

COMPRESSION PLATENS



SPECIFICATION
SS-MT-6402-0101
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INTERNET
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www.chatillon.com
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TG86: Square Low Force Direct Compression Platens

Description

Square direct compression platens for performing General purpose low force compression tests.

Specification

Maximum Capacity	500 N	112 lbf
Minimum Load Cell	20 N	4.5 lbf
Maximum Sample Dimensions	50 x 50 mm	2.0 x 2.0 in
Load Cell Fitting (screw)	9.52 mm	0.4 in
Weight of Upper Platten	<0.1 Kg	0.2 lb
Temperature Limits	-70°C +200°C	
Screw Thread	3/8 - 24 UNF	



Applications (TG86 & TG87)

Low force compression testing for small components for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Strength
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain

TG87: Circular Low Force Direct Compression Platens

Description

Circular direct compression platens for performing General purpose low force compression tests.

Specification

Maximum Capacity	500 N	112 lbf
Minimum Load Cell	20 N	4.5 lbf
Maximum Sample Diameter	36mm	1.4 in
Load Cell Fitting (screw)	9.52mm	0.4 in
Weight of Upper Platten	<0.1 Kg	<0.2 lb
Temperature Limits	-70°C +200°C	
Screw Thread	3/8 - 24 UNF	



TG166 & TG61: Rectangular Direct Compression Platens

Description

Rectangular direct compression platens for samples up to 400mm x 300mm. Not for use with LRX machines.

Specification

Maximum Capacity (TG61)	10 kN	2248.1 lbf
Maximum Capacity (TG166)	30 kN	6744.3 lbf
Minimum Load Cell	1 kN	225 lbf
Max Sample Dimensions	400 X 300 mm	15.7 x 11.8 in
Eye End Diameter	31.7 mm	1.25 in
Weight of Upper Platten	9.0 Kg	20 lb
Temperature Limits	Ambient	

Applications

General compression testing for a wide range of materials and products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain

TG36: Rectangular Direct Compression Platens

Description

Rectangular direct compression platens for samples up to 175mm x 115mm (6.9 x 4.5 in)

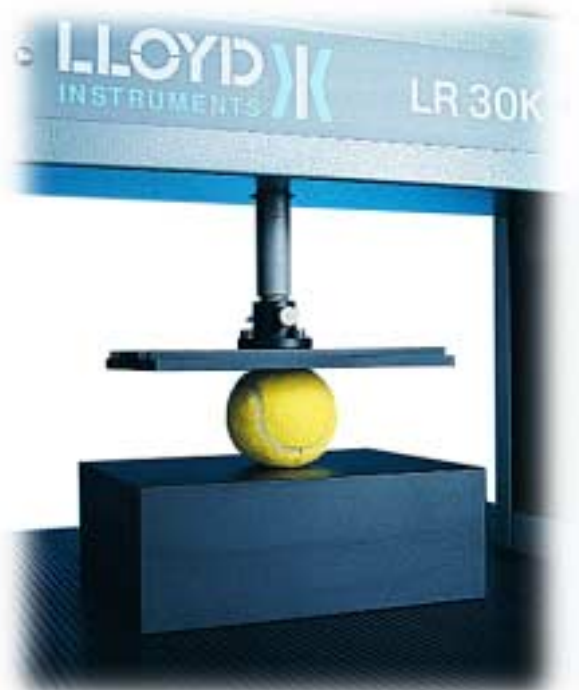
Specification

Maximum Capacity	5 kN	1124 lbf
Minimum Load Cell	50 N	11.3 lbf
Max Sample Dimensions	175 x 115 mm	6.9 x 4.5 in
Eye End Diameter	15.85 mm	0.62 in
Weight of Upper Platten	0.6 Kg	1.3 lb
Temperature Limits	Ambient	

Applications

General compression testing for a wide range of materials and products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain



TG162: Circular Compression Jig with Linear Bearing Guides

Description

Circular compression jig with linear bearing guides to maintain parallel alignment of face plates.

