

Mass, Chinese TAIPEI, CMS (Center for Measurement Standards)

Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty						
Class	Instrument or Artifact	Instrument Type or Method	Minimum value	Maximum value	Units	Parameter	Specifications	Value	Units	Coverage Factor	Level of Confidence	Is the expanded uncertainty a relative one?	NMI internal service identifier	Comments
Mass	Mass standard	Comparison in air	1	5	mg			0.53 to 0.77	µg	2.1 to 2.0	95%	No	1	
Mass	Mass standard	Comparison in air	10	50	mg			0.46 to 0.67	µg	2.0	95%	No	2	
Mass	Mass standard	Comparison in air	0.1	5	g			0.62 to 6.1	µg	2.0	95%	No	3	
Mass	Mass standard	Comparison in air	10	50	g			5.6 to 21	µg	2.0 to 2.2	95%	No	4	
Mass	Mass standard	Comparison in air	100	500	g			17 to 22	µg	2.0	95%	No	5	
Mass	Mass standard	Comparison in air	1	1	kg			0.033	mg	2.0	95%	No	6	
Mass	Mass standard	Comparison in air	2	50	kg			0.32 to 15	mg	2.0 to 2.1	95%	No	7	
Mass	Mass standard	Comparison in air	50	100	kg			0.5	g	2.0	95%	No	8	
Mass	Mass standard	Comparison in air	100	200	kg			0.6	g	2.0	95%	No	9	
Mass	Mass standard	Comparison in air	200	1000	kg			3.0E-06		2.0	95%	Yes	10	
Force, tension, compression	Force measuring device	Direct comparison	500	5000	N			2E-05		2	95%	Yes	11	
Force, tension, compression	Force measuring device	Direct comparison	5	50	kN			3E-05		2	95%	Yes	12	
Force, compression	Force measuring device	Direct comparison	50	500	kN			3E-04		2	95%	Yes	13	

Calibration and Measurement Capabilities

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Force, compression	Force measuring device	Direct comparison	500	2000	kN			3E-04		2	95%	Yes	14		
Hardness	Hardness block	Rockwell A (with diamond indenter) according to ISO 6508:3	60	90	HR	Preliminary test force	98.07 N	0.3	HR	2	95%	No	15		
						Total test force	588.40 N								
Hardness	Hardness block	Rockwell B (with ball indenter) according to ISO 6508:3	40	100	HR	Preliminary test force	98.07 N	0.4	HR	2	95%	No	16		
						Total test force	980.7 N								
Hardness	Hardness block	Rockwell C (with diamond indenter) according to ISO 6508:3	20	65	HR	Preliminary test force	98.07 N	0.3	HR	2	95%	No	17		
						Total test force	1471 N								
Absolute pressure, gas medium	Pressure measuring device, vacuum gauge	Direct comparison with standard	5E-06	6E-04	Pa			0.078 to 0.074		2	95%	Yes	18		
Absolute pressure, gas medium	Pressure measuring device, vacuum gauge	Direct comparison with standard	6E-04	1	Pa			0.029		2	95%	Yes	19		
Absolute pressure, gas medium	Pressure measuring device, vacuum gauge	Direct comparison with standard	1	1000	Pa			0.018		2	95%	Yes	20		

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Absolute pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard	1	372	kPa			$Q[0.65, 2.6E-05p]$, p pressure in Pa	Pa	2	95%	No	21	
Absolute pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	372	700	kPa			2.2E-05		2	95%	Yes	22	
Absolute pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	700	7000	kPa			4.2E-05		2	95%	Yes	23	
Gauge pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard	20	5700	Pa			$(0.76 + 4.16E-04p)$, p pressure in Pa	Pa	2	95%	No	24	
Gauge pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	17	172	kPa			3.0E-05		2	95%	Yes	25	
Gauge pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	172	700	kPa			2.2E-05		2	95%	Yes	26	
Gauge pressure, gas medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	700	7000	kPa			4.2E-05		2	95%	Yes	27	
Gauge pressure, liquid medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	2.8	28	MPa			2.8E-05		2	95%	Yes	28	

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Gauge pressure, liquid medium	Pressure measuring device, standard pressure generator	Direct comparison with standard, cross float	28	273	MPa			6.3E-05		2	95%	Yes	29		

