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INDEX

**TRANSACTIONS OF
TECHNICAL MEETINGS
AND CONFERENCES
1977—1978 SESSION**

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INTRODUCTION

This Index covers volume 90 of the Transactions, and the Proceedings of the conferences held in the 1977-78 session. Conference Proceedings are not issued with the annual volume of Transactions, but they are available for sale or loan from the Institute. The three sections of the Index and the instructions for use are described below.

SECTION 1. LIST OF PAPERS

This is a complete list of papers presented during the year at the Institute's Evening Meetings and Conferences. The Conferences do not form part of the annual volume of Transactions but they can be obtained from the Institute as separate publications. The entry for each paper consists of a full bibliographical description and a code number.

The code numbers are used in both the Author and Subject Indexes. Papers presented at the Evening Meetings have been given code numbers which indicate the volume number, the series, the part number and the number of the paper within the part.

V90	/A	-1	(1)
Volume 90	Series A	Part 1	Paper 1

Conferences, which are collectively known as "Series B", have been assigned their initial letters as a code. The number following these initials indicates the paper number within the conference.

CD	/1
Component Design for High Pressure Charged Diesel Engines	Paper 1

SECTION 2. AUTHOR INDEX

The authors of the papers are listed alphabetically; the codes which follow the names refer to the List of Paper Numbers.

To find paper written by a particular author:

- (1) Turn to the Author Index.
- (2) Note the code numbers adjacent to the names.
- (3) Look for the code numbers in the List of Papers; this will provide full bibliographical descriptions and the locations.

SECTION 3. SUBJECT INDEX

The contents of each paper have been summarized as a series of keywords. These have been arranged in chains. The terms included within the chains might describe a concept which requires greater explanation than a single keyword can offer, or alternatively they might show that several aspects of a concept are discussed in the paper. Chains are punctuated by the symbol "\$": keywords are separated by the symbol ":".

For example, an entry for the paper "Metallurgy of Inert Gas Systems" by M. Levens reads:

INERT GAS SYSTEMS : Very Large Crude Carriers : Cargo Tanks \$ Scrubbing Towers : Pipes : Materials \$ Metallurgy : Corrosion : Acids. **V90/A-1 (1)**

This would indicate that the paper describes inert gas systems for use in V.L.C.C. with reference to the metallurgy of the materials used for the construction of the constituent elements.

To find paper on a given subject:

- (1) Turn to the Subject Index.
- (2) Think of the terms which best describe your subjects; as a general rule it is better to work from the broadest to the most specific.
- (3) Note the Code numbers.
- (4) Look for the code numbers in the List of Papers; this will provide full bibliographical descriptions and the locations.

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- V90/A-1 (1) LEVENS, M.**
Metallurgy of inert gas systems.
Volume 90, Series A. Part 1, Paper 1. Pages 1-24.
Shell International Marine Ltd.
- V90/A-2 (1) MAJOR, T. W.**
Running and maintenance of a fleet of bulk carriers and general cargo carriers.
Volume 90, Series A. Part 2, Paper 1. Pages 25-71.
Sir William Reardon Smith and Sons Ltd.
- V90/A-2 (2) GEE, P. H. and HOLBROOK, R. P.**
Specialist ships—pipe systems and pumping arrangements.
Volume 90, Series A. Part 2, Paper 2. Pages 72-116.
Lloyd's Register of Shipping.
- V90/A-3 (1) SLAUGHTER, A. P. W.**
Marine application of thermal fluid heating.
Volume 90, Series A. Part 3, Paper 1. Pages 117-136.
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A review of the causes of cylinder wear in marine diesel engines.
Volume 90, Series A. Part 3, Paper 2. Pages 137-163.
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- V90/A-4 (1) SINCLAIR, C. A. and MARSHALL, A. D.**
Modern ship salvage.
Volume 90, Series A. Part 4, Paper 1. Pages 165-196.
The Salvage Association.
- V90/A-4 (2) HILL, E. C.**
Microbial degradation of marine lubricants—its detection and control.
Volume 90, Series A. Part 4, Paper 2. Pages 197-216.
University College, Cardiff.
- V90/A-5 (1) GROSSMAN, K. G.**
A realistic advanced steam cycle for ships.
Volume 90, Series A. Part 5, Paper 1. Pages 217-241.
Technical University, Berlin-West.
- V90/A-5 (2) WUHRER, W.**
C.P. propeller design considerations in respect of vibratory loads.
Volume 90, Series A. Part 5, Paper 2. Pages 242-260.
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- V90/A-6 (1) MEARNS, G. M.**
Dynamic positioning, its application to offshore craft.
Volume 90, Series A. Part 6, Paper 1. Pages 261-292.
Planning Associates Ltd.
- V90/A-6 (2) FLISING, A.**
Noise reduction in ships.
Volume 90, Series A. Part 6, Paper 2. Pages 292-320.
Swedish Ship Research Association.
- V90/A-7 (1) FAGERLAND, H., ROTH AUG, K. and TOKLE, P.**
Monitoring and diagnosing process deviations in marine diesel engines.
Volume 90, Series A. Part 7, Paper 1. Pages 321-349.
Ship Research Institute of Norway.
- V90/A-7 (2) DONALD, K. M. B.**
Cargo oil pump installations—some aspects of design and operation and problems encountered.
Volume 90, Series A. Part 7, Paper 2. Pages 350-372.
Lloyd's Register of Shipping.

