

## VANTA VCW RoHS LODs

## Vanta analyzers Rugged. Revolutionary. Productive.

Olympus is a leader in XRF technology with a reputation for durability, quality, and accuracy. Vanta<sup>™</sup> handheld XRF analyzers incorporate Olympus' Axon<sup>™</sup> technology to deliver higher X-ray counts per second and fast calculations to identify alloy grades in as little as 1–2 seconds in even the most challenging environments.

The Vanta model VCW is capable of measuring elements from concentrations as low as several parts per million (ppm) all the way up to 100%.

The limits of detection (LODs) reported here are based on automatically selected beam conditions (kV, µA, and filter settings) and a measurement time of 60 seconds per beam.

- The LODs represent the calculated value using three sigma 99.7% confidence level. The LOD for each element is a function of the testing time.
- Several certified alloy standards were used for each base material.
- The iron (Fe) category contains both low alloy steels and stainless steels.
- Actual working samples may contain interfering elements, so the actual working LODs for some 'real-world' samples may be higher than those presented here.
- The commonly accepted level for the limit of quantification (LOQ), or ability to quantify the concentration of an element, is 10 times the statistical noise.
- Only commonly occurring elements in each base material are listed. Vanta analyzers are capable of measuring many other elements.
- Chlorine, arsenic, and bromine LODs are not provided for alloy bases since they are not in those materials.

Alloy bases		Polymer bases	
Element Bras	s (Cu/Zn)	Element	PE
Cr	54	CI	0.10%
Hg	60	Cr	3
Pb	10	Hg	1
Cd	4	As	1
Sb	13	Br	1
Element S	Solder	Pb	1
Cr	130	Cd	8
Hg	54	Sb	9
Pb	17	Element	PVC
Cd	34	Cr	13
Sb	38	Hg	2
Element	Steel	As	2
Hg	33	Br	1
Pb	40	Pb	2
Cd	15	Cd	6
Sb	25	Sb	10

Please contact your local Olympus representative for more information.

www.olympus-ims.com/vanta

