



ENGINEERING
AND SERVICES

Bilfinger Water Technologies

Vee-wire[®] Technology in Starch Processing

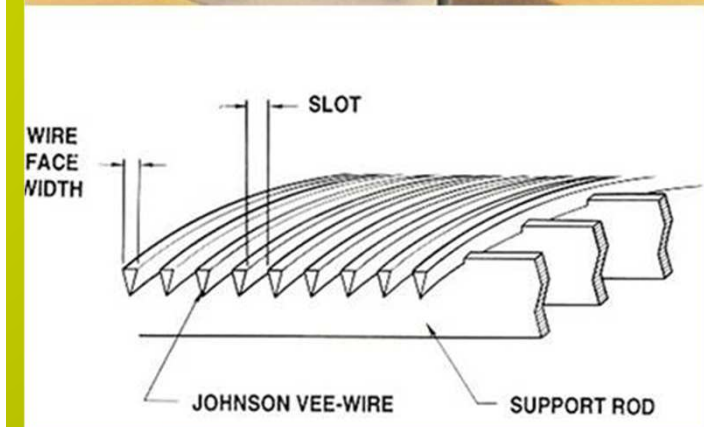
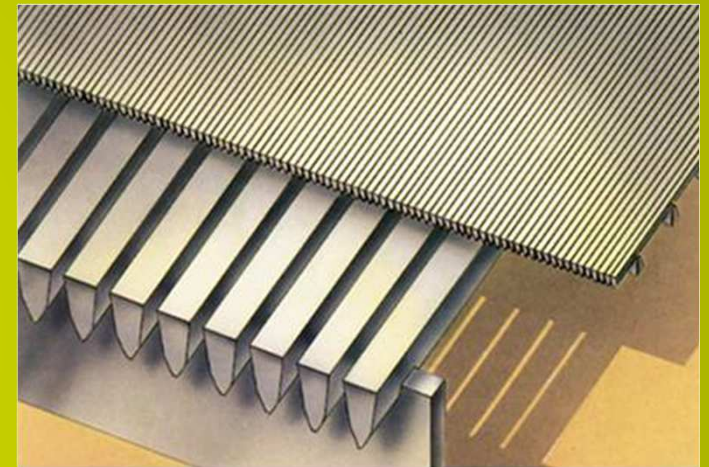
Philip Schofield

ACHEMA 2015, Frankfurt am Main | 15 -19 June 2015

Vee-Wire®

Main Features

- High Open Area
- Continuous Slot Opening
- Optimized Screen Design
- Vee-Wire® Profile
- Two Point of Contact of Particles
- Smooth Surface
- Strong All-Welded Construction
- Easy Cleaning
- Quick On-Site Installation



Vee-Wire® Products in Starch Processing



DSM Sieve Bends 120°



**Pressure Boxes
for DSM Screens**



Fugal Screens



Gluten Screens

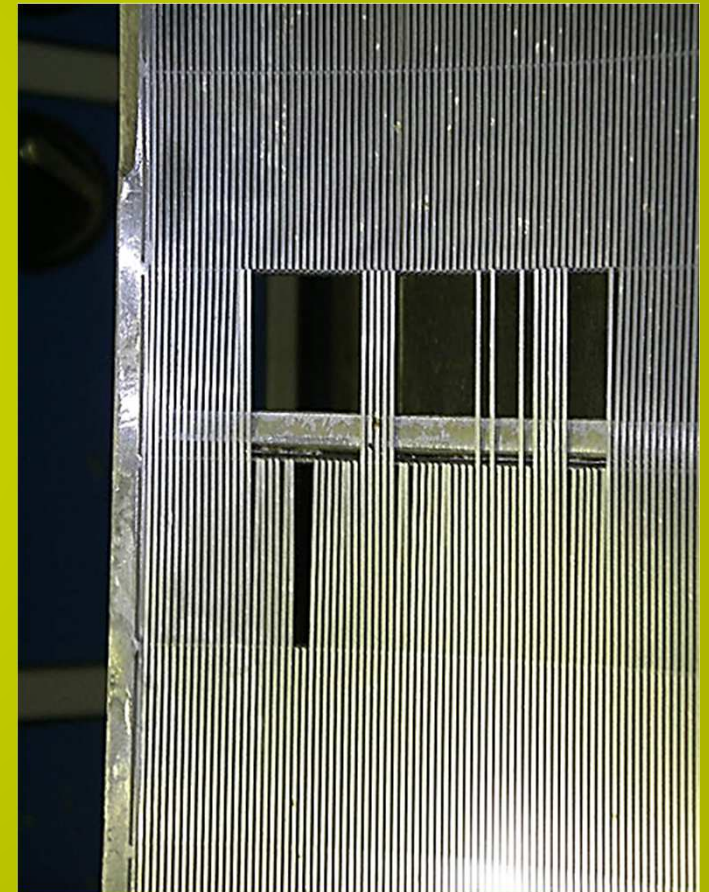
Optimization with Vee-Wire® Products in Starch Processing