The following papers which were presented at conferences can be obtained from the Institute as separate publications.

Proceedings of the Conference on Component Design for High Pressure Charged Diesel Engines. The Institute of Marine Engineers, London, 1978.

CD/1 HOLT, J. S. and PARSONS, S.
Diesel engine component analysis by finite element methods.
Component Design Conference, Paper 1, Pages 1-12.
Department of Mechanical Engineering, University of Leeds.

CD/2 NISHIHARA, M. and FUKUI, Y.
Fatigue properties of full scale forges and cast steel crankshafts.
Component Design Conference, Paper 2, Pages 13-25.
Kobe Steel Ltd., Japan.

CD/3 BAKER, A. J. S. and ECONOMOU, P. N.
The lubrication of piston rings applied to highly rated engines.
Component Design Conference, Paper 3, Pages 26-36.
Esso Research Centre, Daros—Nova A.G., Switzerland.

CD/4 ¹GROSCHER, E. R., ²MARSHALL, W. G. and ²WALKER, P. T.
Fuel injection criteria.
Component Design Conference, Paper 4, Pages 37-46.
Fuel Injection Consultant, Mannheim¹, Dorman Diesels².

CD/5 IZUMI, S. and NOMURA, J.
Recent developments and applications of Mitsubishi MET-type turbochargers.
Component Design Conference, Paper 5, Pages 47-60.
Mitsubishi Heavy Industries.

CD/6 MULLER, R.
Two stage turbocharging.
Component Design Conference, Paper 6, Pages 61-68.
Brown Boveri and Co. Switzerland.

CD/7 FORBES, M. K. and LEDOYEN, M. J.
Charge air coolers for large diesel engines.
Component Design Conference, Paper 7, Pages 69-78.
Serck Heat Transfer.

Proceedings of the Conference on Steam Propulsion for Ships in the Changing Economic environment. The Institute of Marine Engineers, London, 1978.

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Introduction to Conference.
Steam Propulsion Conference, Paper 1, Page 1.

SP/2 PLATT, E. H. W.
Summary of the discussions.
Steam Propulsion Conference, Paper 2, Pages 2-3.

SP/3 EWART, W. D.
Prospects for marine steam turbines.
Steam Propulsion Conference, Paper 3, Pages 4-6.
Fairplay International Shipping Weekly.

SP/4 McCONOCHIE, N. H. and JONES, M. V.
A shipowner's comments on steam propulsion.
Steam Propulsion Conference Paper 4, Pages 7-18.
Ocean Fleets Ltd.

SP/5 LARSEN, G. A.
V.A.P. turbine plant and its economy.
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Steam propulsion for modern ships.
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Steam Propulsion Conference, Paper 9 pages 87-93.
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- SP/10** **CRAWFORD, R. G. and JONES, B. A.**
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Steam Propulsion Conference, Paper 10, Pages 94-102.
F.M.C. Corporation, U.S.A.

