User Manual For Lifting Accessories

This user manual is to be kept through the complete user period for the tool

Original User Manual

Ref. **NORSOK R-002**

Product: **Lift-Sub**

Model No:

- NC38-312-NC38
- 758Reg-500-NC50
- 758Reg-512-512FH
- 758Reg-578-XT57
- 758Reg-658-658Reg
- NC38-400-NC38
- NC50-500-NC50
- NC50-512-512FH
- NC50-578-XT57
- 658Reg-500-NC50
- 658Reg-512-512FH
- 658Reg-578-XT57
- 658Reg-658-658Reg

This User Manual do not replace the user training of the operator for use.

CONTENTS

USER MANUAL FOR LIFTING ACCESSORIES

1. MACHINERY DESCRIPTION

1.1 Product data

Producer: Odfjell Technology/Odfjell Well Services Norway AS
Hammaren 19, PO. 152
NO-4098 Tananger, Norway

Designation: Lift-Sub for pipe handling on drill floor

Type:

- NC38-312-NC38
- 758Reg-500-NC50
- 758Reg-512-512FH
- 758Reg-578-XT57
- 758Reg-658-658Reg
- NC38-400-NC38
- NC50-500-NC50
- NC50-512-512FH
- NC50-578-XT57
- 658Reg-500-NC50
- 658Reg-512-512FH
- 658Reg-578-XT57
- 658Reg-658-658Reg

Standard:	Norsok R-002 (2017), Norsok R-003 (2017)
Drawing no.:	Docs. # 1114239
Year of manufacture:	Ref. Machining Reports
Load Capacity:	Acc. to enclosed table
Weight:	Acc. to enclosed table
Declaration Of Conformity:	Defined by EU Machinery Directive 2006/42/EU

1.2 Equipment description

This lifting appliance in pipe design, is fabricated in material AISI-4145H or equal.

Minimum yield is 758 MPa (110ksi).

Surface is not grit blasted, nor primed, but painted with RAL-6000 Wedekryl PT 50 Green.

1.3 General information

This document describes the lifting accessory and how to use it. In case of something indistinct, please contact Odfjell Well Services Norway AS.

- It is of high importance that this document is read and understood by the operator before use.
- This document is addressed to qualified personnel for operation, inspection, maintenance and repair of the equipment. The lifting accessory is to be operated, inspected, maintained and repaired by adequate qualified personnel.
- In case of improper use, inspection, maintenance and repair, Odfjell Well Services AS will not be held liable.
- This document makes use of both standard USC and SI units.
- SI-units are printed in blue italic fonts.
- All inspection, maintenance standards, and deadlines described herein are to be followed and documented by the operator.
- The lifting accessory must be used for its intended purpose only, meaning pipe handling on drill floor.
- Other use is not permitted, and release Odfjell Well Services AS from any guaranty and responsibility.
- This document is to be kept available at all times during equipment lifetime.
-
- This document, nor any part of it, must be made available to Odfjell's competitors.
- Odfjell Well Services AS makes reservation for an eventual change in this document.
- All data and information in this document are given to the best of our knowledge about the equipment and the handling/operation of it.
- Odfjell Well Services AS accepts no responsibility or liability from the use of information herein.

2. SAFETY INSTRUCTIONS

2.1 Explanation of warning signs

Any marketing, startup, use, inspection, maintenance and repair of this lifting accessory can only be done on the basis of the instructions and procedures given in this document.

Carefully read through this document before any use of the lifting accessory.

Important instructions, especially technical safety instructions, are marked with matching symbols of significance as described below.

Instructions must be followed to avoid danger for both humans and equipment.

Imminent danger - death or serious injury occurs.

Possible impending danger – death or serious injury can occur.

Possible impending danger – less serious injuries or property damage may occur.

Possible impending danger due to suspended load – death or serious injury can occur.

Possible impending danger due to a crush injury. Directions in the context of security and protection of property.

Directions in relation to the protection of property.

