Double-Piston Hydraulic Sample Extruder

LT-S0115 | Controlled sample extrusion with motorized hydraulics

Proctor • CBR • Marshall • Unconfined and triaxial specimens



60 kN

HYDRAULIC EXTRUSION CAPACITY

650 / 200 mm

PRIMARY / SECONDARY PISTON STROKE

Two pistons • Adaptors for different mould and tube sizes

LT-S0115

Photographs and Instrument Components

Primary extrusion frame, secondary piston and hydraulic controls

The Double-Piston Hydraulic Sample Extruder removes compacted soil and asphalt specimens from moulds and tubes by axial force. Motorized hydraulics and two piston strokes support larger moulds and smaller specimen tubes on the same machine.

PRIMARY PISTON AND FRAME

The 650 mm stroke supports controlled removal from different mould and tube assemblies.

SECONDARY PISTON

The 200 mm stroke suits small tubes and cutters with Ø38-72 mm internal diameters.



HYDRAULIC CONTROL

The control lever manages piston movement in the motorized hydraulic system.

PRESSURE GAUGE

The manometer allows hydraulic system pressure to be monitored.



Primary piston, pushing head and upper support



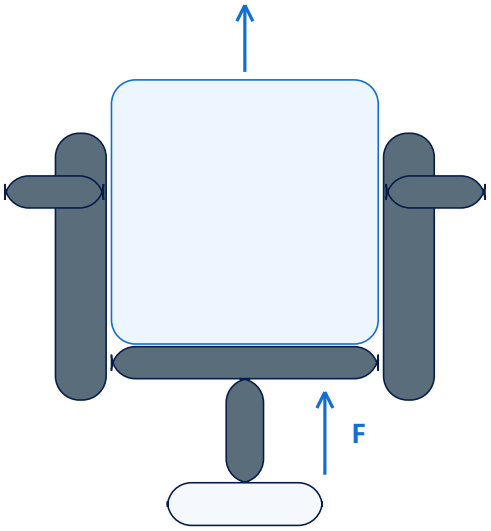
Control lever, gauge and secondary piston area

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Controlled Extrusion by Axial Force

Select adaptor • Centre mould • Advance piston • Receive specimen

HYDRAULIC PISTON + ADAPTOR + MOULD



PISTON FORCE ACTS ALONG THE SPECIMEN AXIS

MOULD SUPPORTED AROUND THE EXIT OPENING

The specimen leaves the mould as the piston advances

Prepare the extracted specimen for the next stage

REPRESENTATIVE SPECIMEN EXTRUSION SECTION • NOT TO SCALE

Select the Adaptor

Choose the piston arrangement and adaptor for the mould or tube diameter and length.

Centre and Support

Secure the mould. Align piston, adaptor and specimen along the same axis.

Extrude Gradually

Advance the piston in a controlled way. Support and receive the emerging specimen.

Support the mould or tube around an opening that permits the specimen to pass through. The hydraulic piston and suitable adaptor push the specimen axially. Correct centring and controlled movement support orderly specimen removal.

650 mm Primary and 200 mm Secondary Piston

The 650 mm primary stroke supports Proctor, CBR and Marshall specimen removal. The primary arrangement accommodates different tubes and moulds from 38 mm internal diameter to 160 mm external diameter.

The secondary piston provides 200 mm stroke for tubes and cutters with Ø38-72 mm internal diameters. This arrangement serves smaller cylindrical unconfined and triaxial soil specimens.

Adaptors and Specimen Handling

Standard adaptor diameters are 150, 100, 72, 50.8 and 38 mm. Additional sizes can be ordered separately. Check dimensional compatibility between mould, specimen and adaptor before operation.

Monitor piston alignment and specimen exit throughout extrusion. After removal, retain specimen identification and the preparation conditions required for subsequent testing.

LT-S0115

Technical Specifications and Working Ranges

LT-S0115 | Double-piston motorized hydraulic sample extruder

Parameter	Description / Specification
Product Code	LT-S0115
Hydraulic Extrusion Capacity	60 kN
Primary Piston Stroke	650 mm
Secondary Piston Stroke	200 mm
Primary Working Arrangement	From 38 mm internal to 160 mm external diameter
Secondary Tube Internal Diameter	Ø38-72 mm
Standard Adaptor Diameters	150 / 100 / 72 / 50.8 / 38 mm
External Dimensions	65 × 75 × 175 cm
Approximate Weight	350 kg
Power Supply	220 V • 50-60 Hz

Match the Piston Arrangement to Mould and Specimen Size

Use a suitable stroke and adaptor. Check mould support, specimen exit clearance and axial alignment; retain the extrusion record with specimen identification.

Hydraulic Specimen Extrusion Workflow

01
Select
Choose piston arrangement and adaptor.

02
Position
Support and centre the mould axially.

03
Advance
Advance the hydraulic piston gradually.

04
Receive
Support the specimen as it leaves the mould.

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