

HOW TO ELIMINATE

Dust Leakage & Excess Downtime With BFM[®] fitting

— 10 OCTOBER 2023 —

 **BFM[®]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[®] 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[®] fitting 100%
seal – cleaner, safer &
more efficient



The Problem with Old-Style Connectors



Inefficient

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



Unhygienic

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



Unsafe

- 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[®] fitting System





THE BFM[®] ADVANTAGE

What's so great about a BFM[®] 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



- FDA
- USDA
- A³
- EC 1831/03
- Ex
- حلال HALAL
- K





QUICK & EASY

To Change

Quick & Easy
Installation

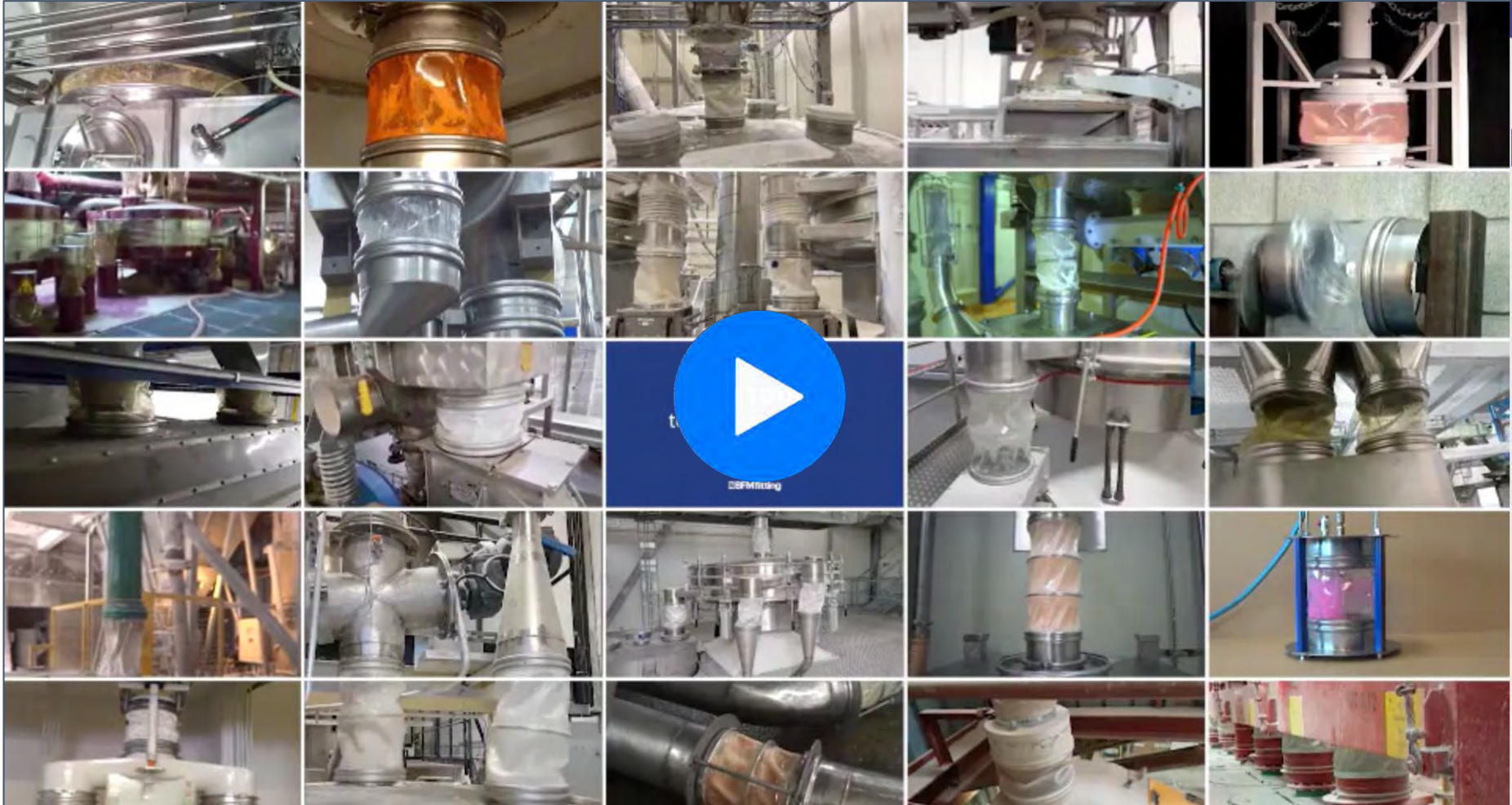
Bend **kidney shape** and place in the pot





