

DESIGN AND CONSTRUCTION
OF AVIATION FUEL FILTER VESSELS

API/IP SPECIFICATION 1596

First edition
November 2006



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CONTENTS

	Page
Foreword	vii
Acknowledgements	viii
1 Introduction and scope	1
1.1 Introduction	1
1.2 Scope	1
2 Design requirements applicable to filter/water separator, filter monitor and microfilter vessels	3
2.1 General	3
2.2 Design code	3
2.3 Design pressure	3
2.4 Hydrostatic test pressure	3
2.5 Materials of construction	3
2.6 Piping connections	4
2.7 Ports and connections	4
2.8 Vent and pressure relief ports	4
2.9 Pressure ports	4
2.10 Access to elements	4
2.11 Work platform	5
2.12 Clean-out connection	5
2.13 Drain and sample ports	5
2.14 Element supports	5
2.15 Electrical continuity	6
2.16 Branch and port marking	6
2.17 Data plate	6
2.18 Exterior paints	6
2.19 Standard accessories	6
2.20 Drawings	7
2.21 Optional accessories	7

Contents Cont...	Page
3 Specific design requirements for filter monitor vessels	9
3.1 General	9
3.2 Hydrostatic test pressure	9
3.3 Element spacing	9
3.4 Element mounting	9
3.5 Interlock systems	10
3.6 Data plate	10
3.7 Optional accessories	10
4 Specific design requirements for filter/water separators	11
4.1 General	11
4.2 Design pressure	11
4.3 Hydrostatic test pressure	11
4.4 Spacing of elements	11
4.5 Element mounting adaptors	11
4.6 Sealing of element connections	11
4.7 Exterior	12
4.8 Data plate	12
4.9 Standard accessories	12
4.10 Optional accessories	12
5 Specific design requirements for microfilters	15
5.1 General	15
5.2 Design pressure	15
5.3 Hydrostatic test pressure	15
5.4 Element sealing	15
5.5 Element spacing	16
5.6 Element mounting	16
5.7 Data plates	16
5.8 Optional accessories	16
Annex A – Purchaser’s specification	17
Annex B – Unit conversion factors	19
Annex C – References	21

FOREWORD

This publication, which has been prepared jointly by the EI Aviation Committee and the API Aviation Technical Services Sub-Committee, is intended to provide the industry with mechanical specifications for the design and construction of aviation fuel filter vessels. Three types of vessels are covered: filter monitor, filter/water separator and microfilter vessels. A vessel characterised as "meeting the requirements of API/IP 1596" shall comply with all mandatory language in this publication appropriate to that type of vessel as distinguished by the use of the word "shall". While this provides minimum levels for selected aspects of vessel design/performance, this publication is not intended to completely describe all aspects of filter vessel performance and design relevant to successful application. It remains the responsibility of the purchaser to ensure that the vessel is fit-for-purpose in the intended application. Note that the approval of the mechanical design of a vessel is the responsibility of the purchaser.

This publication is not in any way intended to prohibit the manufacture, purchase or use of vessels meeting other requirements.

It is assumed that all users of this publication are either fully trained, or under the supervision of a responsible trained person, who is familiar with all normal engineering safety practice, and that all such precautions are being observed. Users of this publication are responsible for ensuring compliance with the requirements of locally prevailing health and safety legislation.

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It is hoped and anticipated that this publication will assist those involved in manufacturing and purchasing filter vessels. Every effort has been made by the API and the EI to assure the accuracy and reliability of the data contained in this publication; however, API and EI make no representation, warranty, or guarantee in connection with this publication and hereby expressly disclaim any liability or responsibility for loss or damage resulting from its use or for the violation of any local or regional laws or regulations with which this publication may conflict.

Suggested revisions are invited and should be submitted to the director of standards, API, 1220 L Street, N.W., Washington, D.C. 20005, or the Technical Department, Energy Institute, 61 New Cavendish Street, London, W1G 7AR.

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1

INTRODUCTION AND SCOPE

1.1 INTRODUCTION

This publication has been prepared to provide mechanical specifications for the design and construction of vessels containing filter elements used in aviation fuel handling systems.

1.2 SCOPE

This publication provides requirements for:

- Design and construction of filter vessels.
- Vessel accessories.

Although this publication is primarily intended to apply to vessels for civilian applications, many of the requirements may also be applicable to vessels intended for military use. Further advice should be sought from manufacturers for specific military applications.