2.2 General safety instructions for proper use

- Use the lifting accessory only for load suitable due to its geometry and design (not for use on equipment with a proper internal elevator recess).
- The lifting accessory should be used only by personnel proper trained in accordance to regulations.
- For safe use the lifting accessory must as a minimum be marked:
  - Classification by producer/vendor
  - Lifting Capacity
  - Weight
  - Equipment Identifications Number (serial number/Model number)
  - Certification Tag
  - Year Of Construction
  - CE Mark
- Before startup, the lifting accessory is subjected to a thorough visual inspection to discover any damage. Especially inspect marking, elevator recess, and both end connections.
- Lifting accessories without proper or unreadable marking, shall not be used.
- It is not allowed to use the lifting accessory out of its temperature range: -20° til +80° Celsius, nor under chemical influence by acids, salt or in explosive surroundings.
- Use of the lifting accessory is only allowed on, or in close proximity, to the drill floor.
- It is not allowed to lift or transport any load above a person.
- Always use appropriate dope and certified lifting equipment (Lift-protector, slings etc.).
- Always use updated user manuals for; Lift-sub, lift-protector, elevator and dope.

3. STARTUP

3.1 Assembling- and disassembling conditions

Risk of damage to the lifting accessory

The lifting accessory has to be protected against influence due to weather conditions or aggressive media.

→ Stored in a suitable place.

Stable and secure storage of the lifting accessory.

The lifting accessory needs to be properly handled, placed and secured in such a way it can't slide, tilt, roll, or fall down.

→ Use appropriate storage facilities or parking element.

3.2 Securing load and lift-sub

* The lifting accessory must be removed from the packaging or transport pallet.

* Perform extraordinary inspection prior to use.

Hazard due to unsecured lifting accessory, respectively not secured lift-sub.

Load can get loose and fall down if the load attachment

(Elevator, Drill collar, ….) is not proper secured.

→ Make sure that elevator and cargo is properly secured.

Hazard due to unsecured components of the hoist.

Do not use equipment with loose or unsecured components.

→ Always check for any loose components prior to use.

Make sure the lifting arrangement is adequately secured, respectively connection locked with sufficient torque.

Hazard due to overload.

The load weight must not exceed the lift-subs specified capacity.

- If so, the hoist can be deformed and fall down.

→ Prior to every use, make sure that the summary of loads do not overcome the maximum load rating.

Hazard due to clamping and locking.

During pick-up – loading – unloading a risk of crushing and damage may occur to hands and feet between following contact points:

- The load and the place where it is put down.
- Contact point between the load and the lift-sub.
- Contact point between the lift-sub and the elevator.

→ Check that the operator avoid all places with danger of crushing.

Hazard due to oblique and shock lifted load.

In case of jerkily and oblique lifting, overload can occur on the lifting accessory.

This can cause harm to the equipment.

→ Ensure to lift and handle any load in a proper way.

3.3 Transport load and lift-sub

Hazard due to limited space.

During transport make sure there is enough space to any surrounding obstacles to avoid collisions.

→ Ensure enough space in the working area.

Hazard of dropped load due to material defects, collisions or negligence.

If dropping or oscillating load systems, personnel staying or moving close to the hanging load, incur serious injuries or fatality.

→ Never stand or move under suspended load.

Hazard due to crushing.

Under transport of lifting arrangement, crushing of fingers and feet can occur.

→ Use appropriate and certified lifting equipment (lift-protector etc.).

Hazard due to damages and defects

Look for damage or defects on the lifting accessory before and during operation. This may be deformation, fractures etc.

→ Monitor the lifting equipment during operation.

3.4 Put down load and lift-sub

Hazard due to sliding, rolling or tilting when unloading on oblique surface.

When unloading on an oblique surface, the load may slide, roll or tilt.

Ensure adequate surface on the place for unloading.

→ Make sure the load don't tilt, slide or roll when unloading, and that the place is adequate and prepared.

Hazard due to space limitation.

Prepare the destination before unloading.

Ensure adequate workspace relative to surrounding obstacles, to avoid hazard due to collision and crushing.

→ Ensure proper workspace and that the load will be put down in a careful and safe manner.

4. INSPECTION – MAINTENANCE & REPAIR

Country regulations, determine type, scope and deadlines concerning required inspection of the lift accessory. First time inspection before use, is additional to *Extraordinary Control of Competence* (S1).

This is normally a visual control with additional function test.

4.1 Inspection before first time use

- Before first time use, the lifting accessory must be inspected by an *Enterprise of Competence* (S1), and can't be used before its certified for use.
- The inspection has to be documented in the certificate (control book).