Gluten Screen

- Increasing production output
 - Before loss of production due to frequent failure
 - Loss of gluten due to presence of wire pieces in gluten product

- Extension of Maintenance Interval

- Increasing the service life from 2 months to 3 years at the moment, without any significant signs of wear



Optimization with Vee-Wire® Products in Starch Processing

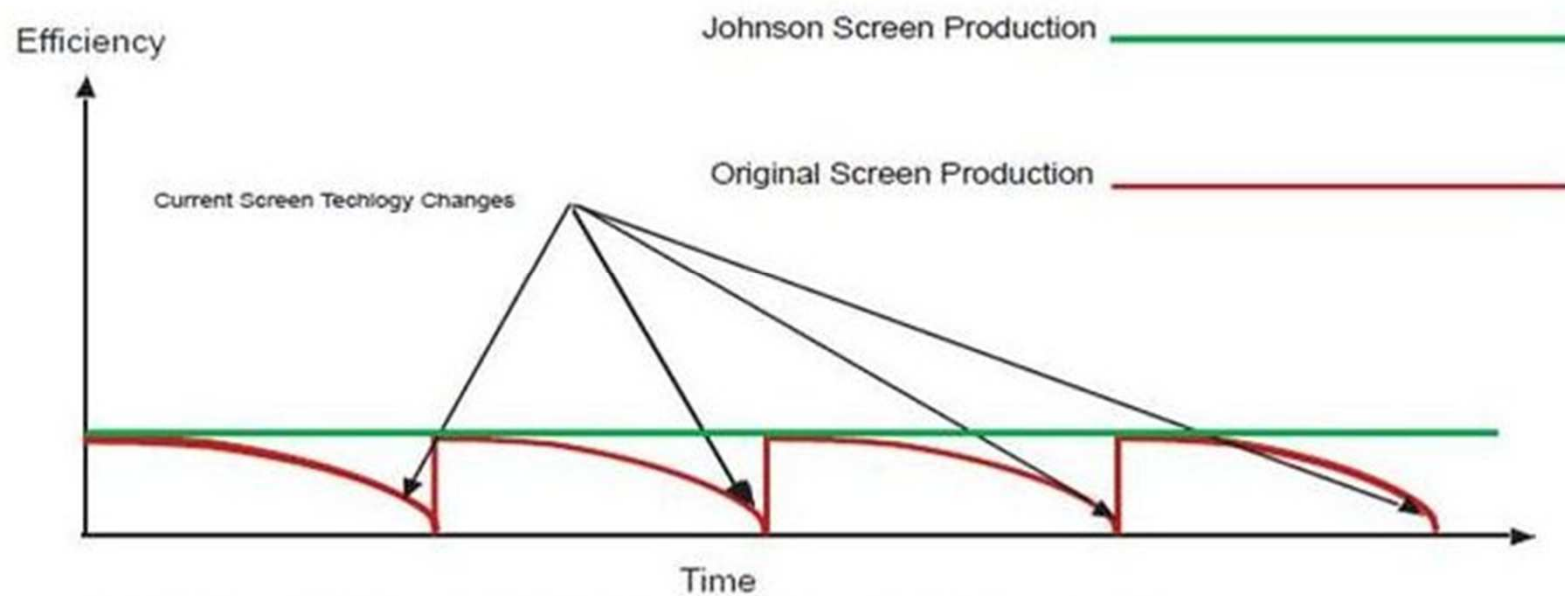
Gluten Screen

- Reduction of Maintenance Time
 - Modification of the screen construction for easier and faster installation and de-installation

- Increasing of Work Safety
 - Significant reduction of the risk of injury because of adding handles for easier mounting (Before 2 hand injuries during fitting)



Optimization with Vee-Wire® Products in Starch Processing



Compare of the lost of efficiency for existing screen technology vs. the improved Vee-Wire® technology
The service life was increased by 18 times!

Optimization with Vee-Wire® Products in Starch Processing

Fugal Screen for Horizontal Centrifuge

- Extension of Maintenance Interval
 - Increase the service life from 2 months to 9 months at the moment, without any significant signs of wear

- Increasing of Open Area and Filtration Performance

Centrifuge A:

Wire 0,5mm width and 63µm slot size = 11,03% Open Area

Centrifuge B:

Wire 0,37mm width and 25µm slot size = 6,16% Open Area



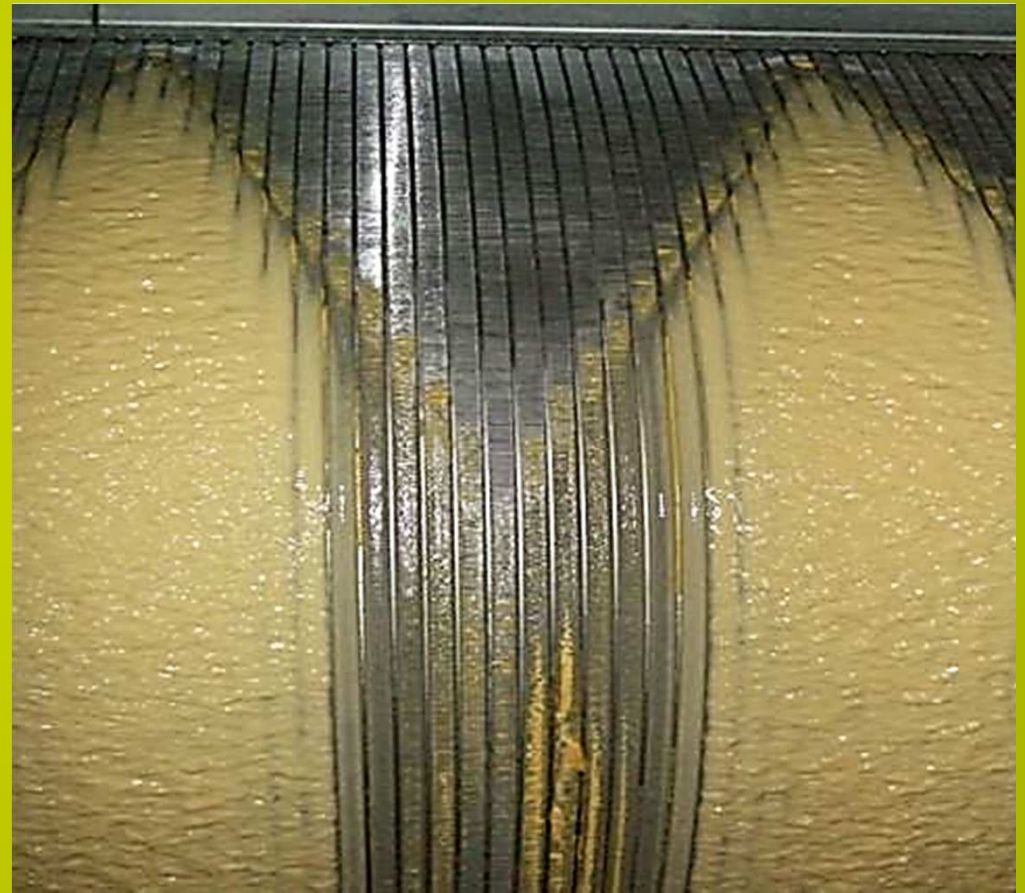
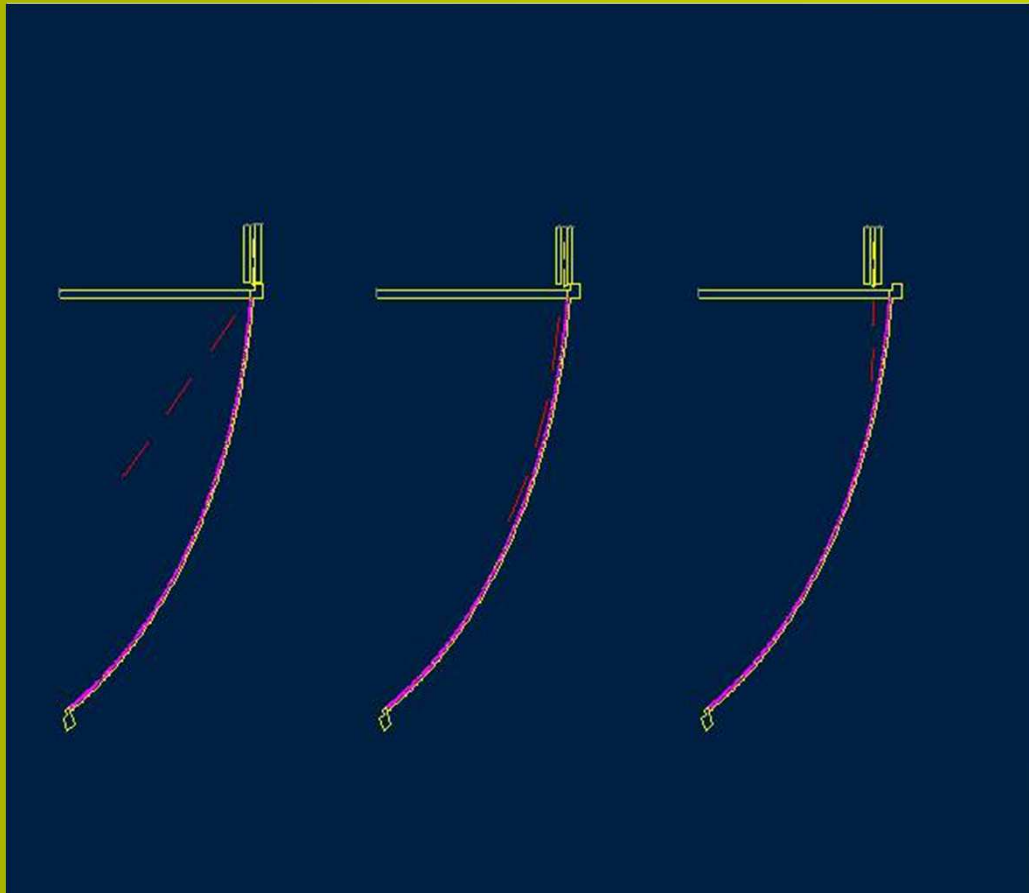
Optimization with Vee-Wire® Products in Starch Processing

Patented Moveable Nozzles

- Increasing of screening area and wear life by 30%
 - Average cost of 1 screen with 7 months wear life = 1.000 Euro
Increased life time = savings 300 Euro per screen
- Flow spreads out as velocity allows
- Non-velocity areas has a collection of build up and will require washing, so less build up = less cleaning required = less down time and maintenance costs



Optimization with Vee-Wire® Products in Starch Processing





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Thank You for Your Attention!