

# Efforts to Reduce Water Consumption and to Prevent Water Pollution

## Reducing water consumption

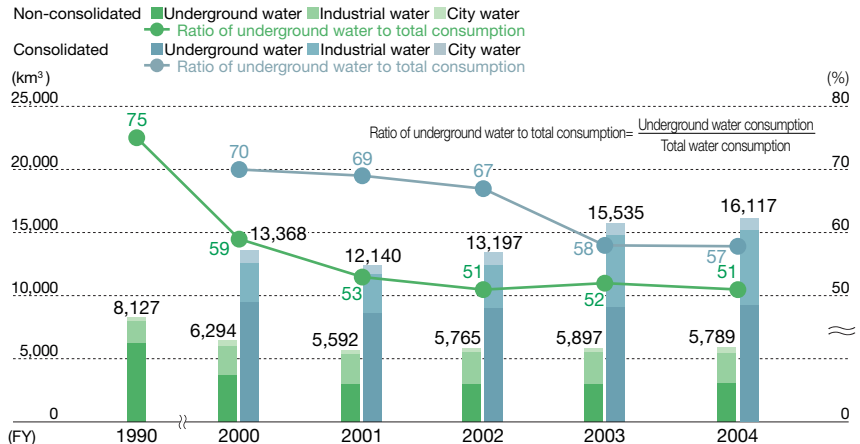
Water consumption by the Hitachi Chemical Group in 2004 amounted to 5,789 km<sup>3</sup> on a non-consolidated basis and 16,117 km<sup>3</sup> on a consolidated basis. The figure on a non-consolidated basis was reduced to 71% compared to 1990. To reduce water consumption, the Group took continuous water-saving measures in 2004, including integration of production facilities, and displacement of pipes from under to above the ground to prevent water leakage. In total, 6,196 km<sup>3</sup> and 8,253 km<sup>3</sup> of water is recycled as coolant water, respectively, on a non-consolidated basis and on a consolidated basis to ensure effective utilization of limited resources.

## Prevention of water contamination by wastewater

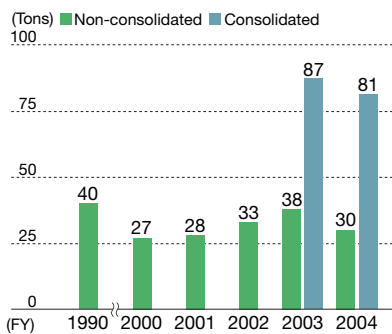
The Hitachi Chemical Group biologically treats the wastewater generated from its production processes and stores the wastewater in a final effluent tank before releasing it into the public sewage system. The treated water in the tank is continuously measured and inspected for BOD \*1, COD \*2 and other indices, ensuring that the concentration of indexed substances meet full legal standards. In 2004, the Group discharged wastewater of 5,595 km<sup>3</sup> on a non-consolidated basis and 15,763 km<sup>3</sup> on a consolidated basis to public waters; and 194 km<sup>3</sup> on a non-consolidated basis and 354 km<sup>3</sup> on a consolidated basis to sewage systems.

\*1 BOD: Biochemical Oxygen Demand  
\*2 COD: Chemical Oxygen Demand

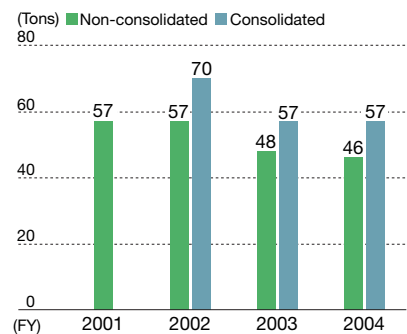
## Water consumption and ratio of underground water to total consumption



## BOD emission



## COD emissions



## A pH Monitoring System for Final Effluent Tank Introduced

Haga Works of Hitachi AIC Inc. introduced a pH monitoring system for a final effluent tank, which enables continuous remote-controlled monitoring of the pH level of the site effluent to prevent harmful or polluted wastewater from being discharged. Data can be continuously

recorded and monitored on the screen. When any abnormality is detected, an audible alarm is generated in the site, email is sent to persons involved, and discharge of effluent is stopped.