4.2 Periodic inspection

- All lifting equipment has to be certified acc. to valid regulations, but minimum once a year by an *Enterprise Of Competence*. Due to use- and environment, it may be necessary to increase intervals.
- This will occur especially due to frequent use, wear, corrosion and increased possibility of fault.
- Inspection has to be documented in the certificate (control book).
- Dirty lifting equipment and/or exposed to salt or chemicals during storage and operation, may be subjected to cleaning prior to inspection.

4.3 Extraordinary inspections

- In case of injuries or special events that may affect the lifting capacity, an extraordinary control has to be carried out by an *Enterprise of Competence*.
- The extent of this control is due to the type of the injury, event or repair, and has to be determined individually.

5. SPECIFIC USE

Basics

- Lift-sub is to be used for handling load such as lifting, transport and unloading of appropriate pipe-loads which due to its design can't be handled in other ways.
- (Not for use on equipment with a proper internal elevator recess).

Preparations prior to assembling

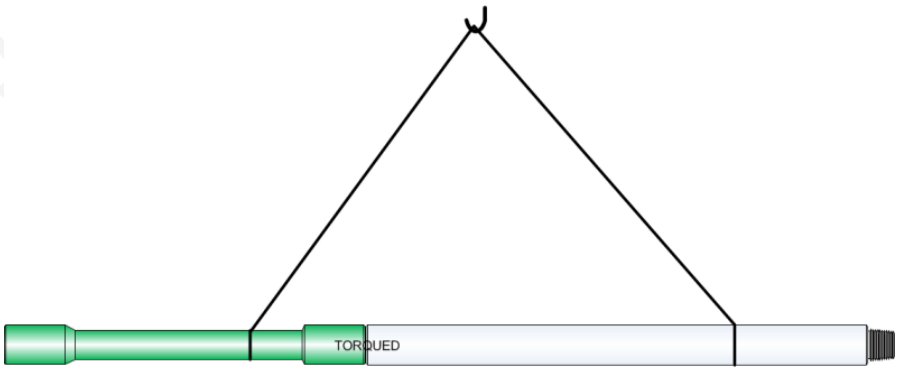
- After unpacking and visual inspection of lift-sub, remove thread protector in both ends.
- Clean connections and check for any visual damages.

- Check that lift-sub is fit for use of the purpose (respectively type and SWL/WLL).

Mounting lift-sub and load

For horizontal mounting (respectively in workshop);

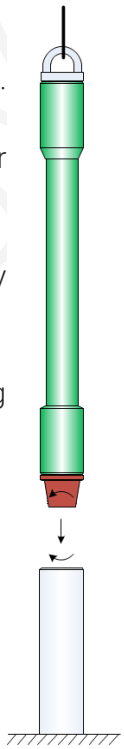
- Mount suitable and certified lifting equipment on to lift-sub for transport to make/brake unit.
- Lift and transport lift-sub into the machine, and place in a suitable position for assembling on to the object.
- Check mating connection (correct dimension & threads– condition). Apply appropriate dope.
- Assemble lift-sub and load by use of the machine, and make-up connection to accurate torque in accordance with enclosed table. Make-up torque is to be documented by a print-out and should be attached in documentation to the customer/user.
- Make a visual inspection of the assembly.
- Mark the connection (respectively stencil and spray):" TORQUED"
- Lift the load out of the machine (make/brake unit) by use of proper lifting equipment.



For vertical mounting (respectively on rig);

- Remove protector in "Box" end, clean and do a visual control. Apply appropriate dope.
- Install a proper and certified lift-protector.

- Install the lift-protector according to instructions in the user manual for the lift-protector.
- The lift-protector should be used only for handling the weight of the lift-sub.
- Attach winch to lift-protector and move lift-sub to the object in a safe manner (respectively by use of a winch).
- Position the lift-sub over the object in best possible and appropriate way for mounting.
- Remove protector from "Pin" end, clean and visually inspect mating connection. Apply dope.
- Mount lift-sub to the object with the use of the Iron-Roughneck.
- Make-up connection to required torque acc. to enclosed table, and remove winch lifting hook.
- Now the load can be lifted up from the rotary table, with the use of a correct elevator.



Put down the load

- Put down the load on the prepared determined area – relieve the elevator.
- Remove the elevator from the load.