Superior

STRENGTH & DURABILITY





Superior

STRENGTH & DURABILITY



BFM[®] are lasting over

50x longer

than our previous
connectors



—— Uk Plaster Manufacturer



Helps

STREAMLINE YOUR INVENTORY

BFMfitting

BFM[®]
Streamlines
Inventory

BFM[®] 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[®]
Product Range

BFM® 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



SEEFLEX 040E



SEEFLEX 020E



SEEFLEX 040AS



SEEFLEX 060ES

Temp Range:

Surge Temp:

Surface Resistivity:

ATEX Compliant:

Regulations:

- 25 to 110°C

120°C

10¹⁰ (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

10¹⁰ (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

10⁸ (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

10¹⁰ (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

10⁶

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:

10⁸

10⁹

10⁸

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:

10¹⁰

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

10¹⁰

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



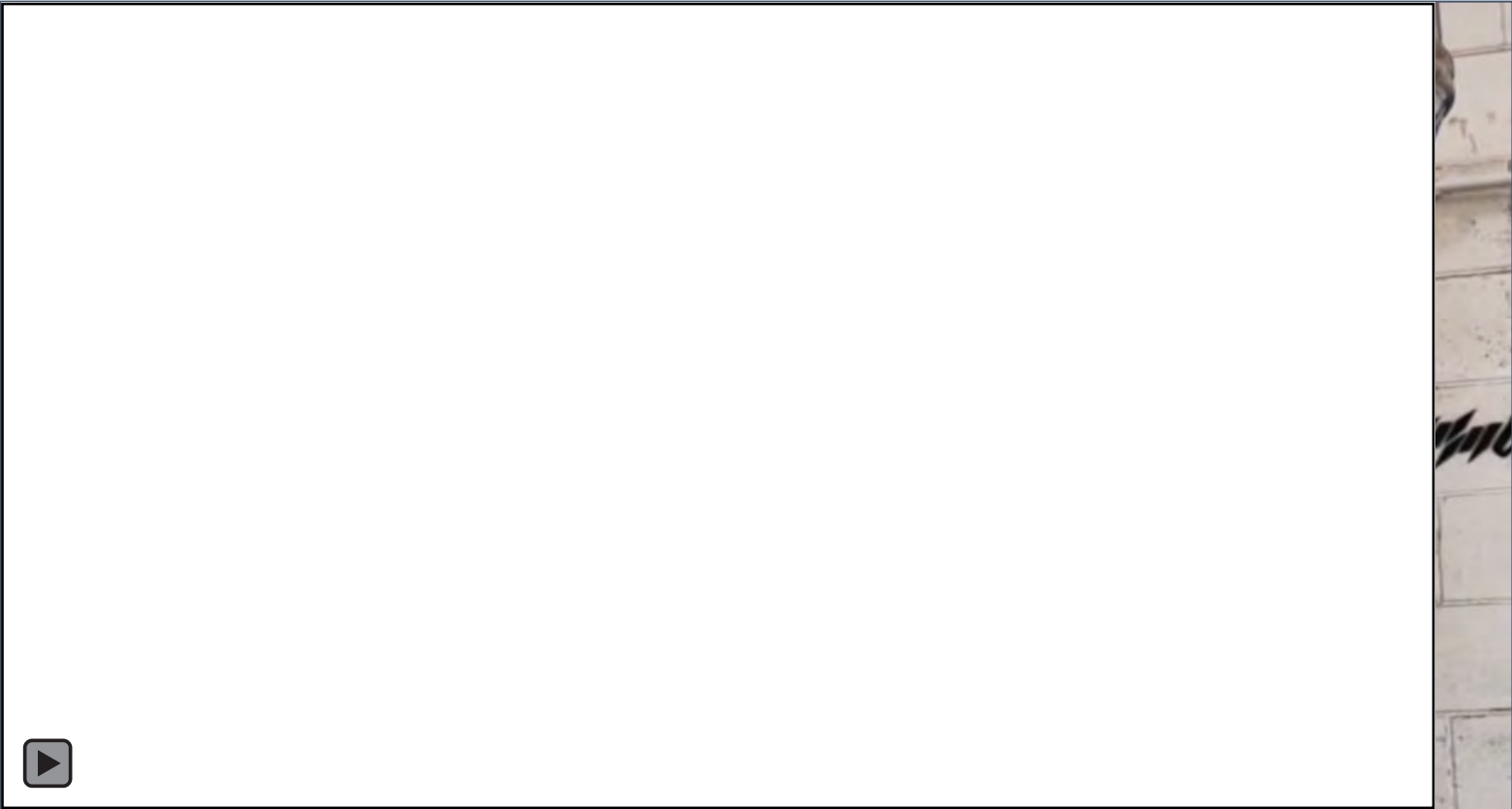
QUICK ACCESS PORT OPTION

BFM® VENTING SURGE HOPPER

**VENTING
SURGE
HOPPER**



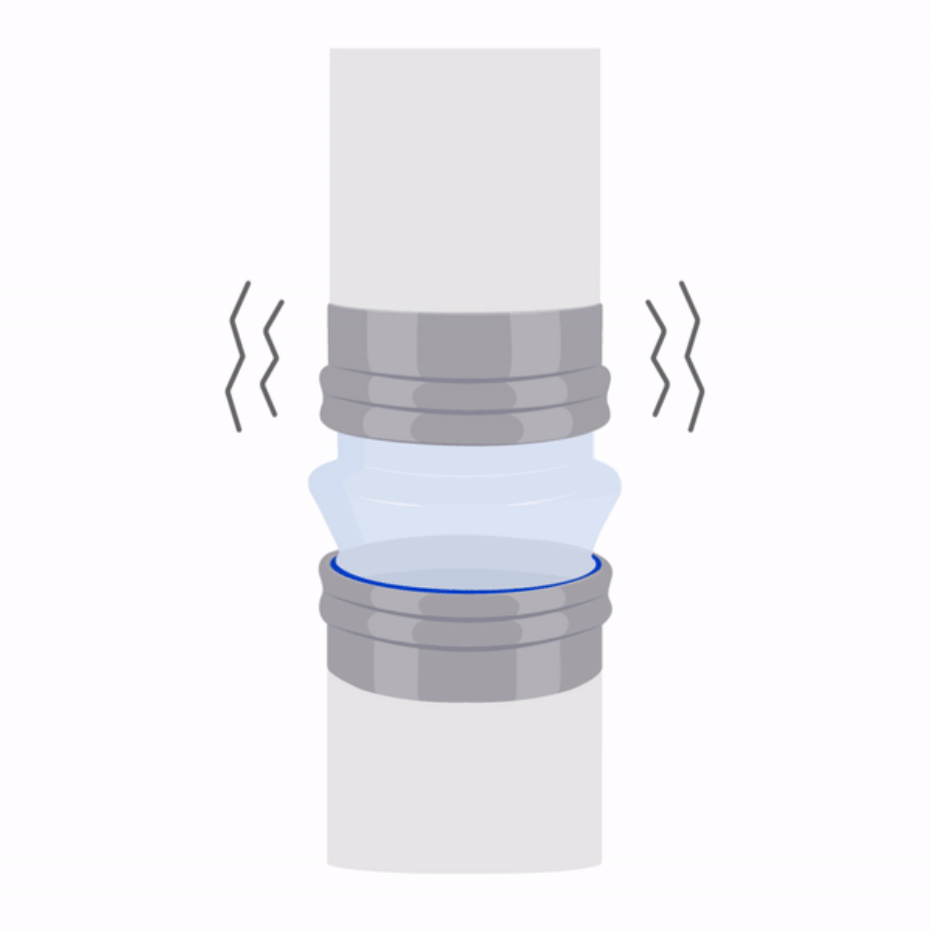
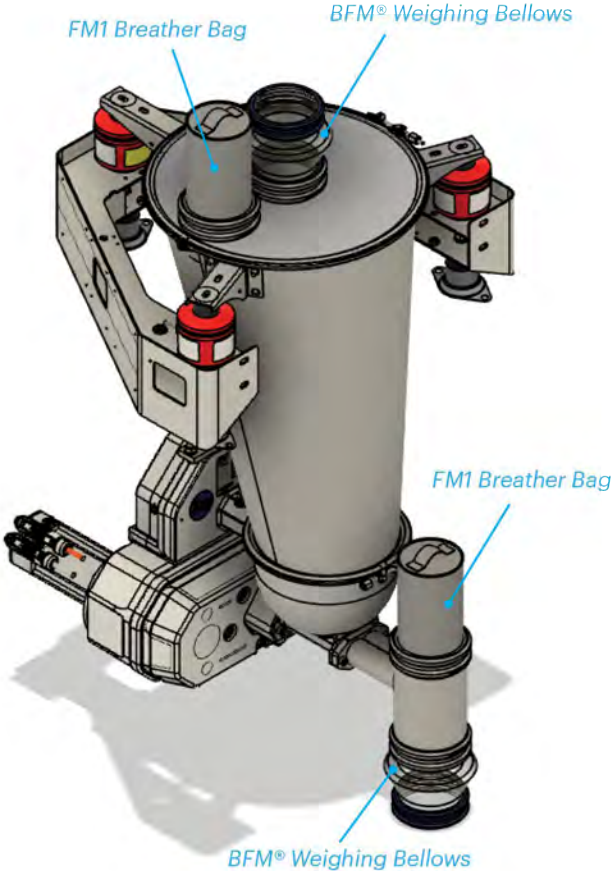
**VENTING
SURGE
HOPPER
SPIGOT**



