

AWHEM CLASSIFICATION OF HANDLING AND RUNNING TOOLS IN ACCORDANCE WITH UK HEALTH AND SAFETY STATUTORY INSTRUMENTS 2307 (LOLER) AND 2306 (PUWER)

GUIDANCE DOCUMENT GD 03-01

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**Association of Well Head
Equipment Manufacturers
Post Office Box 1166
Bellaire, Texas 77401**





**ASSOCIATION OF WELL HEAD
EQUIPMENT MANUFACTURERS**

PO Box 18265, Howe Moss Avenue, Aberdeen, Scotland, AB21 0UJ

GUIDANCE DOCUMENT

ON THE

AWHEM CLASSIFICATION OF

HANDLING AND RUNNING TOOLS

IN ACCORDANCE WITH

UK HEALTH AND SAFETY

STATUTORY INSTRUMENTS

2307 (LOLER) AND 2306 (PUWER)

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TABLE OF CONTENTS

FOREWORD

- 1.0 Introduction
- 2.0 Reference Documents
- 3.0 Coverage, Classification, Application, and Identification
- 4.0 Appendix

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 this document, it will be complying with current legislation in all respects. Consequently, AWHEM and its members cannot be held liable for failure to observe relevant legislation.
- b. This document is limited to the consideration of the design and classification of products used for lifting and handling.
This document does not extend to the use of the product nor the competency of the personnel involved in its use.
- c. All conditions, warranties, terms and undertakings expressed or implied, statutory or otherwise, in respect of this Interpretation are hereby excluded.



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- d. AWHEM shall not be liable to any person who follows the provisions of this Interpretation for damages, costs expenses, loss of profits, goodwill or any type of special indirect or consequential loss howsoever rising (and whether by any act, omission or negligence of AWHEM or its members), including any loss or damage suffered by a person following this Interpretation as a result of any action brought by a third party.
- e. It is a condition of use of this Interpretation that this entire **POLICY** statement section is brought to the attention of:
 - 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.

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



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1.0 INTRODUCTION

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 1998 SI No. 2306 (PUWER)
The Lifting Operations and Lifting Equipment Regulations 1998 SI No. 2307 (LOLER)

The HSE members on the Task Group have noted 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, etc. However, as with many goal-setting Regulations, there is the possibility of differing interpretations. 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.

Therefore, in order that both the offshore drilling industry and the HSE industry regulators, 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 has produced this guidance document.

2.0 REFERENCE Documents

2.1 [Statutory Instrument 1998 No. 2306](#) The Provision and Use of Work Equipment Regulations 1998 (PUWER)

2.2 [Statutory Instrument 1998 No. 2307](#) The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

3.0 COVERAGE, CLASSIFICATION, APPLICATION, and IDENTIFICATION

3.1 COVERAGE

It is the opinion of AWHEM that the referenced statutory regulations apply to the design, manufacture and conformity assessment of Lifting, Handling and Running Tools.

3.2 CLASSIFICATION OF LIFTING, HANDLING AND RUNNING TOOLS



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3.2.1 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.

3.2.2 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

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.



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- (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.

3.2.3 **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

3.3 **APPLICATION**

3.3.1 **NEW MANUFACTURE/NEW TOOL DESIGN**

GUIDANCE ON THE PROCESSES TO BE CONSIDERED WHEN MANUFACTURING NEW TOOLS ARE INCLUDED IN THE APPENDIX IN **CHART 1**.

3.3.2 **EXISTING EQUIPMENT AND WORK IN PROGRESS**

GUIDANCE ON THE PROCESSES TO BE CONSIDERED WHEN REVIEWING EXISTING EQUIPMENT OR WORK IN PROCESS ARE INCLUDED IN THE APPENDIX IN **CHART 2**.

3.4 **IDENTIFICATION**

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 permanently identified.

The identification, where applicable, shall consist of:

either

AWHEM Class A. (see 3.2.1)

or

AWHEM Class B, plus the Rated Load. (see 3.2.2)

Class A and B equipment shall be permanently identified, and the absence of that identification shall, by implication, indicate that the equipment is Class C or that an evaluation to Class A or B has not been performed.

For equipment manufacturers choosing to comply with this Guidance Document, existing equipment shall 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.