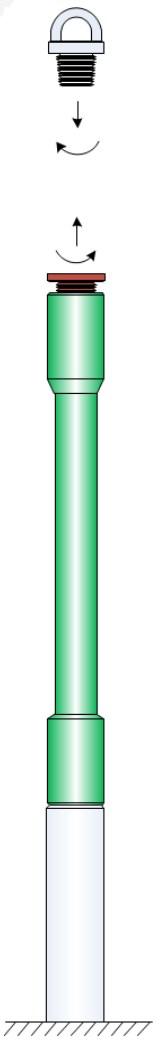
Disassemble the lift-sub from the object

For horizontal dismantling (respectively in the workshop);

- Lift the load into the machine (make/brake unit) by using proper and certified lifting equipment.
- Secure lift-sub and object with proper equipment, to avoid hazard during dismantling.
- Break-out connection on lift-sub/object by use of the machine.
- Mount thread protectors on relevant connections and lift the lift-sub and object out of the machine by use of proper and certified lifting equipment (respectively overhead crane and lifting slings).
- Put lift-sub and/or object down on the prepared destination – relieve the crane.
- Disconnect crane hook from lift-sub/object, and move crane hook to safe height.

For vertical dismantling (respectively on rig);

- Remove any thread protector from the "Box" end of the lift-sub, and visually check the connection.
- Clean and lubricate threads with appropriate lubrication. Install a suitable and certified lift-protector according to the user manual for the lift-protector.
- Mount winch hook on to the lift-protector and make a visual inspection of the lifting arrangement.
- Tighten up any slack on wire.
- Dismantle the lift-sub from the load, by using the Iron-Roughneck.
- Visually inspect lift-sub connection and install thread protector on pin connection.
- Lift and transport the lift-sub to its storage destination by using the winch.
- Put lift-sub down on the prepared destination – relieve winch.
- Remove winch hook from the lift-protector.



EC-DECLARATION OF CONFORMITY – SAMSVARSERKLÆRING

We / Vi,

Odfjell Well Services Norway AS
Hammaren 19
PO. Box 152, NO-4098
Tananger – Norway
Org. Nr. 983 793 347

declare that these products / erklærer at disse produktene

Lift-Sub / Løfte-Sub

Model No./
Modell Nr.:

- NC38-312-NC38
- 758Reg-500-NC50
- 758Reg-512-512FH
- 758Reg-578-XT57
- 758Reg-658-658Reg
- NC38-400-NC38
- NC50-500-NC50
- NC50-512-512FH
- NC50-578-XT57
- 658Reg-500-NC50
- 658Reg-512-512FH
- 658Reg-578-XT57
- 658Reg-658-658Reg

which is the subject of this declaration, conforms with the following standards or normative documents / som er objekt for denne deklarasjon, er i samsvar med disse standarder eller normgivende dokumenter;

Norsok R-002, R-003 2017	Lifting Equipment
2006/42/EU	Machinery Directive
EN ISO 12100:2010	Safety of machinery
ISO/TR-14121-2: 2012	Risk assessment
ISO-10424-1:2004/API 7-1+A2:2009	Specification for Rotary Drill Stem Elements
ISO-10424-2:2007/API 7-2:2008	Specification for Threading & Gauging of Rotary Shouldered Conn.
API RP7G:1998+A2:2009	Recommended Practice for Drill Stem Design & Operating Limits
ISO-13535:2000 (Modified)	Specification for Drilling and Production Hoisting Equipment
API 8C 5-th. Edition 2020	Drilling and Production Hoisting Equipment

Date & Sign. / Dato & Sign.: 27/08/2025

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Frank Lea
Rental Product Line Manager