BFM® WEIGHING BELLOWS



WEIGHING BELLOWS



BFM® WEIGHING BELLOWS



WEIGHING BELLOWS

BFMfitting

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

A diagram showing a side view of a weighing bellows component with two grey spigots inserted into its top and bottom flanges. A blue play button is overlaid on the bellows. To the right, a vertical dimension line indicates the distance between the spigots, labeled as 80mm (3 5/32").



03

Industries &
Applications

INDUSTRIES

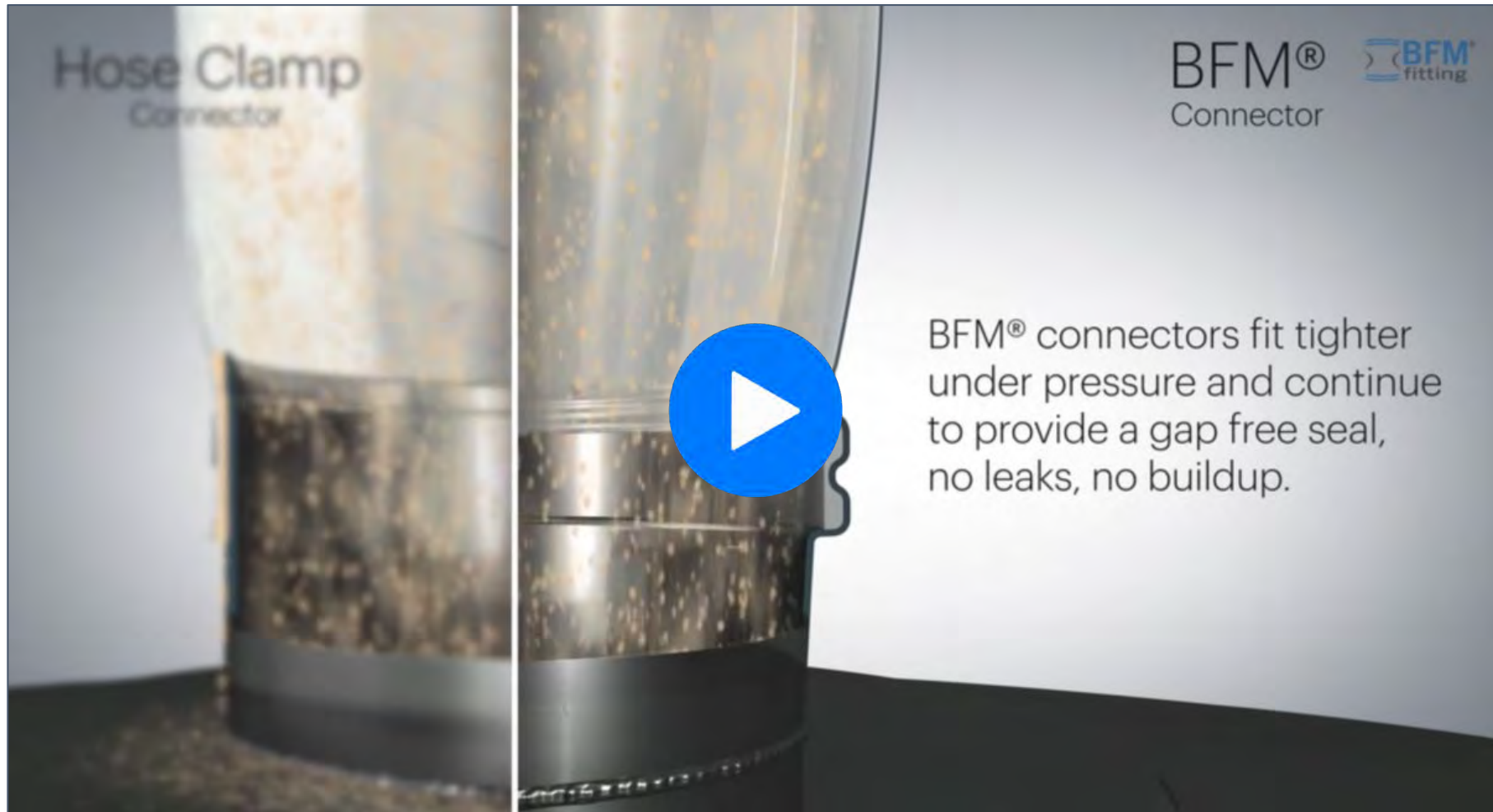


