RIEDEL AUTOMATION
TOBACCO FEEDING SOFTWARE

Automation is playing an increasingly important role in the cigarette manufacturing process due to its direct impact on uptime of cigarette production machinery, reduction of energy consumption, need for tracking and tracing of feeding processes and control of relevant tobacco feeding parameters resulting in optimization and improvement of cigarettes quality.

Riedel offers modular software solutions for tobacco feeding processes.
The graph gives an overview of Riedel software modules which can be integrated into your production systems. Center of the graph consists of state-of-the-art operating systems for filter plants (Jet-Matic OS), blend selector (BSOS) supported by the SACU (Tobtronic OS) which provide the basis for our tobacco feeding software.

The applications shown in the outer fields of graph offer functional extensions of Jet-Matic OS, BSOS and Tobtronic OS. E.g. the Blend Specific Feeding (BSF) module communicates with the SACU Remote Control (SRC) to further process data collected from the SACU. Some applications require superior modules. E.g. the Blend Integrity (BI) mode requires the Maker Inhibit (MI) software module. Last but not least, EcoFeed is a software which encloses the whole system.

Our software applications can be individually adapted to meet the customer needs. Relevant information from each software application is available for the end user giving possibility to identify potential for process improvements thus increasing the overall efficiency of customer processes.
**Blend Selector Operating System**

The blend selector fulfills the role of an interface between tobacco feeders and makers thus making the pneumatic tobacco feeding system flexible for production needs. The BSOS is an efficient tool for communication with operators of the blend selector, e.g. advising for achieving the requested connections between tobacco feeders and cigarette makers on the simplest way.

**Indication On Spot**

The IOS is developed to give an operator fast and precise information concerning current connections within the blend selector. Unique pipe numbering can be assigned by the operator using the HMI of the blend selector. The IOS displays instantly information concerning correct or incorrect connections.

**Maker Inhibit**

The MI module only allows the cigarette maker to start production if correct pipe connections are established within the blend selector. Using BI mode information concerning the tobacco blend requested by the cigarette maker and tobacco blend on assigned tobacco feeder is being compared. If the blend available on the tobacco feeder does not match the request from the cigarette maker the MI module will not grant production allowance.

**Blend Specific Feeding**

The BSF module is developed to allow and ensure individual (blend specific) feeding conditions. Optimum parameters of tobacco and air speed can be assigned individually to every tobacco blend in order to achieve most gentle feeding process resulting in minimum degradation. Upon selecting tobacco blend, individual blend specific feeding parameters are activated.

**SACU Remote Control**

SRC is a unique software solution for network communication enabling a flexible access to SACU. Via the SRC module user is able to remotely adjust SACU operating parameters, e.g. set points and monitor the feeding process. SRC is necessary to achieve all functionalities of EcoFeed, MI, BS and IMB.

**Interactive Message Box**

IMB is an extended functionality for the SACU touch panel enabling instant communication between production supervisors and operators of specific cigarette makers.

**SoftClean**

Our SoftClean module is designed for cleaning filter plants in a most gentle manner. The pressure drop indicates the dustload on the filter bags. Cleaning only takes place when it is necessary thus helping to reduce compressed air consumption and extending the lifetime of filtration material.

**EcoFeed**

EcoFeed is a software designed for optimizing energy consumption during operation of the filter plants. In combination with a frequency converter the required negative pressure and air volume of the filter plant is continuously monitored. Using SRC the EcoFeed system is adjusting the electrical energy consumption of the filter plant depending on the current feeding conditions.