

Fully Automatic Dyestuff Weighing and Dissolving System

Profix FW

1 AG Unit

AG Unit is a supportive unit of Profix FW which is designed for instant dispensing. Recipes less than 1000 gram is that between 50 gram – 1000 gram is being dissolved inside the weighing bucket and dispensed to the dyeing machine through AG Unit. Since the dyestuff is being dissolved inside the weighing bucket minimum water is required during the dissolving which allows the system to support small capacity dyeing machines without effecting the liquid ratio rates as well as increasing overall efficiency of the Profix FW system.

2 SW Unit

SW Unit is a supportive modular unit of the weighing unit, specially designed to fulfill the low amounts of weighing requests. It is a brand new design that allows the system to measure minimum 1 gram of dyestuff by using high precision load cell and precise handling method.

3 Stocker Unit

Stocker Unit consists of 12 buckets. Stocker unit is a intermediary unit between vacuum unit and weighing unit. Its main duty is transferring the weight measured buckets to vacuum unit and take the buckets back to stocker unit once the vacuum transfer completed as well as the bucket washed and dried.

4 Dissolving Unit

2 pieces of 380 Liters dissolving tanks are supplied with the standart package. According to dyehouse requirements, quantity and the volume of the dissolving tank can be increased. Dissolving time can be completed in a very short time due to the special design of the dissolving tank and its powerful mixer. Once the dissolving process completed, dyestuff solution is sent to the dyeing machines through the single pipe. After dispensing is completed whole pipe is washed and gets ready for the next job order.

5 Weighing Unit

This modul consists of the 100 L and 300 L dyestuff silos. 300 L silos are placed in the front side of the weighing unit. Number of the silos can be determined by the customer requirement since it is a modular system. According to the recipe, scale car is quickly moved to be exactly aligned with the silo. The high precision scale situated on the scale car provides quick and reliable weighing.

Once the weighing is completed, system immediately closes the lid of the silo to prevent pouring of any extra dyestuff to the weighing bucket. Dyestuff silos can be filled through the vacuum filling unit. Silo design and filter systems keeps the vacuum line always clean. The amount of dyestuff in the silos can be monitored in the control panel of the software. As per the defined minimum and maximum level of the silos, system will give warning to the operator to re-fill the dyestuff to the silo.

Profix FW can be integrated to your recipe software thus its own recipe module is available in Profix FW. As per the recipe, an empty weighing bucket is requested from the stocker unit and when the weighing is complete the filled weighing bucket is send to the stocker unit to be sent to transfer or dissolving units. If the dye request is over the capacity of the weighing bucket, job order can be divided into multiple weighing buckets. Weighing bucket volumes are available in standart 25 liters and optional 45 liters.