WEAR DATA

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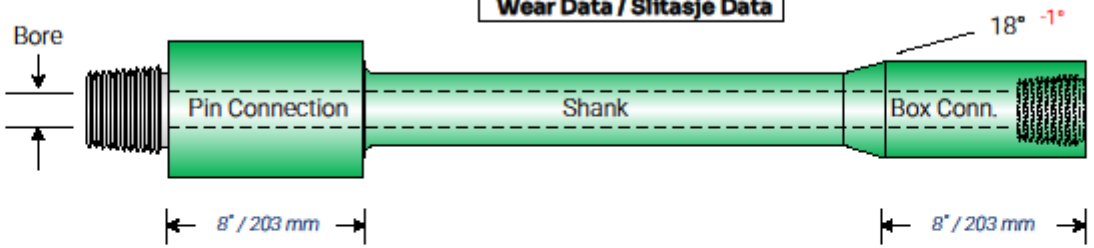
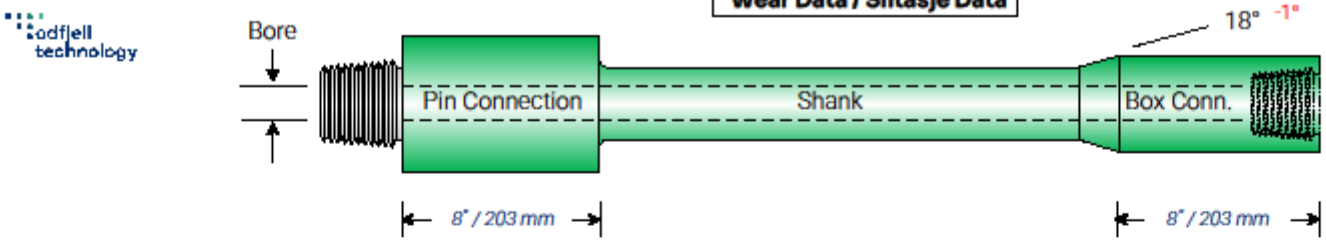
Wear Data / Slitasje Data



Model # Pink - Shank - Box	Pin OD Minimum inch	Pin OD Minimum mm	Pin Conn. Type	Shank OD Minimum inch	Shank OD Minimum mm	Box Conn. OD Minimum inch	Box Conn. OD Minimum mm	Box Conn. Type	Bore id Maximum inch	Bore id Maximum mm
NC38-312-NC38	4,624	117,45	NC-38	3,469	88,10	4,687	119,05	NC-38	2,281	57,95
NC50-500-NC50	6,374	161,9	NC-50	4,969	126,20	6,437	163,50	NC-50	2,844	72,24
NC50-512-512FH				5,469	138,90	6,937	176,20	5 1/2 FH"		
NC50-578-XT57				5,844	148,43	6,937	176,20	XT-57		
658Reg-500-NC50	7,874	200,0	6 5/8" Reg	4,969	126,20	6,437	163,50	NC-50	2,844	72,24
658Reg-512-512FH				5,469	138,90	6,937	176,20	5 1/2 FH"		
658Reg-578-XT57				5,844	148,43	6,937	176,20	XT-57		
658Reg-658-658Reg				6,594	167,48	7,937	201,60	6 5/8" Reg		
758Reg-500-NC50	9,374	238,1	7 5/8" Reg	4,969	126,20	6,437	163,50	NC-50	3,031	77,0
758Reg-512-512FH				5,469	138,90	6,937	176,20	5 1/2 FH"		
758Reg-578-XT57				5,844	148,43	6,937	176,20	XT-57		
758Reg-658-658Reg				6,594	167,48	7,937	201,60	6 5/8" Reg		

Drawing No: Docs. 1114239 Rev: 2 Scale: NA
Issued By: F. Bjørheim Date: 13.11.2013
Descript.: OWS Lift-Sub Wear Data

