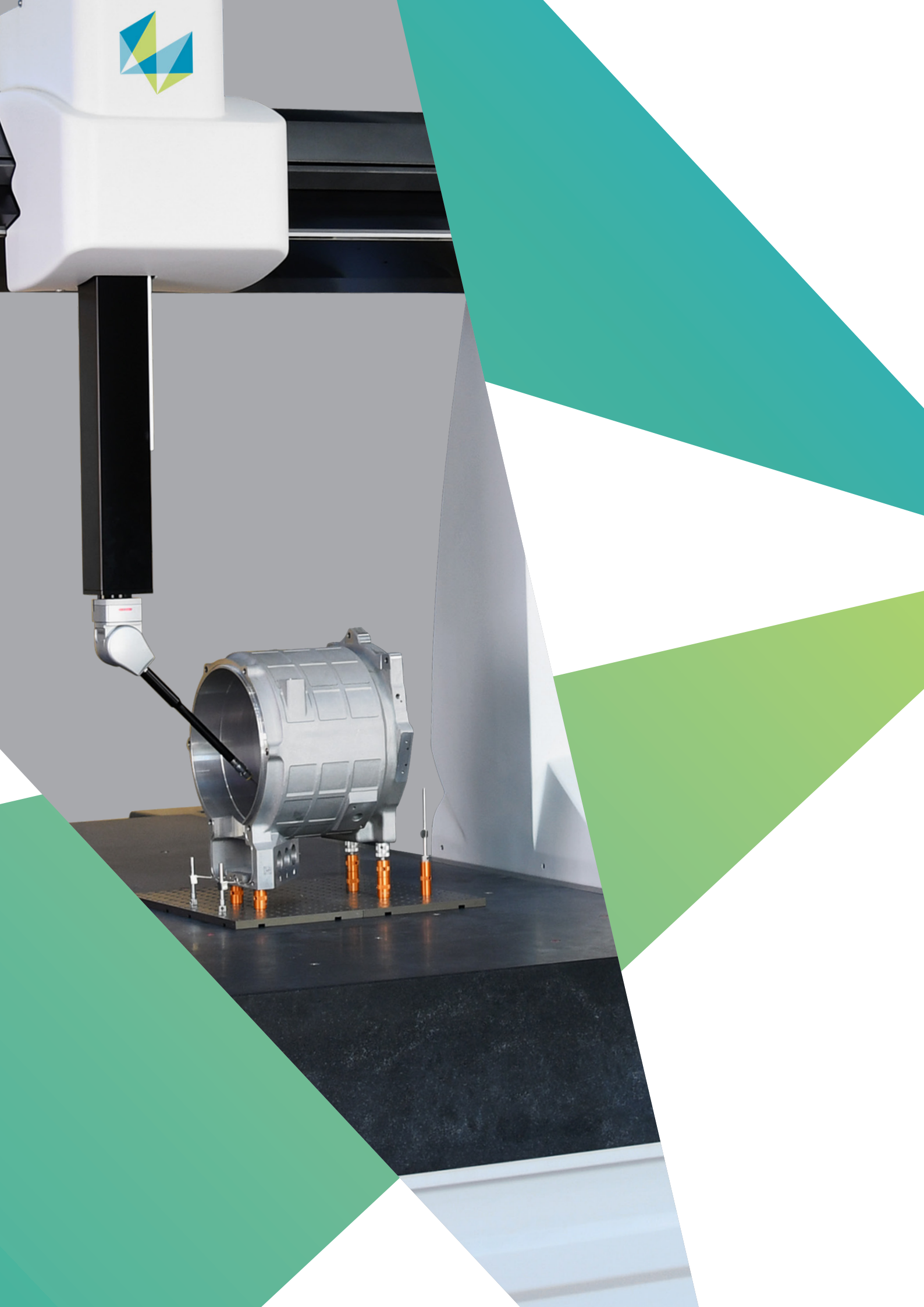


CROMA

Cost effective entry-level coordinate measuring machine





CROMA

Fast response to production beat

Croma originates from English. It means one eighth note, that is, one eighth of a whole note to indicate simplicity, briskness and rapidness. Croma range of CMM can achieve high stability and high efficiency with mature and reliable design and production technology, global supply chain platform of parts and high standard quality control flow.



