Beer brewing wastewater treatment

Our customer manufactures and sells various kinds of ale beer, including the flagship brand "Yona Yona Ale" winning a number of awards. The company, having a catchphrase "Taste into beer, happiness into life!," keeps straight and sincere attitude when it works on brewing beers.

The persistent attitude is applied also in protecting the crystal clear water and fresh clean air of the Japanese Alps that are essential for brewing. The malt waste from brewing processes is completely recycled. Brewing wastewater is treated to the highest quality by Membrane Bioractor (MBR) system using KUBOTA Submerged Membrane Unit[®].

MBR has simplified and stabilized the WWTP operation that was formerly difficult due to seasonal variation of loading amount. Furthermore, replacement of the former hollow fiber membrane unit with KUBOTA Submerged Membrane Unit® has brought easy maintenance as expected.



Overview of Brewery

Installed Membrane Units

Expanded WWTP Outline of the Facility

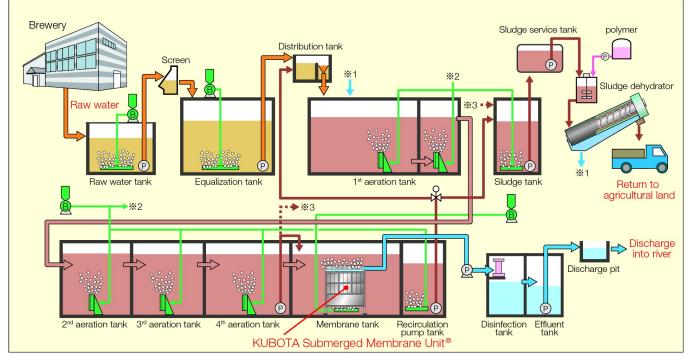
Location	Nagano Prefecture, Japan		
Type of wastewater	Wastewater from Brewery		
Flow	90 m3/d		
Commissioned	Originally in April 1996, Replaced with KUBOTA in May 2009		

'KUBOTA Submerged Membrane Unit[®]' is a registered trademark of KUBOTA Corporation in Australia, Benelux, China, Germany, Spain, France, U.K., Hong Kong, Israel, Italy, Turkey and USA.



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MBR Process Flow Sheet



Design Parameter and Actual Data

Parameter		Influent		Effluent	
		Design	Actual	Design	Actual
BOD5	(mg/L)	4,500	1,400~8,800	<20	0.6
SS	(mg/L)	1,400	460~2,700	<20	<1
O&G	(mg/L)	25	15~35	-	-
рН	(-)	5~7	4.0~7.2	5.8~8.6	7.4

"Design" values of effluent are the regulatory limits. "Actual" values are average values.

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