Wear Data / Slitasje Data

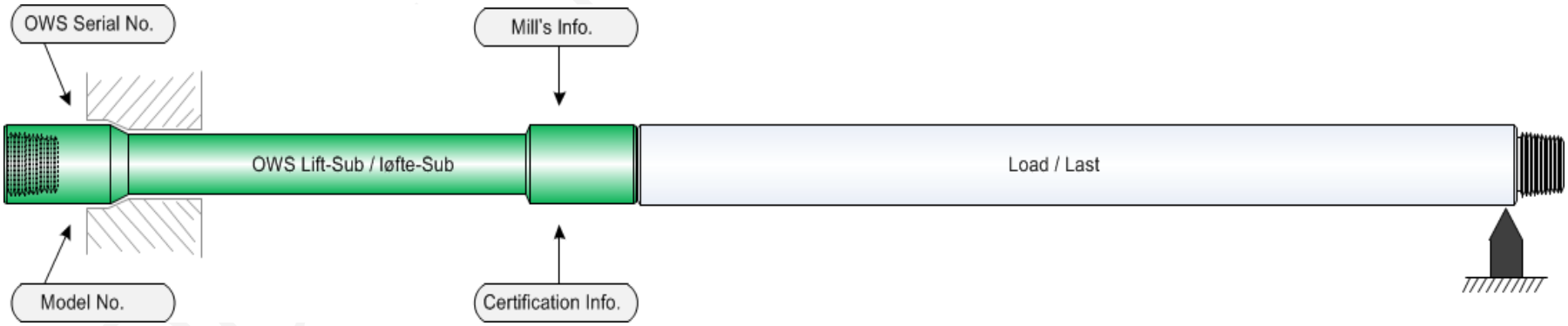


Model # Pink - Shank - Box	Pin OD Minimum inch	mm	Pin Conn. Type	Shank OD Minimum inch	mm	Box Conn. OD Minimum inch	mm	Box Conn. Type	Bore id Maximum inch	mm
NC38-400-NC38	4,624	117,45	NC-38	3,868	98,24	4,859	123,42	NC-38	2,281	57,95

Drawing No: Docs. 1114239 Rev.: 2 Scale: NA
Issued By: Frank Lea Date: 29.05.2017
Descript.: OWS Lift-Sub Wear Data-Page 2

MAKE UP TORQUE DATA

Lift-Sub Table/Tabell										
Model/Modell	Egenvekt/Weight (Estimert/Estimated)		Pin Conn.	DP. Elevator size		Box conn.	Make-up Torque/Moment Pin Connection			
Pin - Shank - Box			Type	Shank "OD"		Type	Minimum		Maximum	
	lbs	*kg*		inch	*mm*		lbf/ft	*kNm*	lbf/ft	*kNm*
NC38-312-NC38	150	*70*	NC-38	3-1/2"	*88,90*	NC-38	6,500	*8.8*	8,120	*11.0*
NC38-400-NC38	165	*75*	NC-38	4"	*101,60*	NC-38	6,500	*8.8*	8,120	*11.0*
NC50-500-NC50	310	*140*	NC-50	5"	*127,00*	NC-50	21,040	*28.5*	26,300	*35.7*
NC50-512-512FH	375	*170*	NC-50	5-1/2"	*139,70*	5-1/2" FH	21,040	*28.5*	26,300	*35.7*
NC50-578-XT57	400	*180*	NC-50	5-7/8"	*149,23*	XT-57	21,040	*28.5*	26,300	*35.7*
658Reg-500-NC50	375	*170*	6-5/8" Reg	5"	*127,00*	NC-50	42,630	*57.8*	53,290	*72.3*
658Reg-512-512FH	430	*200*	6-5/8" Reg	5-1/2"	*139,70*	5-1/2" FH	42,630	*57.8*	53,290	*72.3*
658Reg-578-XT57	460	*210*	6-5/8" Reg	5-7/8"	*149,23*	XT-57	42,630	*57.8*	53,290	*72.3*
658Reg-658-658Reg	570	*260*	6-5/8" Reg	6-5/8"	*168,28*	6-5/8" Reg	42,630	*57.8*	53,290	*72.3*
758Reg-500-NC50	430	*200*	7-5/8" Reg	5"	*127,00*	NC-50	71,100	*96.4*	88,880	*120.5*
758Reg-512-512FH	490	*220*	7-5/8" Reg	5-1/2"	*139,70*	5-1/2" FH	71,100	*96.4*	88,880	*120.5*
758Reg-578-XT57	520	*240*	7-5/8" Reg	5-7/8"	*149,23*	XT-57	71,100	*96.4*	88,880	*120.5*
758Reg-658-658Reg	630	*290*	7-5/8" Reg	6-5/8"	*168,28*	6-5/8" Reg	71,100	*96.4*	88,880	*120.5*
Max. M/U-Torque is calculated based on dope friction factor 1.0										



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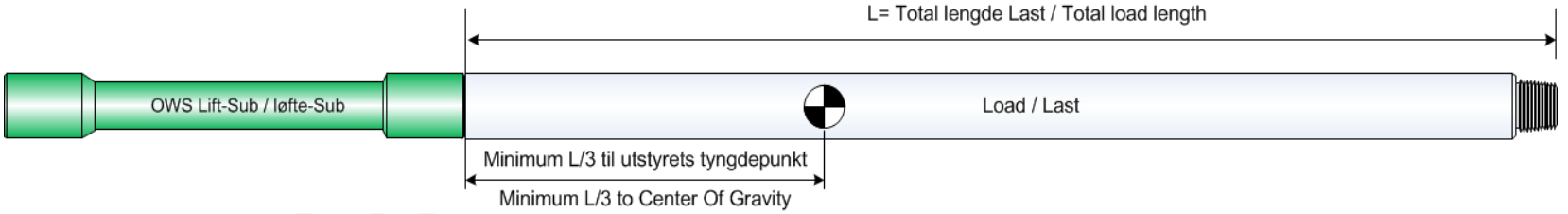
LOAD DATA

