

# HOW TO ELIMINATE

Dust Leakage & Excess Downtime With BFM<sup>®</sup> fitting

— 10 OCTOBER 2023 —

 **BFM<sup>®</sup>fitting**

# Meet Our Speakers



**Blair McPheat**  
BFM® CEO & Founder



**Matthew Bailey**  
BFM® Technical Lead



**Claudio Pavanelli**  
BFM® BDM, S, Europe



**Hans Assink**  
BFM® BDM, N, Europe

# BFM<sup>®</sup> At a Glance

Made in NZ, Used The World Over

**54+**

Distributors

**77+**

Countries

**20+**

Developed  
Products

**2006**

Patented

**10K**

Customers



# Just some of our Global Customers



# AGENDA

**01** The BFM® fitting 100% seal – cleaner, safer & more efficient

**02** BFM® Product Range

**03** Industries & Applications

**04** Case Studies

**05** Installing the BFM® fitting System

**06** Q&A

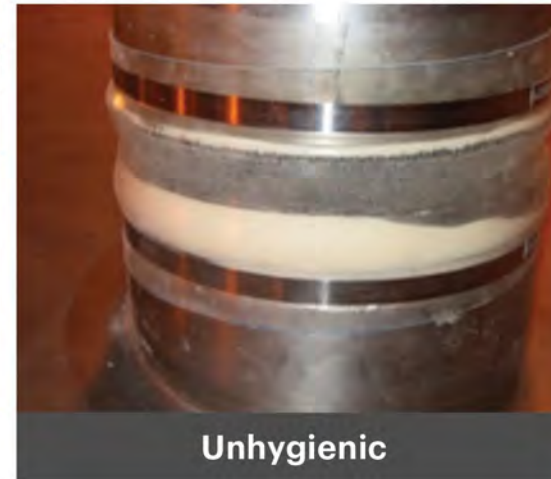
# 01

The BFM<sup>®</sup> fitting 100%  
seal – cleaner, safer &  
more efficient

# The Problem with Old-Style Connectors



- **Short lifespan** so frequent replacements
- **Lengthy installation** process
- **Significant downtime** to replace & clean up after
- **Larger inventory** due to variation in sizes



- **Poor sealing ability**
- **Product build-up** between connector & pipe walls
- **Frequent cleanups** required



- Dust leakage is a **serious explosion risk**
- Dust in plant atmosphere **unhealthy for staff**
- Clamps and tools required for fitment **risk workers hands**

# The BFM<sup>®</sup> fitting System



01. The BFM<sup>®</sup> fitting 100% seal – cleaner, safer & more efficient



# THE BFM<sup>®</sup> ADVANTAGE

What's so great about a BFM<sup>®</sup> fitting?



# 100% SEALED

Stops Product Loss



**BEFORE**



**AFTER BFM® FITTING**



Provides Improved  
**PLANT HYGIENE**



**BEFORE**



**AFTER BFM® FITTING**



Provides Better  
**HEALTH & SAFETY**



- Snap fit installation means **no tools required** for standard BFM® fitting connector installation & removal



- For high-risk areas, **special tool-release options** are available for added staff security, with user friendly design



