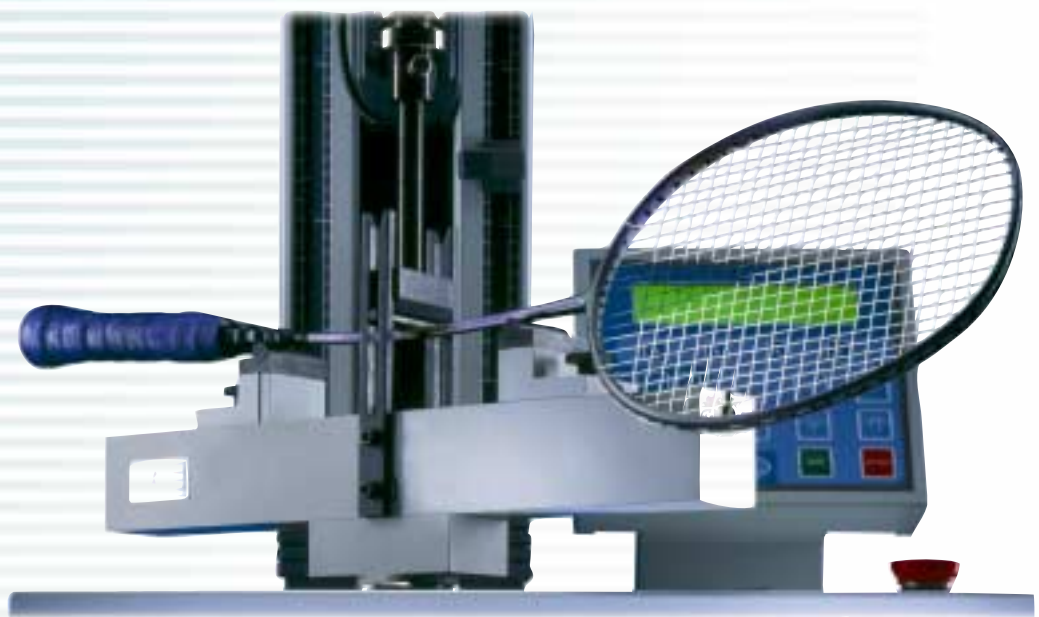


FLEXURAL GRIPS



SPECIFICATION
SS-MT-6403-0101
January 2001

INTERNET
www.ametek.com
www.chatillon.com
www.lloyd-instruments.co.uk

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TG29: Three Point bend Jig

Description

Three Point Flexural Jig Operating in compression only. Specimen supports of 10mm, 15mm, 20mm and 25mm (0.4, 0.6, 0.8, 1.0 in) diameter are supplied as standard.

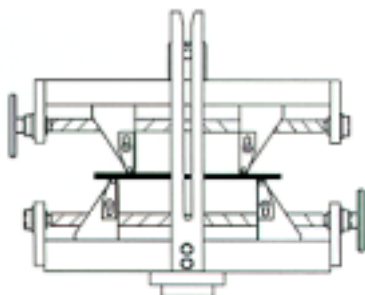
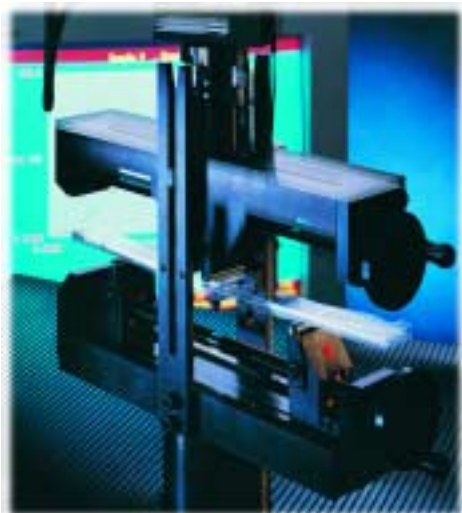
Specification

Maximum Capacity	30 kN at 200 mm	6744 lbs at 7.9 in
Minimum Load Cell	100 N	22.5 lbs
Max Sample Width	100 mm	4.0 in
Eye End Diameter	31.7 mm	1 1/4 in
Weight	11 Kg	24.3 lb
Temperature Limits	Ambient	
Span Adjustment	20 - 550 mm	0.79 - 21.7 in
Span Support Diameter	10, 15, 20, 25 mm	0.4, 0.6, 0.8, 1.0 in

Applications

Determining the flexural properties of rigid and semi-rigid materials such as glass, ceramics, composites, wood and rigid plastics, etc...in the form of rectangular bars of standard or non-standard dimensions, moulded directly or cut from sheets or other shapes. The following properties can be determined:

- Flexural Stress at a given time of test
- Flexural Stress at the conventional deflection
- Flexural Stress at Maximum Load
- Flexural Stress at Rupture
- Apparent Modulus of Elasticity in Flexure



TG180: Three and Four Point Bend Jig

Description

Three and Four point flexural jig, supplied with specimen supports of 6.35mm (1/4 inch) diameter, operating in compression only with single screw span adjustment. Displacement measurement is achieved by using a high precision LVDT device. The LVDT requires a +10V power supply which is provided by the LR Series machine. Older machines will require the output connections to be reversed. Note that the LRX will require the optional extensometer amplifier kit 01/2252

Specification

Maximum Capacity	10 kN	2248 lbs
Minimum Load Cell	500 N	112 lbs
Max Sample Width	30 mm	1.2 in
Eye End Diameter	15.85 mm	5/8 in
Weight	8 Kg	17.6 lb
Temperature Limits	Ambient	
Span Adjustment	10 - 150 mm	0.4 - 6.0 in

Applications

Determining the flexural properties of rigid and semi-rigid materials such as glass, ceramics, composites, wood and rigid plastics, etc...as above.

