



Chlorine Dioxide Bleaching

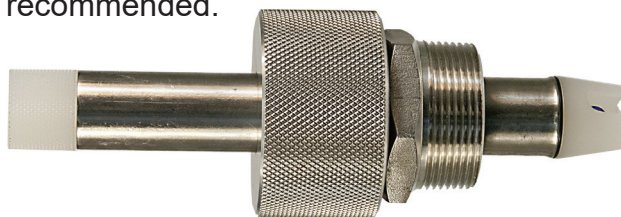
Chlorine Dioxide is introduced to the pulp, which removes lignin binding agents without destroying the carbohydrates. pH is maintained at a range of 2-4 pH to insure a rapid reaction without consuming excess ClO_2 , and temperatures can vary between 45°C and 85°C. After bleaching, the pulp is washed, which reclaims ClO_2 and removes residual acid. The following steps include dissolution of remaining lignin by a high pH caustic (typically 10.5-11 pH), which is reinforced with oxidizers – typically Hydrogen Peroxide and Oxygen. Further stages are used to bleach the pulp to a desired consistency, with solids regularly as high as 15%, minimizing water consumption and increasing efficiency. Temperatures in this stage are typically 65°C-85°C.

Challenges:

High pulp densities and harsh chemistries typically require regular maintenance of pH sensors. Frequently, reference cells have issues in the strongly oxidizing environment. pH sensors are often installed in downstream extraction sample locations, creating lag time between pH measurement and process.



If the process is isolated, an in-line electrode such as the Y-410B-F6 or V-19DB-F6 Series is recommended.



If the process is not isolated, a retractable such as the MK7 or Live Tap model is recommended.

Specifications

Body material	Ryton	Kynar	Stainless Steel
pH Range	0-14	0-14	0-14
Temperature Range	0-130°C	0-130°C	0-130°C
Pressure Range	0-150 PSI @ 25°C		

For more information, contact your AlpHa/Van London Co. representative or distributor.