Helps

# PREVENT & CONTAIN EXPLOSIONS



BFM® FITTING

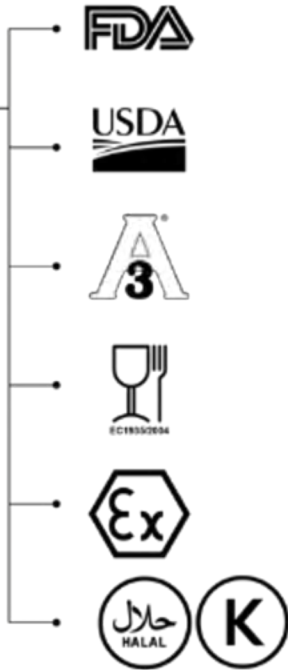


HOSE CLAMP

# REGULATORY COMPLIANCE



Confidence





# QUICK & EASY

To Change

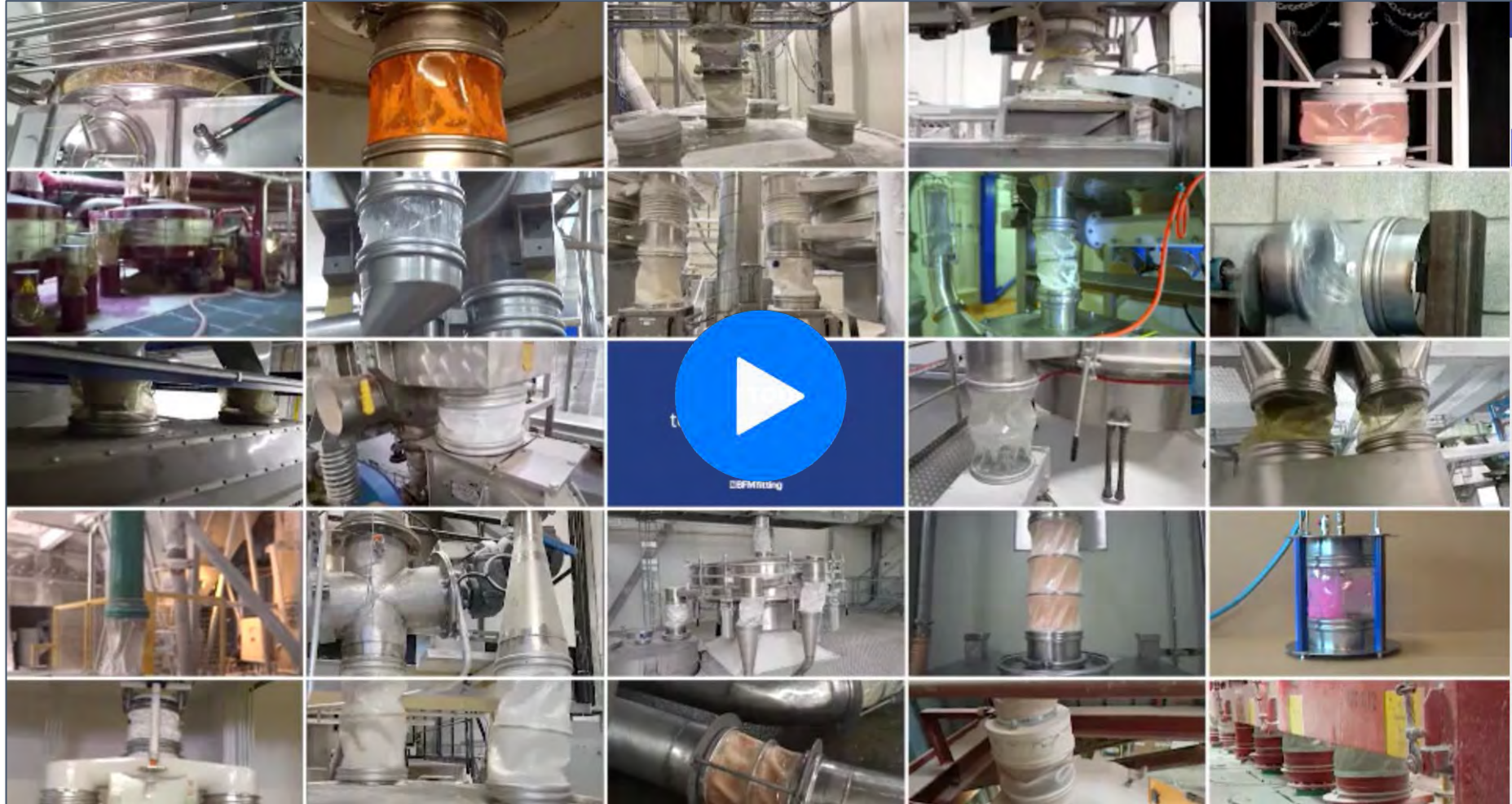
Quick & Easy  
**Installation**

Bend **kidney shape** a  
placing **the** not





# Superior **STRENGTH & DURABILITY**







Superior

**STRENGTH & DURABILITY**



“ BFM<sup>®</sup> are lasting over  
**50x longer**  
than our previous  
connectors ”

—— Uk Plaster Manufacturer



Helps

# STREAMLINE YOUR INVENTORY

BFMfitting

**BFM<sup>®</sup>**  
Streamlines  
Inventory

BFM<sup>®</sup> can **simplify** and **streamline** your inventory



Significantly

**REDUCES DOWNTIME**



**NO LEAKS = LESS CLEAN-UPS**



**LAST LONGER – LESS CHANGOVERS**



**FAST TO CHANGE**



**PERFECT FIT EVERY TIME**

02

BFM<sup>®</sup>  
Product Range

# BFM<sup>®</sup> SPIGOTS RANGE



## STANDARD SPIGOT

- Stainless Steel T304L and T316L , & C22 Hastelloy
- Ø100mm to 1,650mm in 50mm increments (incl a Ø125mm)



## LIPPED SPIGOT

- Stainless Steel T304L only
- Ø100mm to 400mm in 50mm increments

# BFM® SEEFLEX RANGE



**SEEFFLEX 040E**



**SEEFFLEX 020E**



**SEEFFLEX 040AS**



**SEEFFLEX 060ES**

**Temp Range:**

**Surge Temp:**

**Surface Resistivity:**

**ATEX Compliant:**

**Regulations:**

- 25 to 110°C

120°C

10<sup>10</sup> (Tested to ASTM D-257)

IBExU tested

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011

- 25 to 80°C

100°C

10<sup>10</sup> (Tested to ASTM D-257)

IBExU tested

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011

- 25 to 95°C

100°C

10<sup>8</sup> (Tested to ASTM D-257)

IBExU tested

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011

- 25 to 120°C

140°C

10<sup>10</sup> (Tested to ASTM D-257)

IBExU tested

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011

# BFM® TEFLEX RANGE



## TEFLEX WOVEN

**Temp Range:**

- 40 to 260°C

**Surge Temp:**

280°C

**Surface Resistivity:**

Insulative

**ATEX Compliant:**

IBExU tested

**Regulations:**

• FDA 21 CFR 177.1550, 178.3297.



## TEFLEX NP BLACK

- 73 to 300°C

316°C

10<sup>6</sup>

IBExU tested

• FDA 21 CFR 177.1550 & 178.3297  
• (EC) 1935/2004 & 10/2011.



## TEFLEX NP OPAQUE

- 73 to 300°C

316°C

Insulative

IBExU tested

• FDA 21 CFR 177.1550  
• (EC) 1935/2004 & 10/2011.

# BFM® FLEXI RANGE



## FLEXI CONNECTOR

- 20 to 85°C

105°C

3:1

IBExU tested

- FDA 21 CFR 177.1680, 175.105 (adhesives) & 177.2600
- (EC) 1935/2004, 2023-2006 & 10/2011
- USDA



## FLEXI-LIGHT

- 20 to 85°C

105°C

4:1

IBExU tested

- FDA 21 CFR 177.1680, 175.105 (adhesives) & 177.2600
- (EC) 1935/2004, 2023-2006 & 10/2011
- USDA



## FLEXI-EARTHED

- 20 to 85°C

105°C

3:1

IBExU tested

- FDA 21 CFR 177.1680, 175.105 (adhesives) & 177.2600
- (EC) 1935/2004, 2023-2006 & 10/2011
- USDA