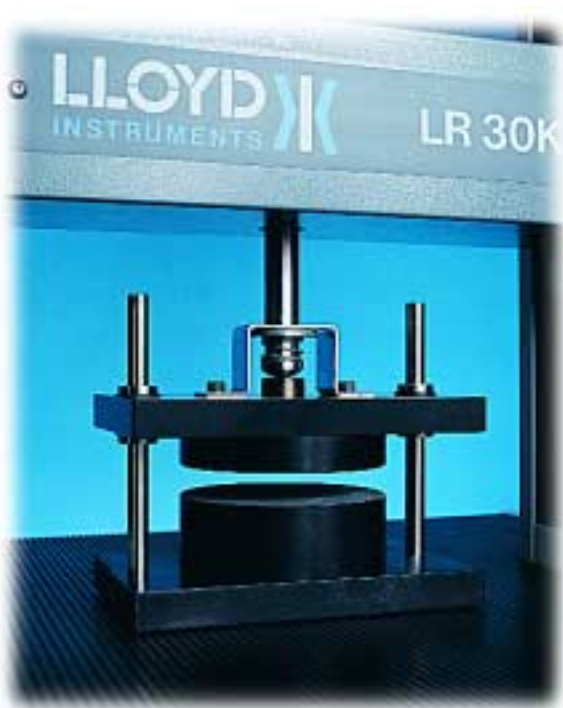
Specification

Maximum Capacity	2.5 kN	562 lbf
Minimum Load Cell	100 N	22.5 lbf
Max Sample Diameter	115 mm	4.5 in
Eye End Diameter	31.7 mm	0.62 in
Weight of Upper Platten	2.5 Kg	5.5 lb
Temperature Limits	Ambient	

Applications

Compression testing of corrugated cardboard and paper products. A test piece of corrugated cardboard or paper is placed between the platens of a crush tester with the flutes perpendicular to the platens. It is then subjected to compression until failure. The maximum force sustained by the test piece is measured.

Note: The platens may be faced with a very fine abrasive paper, but where this is done, care must be taken to ensure the faces remain flat and parallel.



TG63: Circular Direct Compression Platens

Description

Circular direct compression platens for samples up to 80mm (3.1 in) diameter.

Specification

Maximum Capacity	100kN	22481 lbf
Minimum Load Cell	500N	112.4 lbf
Max Sample Diameter	80mm	3.1 in
Eye End Diameter	31.7mm	1.25 in
Weight Each	5Kg	11.0 lb
Temperature Limits	-70°C +300°C	

Applications

General compression testing for a wide range of materials and products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain





TG64: Circular Direct Compression Platens

Description

Circular direct compression platens for samples up to 150mm (6.0 in) diameter.

Specification

Maximum Capacity	100 kN	22481 lbf
Minimum Load Cell	500 N	112.4 lbf
Maximum Sample Diameter	150 mm	6.0 in
Eye End Diameter	31.7 mm	1.25 in
Weight Each	5.2 kg	11.5 lb
Temperature Limits	-70°C +300°C	

Applications

General compression testing for a wide range of materials and finished products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain

TG67: Circular Linear Compression Platens

Description

Circular 50mm (2.0 in) diameter compression cage for machines operating in tension and compression, or tension only. Suitable for use in furnaces and thermal cabinets.

Specification

Maximum Capacity	20 kN	4496.2 lbf
Minimum Load Cell	100 N	22.5 lbf
Maximum Sample Diameter	50 mm	2.0 in
Eye End Diameter	15.85 mm	0.62 in
Weight	3.8 Kg	8.4 lb
Temperature Limits	-70°C +300°C	

Applications

General compression testing for a wide range of materials and finished products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Strength
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain



TG364: Heavy Duty Circular Compression Platens

Description

Round Compression Platens for large samples up to 200mm (7.9 in) in diameter.

