# **Kurita**

### **PRODUCT OVERVIEW**

# AERATION & STRIPPING









**TONKAWATER** a Kurita brand

Kurita America offers a selection of aeration and stripping products for a range of treatment applications including basic oxidation, degasification for pH adjustment, and targeted removal of volatile organic compounds. Our designs balance air and water distribution with the appropriate level of contact to facilitate the necessary mass transfer between gas and liquid phases, which is the essence of this process. The equipment is often combined with other treatment processes and can be customized to integrate into your specific system design.





## AERATOR AND STRIPPER PRODUCT OFFERINGS



#### AERATORS & STRIPPERS PROVIDE:

- Chemical-free iron oxidation
- Increased dissolved oxygen levels
- Degasification (e.g. CO<sub>2</sub>, H<sub>2</sub>S, radon, methane)
- Removal of volatile organic compounds (VOCs, e.g. TCE, PCE)

#### TARGETED INDUSTRIES

- Agriculture
- Biofuels
- Food & Beverage
- General Manufacturing
- Mining
- Municipal Drinking Water
- Power Generation

#### **Standard Aerators**

Kurita America's standard aerators are generally implemented for natural iron oxidation, or degasification applications for carbon dioxide (pH adjustment), hydrogen sulfide, radon or methane. Air flow can be induced draft, optimizing footprint; or forced draft for stronger delivery, eliminating blower exposure to gases. Our standard design includes PVC tube trays for air/water contact, which are resilient to fouling and easily cleaned; or modifications can accommodate loose-fill packing media for greater efficiency in removing dissolved gases.

#### **Stripping Towers**

Stripping towers use loose-fill, high efficiency packing to maximize mass transfer potential in a given volume. Each is designed with a packing depth and air flow rate specific to the removal of a certain contaminant, such as a volatile organic compound or dissolved gas. Towers are cylindrical in shape and can be constructed of painted carbon steel, aluminum, or FRP depending on the application and corrosivity concerns. Kurita America can offer removal guarantees based on your specific water chemistry.

#### **Cascade Aerators**

With no blowers or mechanical components, cascade aerators offer the easiest operation and least amount of maintenance for basic aeration applications. Water cascades down the unit over several baffles, exposing it to the atmosphere and allowing the natural draft of air to flow across the equipment. Such aerators are often installed outdoors at high elevations, atop a stilling well or reaction tank, and are more common in warmer climates.

#### **Pressure Aerators**

Simple pressure treatment applications can benefit from aeration without the need for additional pumping. Compressed air is injected directly into the water flow stream through a pipe spool with diffuser element to oxygenate the water without breaking pressure. Pressure aerators are commonly implemented for natural iron oxidation, decreasing chemical demand; and in biological treatment applications for providing critical oxygen to facilitate the growth of beneficial microorganisms.

#### A BOLTLESS DOOR OPTION IS ALSO AVAILABLE FOR EASE OF ACCESS!