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4.0 APPENDIX

4.1 CHART 1

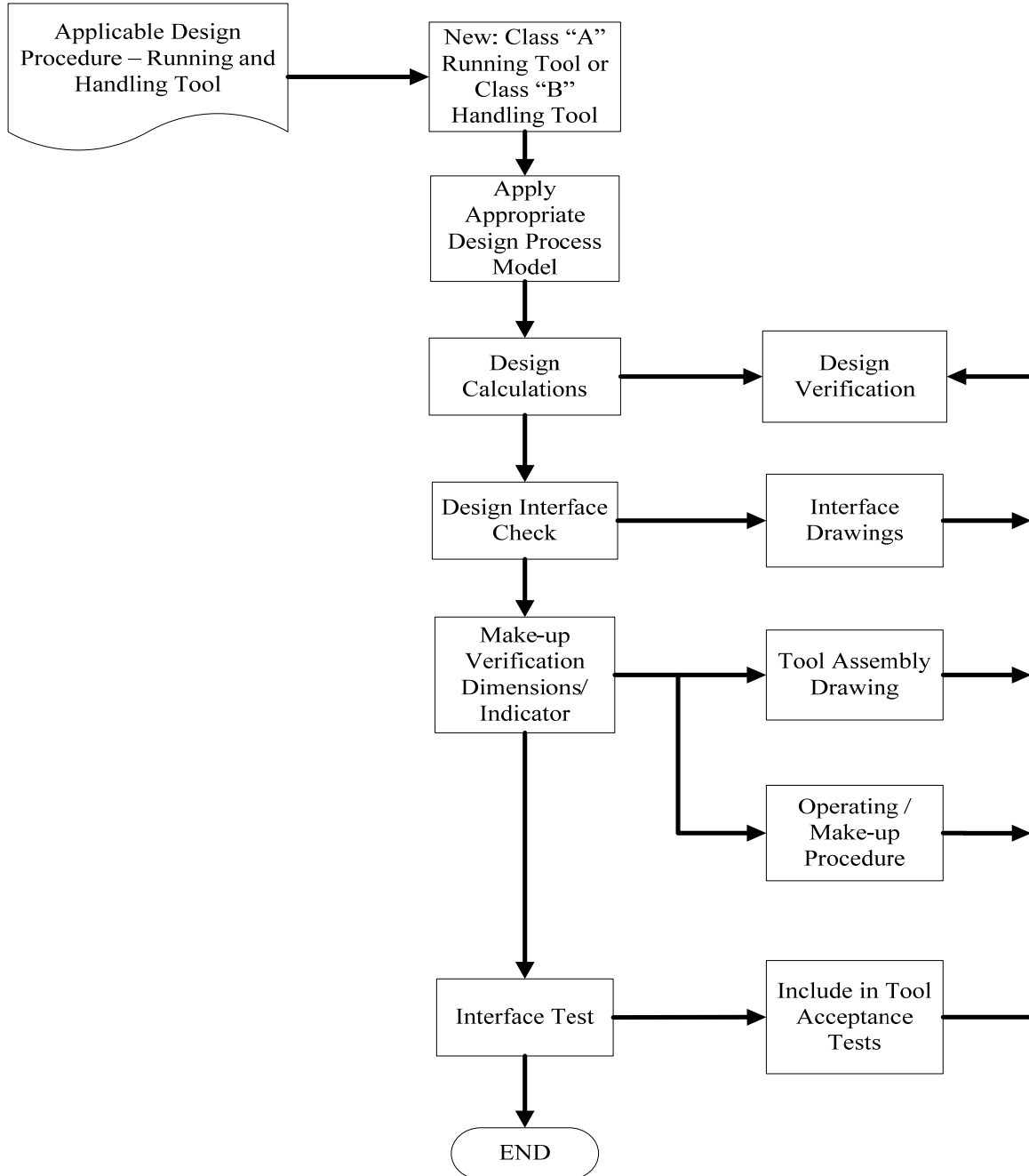
4.2 CHART 2



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Process Flow Chart for New Manufacture/New Tool Designs Chart 1





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Process Flow Chart for Existing Equipment & Work in Progress Chart 2