**Temp Range:**

**Surge Temp:**

**Compression Ratio:**

**ATEX Compliant:**

**Regulations:**



# BFM® BREATHABLE CONNECTORS



**LM3 CONNECTOR**



**LM4 CONNECTOR**



**FM1 BREATHER BAG**

**Max. Operating Temp:**

-70 to 94°C

- 40 to 130°C

- 20 to 130°C

**Max. Surge Temp:**

107°C

150°C

150°C

**Surface Resistivity:**

10<sup>8</sup>

10<sup>9</sup>

10<sup>8</sup>

**ATEX Compliant:**

IBExU tested

IBExU tested

N/A

**Regulations:**

- FDA 21 CFR 177.2800
- (EC) 1935/2004, 2023/2006 & 10/2011

- FDA 21 CFR 177.2800
- (EC) 1935/2004, 2023/2006 & 10/2011

- FDA 21 CFR 177.2800
- (EC) 1935/2004 & 10/2011

# BFM® BLANKING CAPS & BINS



## BLANKING CAP

**Temp Range:**

- 25 to 110°C

**Surge Temp:**

120°C

**Surface Resistivity:**

10<sup>10</sup>

**ATEX Compliant:**

IBExU tested

**Regulations:**

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011



## BLANKING BIN

- 25 to 110°C

120°C

10<sup>10</sup>

IBExU tested

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023-2006 & 10/2011

# BFM® BULK BAG LOADER





**KEVLAR COVER**

IBExU tested\*

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023–2006 & 10/2011



**BLACK-OUT COVER**

IBExU tested\*

- FDA 21 CFR 177.1680 & 177.2600
- USDA
- (EC) 1935/2004, 2023–2006 & 10/2011

**ATEX Compliant:**

**Regulations:**

# BFM® ADDITIONAL OPTIONS

**STANDARD  
TR**



**SMILEY  
FACE TR**



**SS RINGS**



**PLASTIC RINGS**



**TAPERED  
CONNECTOR**



# BFM® NEW PRODUCTS



**CORNER CONNECTOR 040E & 060ES**



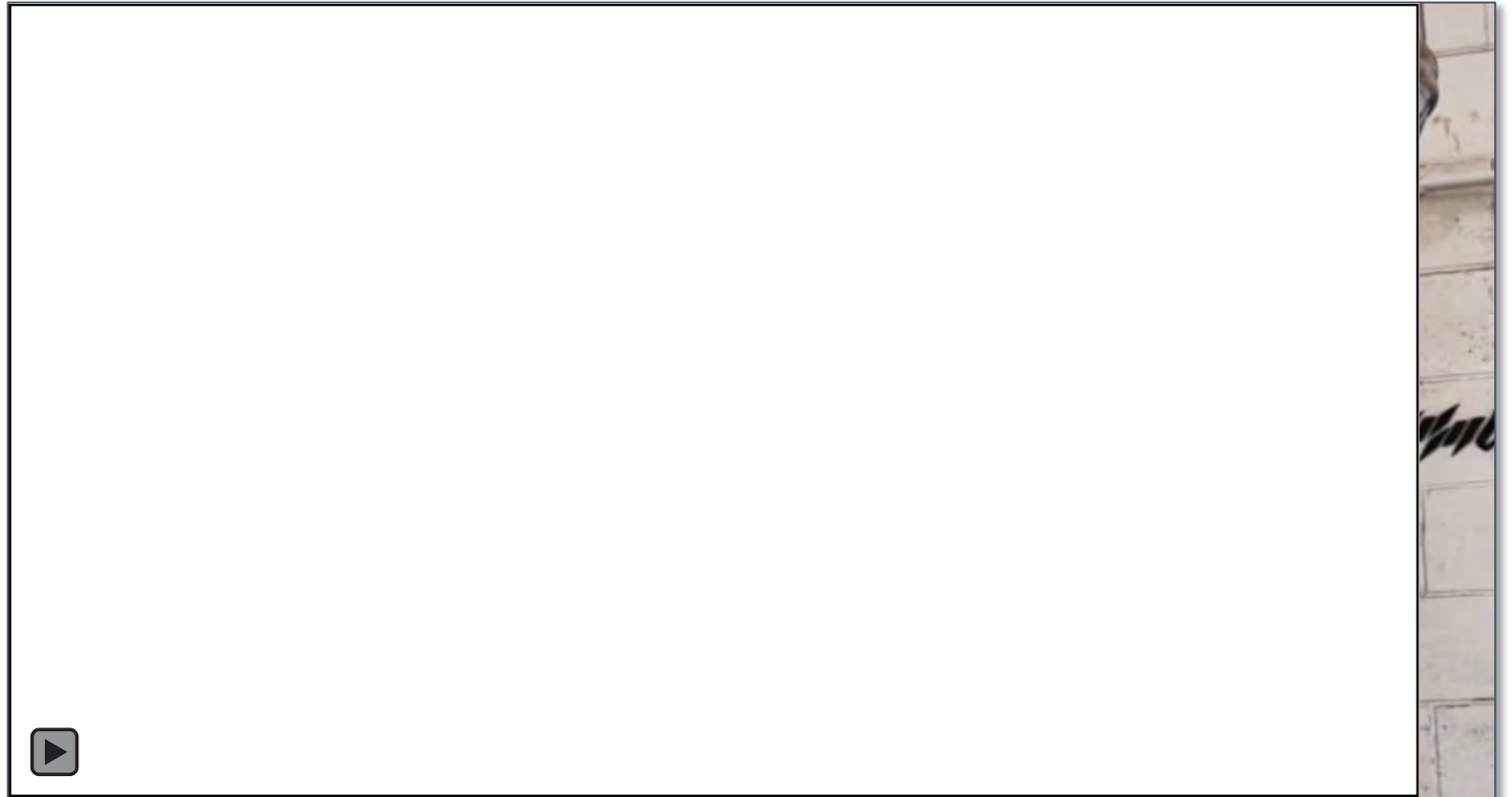
**QUICK ACCESS PORT OPTION**

# BFM® VENTING SURGE HOPPER

**VENTING  
SURGE  
HOPPER**



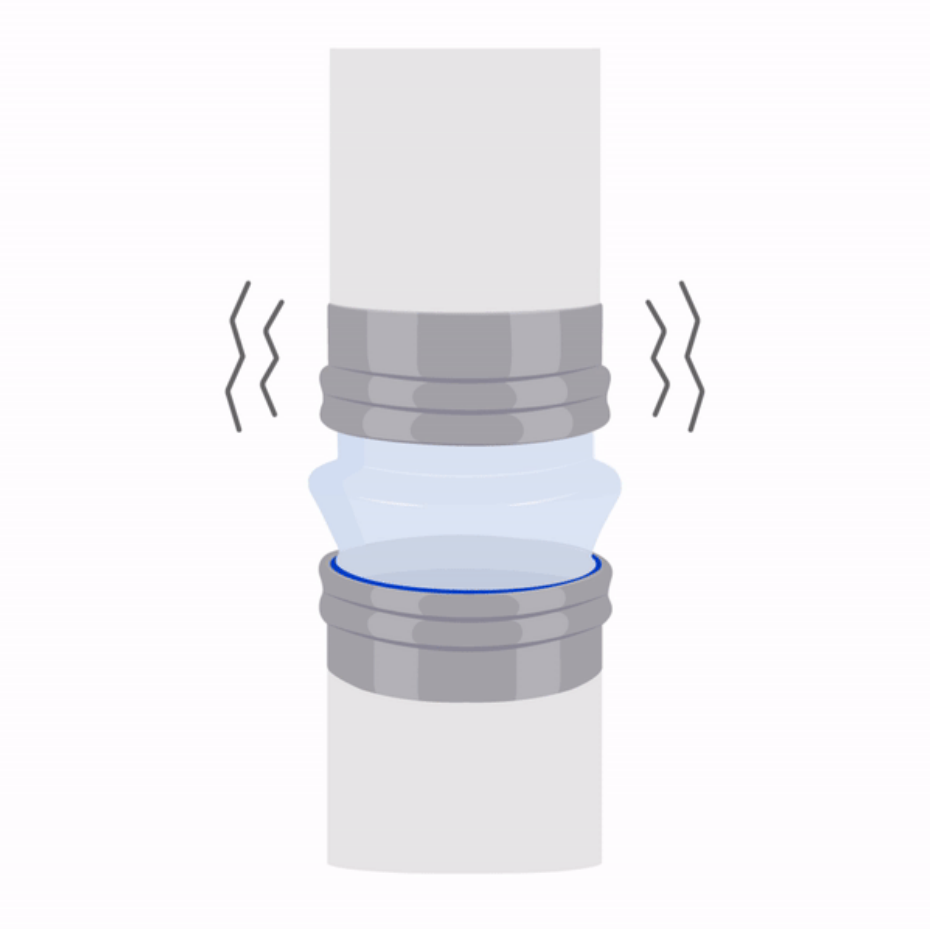
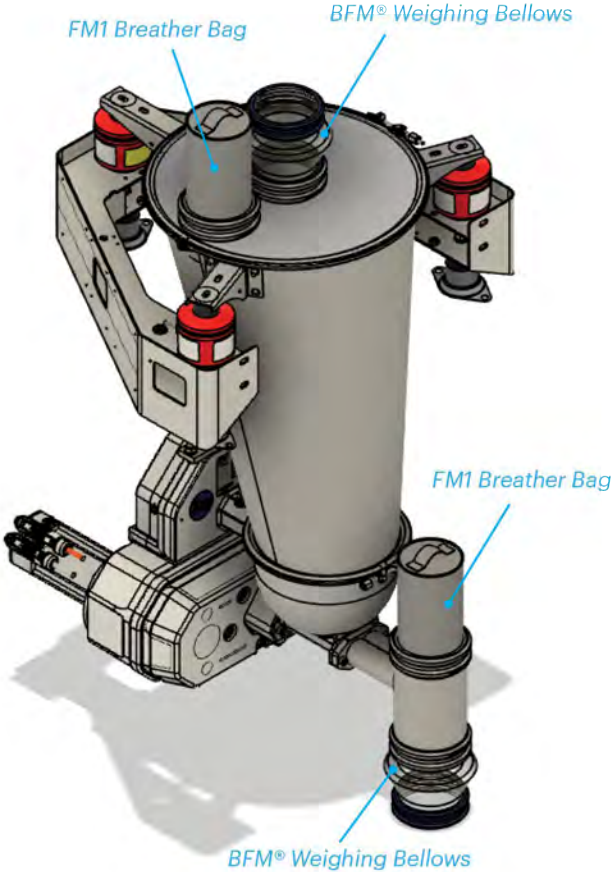
**VENTING  
SURGE  
HOPPER  
SPIGOT**



