

Excellence and
Innovation

Modern Technology Replaces COD Analysis in Arauco Laboratory

"Since 2016, the laboratory of Arauco Pulp and Paper has invested in new pieces of high-tech equipment that will allow us to measure COD (Chemical Oxygen Demand) more accurately and rapidly."

"The variation in the COD speed, from 120 minutes to 8 minutes, is due to the acquisition of a "MANTECH PeCOD". A modern equipment that offers a new way to measure this parameter, since it is currently carried out directly from a photocurrent (charge from the oxidation of the organic contamination contained in a sample.) The core of the PeCOD technology is its sensor, which consists of a photocatalyst coupled to an external circuit with nanoparticles of TiO₂ (titanium dioxide) that are activated by UV light. The high electrochemical potential of TiO₂ gives it a substantial advantage over the lower chemical potential of oxidation methods based on dichromate."

Arauco has since invested in 5 x PeCOD over 2 different mills. The PeCOD method has significantly improved the health and safety and working conditions of the laboratory people by eliminating dichromate, mercury, concentrated acid and high temperature digestion. It is also better for the environment. Utilizing the peCOD method has led to actionable decisions due to the fast COD results in 8 minutes. This has generated millions in extra profit for Arauco.



Mantech PeCOD™



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