- SP/11** **BRYANT, R. C.**
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Steam Propulsion Conference, Paper 11, Pages 103-111.
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- SP/12** **FAGES, A. W., BRADSHAW, C. L.
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Steam Propulsion Conference, Paper 12. Pages 112-120.
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- SP/13** **PROHL, M. A., SIEGEL, B. and
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Steam Propulsion Conference, Paper 13, Pages 121-137.
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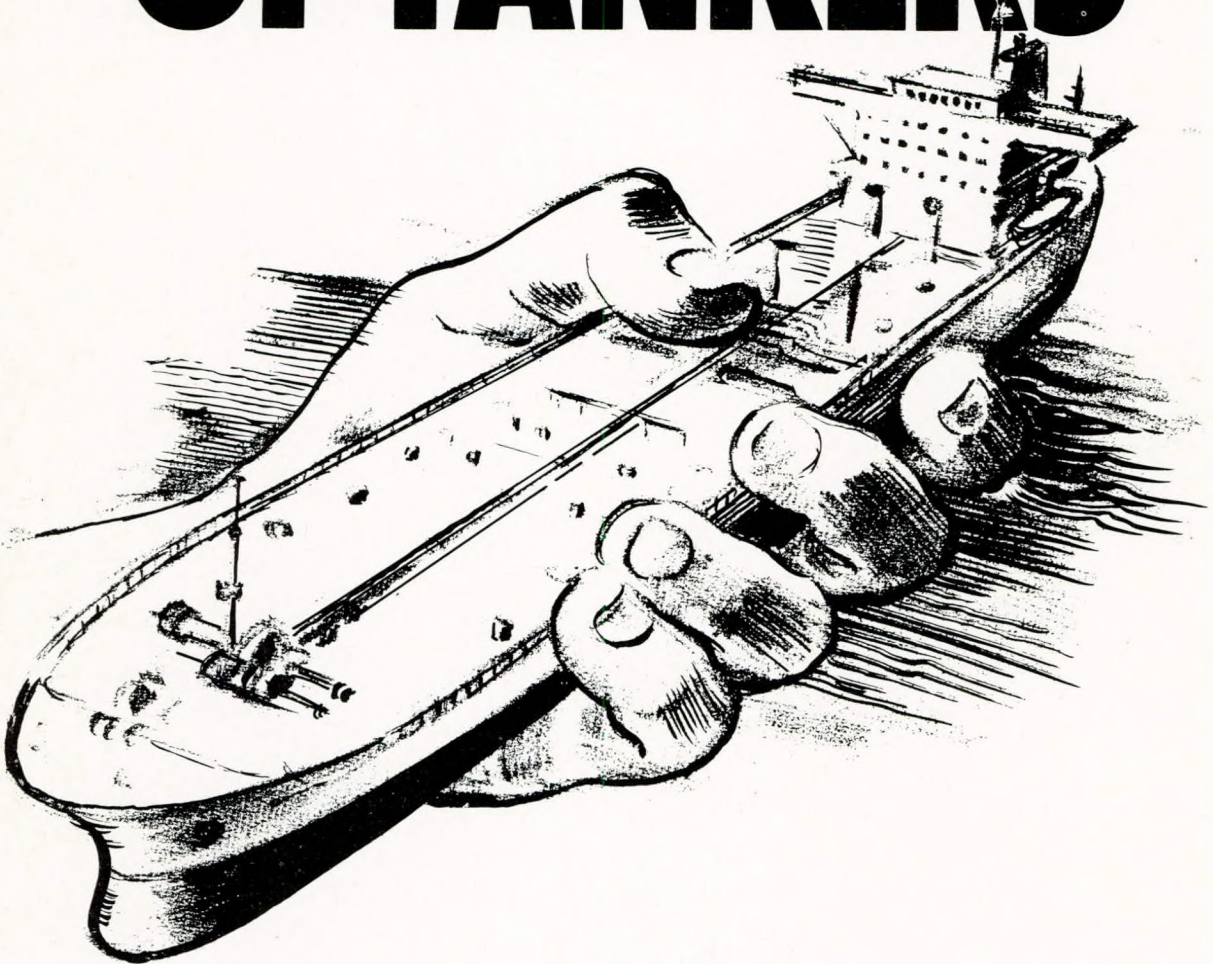
SERIES A, PART 1

1978



METALLURGY OF INERT GAS SYSTEMS

FOR THE SAFETY OF TANKERS



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Fredriksstad mek. Verksted (FMV) has more than 15 years experience in design, manufacture and installation of inert gas systems and — generators, and more than 100 years experience in shipbuilding and production of marine equipment.

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No. of retrofits completed: 50

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