



TOBACCO ENGINEERING



### **BENEFITS**

- Highly efficient in collecting airborne ferrous particles
- Unique Magnet design avoids 'wiping'
- Simple to clean
- Sight glass provides instant visual confirmation that lines are operating effectively

## **ROUND PIPE SEPARATOR AND SIGHT GLASS ASSEMBLY**

### **CLEANING AND INSPECTION FOR YOUR CUT TOBACCO TRANSFER LINES**

The LTL Round Pipe Separator and Sight Glass assembly provides an effective method of Removing Ferrous material from a stream of pneumatically conveyed tobacco. The separator comprises of a specially designed stainless steel body which flattens the flow of tobacco and presents a thin carpet to the surface of a plate type magnet which attracts and retains ferrous particles.

# ROUND PIPE SEPARATOR AND SIGHT GLASS ASSEMBLY FUNCTIONAL DESCRIPTION

## GENERAL DESCRIPTION

The assembly comprises of a 316 grade stainless steel fabricated housing with a hinged door which incorporates a plate type magnet. Each end of the separator terminates with a flange connection. The sight glass is secured to the outlet side of the separator via a mating flange and clamp arrangement.

## PRINCIPLE OF OPERATION

The flow of tobacco through a pneumatic transfer system and entering the separator is gently flattened to provide a thinner carpet depth and then guided close to a plate type magnet. Ferrous particles within the tobacco stream are collected by the plate magnet which is mounted within a hinged access door to facilitate cleaning.

The surface of the magnet incorporates a saw tooth profile which is designed to protect the collected particles from being 'wiped' from the surface of the magnet by the flow of air (see diagram below). The sight glass provides a visual indication that the transfer line is in use to prevent attempted cleaning during operation.

## TECHNICAL SPECIFICATION

The magnet is a rare earth plate type with a flux density of 9,500 - 10,000 Gauss. The housing is manufactured from 316 grade stainless steel.

The sight glass is manufactured from Borosilicate (Pyrex) with a 5mm or 7mm wall thickness depending upon the internal diameter.