Croma 564/686/8xx6



Croma 10xx8



Croma 12xx10/15xx10/15xx12

Proven technology

The Croma range of affordable bridge-type coordinate measuring machines (CMMs) is designed to enable customers to improve quality control across the production process and provide great value for money. Croma machines combine innovative design with proven construction and patented technology.

With advanced frame design, well-engineered structure, specially-designed controller technology and the latest software packages, the range balances accuracy, throughput and reliability with price/performance ratio.



All aluminium structure

Robust frame with hard anodised aerometal beam and Z-axis offers temperature consistency as well as a reduced mass of moving parts and force of inertia.



Integral dovetail guide way

The integral dovetail reduces the machine weight and helps prevent motional swings during the inspection process to ensure measuring accuracy and stability.



Specially-designed control system

The IDC-I control system, designed by Hexagon specifically for the Croma range, improves the dynamic performance and measuring capabilities of the machine.



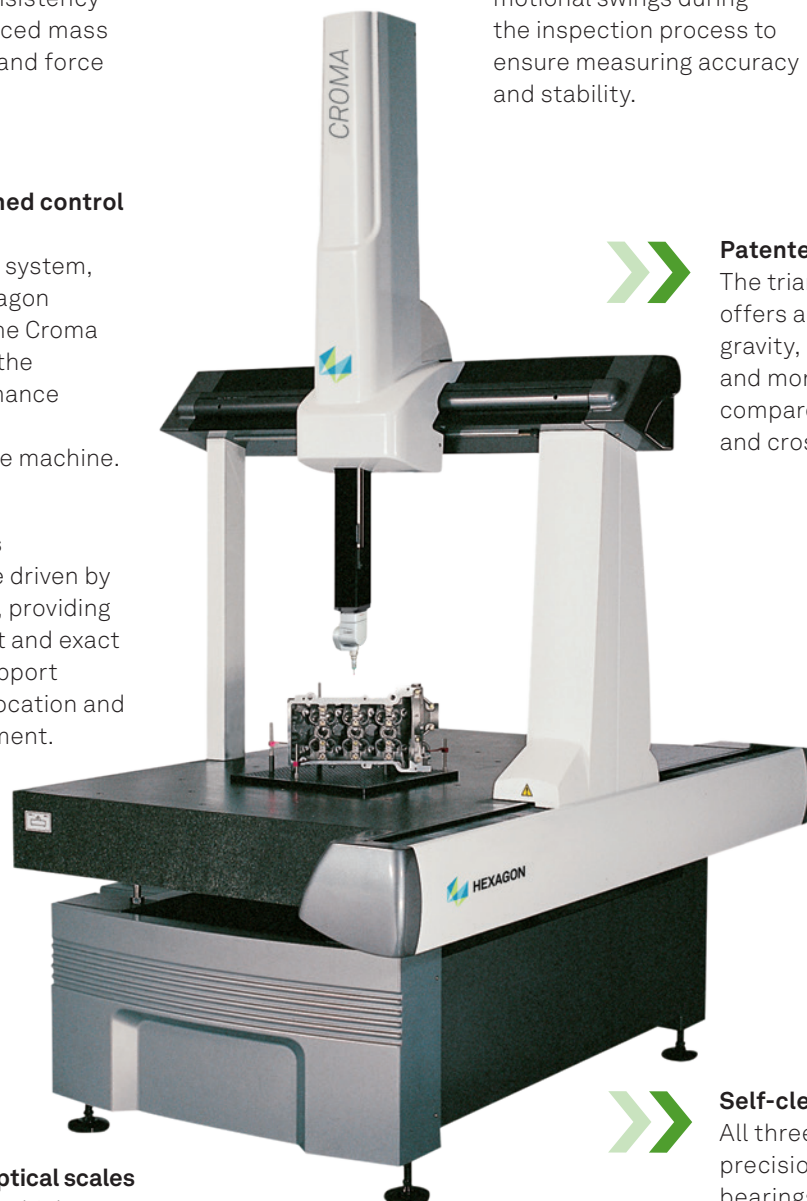
Patented triangular beam

The triangular beam design offers a lower centre of gravity, better stiffness and more reliable motion compared to rectangular and cross beams.



