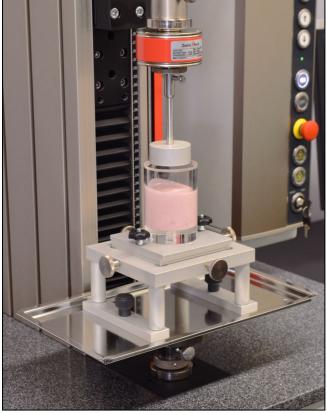


## **Product Information**

Back Extrusion Device



Back extrusion fixture

### Applications

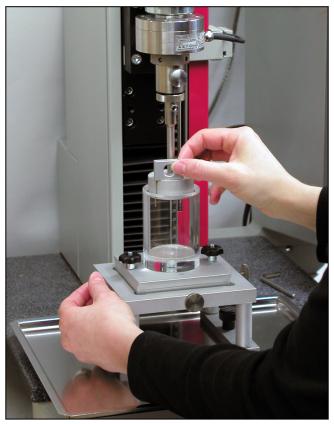
Testing the viscosity of liquid and paste-like substances

• **Specimen material:** liquid and paste-like substances (e.g. yoghurt,

sauces, oils, fruit preparations)

The principle of the back extrusion device is based on extrusion of the test material through an annulus between piston and cell.

The test substance is loaded into the cell. The piston travels downwards in the cell, thereby forcing the material upwards through the annular gap. During the return stroke of the piston the material flows back through the annulus into the space below the piston.



Setting up the back extrusion cell

#### **Advantages and features**

- The test cycle can be repeated as often as required, with freely selectable shear rates. As well as enabling optimum matching of the test to the test substance, this allows a single test to deliver viscosities over the entire shear-rate.
- Testing can also be performed directly in containers taken straight from the production line, eliminating pre-loading of the material during transfer from one container to another.
- Flow effects arising in production lines can be reproduced.
- Use of a larger annular gap allows fruit preparations to be tested also.
- Automatic pre-conditioning of the material is also possible where required.
- Adjustment aids allow the annular gap to be set quickly and easily.



# **Product Information**

**Back Extrusion Device** 

- An insert-plate with alignment pins ensures precise location of the back-extrusion cell following cleaning.
- Test results on Newtonian fluids correlate with results from measurements with rotational viscometers. Obtain reproducible, comparable test results for non-Newtonian fluids, generally with more sensitive characteristics than those obtained with rotational viscometers.



# **Product Information**

Back Extrusion Device

### **Technical data**

Туре	Back extrusion fixture	
Item No.	325832 <sup>1)</sup>	
Test load F <sub>max</sub>	500	Ν
Extrusion vessel (back extrusion cell):		
Diameter, inner	50	mm
Height	69	mm
Ambient temperature	+10 +35	°C
Connection, upper	Ø 8 mm	
Connection, lower	Universal work platform	

1) Safety guard or safety device required.

### Accessories required

#### **Die holder**

Item No.	324659	
Test load F <sub>max</sub>	1	kN
Connection, upper	Stud Ø 8 mm	
Ambient temperature	-70 +250	°C

### Extrusion die (1 x required)

Description	ArticleNumber
Ø 40 mm, cylindrical height 20 mm, tapered surface 160°, incl. adjustment aid	325834
Ø 46 mm, cylindrical height 20 mm, tapered surface 160°, incl. adjustment aid	325836
Ø 47 mm, cylindrical height 20 mm, tapered surface 160°, incl. adjustment aid	325838
Ø 48 mm, cylindrical height 20 mm, tapered surface 160°, incl. adjustment aid	325840
Ø 35/40/45 mm, Plexiglas, 3 items, approx. height 6 mm, Fmax 100 N	325842

• Universal Specimen Platform (Item No. 085019)