# BFM® WEIGHING BELLOWS



**WEIGHING BELLOWS**





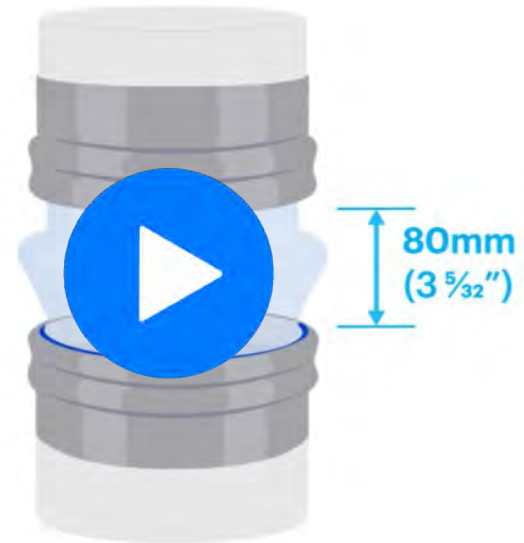
# BFM® WEIGHING BELLOWS



**WEIGHING BELLOWS**

BFMfitting

Spigots for Weighing Bellows must be installed exactly **80mm (3 5/32")** apart



03

Industries &  
Applications

# INDUSTRIES



FOOD



CHEMICAL



PHARMA



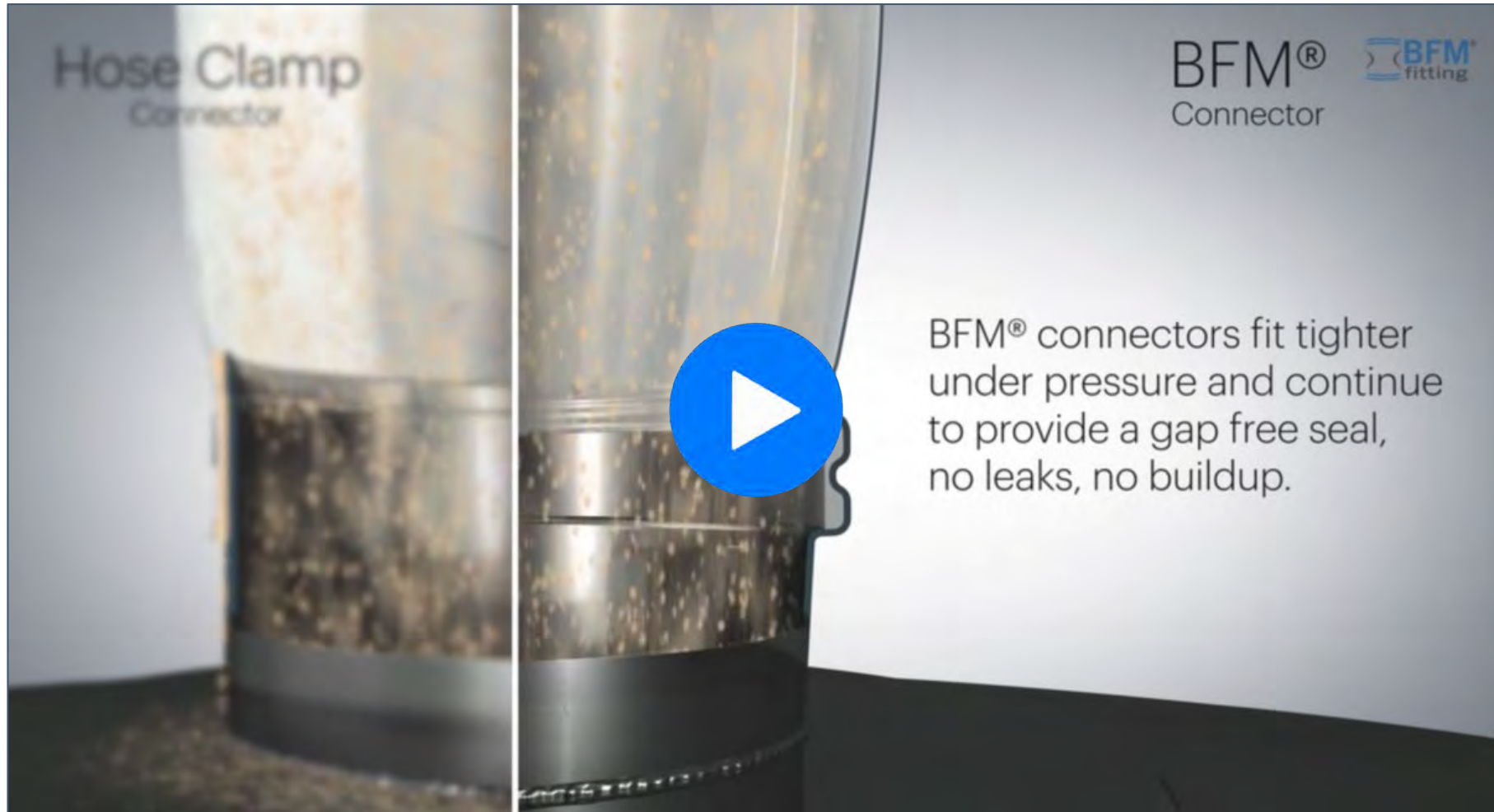
MINERAL

# **APPLICATIONS / OPERATING CONDITIONS**

# BFM® & MOVEMENT




# BFM® & PRESSURE




# BFM® & VACUUM


Under vacuum, we recommend a connectors length should be no longer than its diameter without support rings.



