WENZEL®
The company of µ

Just measure

The new XOrbit Generation

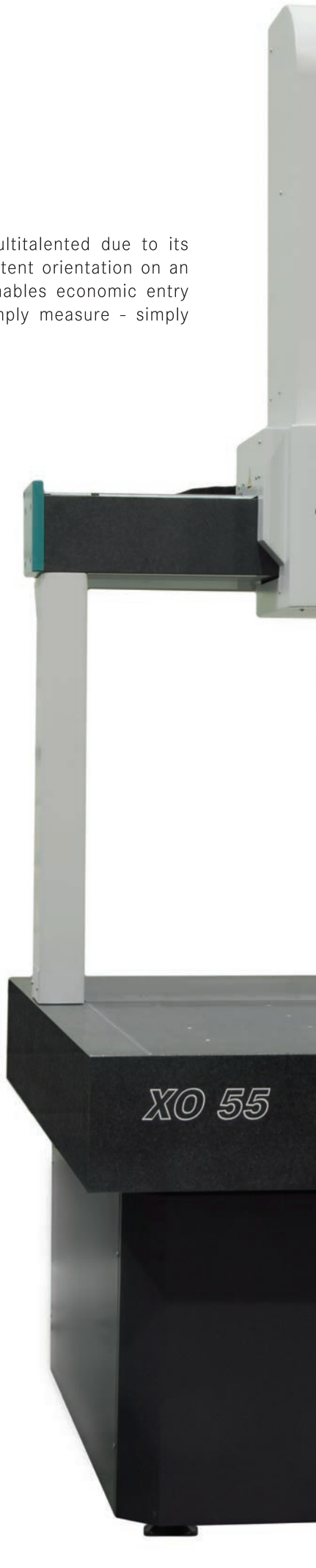
Mena 3D
TOP MEASURE

MEASUREMENT RESULTS - FAST AND EASY

XOrbit – just measure

The WENZEL XOrbit is the ideal coordinate measuring machine, wherever the core aspects of measuring are required and where rapidity and ease of use are in demand. It can be used for checking incoming goods and throughout the production cycle until final inspection since it fulfils all major demands. Whether for individual or serial measurements (total CNC control), XOrbit is suitable for universal applications.

The XOrbit is efficient and multitalented due to its flexible and simple use. Consistent orientation on an intelligent machine concept enables economic entry into coordinate metrology. Simply measure - simply good.



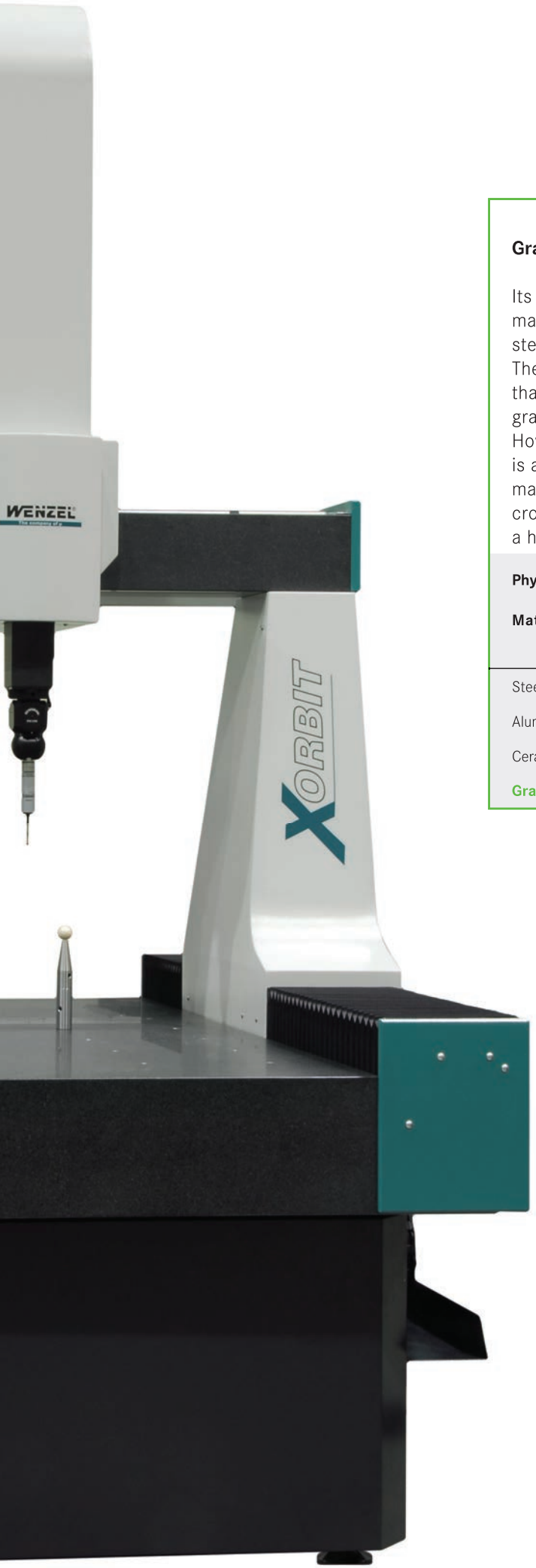
XOrbit Features:

- The XOrbit combines the decades of experience gained by WENZEL by concentrating purely on the functionality
- CMM material No. 1 is used for the XOrbit: Granite
- The base plate, the cross-beam and the quill are made from granite thus ensuring an identical thermal reaction in all axes
- High-tensile air bearing guide ways in the Y-axis with very precisely lapped locating surfaces incorporated in the granite base plate:
  A guarantee for outstanding long-term stability
- Self-cleaning and wear-free air bearings in all axes ensure easy operation
- Good accessibility during maintenance work

The sizes of the XOrbit
Overview measuring range (in mm)

	X-Axis	Y-Axis	Z-Axis
XOrbit 55	500	700/1000	500
XOrbit 87	800	1000/1500/2000	700
XOrbit 107	1000	1200/1500/2000	700

Further Y-lengths on request. Subject to technical modification and to changes in scope and design.



Granite: CMM material No. 1

Its physical characteristics make granite the perfect material for metrology. WENZEL conducts all process steps from cutting to milling and grinding.
The first impression that aluminum is much lighter than granite proves wrong. The specific weight of granite is only 1 % above the weight of aluminum. However, the expansion coefficient of aluminum is almost four times larger. All relevant measuring machine parts are made of granite. As the base plate, cross-beam and sleeve are made of the same material a homogeneous thermal behavior is achieved.

Physical characteristics of materials in metrology

Material	Specific Weight [Kg/dm³]	Expansion Coefficient [1/K]	Temperature Diffusionrate [W/mK]	Elasticity Module [10³N/mm²]
Steel	7,25	$10{,}4*10^{-6}$	42-63	90-180
Aluminum	2,7	$23{,}8*10^{-6}$	210	72
Ceramic (Al203)	3,85	$8*10^{-6}$	28	370
Granite	**2,8**	**$6{,}5*10^{-6}$**	**3,5**	**NIL**

The advantages at a glance:

- Economic use
- Simple operation
- Reliable measuring results
- Efficient, flexible and uncomplicated in use
- Simple checking of control geometrics and free-form surfaces