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JIS K 7040 : 1998
(ISO 7510 : 1997)

**Plastics piping systems—
Glass-reinforced thermosetting
plastics (GRP) components—
Determination of the amounts
of constituents using
the gravimetric method**

ICS 23.040.20

Descriptors : thermosetting polymers, plastics, reinforcing materials, glass, pipework systems, pipes, pipe fittings, determination of content

Reference number : JIS K 7040 : 1998 (E)

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

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In the event of any doubts arising as to the contents,
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Plastics piping systems — Glass-reinforced thermosetting plastics (GRP) components — Determination of the amounts of constituents using the gravimetric method

Introduction This Japanese Industrial Standard has been prepared based on ISO 7510, *Plastics piping systems—Glass-reinforced plastics (GRP) components—Determination of the amounts of constituents using the gravimetric method* issued in 1997 without changing the technical contents.

1 Scope

This Japanese Industrial Standard specifies a method for the determination of constituent materials of a test sample cut from a glass-reinforced plastics (GRP) component intended for use in a piping system. It includes determination of resin, glass, aggregate and filler contents, and determination of the type and arrangement of the constituent glass layers.

Two burning temperatures are given, related to the stability of the glass reinforcement at elevated temperatures.

Application to other composite components should be considered in the referring standard.

2 Principle

A test piece of known size and mass is heated to burn off the resin, and the residue analysed by separating and weighing the constituents.

NOTES

1 In the case of filled laminates, especially those containing fillers of small particle size (including thixotropic agents), accurate analysis of the constituents may prove difficult. This is because of the difficulty in separating such fillers from the other constituents and the risk of some filler being lost during combustion.

2 It is assumed that the following test parameters are set by the standard making reference to this Standard:

a) whether or not the types of glass reinforcement are to be separated [see item c) of 5.6 and item h) of clause 7];

b) details of the grammage and/or presence of synthetic fibre veil, if known (see 5.8 and 6.6);