

## Compression Platens | W-2004 and W-2005 Series

Instron® Industrial Series Compression Platens are designed to maximize compression testing performance. These high-strength, versatile platens are available in both plane and self-aligning models, and can be easily configured with Instron and other static universal testing machines.

### Features and Benefits

- A spherical seat equal to the platen diameter offers optimal balance of rigidity and self-alignment, ensuring uniform specimen loading (W-2005 Series)
- Full 4° angular tilt around the entire platen diameter provides compensation for test specimens with non-parallel surfaces (W-2005 Series)
- Concentric circles assist the user in properly centering the test specimen for axial alignment (W-2004 Series)
- Through-hardened steel resists wear and deformation, and allows for re-surfacing as permitted by test standards, without compromising strength and loading characteristics
- Standard compression platen mounting options offer quick and easy installation

### Standards

Compression platen combinations can be configured to comply with the following test standards:

- ASTM C39, C67, C109, C133, C140, C365
- AASHTO T22
- Other standards per requirements

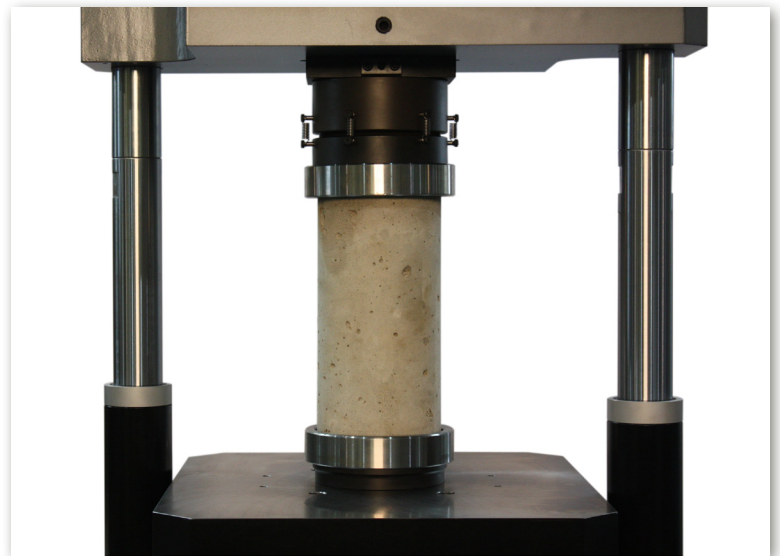
### Accessories

The following mounting options allow the standard platens to be easily adapted to other Instron frames:

- W-2006-A: Type R1m to Type R2m Conversion Adapter
- W-5543: Type R2f Adapter Plate for Instron DX and HDX Models



W-2004 and W-2005 Series Compression Platens (shown with R1m Mounting)



Compression Platen Configuration for ASTM C39 with Pad Cap Fixtures

## General Specifications

Stress Capacity <sup>1</sup>	MPa	690
	psi	100,000
Fitting <sup>2</sup>	m	R1
	f	0.5-13
Hardness	(HRC)	60
Finish	-	Black Oxide
Temperature Rating	°C	32 to 212
	°F	0 to 100

## Spherically-Seated (Self-Aligning) Platens

		W-2005-A	W-2005-B	W-2005-C	W-2005-D	W-2005-F
Platen Diameter	mm	79	114	165	228	305
	in	3.125	4.5	6.5	9	12
Spherical Seat Diameter	mm	79	114	165	228	305
	in	3.125	4.5	6.5	9	12
Alignment Compensation	4° Angular Tilt Around Entire Platen Diameter					
Load Capacity <sup>1</sup>	kn	1,000	2,000	4,500	4,500	5,000
	lbf	250,000	450,000	1,000,000	1,000,000	1,124,000
Effective Height	mm	50.8	76.2	101.6	127	170
	in	2	3	4	5	6.7
Approximate Weight	kgs	2.2	6.2	17	41	88
	lbs	4.8	13.6	37.4	90	194
Flatness	mm	0.0127	0.0127 per 152	0.0127 per 152	0.0127 per 152	0.0127 per 152
	in	0.0005	0.0006	0.0006	0.0005 per 6	0.0005 per 6

## Plane (Rigid) Platens

		W-2004-A	W-2004-B	W-2004-C	W-2004-D	W-2004-F
Platen Diameter	mm	73.5	114	165	228	305
	in	2.9	4.5	6.5	9	12
Centering Circles	mm	-	50.8, 76.2, 101.6	101.6, 152.4	152.4, 203.2	254
	in	-	2, 3, 4	4, 6	6, 8	10
Load Capacity <sup>1</sup>	kN	600	2,000	4,500	4,500	5,000
	lbf	135,000	450,000	1,000,000	1,000,000	1,124,000
Effective Height	mm	25.4	25.4	25.4	38.1	50.8
	in	1	1	1	1.5	2
Approximate Weight	kgs	0.93	2	4	11.5	27
	lbs	2	4.4	8.8	25.3	59.5
Flatness	mm	0.0127	0.0127 per 152	0.0127 per 152	0.0127 per 152	0.0127 per 152
	in	0.0005	0.0005 per 6	0.0005 per 6	0.0005 per 6	0.0005 per 6

**Notes:**

1. Exceeding either the stress or load capacity may cause damage to the platen.
2. Fitting for W-2005-E is R2m.

[www.instron.com](http://www.instron.com)



Worldwide Headquarters  
825 University Ave, Norwood, MA 02062-2643, USA  
Tel: +1 800 564 8378 or +1 781 575 5000

European Headquarters  
Coronation Road, High Wycombe, Bucks HP12 3SY, UK  
Tel: +44 1494 464646

Instron Industrial Products  
900 Liberty Street, Grove City, PA 16127, USA  
Tel: +1 724 458 9610