DC servo motors

All three axes are driven by DC servo motors, providing stable movement and exact positioning to support accurate probe location and overall measurement.



High-precision optical scales

European-import, high-precision optical scales installed with one end fixed and the other freely extensible ensures linear expansion and contraction with temperature changes to mitigate the impact of thermal deformation.



Self-cleaning air bearings

All three axes run on high-precision self-cleaning air bearings, providing smooth movement that reduces wear on the guide ways to maximise equipment durability and minimise repair costs.

Applications



Motor housing



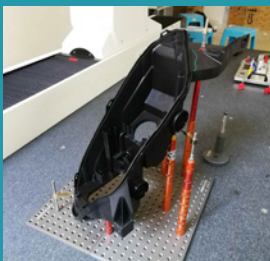
Sheet metal



Engine box



Communication equipment



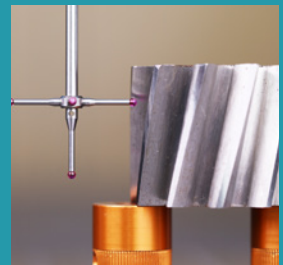
Automotive parts



Mould



EDM



Gear



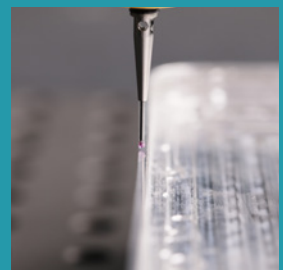
Plastic part



Reductor



Injection part

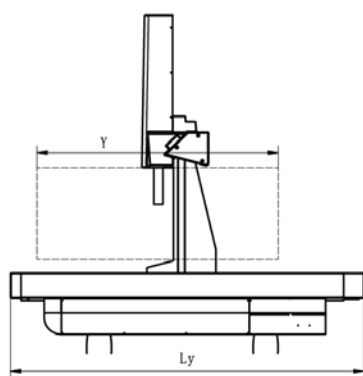


Housing

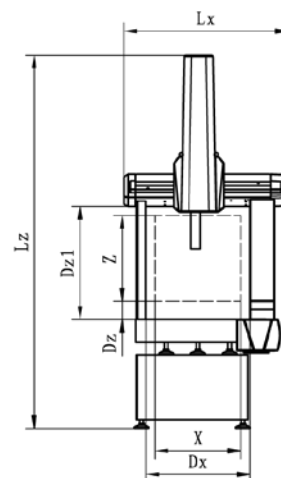
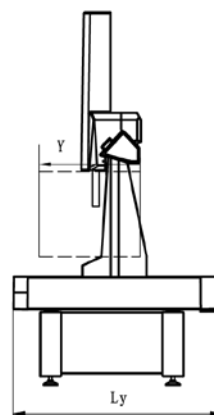
Strokes, dimensions and weight

Models	Strokes (mm)			Overall dimensions (mm)			Daylights (mm)			Max. part weight (kg)	CMM weight (kg)
	X	Y	Z	Lx	Ly	Lz	Dx	Dz	Dz1		
564	500	600	400	1050	1535	2247	634	114	594	300	590
686	600	800	600	1150	1735	2647	734	114	794	300	730
8106	800	1000	600	1350	1935	2729	934	114	794	500	1074
8126	800	1200	600	1350	2135	2729	934	114	794	500	1196
8156	800	1500	600	1350	2435	2729	934	114	794	500	1379
10128	1000	1200	800	1600	2177	2837	1130	118	940	1300	1785
10158	1000	1500	800	1600	2477	2837	1130	118	940	1500	2090
10218	1000	2100	800	1600	3077	2837	1130	118	940	1800	2635
10308	1000	3000	800	1600	3977	2837	1130	118	940	1800	3225
121510	1200	1500	1000	1839	2896	3480	1339	150	1173	1800	3792
122210	1200	2200	1000	1839	3596	3480	1339	150	1173	2250	5696
123010	1200	3000	1000	1839	4396	3480	1339	150	1173	2250	7637
152210	1500	2200	1000	2139	3596	3480	1639	150	1173	2250	6730
153010	1500	3000	1000	2139	4396	3480	1639	150	1173	2250	9046
152212	1500	2200	1200	2139	3596	3480	1639	150	1373	2250	6760
153012	1500	3000	1200	2139	4396	3480	1639	150	1373	2250	9076

