Photometry

The History

Several decades have passed since the appearance of the first Lovibond® PC 100 photometer system.

Since that time, Tintometer has become a worldfamous name as the manufacturer of photometer systems sold under the brand name of Lovibond[®].

Our range of photometer systems extends from the MD 100* and MD 110* as hand-held model over the multi parameter photometer MD 200* as benchtop model in different parameter variants.

The multi-functional PM 600, PM 620 & PM 630 photometers provide the answer to all requirements relating to the analysis of water used in modern swimming pools and baths. They offer a wide variety of pre-programmed methods and are therefore suitable for the demands of modern water analysis.

All the parameters which can be measured with Lovibond[®] photometer systems are set out in the table. This table also explains what parameters can be measured with which photometer.

Parameter

/		& MD 110*	f And	.4 63 ⁰
Parameter	AN.	140 140 202	PM 620	² 14 600
Acid Capacity K _{54.3}				
Alkalinity-M (total)				
Aluminium				
Ammonia				
Bromine	-			
Calcium Hardness	-			
Chlorine	-			
Chlorine Dioxide				
Copper				
Cyanuric acid	-			
Hydrogen Peroxide				
lodine				

* The MD 100 and MD 200 photometer series do not provide all parameters in a single instrument. The number and type of parameters depend on the variant (please refer to the relevant chapter).



MD 100 & MD 110

MD 200

PM Photometer



The photometric principle

When specific reagents are added, the water sample takes on a degree of coloration that is proportional to the concentration of the parameter being measured. The photometer measures this coloration.

When a light beam passes through the coloured sample, energy with a specific wavelength is absorbed by the test substance. The photometer determines the coloration of the sample by measuring the transmission or absorption of light of this wavelength (in other words, monochromatic light). The photometer then uses a microprocessor to calculate the required concentration and displays the result.



