

This is a preview of "ISO 10715:1997". [Click here to purchase the full version from the ANSI store.](#)

First edition  
1997-06-01

---

---

## Natural gas — Sampling guidelines

*Gaz naturel — Lignes directrices pour l'échantillonnage*



Reference number  
ISO 10715:1997(E)

This is a preview of "ISO 10715:1997". [Click here to purchase the full version from the ANSI store.](#)

## Contents

<b>1 Scope</b> .....	<b>1</b>
<b>2 Definitions</b> .....	<b>1</b>
<b>3 Principles of sampling</b> .....	<b>3</b>
<b>4 Safety precautions</b> .....	<b>5</b>
<b>5 Technical considerations</b> .....	<b>7</b>
<b>6 Materials used in sampling</b> .....	<b>10</b>
<b>7 General preparation of equipment</b> .....	<b>11</b>
<b>8 Sampling equipment</b> .....	<b>12</b>
<b>9 Spot sampling</b> .....	<b>18</b>
<b>10 Direct sampling</b> .....	<b>19</b>
<b>11 Incremental sampling</b> .....	<b>21</b>
<b>Annexes</b>	
<b>A Use of a block valve in direct sampling</b> .....	<b>23</b>
<b>B Cleaning of steel sampling cylinders</b> .....	<b>25</b>
<b>C Procedure for low-pressure sampling into glass cylinders</b> .....	<b>26</b>
<b>D Procedure for sampling by the fill-and-empty method</b> .....	<b>28</b>
<b>E Procedure for sampling by the controlled-rate method</b> .....	<b>30</b>
<b>F Procedure for sampling by the evacuated-cylinder method</b> .....	<b>32</b>
<b>G Guidelines for the calculation of the residence time</b> .....	<b>34</b>
<b>H Student's <i>t</i>-table</b> .....	<b>38</b>
<b>J Bibliography</b> .....	<b>39</b>

© ISO 1997

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization  
Case postale 56 • CH-1211 Genève 20 • Switzerland  
Internet: central@iso.ch  
X.400: c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

This is a preview of "ISO 10715:1997". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10715 was prepared by Technical Committee ISO/TC 193, *Natural gas*, Subcommittee SC 1, *Analysis of natural gas*.

Annexes A to J of this International Standard are for information only.

This is a preview of "ISO 10715:1997". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This International Standard provides guidance on all aspects of the sampling of processed natural gas. Unless otherwise stated, all pressures up to 15 MPa in this International Standard are given as gauge pressures.

The determination of the composition and the properties of the gas is highly dependent on the sampling technique. Also of great importance are the design, construction, installation and maintenance of the sampling system as well as the conditions of sample transfer and transport.

These guidelines cover sampling strategy, details of sampling methods, the choice of sampling method and sampling equipment.

This document is intended for use in those cases where sampling is not described as part of the analytical procedure.

This document concentrates on sampling systems and procedures. Analyses from the samples collected using these systems and procedures may be utilized in many different ways, including calculations to determine the calorific value of the gas stream, identification of contaminants contained in the gas stream, and compositional information to determine whether or not the stream meets contractual specifications.