

Solvitex

dosatec



The dissolving unit is composed of a tank, a group of valves and a sending group. The dissolving tank is built in such a way that the typical problems of the traditional dissolving systems are avoided.

To bypass the risk of deposit of dyes

to have the most effective washing operation, the following solutions have been adopted:



Electro-polishing of the inner surfaces of the tank that eliminates the sticking of the dyestuff to the wall.

Heating system with external jacket allowing a correct heat distribution according to the thin film heating technology.

Mixer with open impeller installed on the bottom of the dissolver so as to avoid the dyestuffs deposit on the rotating shaft.

Spraying ring for internal wall washing.

Special rotating device for lid washing.

Conically shaped bottom with self-emptying collector for sending group connection.

The sending group is made up of a special centrifuge pump, able to create a nominal delivery of 160 L/min at a lift of 5 Bar. The dissolving unit is completed with an impulse water counter flow meter for water inlet control. The distribution line is composed of a monopipe structure, made of polished



AUTOMATIC DISSOLVING AND DISTRIBUTION SYSTEM

Dye dissolving is a main aspect in dyeing batch preparation; different types of dyestuffs need completely different parameters for their dissolving. Even respecting these parameters only partially can cause physical and chemical reactions whose negative results can affect the reliability of the dyeing. For example, some common problems can be hydrolysis in reactive dyes or the lower dispersion and clotting in VAT and disperse dyes. SOLVITEX is a technology, conceived and created by Pozzi, suitable for the optimization of the dissolving and distribution operations of dyestuffs. The structure is basically composed of two units completely made of stainless steel: the dissolving unit and the distribution line to machines.

stainless steel pipes, and a series of pneumatic 3-way valves for dyeing machines selection.

The maximum distance between sending group and machine to be served can be more than 400 mt.

This feature makes the SOLVITEX easy to install in working dye houses and always expandable in the future.

For the installation of the distribution line,

no weldings or threaded joints are used, but only press fit type joints that are crimped with a special tool; this solution avoids the risk of deposits of dyestuff and makes the line easy to be washed. Another main feature is the realisation on-site of wide curves of the distribution line, that considerably reduce pressure drops and allow high efficiency in the distribution.





The SOLVITEX management software foresees the automatic setting, of each cycle, of the following parameters:

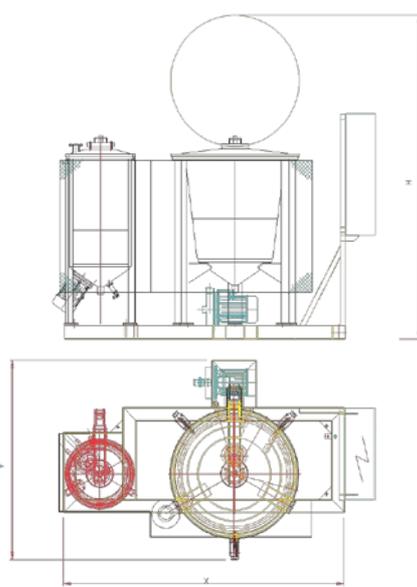
Amount of water for dissolving

Dissolving temperature

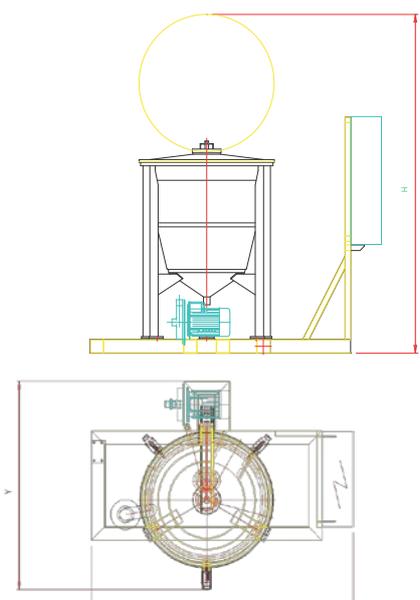
Mixing time

Quantity of water for washing operations

The automatic sequence of dissolving and distribution operations is managed by the DOSATEX software allowing the optimization of the cycle times of SOLVITEX, by controlling and planning its working according to production needs. It is also possible to interface it with the assisted weighing unit COLORTEX or PITEX and with the SAFETEX identification system. SAFETEX manages completely safe operations, thanks to its possibility to code and electronically identify the dyestuffs to be weighed and link the recipe dissolving and distribution operation to a dyeing lot, to a machine and to a defined operator.



Double SOLVITEX	X (mm)	Y (mm)	H (mm)
150+350	2160	1380	2450
150+450	2160	1380	2670
150+600	2210	1575	2670
300+600	3320	1575	2670



Single SOLVITEX	X (mm)	Y (mm)	H (mm)
150	1200	1200	2120
300	2065	1520	2450
450	2065	1520	2670
600	2265	1750	2670
900	2420	1850	2780
1200	2670	1950	2900

Features	Benefits	Advantages
✓ Electropolished tank	✓ No need to sort recipes according to colour	✓ Higher dyehouse flexibility
✓ External heating	✓ No parts to be cleaned in tank	✓ Reduce water usage
✓ Lid washing system	✓ Efficient cleaning the lid	✓ No contamination between dissolving cycles
✓ Chaos steerer mounted on the bottom	✓ High mechanical action transferred to the liquid	✓ No leftovers of dyestuff / More efficient cleaning
✓ Dyestuff by dyestuff tunability	✓ Can be used with all available classes of dyestuffs	✓ Higher process repeatability
✓ Can be fitted with two tanks	✓ Can serve both small and big machines	✓ Only one dissolver is required
✓ Sealed lid during cycle	✓ No danger for operators	✓ Complete safety
✓ SAFETEX technology	✓ Total control & tracking of operators, weighted lots and dyestuff dispensing	✓ Eliminates human errors
✓ Monopipe Distribution System	✓ Only one pipe running across the plant. Easily expandable. Can connect machines up to 400 mt.	✓ Easy installed in existing dyehouses. Less space required for connecting the machines.



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