

# Australian/New Zealand Standard™

## Methods of testing wool packs for greasy wool

### Method 4: Handling resistance

AS/NZS 4547.4

#### 1 SCOPE

This Standard specifies a procedure for determining the force required to continue to pull a rod through a specimen of woven fabric.

#### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2001 Methods of test for textiles

2001.1 Part 1: Conditioning procedures

2706 Numerical values—Rounding and interpretation of limiting values

#### 3 DEFINITIONS

For the purposes of this Standard, definitions below apply.

##### 3.1 Peak load

The load required to break one or more yarns. This load is registered on the chart as a peak, i.e. a value exceeding the values immediately preceding or following it.

##### 3.2 Warp test

A test in which the warp yarns of the fabric sample are broken.

##### 3.3 Weft test

A test in which the weft yarns of the fabric sample are broken.

#### 4 PRINCIPLE

A specimen of specific shape and dimensions is cut up the centre to form two wings and folded so that the wings are face-to-face. The two wings are gripped in the upper jaw of a tensile testing machine and a rod is positioned between them at the base of the cut. The rod is then pulled through the fabric by a tensile testing machine to simulate the action of handling equipment. The force required to pull the rod through the fabric is calculated from the autographic chart by averaging peak force values.

#### 5 APPARATUS

The following apparatus is required:

- (a) A tensile testing machine of the constant rate of extension type with—
  - (i) a rate of jaw separation of 200 mm per minute;
  - (ii) an autographic recorder giving a chart of force versus extension; and
  - (iii) the upper clamps or jaws holding the fabric measuring at least 70 mm × 25 mm, with the longer dimension perpendicular to the direction of application of the load.