The diagram consists of three light blue icons. The first is a rectangle with rounded ends containing the letters 'CL', with a vertical double-headed arrow to its right. This is followed by a less-than sign '<'. The final icon is a circle with a dashed horizontal line and a double-headed arrow across it, representing diameter.

 BFM fitting

Vacuum



A blue circular play button icon is centered over the image.

# BFM® & VACUUM





# BFM® & METAL DETECTORS



METAL DETECTOR UNDER SILO



FROM A BIN DISCHARGE TO INTERMEDIARY HOPPER

# BFM® & METAL DETECTORS

**EASY ACCESS FOR  
METAL DETECTOR  
TESTING**

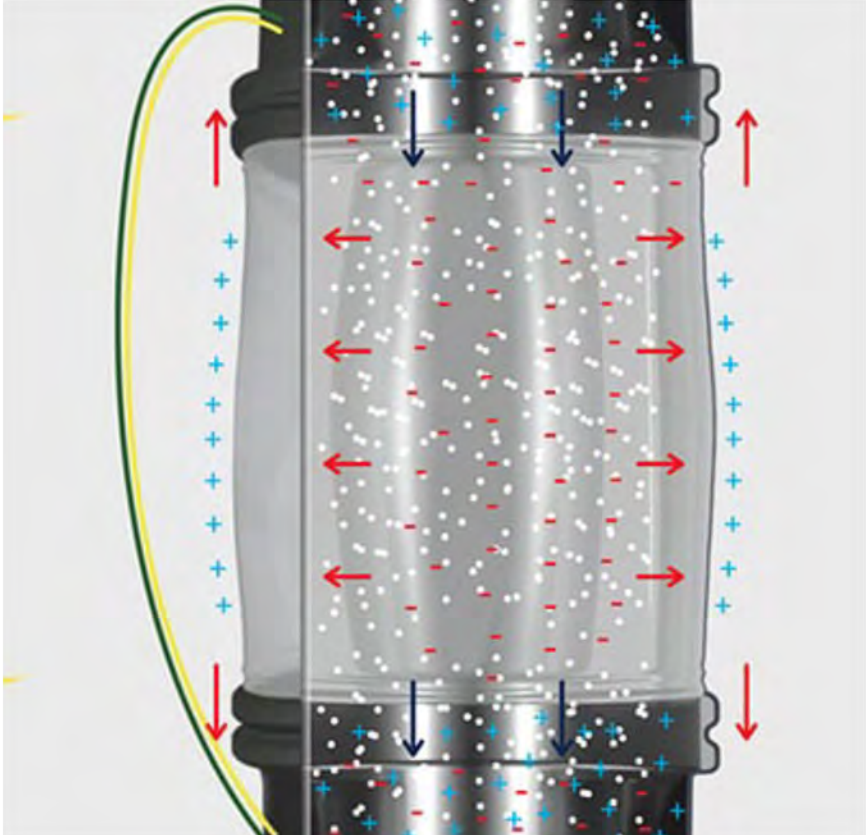
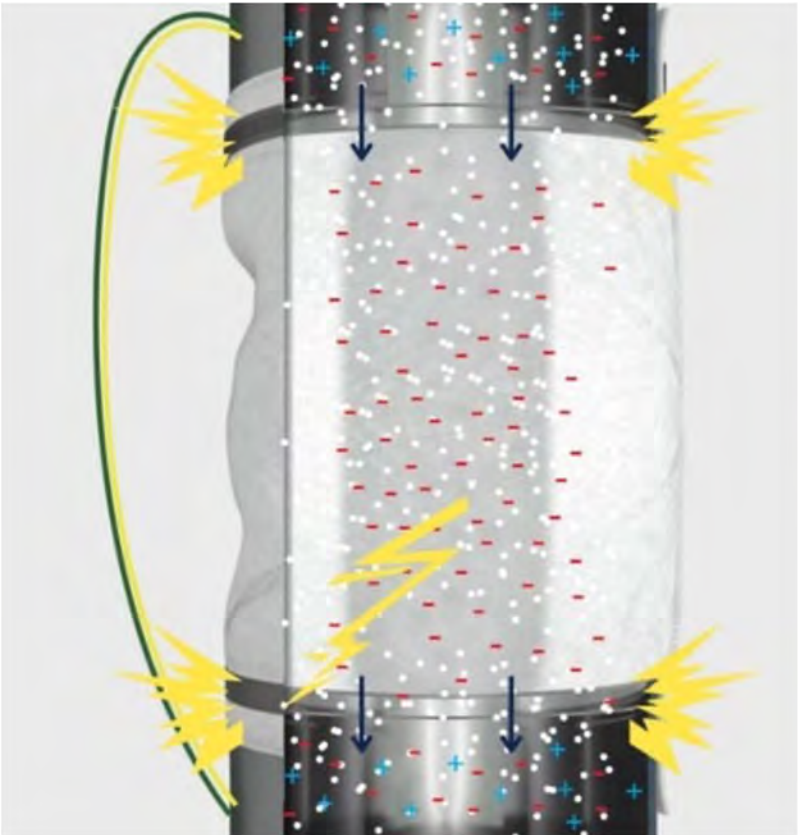


**QUICK ACCESS PORT OPTION**

# BFM® & ELECTROSTATIC BUILD-UP



# BFM® & ELECTROSTATIC BUILD-UP



# BFM® & ELECTROSTATIC BUILD-UP

- Aren't earthing cables enough?
- No!



# BFM® & ELECTROSTATIC BUILD-UP

**High Risk Area  
Solution:**

**Double Layer  
Connectors**




# BFM® & CLEAN IN PLACE (CIP)



# BFM® & CLEAN IN PLACE (CIP)

**ACID**  
No more than  
**0.8%**

**CAUSTIC**  
No more than  
**1.5%**





# BFM® & CLEAN IN PLACE (CIP)



Replaces expensive  
tundish type  
drainage systems



# 04

## Case Studies



# HEAVY LEAKAGE SOLVED

On Sifter With Large Throw



**BEFORE**



**AFTER BFM® FITTING**

[Read full Case Study here.](#)



# NO LOST PRODUCTION

Since Installation



**BEFORE**



**AFTER BFM® FITTING**

[Read full Case Study here.](#)