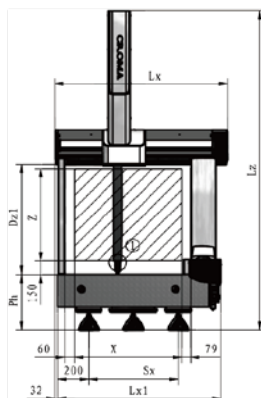
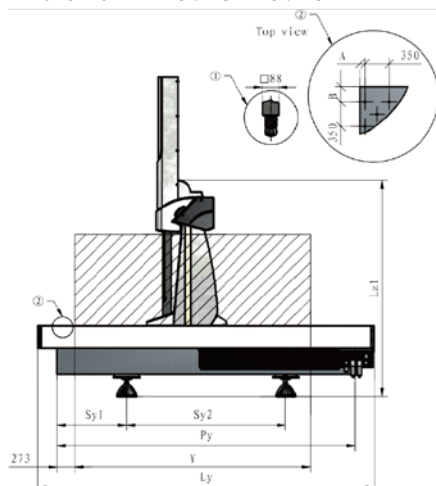
Croma 564 / 686 / 8xx6



Croma 10xx8



Croma 12xx10 / 15xx10 / 15xx12



Specifications

Croma models	MPE (μm).L(mm)						max. 3D speed (mm/s)	max. 3D accel. (mm/s²)
	HH-MI		HP-TMe		HP-THDe			
	MPE _E	MPE _P	MPE _E	MPE _P	MPE _E	MPE _P		
564/686	2.8 + L / 300	3.2	2.6 + L / 300	3.2	2.4 + L / 300	2.8	520	1730
8.xx.6	3.0 + L / 300	3.2	2.8 + L / 300	3.2	2.6 + L / 300	2.8	520	1470
10.xx.08	3.2 + L / 300	3.5	3.0 + L / 300	3.5	2.8 + L / 300	3.0	520	1470
12.xx.10	-	-	3.3 + L / 300	3.8	3.1 + L / 300	3.6	433	1040
15.xx.10	-	-	3.8 + L / 300	4.3	3.6 + L / 300	4.1	433	1040
15.xx.12	-	-	4.3 + L / 300	4.8	4.1 + L / 300	4.6	433	1040

Croma plus models	MPE (μm).L(mm)							max. 3D speed (mm/s)	max. 3D accel. (mm/s²)
	HP-TMe		HP-THDe		HP-S-X1				
	MPE _E	MPE _P	MPE _E	MPE _P	MPE _E	MPE _P	MPE _{THP/T}		
564/686	2.3 + L / 300	2.5	2.1+ L / 300	2.3	1.9 + L / 300	2.1	3.0/68	520	1730
8.xx.6	2.4 + L / 300	2.6	2.1+ L / 300	2.3	2.0 + L / 300	2.2	3.0/68	520	1730
10.xx.08	2.6 + L / 300	2.8	2.4 + L / 300	2.7	2.3 + L / 300	2.5	4.0/68	520	1730
12.xx.10	2.9 + L / 300	3.4	2.7 + L / 300	3.3	2.6 + L / 300	3.1	5.0/68	433	1040
15.xx.10	3.4+ L / 300	3.9	3.2 + L / 300	3.8	3.1 + L / 300	3.6	5.2/68	433	1040
15.xx.12	3.9 + L / 300	4.4	3.7 + L / 300	4.3	3.6 + L / 300	4.1	5.2/68	433	1040

MPE_E and MPE_P according to ISO 10360-2:2009

MPE_{THP} according to ISO 10360-4:2009

HP-TMe: standard measuring force, stylus length 10 mm, tip diameter 4 mm

HP-THDe: medium measuring force, stylus length 10 mm, tip diameter 4 mm

HP-S-X1: HP-S-X1S / X1H / X1C, stylus length 50 mm, tip diameter 5 mm

Technical characteristics

Air pressure	120 NL / min, 0.45 Mpa
Operating temperature	20 ± 2°C
Temperature gradients	
- Air temperature variation	1°C / h - 2°C / 24h
- Air temperature gradient	1°C / m
Relative humidity	45% - 75%



Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

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