

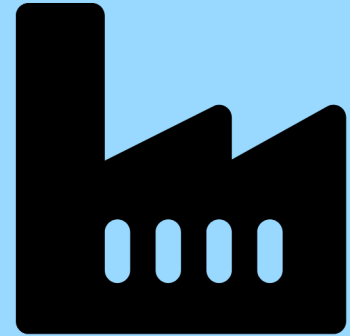
Hisaar Foundation Water Conservation Guidelines

Voluntary Public Awareness Campaign

Water Conservation at Industries

WATER CONSERVATION IN PLANT/MANUFACTURING/PROCESS AREAS

1. Collect and reuse steam condensate. With a small investment in condensate traps and a small pipeline, all condensate can be collected and reused in boilers. This not only saves water but also energy. The boilers will run more efficiently and will require fewer cleanings.
2. Collect and reuse cooling tower and boiler blow-down. If chemicals are not used in the water, it can easily be used for irrigation, general area washing such as bathroom flush tanks. This water can be put through existing water treatment system for reuse.
3. Collect and reuse bearing cooling and pump sealing water. This water often contains oil and grease and sometimes product, but with simple grease traps, a substantial proportion can be filtered and reused.
4. Check for leakages in the valve body or stem. In order to detect a leaking valve, especially if a pipe-line is not being used on a regular basis, leave it open at one end. If the valve is leaking, the line will drip from that point. Alternatively, install a blind flange or a plug at the point nearest to the source instead of depending on a valve to shut off completely.
5. In case of a large consumer of water, consider whether it makes sense to reuse process water. In most cases, 90 percent of industrial wastewater can be treated and reused, minimising the load on fresh water.
6. In conducting the evaluation, consider the alternatives; in most cases it is cheaper to treat wastewater than it is to install a desalination system or purchasing fresh water by tankers.



ADVANTAGES OF WATER REUSE AND RECYCLING

1. Reduction in demand and increased savings on buying water.
2. Reduction in disposal requirements as only solid matter will need disposal collection from the process.
3. Reduction in the load on the wastewater network and treatment plants.
4. Reduction in the pollution caused by wastewater in cases where the industrial area does not provide treatment.
5. Release of water for others to use.



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