# EXPLOSION RISK REDUCED

For AkzoNobel



**BEFORE**



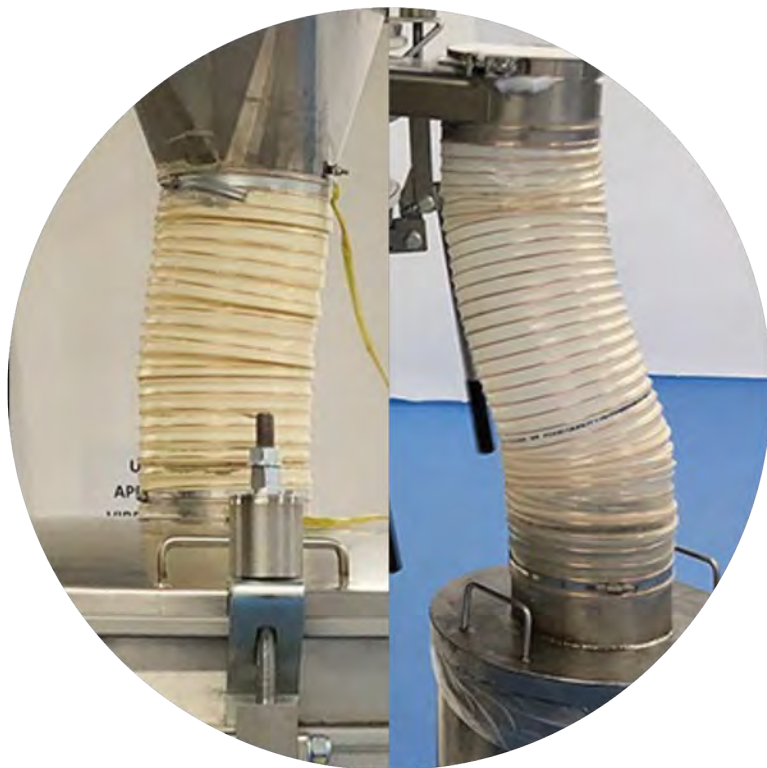
**AFTER BFM® FITTING**

[Read full Case Study here.](#)



# EASY CLEAN-ROOM HYGIENE & LESS DOWNTIME

For Ingredient Manufacturer



**BEFORE**



**AFTER BFM® FITTING**

Read full Case Study here.

# 05

Installing the  
BFM<sup>®</sup> fitting System

# GETTING THE PERFECT FIT



- Static Inline
- Static Offset
- Vibrating
- Oscillating



- Measure the maximum space available to fit the spigots and connector

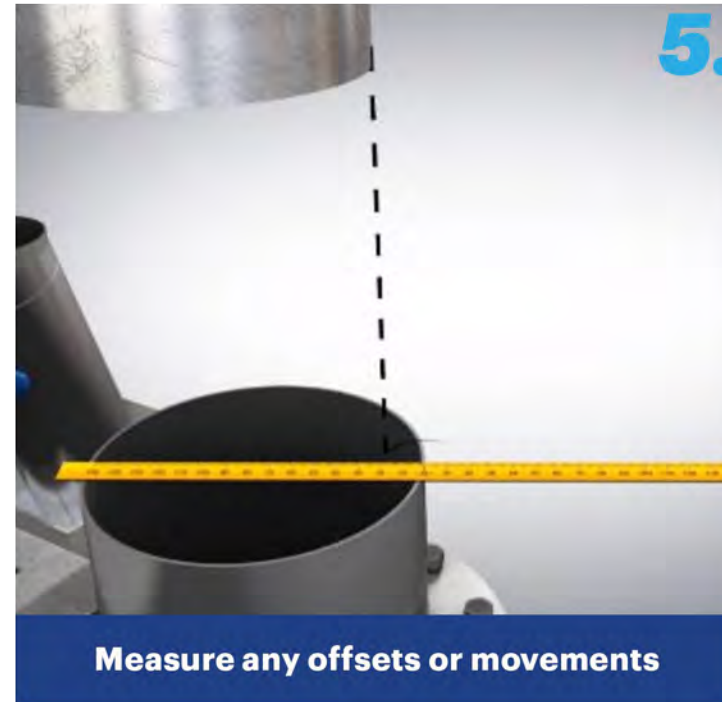


- Measure total space and diameters on all machines.

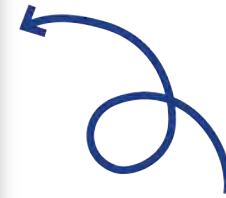
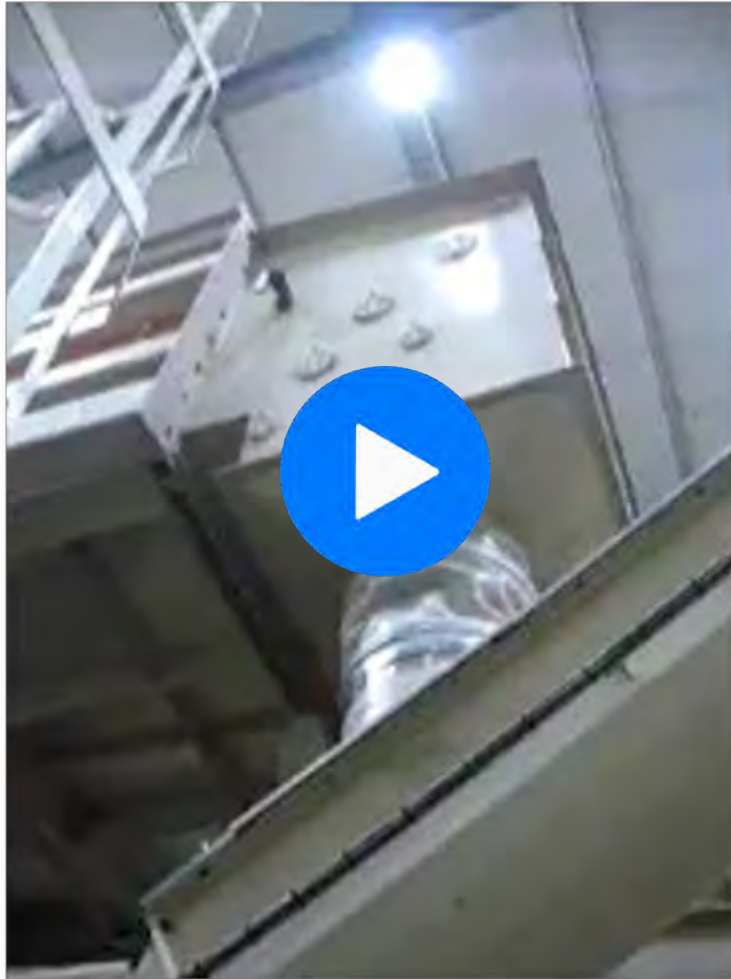
*Note: BFM® spigot diameters are measured on the inside diameter (ID) except for the 100mm / 4" spigots which are measured on outside diameter (OD).*



# GETTING THE PERFECT FIT



# TIPS FOR MEASURING MOVEMENT



*Measuring  
with a laser  
pointer*

# INSTALLING SPIGOTS



# INSTALLATION GAP (IG) CALCULATOR

**BFM fitting**

v1.0

Installation Type

- In-line Static
- Offset Static
- Vibratory
- Oscillating
- Oscillating Offset

Units

- Millimetres
- Inches

Key:

- CL - Connector Length
- IG - Installation Gap
- Blade Not to Scale

Not To Scale

Diameter: 100mm

Total Spigot Length: 89mm

Connector length: 400mm

Total Space Required: 568mm

IG: 390mm

Save 1

Save 2

Save 3

Save 4

Save 5

unity WebGL

BFM Calculator

Installation Don'ts:

# DON'T INSTALL WITH IG THAT'S TOO BIG



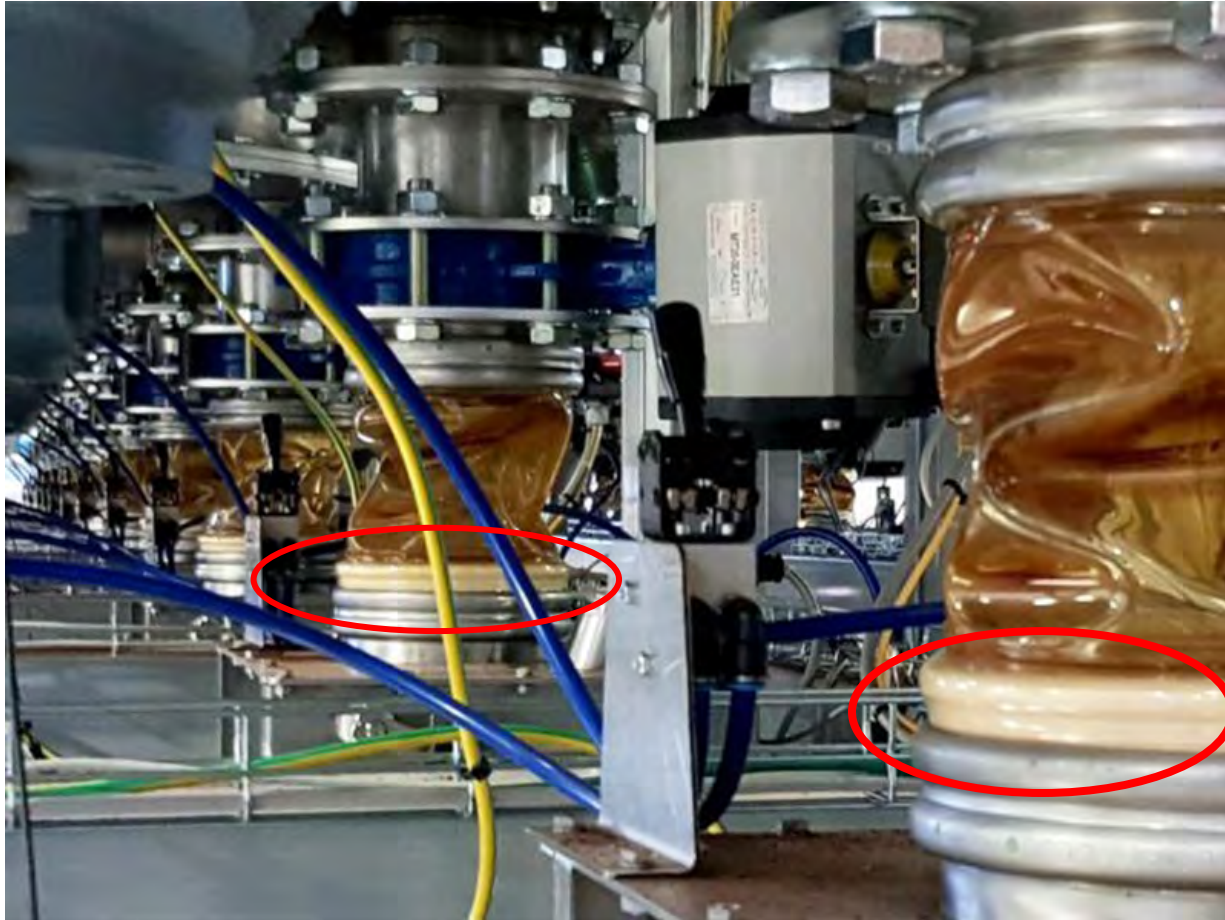
Installation Don'ts:

# DON'T INSTALL WITH IG THAT'S TOO SMALL



Installation Don'ts:

**ENSURE BOTH CUFFS ARE INSIDE THE SPIGOT RIDGES**



# SPIGOT ADAPTATION



SQUARE TO ROUND



FLUSH-MOUNTED



BLANKING BIN LID



# SPIGOT ADAPTATION



CONTAINER LOADING/LID

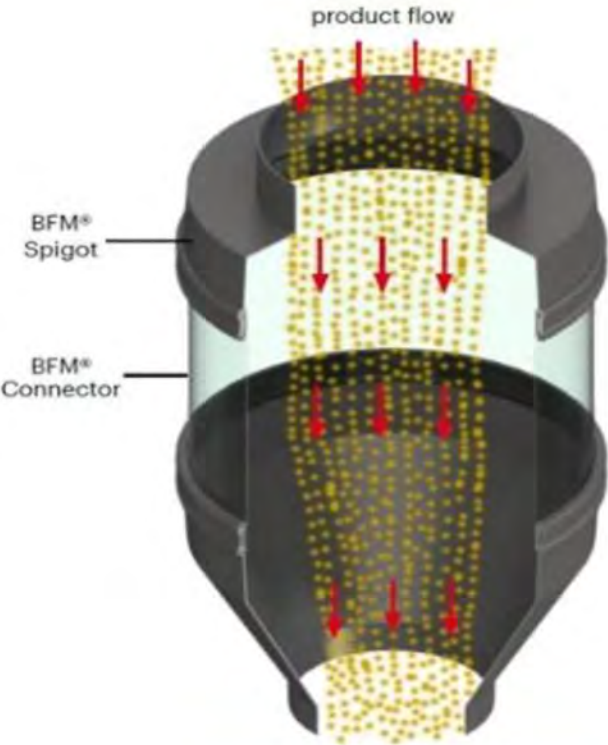


MATCON IBC LOADING

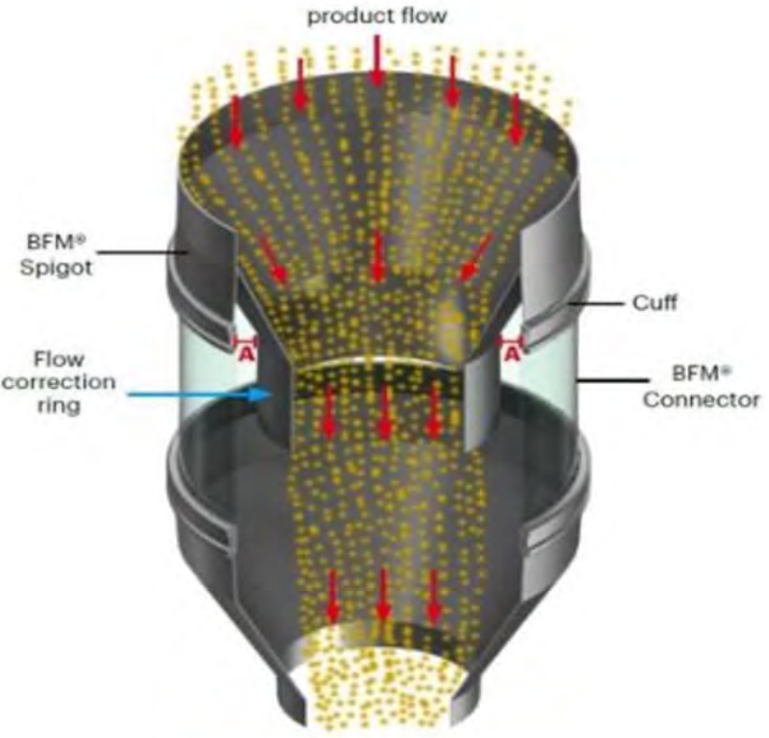


TWIN DISCHARGE TO BUTTERFLY VALVES

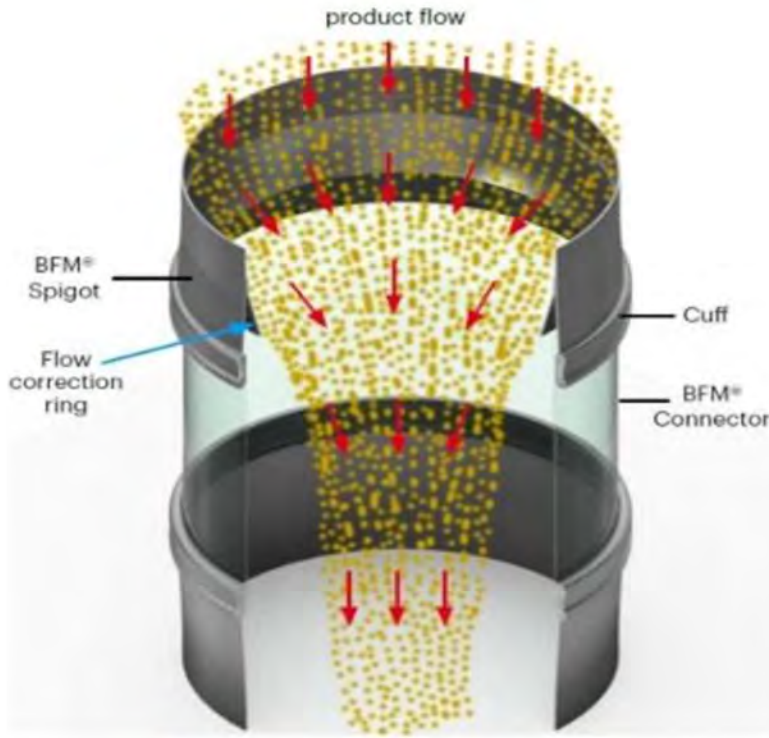
# BFM® & FLOW CORRECTION



**METHOD 1**

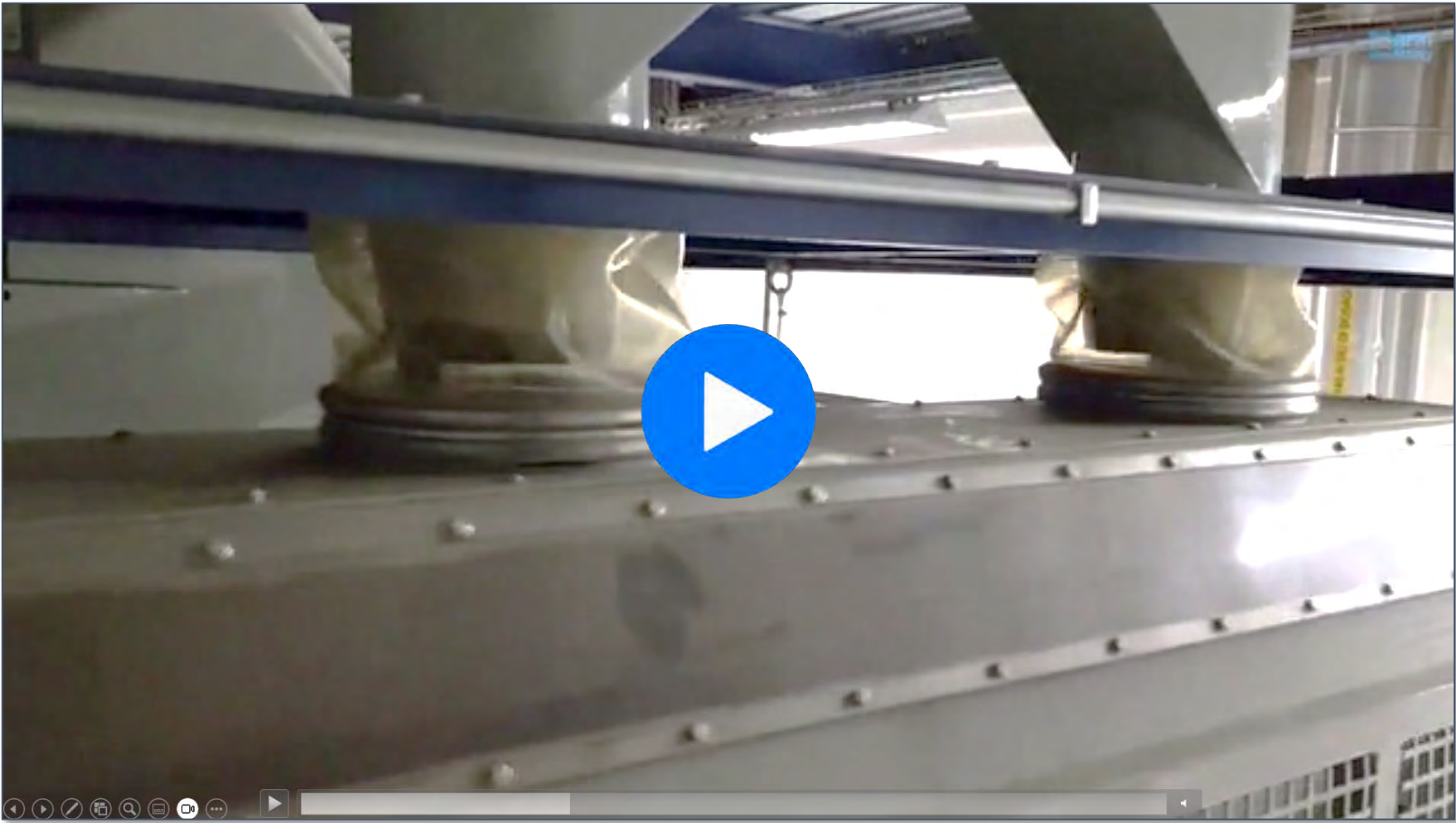


**METHOD 2**



**METHOD 3**

# BFM® & FLOW CORRECTION



06

Q & A

# Thanks for Attending

 **BFM fitting**

BFMfitting.com



@BFMfitting



@BFMfitting



BFM fitting by BFM Global Ltd



@BFMfitting