

## Magnetic separators

Successful test leads to multiple installations at ConAgra flour mills

ConAgra of Omaha, Neb. is a diversified international food company that operates across the food chain in 32 countries. Meticulous about product purity, ConAgra decided to procure additional magnetic separators for their flour mills around the country.

They took extraordinary measures to evaluate available magnetic separators. ConAgra conducted a test to evaluate various magnetic separators at their Omaha plant. ConAgra supplied a truckload of flour to conduct the test, and sacrificed the product, downtime and man-hours. Representatives of the various companies were not permitted at the test site to ensure test integrity.

tive Magnetics direct contact design.

"The Innovative Magnetics separator tested highest in magnetic strength and removed a higher percentage of iron than the other quick clean separators," said Anthony Yount of ConAgra, who evaluated the separator. "It also proved to be the most user friendly, due to its small size, light weight, and ease of inspection".

Bob, Wysol, Innovative Magnetics president and product designer said "Additionally, it is the only known pneumatic separator that offers an unconditional guarantee to be air-tight to 40 psi."

Its design forces the product to contact the magnet before exiting the separator. This approach

is essential because product time in the magnetic zone is substantially less in pneumatic lines than in gravity flow applications, according to Wysol.

The magnet was also designed to prevent catured iron from being discharged by the powerful flow of high velocity product.

Wysol does not manufacture cone/cylinder design for pneumatic applications. The non-magnetic cone in the design of the magnet deflects product to the outside walls of



The standard pneumatic magnet of industry was the cone/cylinder magnet design. Rare earth magnet materials are strongest, and four models containing rare earth magnets were tested, along with a newer rare earth design from Innovative Magnetics.

Ten thousand pounds of the most difficult to convey flour was tested. To ensure fairness, 15 pieces of identical fine iron were introduced to the product for each magnet tested. When the tests were completed, the company decided on Innova-

the separator, away from the magnet. In addition, the design is notorious for leaking product.

ConAgra flour mills use multiple rotary tri-magnets for gravity flow application. Rotating tri-magnets are guaranteed not to plug and to keep difficult product flowing. The quick clean tri-magnets test stronger than tube, grate-type magnets.

For more information on the separators, contact Innovative Magnetics at **603-598-8300**

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