TG18: Three Point Bend Jig

Description

Three Point Flexural Jig Operating in compression only. Specimen supports of 1mm, 4mm and 10mm (0.04, 0.16, 0.4 in) diameter are supplied as standard.

Specification

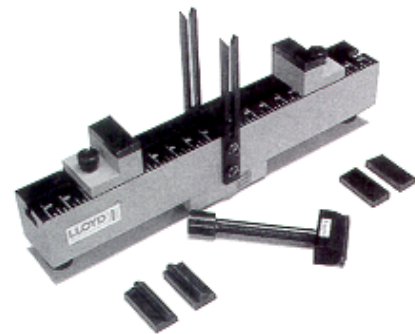
Maximum Capacity	5 kN at 400 mm	1124 lbf at 15.7 in
Minimum Load Cell	50 N	11.2 lbf
Max Sample Width	50 mm	2.0 in
Eye End Diameter	15.85 mm	5/8 in
Weight	5 Kg	11 lb
Temperature Limits	Ambient	
Span Adjustment	10 - 400 mm	0.4 - 15.7 in
Span Support Diameter	1,4,10 mm	0.04, 0.16, 0.4 in



Applications

Determining the flexural properties of rigid and semi-rigid materials such as glass, ceramics, composites, wood and rigid plastics, etc...in the form of rectangular bars of standard or non-standard dimensions, moulded directly or cut from sheets or other shapes. The following properties can be determined:

- Flexural Stress at a given time of test
- Flexural Stress at the conventional deflection (Flexural Stress at deflection X a preset figure determined by the standard used)
- Flexural Stress at Maximum Load
- Flexural Stress at Rupture
- Apparent Modulus of Elasticity in Flexure (modulus of elasticity determined by flexure test)



TG62: Heavy Duty Three Point Bend Jig

Description

Heavy Duty Three Point Flexural Jig operating in compression only, for performing unidirectional bending tests on rigid and semi rigid materials. Supplied with specimen supports of 10mm (0.4 in) diameter. A four point bend adaptor kit (TG62/4) is available to order.

Specification

Maximum Capacity	100kN	22481 lbf
Minimum Load Cell	500N	112.4 lbf
Max Sample Width	150mm	6.0 in
Eye End Diameter	31.7mm	1 1/4 in
Weight of Blade	4.5Kg	10 lb
Temperature Limits	Ambient	
Span Adjustment	20 - 300mm	0.8 - 11.8 in

Applications

Determining the flexural properties of rigid and semi-rigid materials such as glass, ceramics, composites, wood and rigid plastics, etc...as above.



TG362: Heavy Duty Three Point Bend Jig

Description

Heavy Duty Three Point Flexural Jig operating in compression only, for performing unidirectional bending tests on rigid and semi rigid materials. A four point bend adaptor kit (TG62/4) is available to order.

Specification

Maximum Capacity	300 kN	67443 lbf
Minimum Load Cell	1 kN	225 lbf
Max Sample Width	100 mm	4.0 in
Eye End Diameter	31.7mm	1 1/4 in
Weight of Blade		
Temperature Limits	Ambient	
Span Adjustment	25 - 550mm	1.0 - 21.7 in

Applications

Determining the flexural properties of rigid and semi-rigid materials such as glass, ceramics, composites, wood and rigid plastics, etc...in the form of rectangular bars of standard or non-standard dimensions, moulded directly or cut from sheets or other shapes. The following properties can be determined:

- Flexural Stress at a given time of test
- Flexural Stress at the conventional deflection
- Flexural Stress at Maximum Load
- Flexural Stress at Rupture
- Apparent Modulus of Elasticity in Flexure (modulus of elasticity determined by flexure test)

ORDERING INFORMATION

Model	Part No.	Description
TG29	01/1894	Three Point Bend Flexural Jig (30 kN - 6744 lbf Max)
TG180	01/1953	Three & Four Point Bend Flexural Jig (10 kN - 2248 lbf Max)
TG18	01/1511	Three Point Bend Flexural Jig (5 kN - 1124 lbf Max)
TG62	01/1112	Heavy Duty Three Point Bend (100 kN - 22481 lbf Max)
TG362	01/2544	Heavy Duty Three Point Bend (300 kN - 67443 lbf Max)
TG62/4	01/1677	Four Point Bend Conversion Kit for TG62 & TG362



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