



EFFICIENT CIP TECHNOLOGIES

EFFICIENT INSTANT COFFEE CIP TECHNOLOGY

TEC Square designs an instant coffee CIP plant to guarantee minimum care and maximum efficiency. Our objective is to minimize the total time required for CIP.

- ◆ First of all, we aim to avoid cleaning by designing the process and CIP circuits effectively.
- ◆ We design each circuit to minimize CIP time needed.

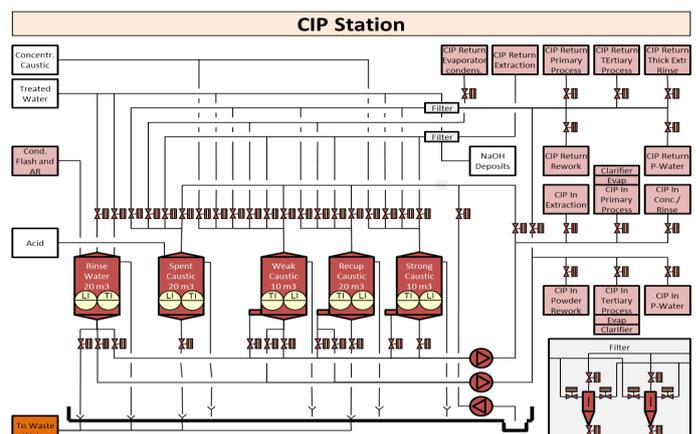
The TEC Square CIP plant design is characterized by:

- ◆ Optimum number of CIP circuits.
- ◆ Minimum CIP time per circuit.
- ◆ Maximum CIP efficiency for each circuit.
- ◆ Recuperation of CIP solutions where possible.

TEC Square believes that a well designed coffee plant should not require high investment in waste water treatment.

EFFICIENT INSTANT COFFEE CIP — KEY POINTS

A well designed CIP Plant should work autonomously. We plan the configuration for maximum operational convenience.



A Typical CIP plant

SPECIFICATIONS AND ADVANTAGES

	TEC Square Efficient CIP Technology	Advantages
Configuration	An effective operation of an instant coffee plant, aims to create as little waste as possible. The CIP plant follows this philosophy as well. First we recuperate remnants of product where we can, then we provide CIP solutions that require the minimum resources.	<ul style="list-style-type: none"> ◆ Investment in a good operational system with corresponding CIP plant can avoid investment in waste water systems. ◆ High degree of recuperation of solids optimizes raw material usage
Caustic Soda (NaOH)	TEC Square uses a combination of several caustic soda tanks to optimize the use and recuperation of caustic soda.	<ul style="list-style-type: none"> ◆ Low usage of concentrated caustic soda. ◆ Low usage of acid. ◆ Less "high-BOD" waste water .
Rinse	We use waste streams from the process as rinse fluid.	
Waste Water	Our systems allow for a huge reduction in waste water. We reuse chemicals to a maximum and only send streams to drain that cannot be used anymore.	<ul style="list-style-type: none"> ◆ Less usage of chemicals
Product Condensate	Condensate formed in the evaporation process can be reused in the plant.	<ul style="list-style-type: none"> ◆ Less water usage ◆ Less energy usage
Automation	CIP circuits are designed to function automatically. The exact timing per circuit and sub-circuit is set on site together with specialists from your operation. We provide next to fully automatic CIP and the possibility to work with a solution that requires less investment.	<ul style="list-style-type: none"> ◆ A CIP circuit is a fully automated operation, requiring little supervision.

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