

Plastics—Glass filament reinforced plastics (GRP)—Methods of test

Method 9: Determination of pressure regression characteristics as a function of time for glass filament reinforced plastics pipes

1 SCOPE

This Standard establishes the procedure for determining linear regression coefficients of the pressure/time relationship of GRP pipes, and regression ratios based on lower confidence limits used for the determination of quality control test pressures.

2 PRINCIPLE

Test specimens are subjected to internal hydraulic pressures selected so that failure will occur within prescribed ranges of time.

3 REFERENCED DOCUMENTS

The documents below are referred to in this Standard.

AS

1349	Bourdon tube pressure and vacuum gauges
3572	Plastics—Glass filament reinforced plastics (GRP)—Methods of test
3572.1	Method 1: Preparation of glass filament reinforced plastics test specimens
3572.3	Method 3: Determination of loss on ignition of glass filament reinforced plastics
3572.4	Method 4: Determination of dimensions of glass filament reinforced plastics pipes
3572.12	Method 12: Determination of initial failure pressure and initial hoop strength of glass filament reinforced plastics pipes
3572.14	Method 14: Determination of long-term ring deflection of glass filament reinforced plastics pipe subject to constant load and environmental exposure
3572.15	Method 15: Determination of resistance to long-term strain corrosion of glass filament reinforced plastics pipes

4 APPARATUS

The following is required:

- (a) *Pressurizing system* A hydraulic system capable of producing the appropriate pressure without shock or pulsations, and capable of maintaining an accuracy of $\pm 1\%$ of the set value. A hydraulic accumulator or a pump may be used for this purpose.