APPLICATIONS / OPERATING CONDITIONS

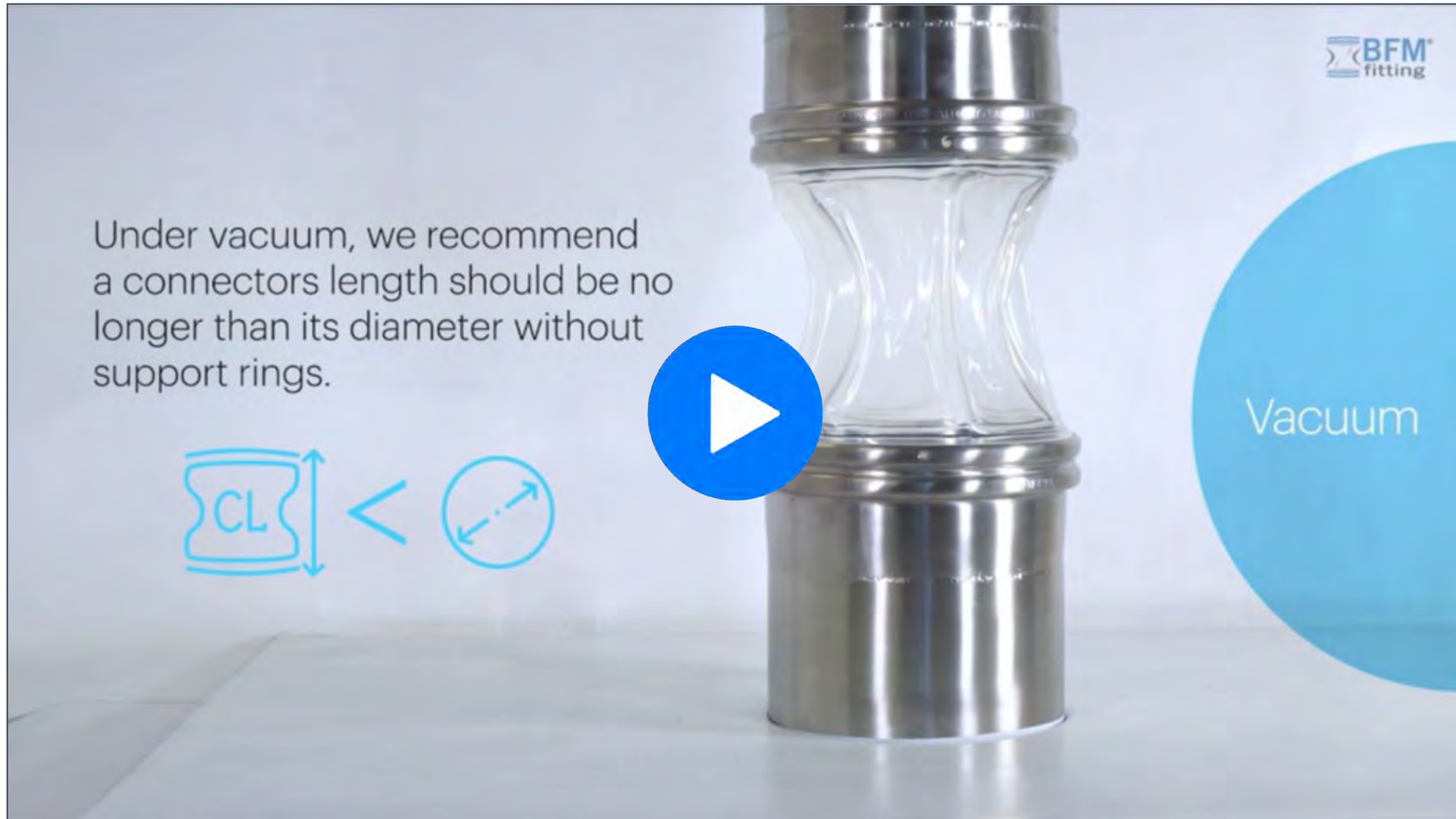
BFM® & MOVEMENT



BFM® & PRESSURE



BFM® & VACUUM



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**

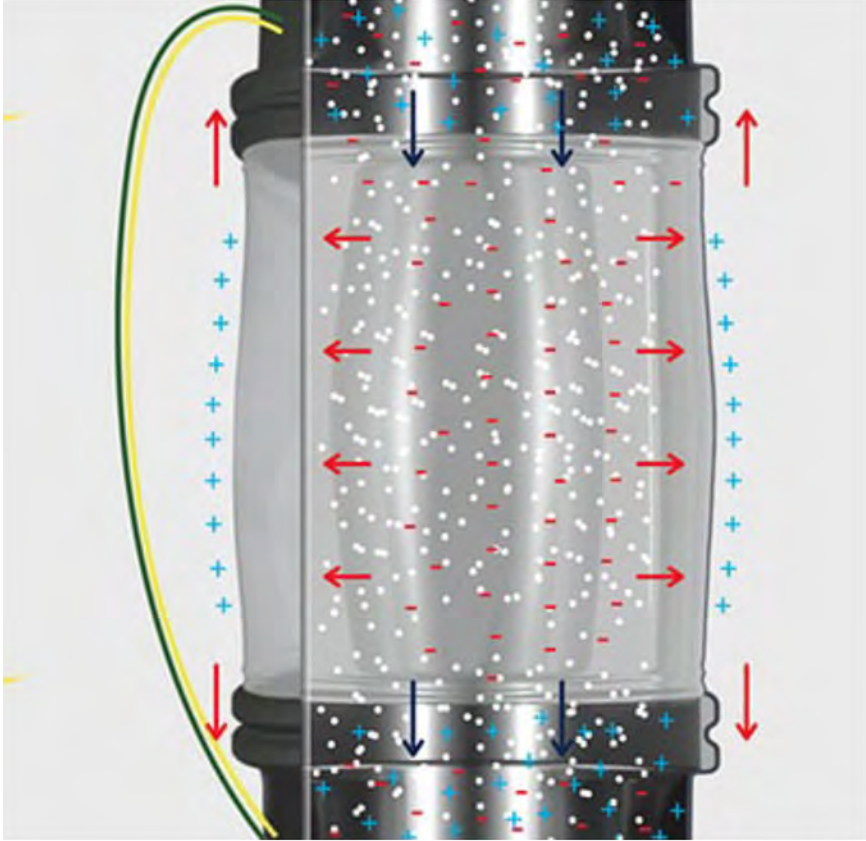
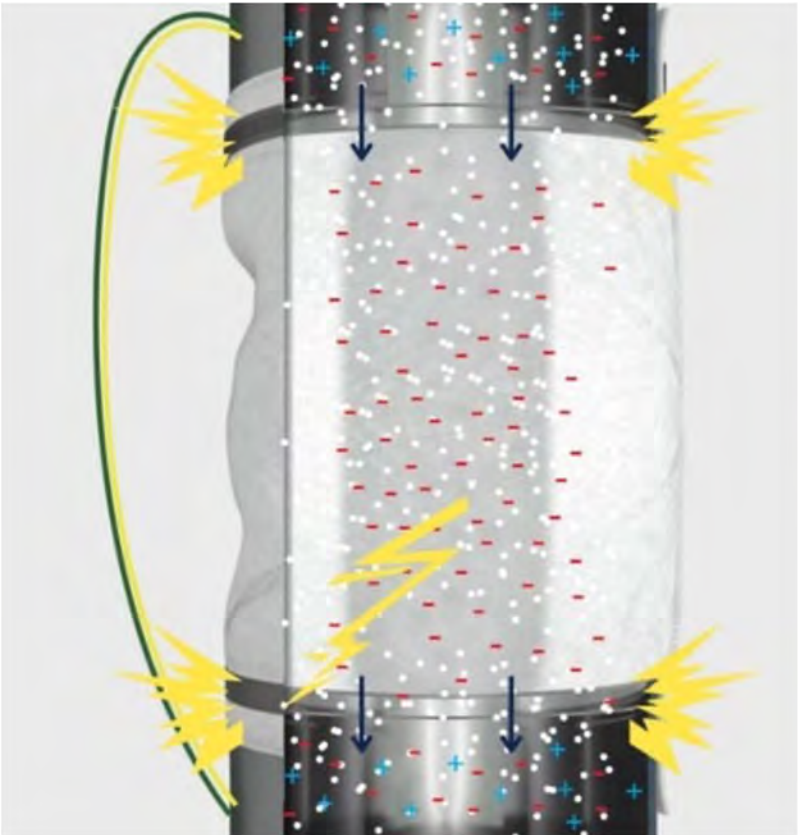