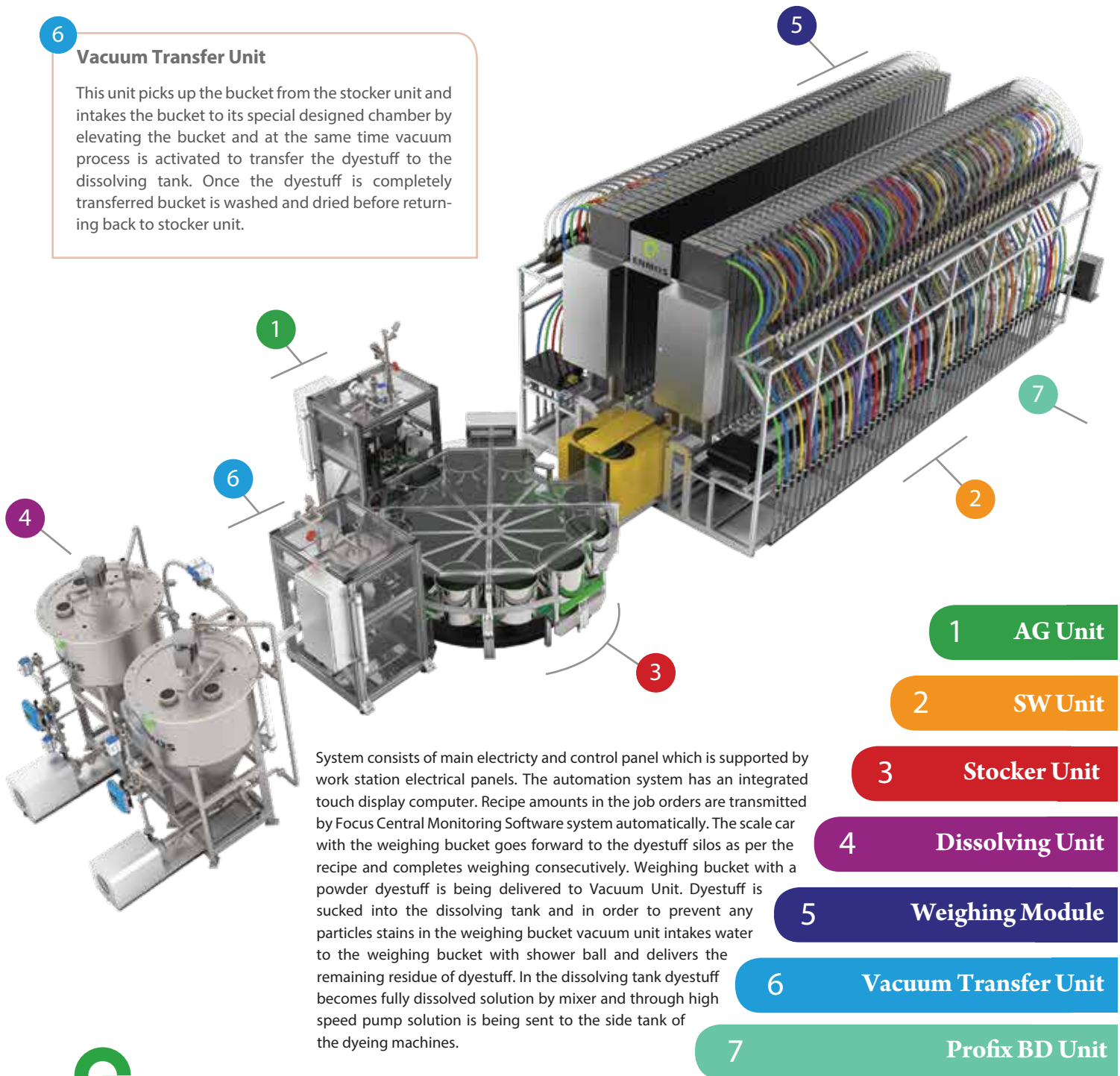
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Vacuum Transfer Unit

This unit picks up the bucket from the stocker unit and intakes the bucket to its special designed chamber by elevating the bucket and at the same time vacuum process is activated to transfer the dyestuff to the dissolving tank. Once the dyestuff is completely transferred bucket is washed and dried before returning back to stocker unit.



System consists of main electricity and control panel which is supported by workstation electrical panels. The automation system has an integrated touch display computer. Recipe amounts in the job orders are transmitted by Focus Central Monitoring Software system automatically. The scale car with the weighing bucket goes forward to the dyestuff silos as per the recipe and completes weighing consecutively. Weighing bucket with a powder dyestuff is being delivered to Vacuum Unit. Dyestuff is sucked into the dissolving tank and in order to prevent any particles stains in the weighing bucket vacuum unit intakes water to the weighing bucket with shower ball and delivers the remaining residue of dyestuff. In the dissolving tank dyestuff becomes fully dissolved solution by mixer and through high speed pump solution is being sent to the side tank of the dyeing machines.

1 AG Unit

2 SW Unit

3 Stocker Unit

4 Dissolving Unit

5 Weighing Module

6 Vacuum Transfer Unit

7 Profix BD Unit