



SOLUTION FOR ROHS DETECTION

The RoHS Directive is a mandatory standard set by the EU legislation and its full name is "on the Restriction of Hazardous Substances in the use of electronic and electrical equipment Directive" (Restriction of Hazardous Substances), up to now, its restricted substances a total of 10 items.

1) The standard was officially implemented on July 1, 2006, which contains six restricted substances: Plumbum (Pb), Hydrargyrum (Hg), Cadmium (Cd), hexavalent Chromium (Cr⁶⁺), Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE).

2) Upgraded to ROHS 2.0 in July 2011, increasing the number of restricted substances to 10 items: Plumbum (Pb), Hydrargyrum (Hg), Cadmium (Cd), hexavalent Chromium (Cr⁶⁺), Polybrominated biphenyl (PBB), Polybrominated diphenyl ether (PBDE), Di-(2-ethylhexyl)Phthalate (DEHP), Benzyl butylphthalate (BBP), Dibutyl phthalate (DBP), and diisobutyl phthalate (DIBP).

3) If the Tetrabromobisphenol A (TBBP-A) and Medium chain Chlorinated paraffins (MCCPS) pass the final resolution, it will lead to ROHS 3.0 for 12 restricted substances.

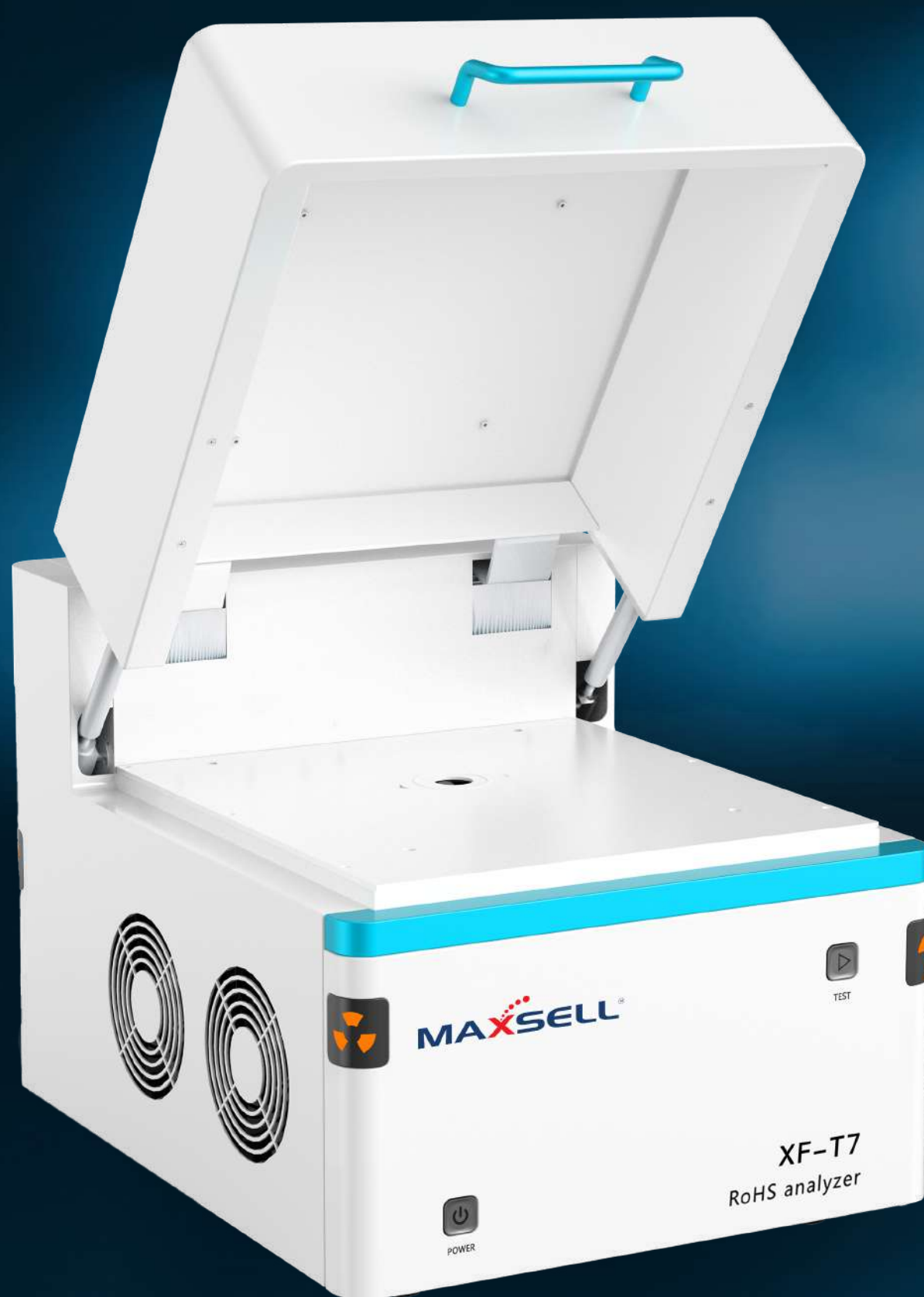




	Composition	Max limit	Machines
RoHS 1.0	Pb	1000ppm	XRF
	Hg	1000ppm	XRF
	Cd	100ppm	XRF
	Cr 6+	1000ppm	XRF
	PDD	1000ppm	XRF
	PBDE	1000ppm	XRF