Lift-Sub Table/Tabell									
Største tillatte arbeidslast / Max. allowable workingload (WLL) Kilogram iht./acc. to: Norsok R-002 2017, R-003 2017									
Model/Modell	**Horisontal-Vertikal eller Vertikal-Horisontal / Horizontal-Vertical or Vertical to Horizontal**								**Vertikal/Vertical**
Pin - Shank - Box	0m < L ≤ 1,5m	1,5m < L ≤ 3,0m	3,0m < L ≤ 4,5m	4,5m < L ≤ 6,1m	6,1m < L ≤ 7,8m	7,8m < L ≤ 9,5m	9,5m < L ≤ 11,6m	11,6m < L ≤ 13,7m	Alle lengder/All lengths
NC38-312-NC38	2,910	*2,260*	2,050	1,930	*1,860*	1,820	1,790	*1,760*	30,050
NC38-400-NC38	2,910	*2,260*	2,050	1,930	*1,860*	1,820	1,790	*1,760*	30,050
NC50-500-NC50	7,250	*5,640*	5,110	4,820	*4,650*	4,540	4,450	*4,390*	66,360
NC50-512-512FH	7,250	*5,640*	5,100	4,820	*4,650*	4,530	4,440	*4,380*	80,830
NC50-578-XT57	7,290	*5,680*	5,150	4,860	*4,690*	4,580	4,490	*4,420*	80,830
658Reg-500-NC50	10,350	*8,050*	7,290	6,890	*6,640*	6,460	6,350	*6,260*	66,360
658Reg-512-512FH	11,360	*8,840*	8,000	7,560	*7,290*	7,120	6,980	*6,880*	80,830
658Reg-578-XT57	11,430	*8,920*	8,080	7,640	*7,360*	7,190	7,050	*6,950*	80,830
658Reg-658-658Reg	11,380	*8,860*	8,010	7,580	*7,310*	7,130	6,990	*6,890*	117,550
758Reg-500-NC50	9,910	*7,710*	6,970	6,590	*6,350*	6,200	6,070	*5,980*	62,670
758Reg-512-512FH	13,970	*10,860*	9,840	9,290	*8,960*	8,750	8,560	*8,440*	76,870
758Reg-578-XT57	17,710	*13,810*	12,510	11,830	*11,420*	11,150	10,930	*10,770*	76,400
758Reg-658-658Reg	18,650	*14,520*	13,150	12,430	*11,980*	11,700	11,460	*11,300*	112,050



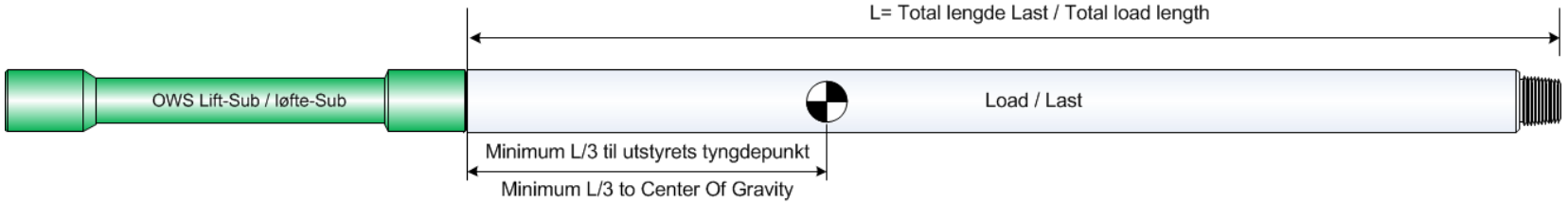
Bruksanvisning for tabell

1. Finn raden som inneholder korrekte løfte-sub modell (venstre kolonne)
2. For horisontal til vertikalt eller vertikalt til horisontalt løft, er maks tillatte WLL avhengig av lengde "L" på utstyret som festes til løfte-subben (fig. ovenfor). Basert på lengden "L" finnes maks. tillatte arbeidslast fra kolonnen der lengden "L" ligger innenfor angitt lengdeintervall.
3. For kun vertikalt løft finnes løfte-subbens WLL i kolonne lengst til høyre i tabellen.
4. Løft skal ikke skje uten at gjengeforbindelse har tilstrekkelig moment iht. angitte tabell (se eget ark) !

