

HOW TEST OF FACEMASK WITH HYGIENA ATP METER SHOWS CONTAMINATION

655 reading on meter on face mask before Immaculate

8 reading on meter after Immaculate

DETAILS OF ATP- ATP Hygiene Monitoring uses a device called an ATP meter to measure how clean a surface is. A sample is taken with a special swab, inserted into the ATP meter, and a numerical value for the contamination level is shown.

ATP is an indicator molecule for the presence of biological residues. ATP testing solutions work by capturing the molecule from a surface via a swab. The more bacteria or product residue on the surface, the more ATP

TECHNICAL

To measure ATP, the sample is mixed with an enzyme from fireflies called luciferase, which catalyses a reaction where two of the phosphates are broken off from the ATP molecule. The energy from this reaction is captured by the enzyme to create light.

The swab is inserted into a device called a luminometer, which reads the amount of light produced by the sample. The light produced is proportional to the amount of ATP in it: the more bacteria or product residue on the surface, the more ATP; the more ATP, the more light produced.

The light is detected in an instrument and displayed in relative light units, or RLUs. The higher the RLUs, the more likely it is that the surface has not been properly cleaned.