RoHS 2.0	DEHP	1000ppm	PY-GC/PY-GCMS
	BBP	1000ppm	PY-GC/PY-GCMS
	DBP	1000ppm	PY-GC/PY-GCMS
	DIBP	1000ppm	PY-GC/PY-GCMS
RoHS 3.0	TBBP-A	1000ppm	PY-GCMS
	MCCPs	1000ppm	PY-GCMS
Halogen	Br	900ppm	XRF
	Cl	900ppm	XRF
	Br+Cl	1500ppm	XRF



ROHS ANALYZER – T 7



Analysis range

S ~ U

Test Duration

60

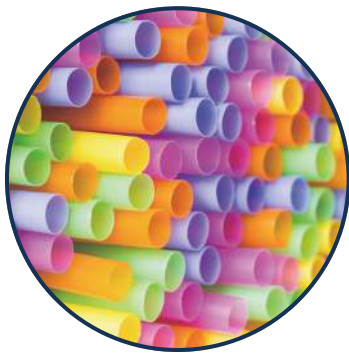
Seconds

FP algorithm

**More
Accurate**

Features

- Analysis range: S (No.16)~U (No.92)
- Max up to 30 elements could be tested at the same time
- Rapid detection of RoHS 1.0 instruction compliance
- Halogen detection, support EN71 directive
- Detection limit: 2 ppm (optimal matrix effect)
- Precision: RSD < ±2.5%
- Detector: US AMETEK customized Si-PIN detector
- X-ray tube Window material: glass window, Emit angle: 90°



Application

Metal

Liquid

Gemstone

Coating

RoHS

Mineral

Test results for toxic heavy metals of plastic

LDPE05	Br (100)	Cd(110)	Cr(610)	Hg(630)	Pb(650)
1st	94.3ppm	109.2ppm	604.3ppm	638.3ppm	641.7ppm
2nd	97.7ppm	104.5ppm	602.6ppm	638.8ppm	645.1ppm
3rd	96.8ppm	104.2ppm	602.8ppm	637.7ppm	648.8ppm
4th	97.4ppm	107.8ppm	603.7ppm	639.2ppm	649.1ppm
5th	96.2ppm	109.5ppm	610.8ppm	642.1ppm	667.1ppm
Average	96.48ppm	107.04ppm	604.84ppm	639.22ppm	650.36ppm
R	3.4ppm	5.3ppm	8.2ppm	4.4ppm	25.4ppm
RSD	1.25%	2.123%	0.503%	0.239%	1.353%