Specification

Maximum Capacity	300 kN	67443.0 lbf
Minimum Load Cell	5 kN	1124.0 lb
Max Sample Diameter	200 mm	7.9 in
Eye End Diameter	31.7 mm	1.25 in
Weight Each	18 Kg	40 lb
Temperature Limits	-70°C +250°C	



TG336: Heavy Duty Square Compression Platens

Description

Square compression platens for large samples up to 500 x 500 mm (19.7 x 19.7 in)

Specification

Maximum Capacity	300kN	67443.0 lbf
Minimum Load Cell	5 kN	1124.0 lbf
Max Sample Diameter	500 x 500mm	19.7 x 19.7 in
Eye End Diameter	31.7mm	1.25 in
Weight Each	45 kg	99 lb
Temperature Limits	-70°C +250°C	

Applications (TG336 & TG364)

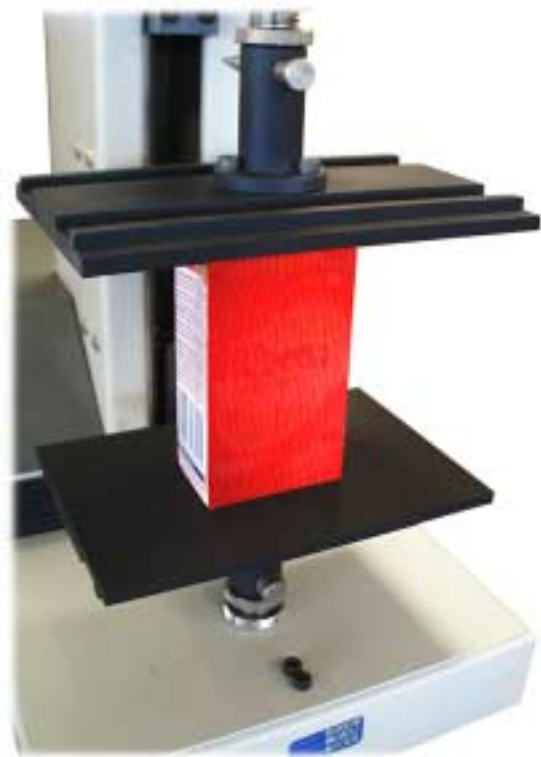
High force compression testing of foams, boards, composites, metals, wood, packaging etc (TG336). High force compression testing of springs, tubes, cement, composites, ceramics, castings etc (TG364) for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain



Compression Frames

A complete range of compression cages are available to order depending on individual requirements and specification. For further information please contact your nearest office.



TG37: Rectangular Direct Compression Platens

Description

General purpose rectangular direct compression platens for samples up to 175mm x 115mm (6.9 x 4.5 in.) Designed for use with the LF500 machine. The lower platen fits onto the lower eye end of the machine.

Specification

Maximum Capacity	500 N	112.4 lbf
Minimum Load Cell	50 N	11.3 lbf
Max Sample Dimensions	175 x 115 mm	6.9 x 4.5 in
Eye End Diameter	15.85 mm	0.62 in
Weight of Upper Platten	0.6 Kg	1.3 lb
Temperature Limits	Ambient	

Applications

General compression testing for a wide range of materials and products for the purpose of determining one or more of the following compressive properties:

- Compressive Yield Stress
- Compressive Strength
- Offset Yield Stress
- Percentage Compressive Strain at Compressive Yield Stress
- Percentage Compressive Strain at Rupture
- Compressive Stress at Specified Compressive Strain

ORDERING INFORMATION

Model	Part No.	Description
TG86	01/1143	Low Force, Square Compression Platens
TG87	01/1144	Low Force, Round Compression Platens
TG61	01/1109	Rectangular Direct Compression Platens - 10 kN (2248 lbf)
TG166	01/1383	Rectangular Direct Compression Platens - 30 kN (6744 lbf)
TG36	01/1136	Rectangular Direct Compression Platens - 5 kN (1124 lbf)
TG67	01/2014	Circular Direct Compression Platens- 20 kN (4496 lbf)
TG64	01/1101	Circular Direct Compression Platens- 100 kN (22481 lbf)
TG162	01/1664	Circular Compression Jig with Linear Bearing Guides - 2.5 kN (562 lbf)
TG63	01/1100	Circular Direct Compression Platens- 100 kN (22481 lbf)
TG336	01/2464	Heavy Duty Square Compression Platens - 300 kN (67443 lbf)
TG364	01/2353	Heavy Duty Round Compression Platens - 300 kN (67443 lbf)
TG37	01/2749	Rectangular Direct Compression Platens - 500N (112.4 lbf)



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