

**AUTOMATIC DIRECT RESIDUAL  
SHEAR MACHINE**



**SOIL**

## AUTOMATIC DIRECT RESIDUAL SHEAR MACHINE



### PRODUCT MODEL

S4180	Automatic Direct / Residual Shear Test Machine, 220-240 V 50-60 Hz
S4180/110	Automatic Direct / Residual Shear Test Machine, 110 V 60 Hz
S4180/01	Direct / Residual Shear Test Frame
G345/S5	Load Cell, 5 Kn
G340/01	Linear Potentiometric Displacement Transducer (10x0.001 mm)
G340/02	Linear Potentiometric Displacement Transducer (25x0.001 mm)
S4180/05	Digital Readout Unit and Software for Direct / Residual Shear

### STANDARDS

Standards	TS 1900-2   ASTM D3080   BS 1377-7   AASHTO T236   NF P094 071-1/2
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### INFORMATION

Manufacturer	TESTMAK INS.LAB.MAK.SAN.VE TİC. PAZ. İTH. İHR. LTD. STİ
Country of Origin	TURKEY
Product Name	Automatic Direct / Residual Shear Test Machine

## AUTOMATIC DIRECT RESIDUAL SHEAR MACHINE

### DESCRIPTION

The Testmak S4180 Automatic Direct Residual Shear Machine is capable of performing the consolidation and shearing phases of a standard direct shear and residual shear test under full automatic control.

The system consists of a computer-controlled unit that utilizes micro-stepper motors to apply the vertical and horizontal loads to the soil specimen. The system is capable of doing a consolidation process at 32 phase automatically.

Horizontal shearing can be applied at a specified rate of deformation or at a specified rate of horizontal force change, or at a specified set of force steps of a specified duration.

The system is capable of displaying the current status of a test and graphically portraying the progress of the test in real time. The system includes the capability for the operator to alter the test process and conditions at any stage of the test.

**The Automatic Direct Residual Shear Test Machine is supplied complete with;**

Load Cell 5 kN

Linear Potentiometric Displacement Transducer (10x0.001 mm)

Linear Potentiometric Displacement Transducer (25x0.001 mm)

Software

Shearbox Assemblies, Slotted Weight Set and other optional accessories including cutting ring and extrusion dolly should be ordered separately

**ACCESSORIES FOR DIRECT RESIDUAL SHEAR MACHINE ( Should be ordered separately )**

- S4182 Shear Box Assembly, 60x60 mm
- S4182/01 Specimen Cutter, 60x60 mm
- S4182/02 Extrusion Dolly, 60x60 mm
- S4183 Shear Box Assembly, Ø 60 mm
- S4183/01 Specimen Cutter, Ø 60 mm
- S4183/02 Extrusion Dolly, Ø 60 mm
- S4184 Shear Box Assembly, 100x100 mm
- S4184/01 Specimen Cutter, 100x100 mm
- S4184/02 Extrusion Dolly, 100x100 mm
- S4185 Shear Box Assembly, Ø 100 mm
- S4185/01 Specimen Cutter, Ø 100 mm
- S4185/02 Extrusion Dolly, Ø 100 mm
- S4186 Shear Box Assembly, Ø 2.5 inch
- S4186/01 Specimen Cutter, Ø 2.5 inch
- S4186/02 Extrusion Dolly, Ø 2.5 inch
- S4180/W50 Slotted Weight Set, 50 kg (4x10 kg + 1x5 kg + 2x2 kg + 1x1 kg)

Technical Specification	
Maximum Shear Force	5 kN (5000 N)
Speed Range	0.00001 to 10,00 mm/min
Horizontal Travel	30 mm
Maximum Vertical Load	0 to 500 N
Dimensions	500x1250x1250 mm
Weight (approx)	120 kg
Power	1100 W





**TM TEST MAK**  
**MATERIAL TEST EQUIPMENTS**

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