



**ASSOCIATION OF WELL HEAD
EQUIPMENT MANUFACTURERS**

PO Box 197, Aberdeen, Scotland, AB9 6EE

GUIDANCE DOCUMENT

ON THE

AWHEM CLASSIFICATION

OF

HANDLING AND RUNNING TOOLS

IN ACCORDANCE WITH

LOLER, SI: 2307

&

PUWER, SI: 2306

GD 03-01

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PO Box 197
Aberdeen
AB9 6EE
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FOREWORD

POLICY

AWHEM has developed this Guidance Document through formation of a task group comprised of AWHEM member companies together with Inspectors from the specialist drilling and lifting sections of the Health & Safety Executive, Offshore Safety Division. Although reflecting the opinions of the membership, this document is not intended to obviate the need for applying sound engineering judgement. The following is specifically drawn to the attention of any person following the provisions of these notes:

- a. This document is AWHEM's Interpretation of current legislation, which is goal setting and therefore not prescriptive in terms of equipment requirements. The legislation also places certain responsibilities and duties on the applicable designated "responsible person". AWHEM cannot guarantee that if any person or organisation follows the Interpretation it will be complying with current legislation in all respects and consequently AWHEM and its members cannot be open to prosecution for failure to observe relevant legislation.
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- d. It is a condition of use of this Interpretation that the entire policy statement section is brought to the attention of:



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- i Any equipment owner who purchases equipment from a supplier who elects to provide equipment or services in accordance with this Interpretation.
- ii Any supplier of equipment or services where the equipment owner insists that those products or services are provided in accordance with this Interpretation.

AWHEM does not in any manner warrant that compliance with this Interpretation will result in approval and/or certification of the Handling and/or Running Tools and AWHEM expressly disclaim any liability or responsibility for any loss for failure to obtain approval and/or certification. Furthermore, AWHEM members would like to emphasise that existing equipment currently being used offshore is perfectly adequate and fit for purpose, any recommendations made for the application of the LOLER Regulations to identified components can equally as well be carried out on existing equipment in the field. This Interpretation is intended to represent best industry practice in relation to the application of LOLER to wellhead equipment and the individual components that make up such an assembly.

1.0 INTRODUCTION

The HSE members on the Task Group have indicated that when LOLER was introduced, it was originally envisaged that it would apply only to items of lifting equipment that were designed specifically for that purpose some examples being cranes, winches, hoists, BOP handlers, &c. However, as with many goal-setting Regulations, there is the possibility of differing interpretations. Therefore, in order that both the offshore drilling industry and the industry regulators, HSE, could get a clearer understanding of how the above two Regulations would be applied to the components which make up a typical wellhead assembly, AWHEM have decided to produce this guidance document. AWHEM members believe that the introduction of two recent Regulations into the UK sector could have some effect on the equipment which they produce and supply to the UK offshore industry, these Regulations being:

The Provision and Use of Work Equipment Regulations SI 2306 (PUWER)
The Lifting Operations and Lifting Equipment Regulations SI 2307 (LOLER)

PUWER would be the most obvious Regulation that would apply to the type of drilling equipment supplied by AWHEM members, as the components making up these wellhead assemblies are generally accepted by the industry as coming under the overall heading of tools. However some components can also be deemed to be carrying out a lifting function and as such, Regulation SI 2307 would be applicable in such a case.



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2.0 COVERAGE AND DEFINITIONS

2.1 COVERAGE

The Regulations apply to the design, manufacture and conformity assessment of Lifting, Handling and Running Tools.

2.2 DEFINITIONS AND CLASS/CATEGORY OF LIFTING, HANDLING AND RUNNING TOOLS

2.2.1 AWHEM Class A (Running Tools)

A range of tools and apparatus, which perform only a limited lifting function, but can be shown, by analytical means, to have a design capability for lifting. Designed to run equipment/tools in/on/out of the wellbore and to carry the 'whole string' when necessary. Where lifting points for self-handling are present, these lifting points are to be in accordance with the manufacturers specifications.

PUWER applies and the equipment is subject to SI: 2306

Examples

Single Trip Multi-Purpose Tool (STMPT). This item of equipment is Primarily used as a Running Tool to run and set casing in the well; as such, the tool is designed to support the entire casing string in the well. It can be and is used to handle and move the casing hanger extension joint (a small portion of the casing string) from the catwalk up to the rig floor. This tool is designed for loads substantially greater than when used for handling purposes.

Wellhead Running Tool (WHRT). This item of equipment is Primarily used as a Running Tool to run the 20" conductor string into a pre-drilled well and is designed to support the entire 20" conductor string through the 18 3/4" Wellhead Housing. It can be and is used to handle and move the 18 3/4" Wellhead extension joint (a small portion of the casing string) alone from the catwalk up to the rig floor. This tool is designed for loads substantially greater than when used for handling purposes.

2.2.2 AWHEM Class B (Handling Tools)

- (i) Equipment designed primarily for lifting, designed for a specific task, the equipment is load rated.
- (ii) Where lifting points are utilised for both self-handling and load carrying, the design of these points must be capable of handling the load of the tool itself plus its maximum supported load.
- (iii) Where lifting points are utilised solely for self-handling and nothing else, these points must be capable of handling the load of the tool itself.

LOLER applies, limited to regulations listed, and the equipment is subject to SI: 2307.

Regulation 4(b) - in this application strength only would be considered.

Regulation 7(a) plus (c) - appropriate component hard marking will be applied



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Regulation 9(3), (ii) & (iii) – adequate information will be supplied to enable a thorough examination to be carried out.

Examples

- (i) **Tree Lift Cap.** The sole purpose of this item of equipment is for Handling and Transportation of Subsea Xmas Trees to and around the rig, and is designed accordingly for the loads involved. It is not used for running purposes.
- (ii) **Wellhead Running Tool Handling Skid.** The sole purpose of this item of equipment is for Handling and Transportation of Subsea Wellhead Running Tools to and around the rig, and is designed accordingly for the loads involved. It is not used for running purposes.
- (iii) **Retrievable Guide Base.** The sole purpose of this item of equipment is for the correct locating and mounting of sub-sea components, stacked one on top of the other. It is not used for lifting or running purposes.

2.2.3 AWHEM Class C (Lifting Tools/Equipment)

Equipment designed solely for lifting. The equipment is load rated.

LOLER applies, in its entirety, and the equipment is subject to SI:2307

Examples

Transportation and Shipping Basket for miscellaneous components

2.3 MARKING

All new Class A and B equipment manufactured in accordance with this interpretation after the Date of Revision shown in the footer of this document shall be hard marked.

The hard marking, where applicable, shall consist of:

either

AWHEM Class A. (see 2.2.1)

or

AWHEM Class B, plus the **Rated Load.** (see 2.2.2)

Class A and B equipment shall be hard marked, and the absence of that hard marking shall, by implication, indicate that the equipment is Class C.

Existing equipment will need to comply with this Guidance Document within two years of the Date of Revision of this document, as shown in the footer.

This provision is not intended to indicate in any way that existing equipment is not safe or fit for purpose.