF GRAVITY BE-NEATH HOOK. SLINGS SHALL BE SYMMETRICAL