Instructions for use of Table

1. Identify the table row that contais correct lift-sub model (left column)
2. For horizontal to vertical or vertical to horizontal lift, max. allowable WLL is dependent on length "L" of the attached drill string equipment (fig. above). Based on the length "L", find the corresponding WLL in the column marked with a length interval incorporating this length.
3. For vertical lift only, the lift-sub WLL is to be found in the columnt to the right of the table.
4. Lifting is not allowed without propper make-up torque on the connection (see enclosed sheet) !

Lift-Sub Table/Tabell									
Største tillatte arbeidslast / Max. allowable workingload (WLL) Pound iht./acc. to: Norsok R-002 2017, R-003 2017									
Model/Modell	**Horisontal-Vertikal eller Vertikal-Horisontal / Horizontal-Vertical or Vertical to Horizontal**								**Vertikal/Vertical**
Pin - Shank - Box	0 ft < L ≤ 5 ft	5 ft < L ≤ 10 ft	10 ft < L ≤ 15 ft	15 ft < L ≤ 20 ft	20 ft < L ≤ 26 ft	26 ft < L ≤ 31 ft	31 ft < L ≤ 38 ft	38 ft < L ≤ 45 ft	Alle lengder/All lengths
NC38-312-NC38	6,415	*4,982*	4,519	4,255	*4,101*	4,012	3,946	*3,880*	66,249
NC38-400-NC38	6,415	*4,982*	4,519	4,255	*4,101*	4,012	3,946	*3,880*	66,249
NC50-500-NC50	15,983	*12,434*	11,266	10,626	*10,251*	10,009	9,811	*9,678*	146,299
NC50-512-512FH	15,983	*12,434*	11,244	10,626	*10,251*	9,987	9,789	*9,656*	178,199
NC50-578-XT57	16,072	*12,522*	11,354	10,714	*10,340*	10,097	9,899	*9,744*	178,199
658Reg-500-NC50	22,818	*17,747*	16,072	15,190	*14,639*	14,242	13,999	*13,801*	146,299
658Reg-512-512FH	25,044	*19,489*	17,637	16,667	*16,072*	15,697	15,388	*15,168*	178,199
658Reg-578-XT57	25,199	*19,665*	17,813	16,843	*16,226*	15,851	15,543	*15,322*	178,199
658Reg-658-658Reg	25,089	*19,533*	17,659	16,711	*16,116*	15,719	15,410	*15,190*	259,153
758Reg-500-NC50	21,848	*16,998*	15,366	14,528	*13,999*	13,669	13,382	*13,184*	138,164
758Reg-512-512FH	30,799	*23,942*	21,693	20,481	*19,753*	19,290	18,872	*18,607*	169,469
758Reg-578-XT57	39,044	*30,446*	27,580	26,081	*25,177*	24,582	24,096	*23,744*	168,433
758Reg-658-658Reg	41,116	*32,011*	28,991	27,403	*26,411*	25,794	25,265	*24,912*	247,028



Bruksanvisning for tabell

1. Finn raden som inneholder korrekte løfte-sub modell (venstre kolonne)

2. For horisontal til vertikalt eller vertikalt til horisontalt løft, er maks tillatte WLL avhengig av lengde "L" på utstyret som festes til løfte-subben (fig. ovenfor). Basert på lengden "L" finnes maks. tillatte arbeidslast fra kolonnen der lengden "L" ligger innenfor angitt lengdeintervall.

3. For kun vertikalt løft finnes løfte-subbens WLL i kolonne lengst til høyre i tabellen.

4. Løft skal ikke skje uten at gjengeforbindelse har tilstrekkelig moment iht. angitte tabell (se eget ark) !

Instructions for use of Table

1. Identify the table row that contais correct lift-sub model (left column)

2. For horizontal to vertical or vertical to horizontal lift, max. allowable WLL is dependent on length "L" of the attached drill string equipment (fig. above). Based on the length "L", find the corresponding WLL in the column marked with a length interval incorporating this length.

3. For vertical lift only, the lift-sub WLL is to be found in the columnt to the right of the table.

4. Lifting is not allowed without propper make-up torque on the connection (see enclosed sheet) !