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Specification

**ISO/PAS 22101-5**

**Polyethylene reinforced with short  
glass fibres (PE-sGF) piping systems  
for industrial applications —**

**Part 5:  
Fitness for purpose of the system**

*Systèmes de canalisations en polyéthylène renforcé de fibres de  
verre courtes (PE-sGF) pour les applications industrielles —*

*Partie 5: Aptitude à l'emploi du système*

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# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>2</b>
<b>4 Fitness for purpose of pipes and/or fittings assemblies</b> .....	<b>2</b>
4.1 Method of preparation of assemblies for testing.....	2
4.1.1 General.....	2
4.1.2 Electrofusion joints.....	2
4.1.3 Butt fusion joints.....	3
4.2 Requirements for fitness for purpose of the system.....	3
4.2.1 General.....	3
4.2.2 Fitness for purpose of the system for electrofusion joints.....	3
4.2.3 Fitness for purpose of the system for butt fusion joints.....	4
4.3 Conditioning.....	5
4.4 Requirements.....	5
<b>5 Design coefficient</b> .....	<b>6</b>
5.1 PE-sGF compound.....	6
<b>Bibliography</b> .....	<b>7</b>

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This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 3, *Plastics pipes and fittings for industrial applications*.

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## Introduction

Polyethylene reinforced with short glass fibres (PE-sGF) piping systems are pipe systems which consist of fittings produced by adding short glass fibres into high density polyethylene resins. Their physical and mechanical properties are influenced by short glass fibre orientation.

The technology of production of PE-sGF pipes is completely different from the traditional technology used during PE pipes extrusion. For this reason, this document makes reference to standard inside dimension ratio (SIDR). To prevent confusion, the parameter "standard dimension ratio" (SDR), commonly used for PE products, is not used in this document.

For the material subject of this document, the mechanical performances are obtained on the basis of standards dedicated to thermoplastics. The geometrical characteristics are defined for this material in line with ISO 4065.

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