

Optimizing Efficiency: Demineralized Water System for Multifuel Boiler at Asia Honour Paper Industries, Mentakab, Malaysia, 2023

In the realm of industrial processes, efficient water treatment is paramount for smooth operations and equipment longevity. Among the critical components of industrial water treatment is the demineralized water system, especially when it comes to powering multifuel boilers. Let's delve into the technology and application of a **demineralized water system** tailored for the needs of Asia Honour Paper Industries (M) Sdn Bhd, Mentakab, Malaysia.



The Technology



Capacity and Performance

The demineralized water system at Asia Honour Paper is designed to handle a capacity of 50m³/h and 125m³/h, accommodating the fluctuating demands of the multifuel boiler operation. This capacity ensures a steady supply of treated water, optimizing boiler performance while minimizing downtime and maintenance.

The demineralized water system designed and supplied by **Penfluid** integrates advanced technology to ensure the purity and quality of water supplied to the multifuel boiler. The system is based on a configuration of 2 bed 3 tanks + a mixed bed polishing ion exchange system.



Treated Water Quality

Conductivity : < 0.3 μ S/cm

Silica (SiO₂) : < 0.02 mg/l

Iron (Fe) : < 0.03 mg/l

Copper (Cu) : < 0.001 mg/l

Na + K : < 0.005 mg/l

pH : 9.2 - 9.6 (after Ammonia dosing) dosing

Benefits and Advantages

Prevention of Scaling and Corrosion:

By effectively removing dissolved minerals and impurities, the demineralized water system mitigates the risk of scale formation and corrosion within the multifuel boiler, thus prolonging its operational lifespan.



Enhanced Efficiency:

The use of high-quality demineralized water improves heat transfer efficiency within the boiler system, resulting in optimized energy consumption and reduced operational costs for Asia Honour Paper.

Consistent Water Quality:

The advanced technology employed in the demineralized water system ensures a consistent and reliable supply of treated water, meeting the stringent quality standards required for industrial processes.

Environmental Sustainability:

By minimizing water wastage and reducing the need for chemical additives to treat boiler water, the demineralized water system contributes to the environmental sustainability goals of Asia Honour Paper.



End Result

In the demanding industrial landscape of facilities like Asia Honour Paper, the implementation of a state-of-the-art demineralized water system exemplifies a proactive approach towards ensuring optimal boiler performance, operational efficiency, and environmental responsibility.

"Through the integration of advanced water treatment technologies, **Penfluid** reaffirms its commitment to excellence and sustainability in providing industrial solutions."

