



Giunone, the New Ultrafiltration Automatic Plant for E-coat

Condoroil Stainless offers complete and automatic ultrafiltration plants, such as the Giunone model for e-coat (Fig. 1). Ultrafiltration is a technique that allows the separation of molecules having different dimensions and, for this reason, it can be, as a first approximation, equated with a very thorough filtration process that uses special filters named membranes. Membranes have different construction configurations and, for economic reasons and flexibility, to process paints of e-coat systems the standard are the spiral membranes. The main use is to produce, starting from the painting bath itself, the first rinse water (or better the mixture water and solvent). However it is becoming always more frequent the use of reverse osmosis systems to get a more thorough purification of the permeate for the last rinse step. Membranes are made of modified PVDF and have a proven efficacy on e-coat paints, both anaphoresis and cataphoresis. Standard 4, 7.6 and 8 inches elements are available, as well as valid and competitive spare parts for each ultrafiltration system. The plant consists of a monobloc unit assembled on a AISI 304 stainless steel skid. Ultrafiltration is a membrane process able to separate components in the solution based on molecular measurements and shapes. Solvents and other small dissolved particles pass through an ultrafiltration membrane and



Figure 1: Giunone is the ultrafiltration automatic plant designed by Condoroil Stainless.

are collected as permeate while the largest substances are retained by the membrane and recovered back to the paint bath (Fig. 2). The permeate is used in the rinse ramps. This closed loop cycle is used to recover paint solids (drag-out). The permeate can be deviated to purge to reduce paint conductivity.

For further information:
www.condoroil.com

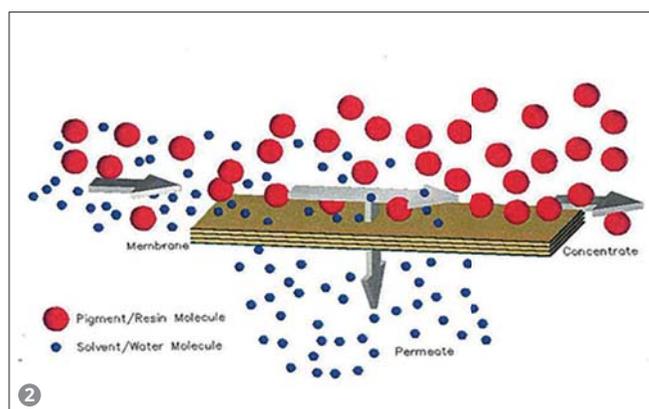


Figure 2: Ultrafiltration is a membrane process able to separate components in the solution based on molecular measurements and shapes.