QUICK ACCESS PORT OPTION

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[®] fitting System

GETTING THE PERFECT FIT



- Static Inline
- Static Offset
- Vibrating
- Oscillating



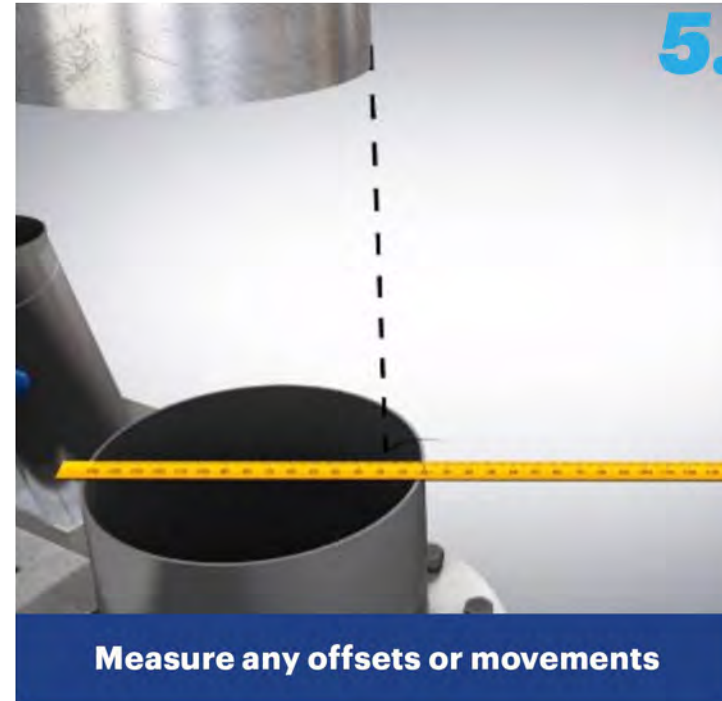
- Measure the maximum space available to fit the spigots and connector



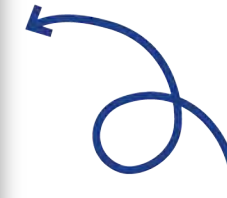
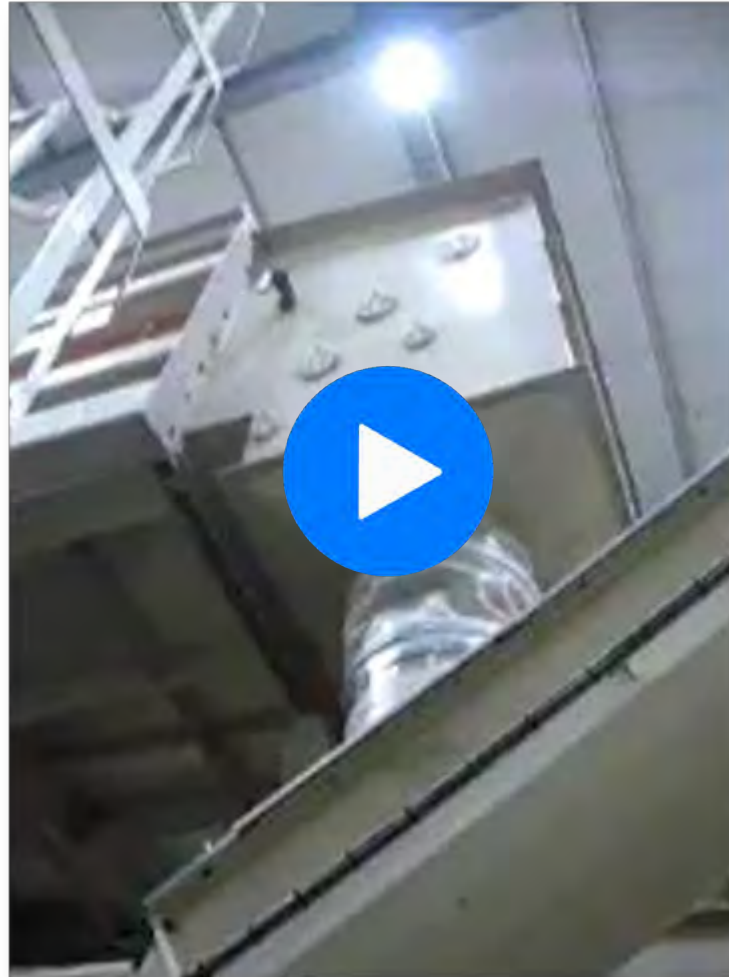
- Measure total space and diameters on all machines.

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
- Blurs 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

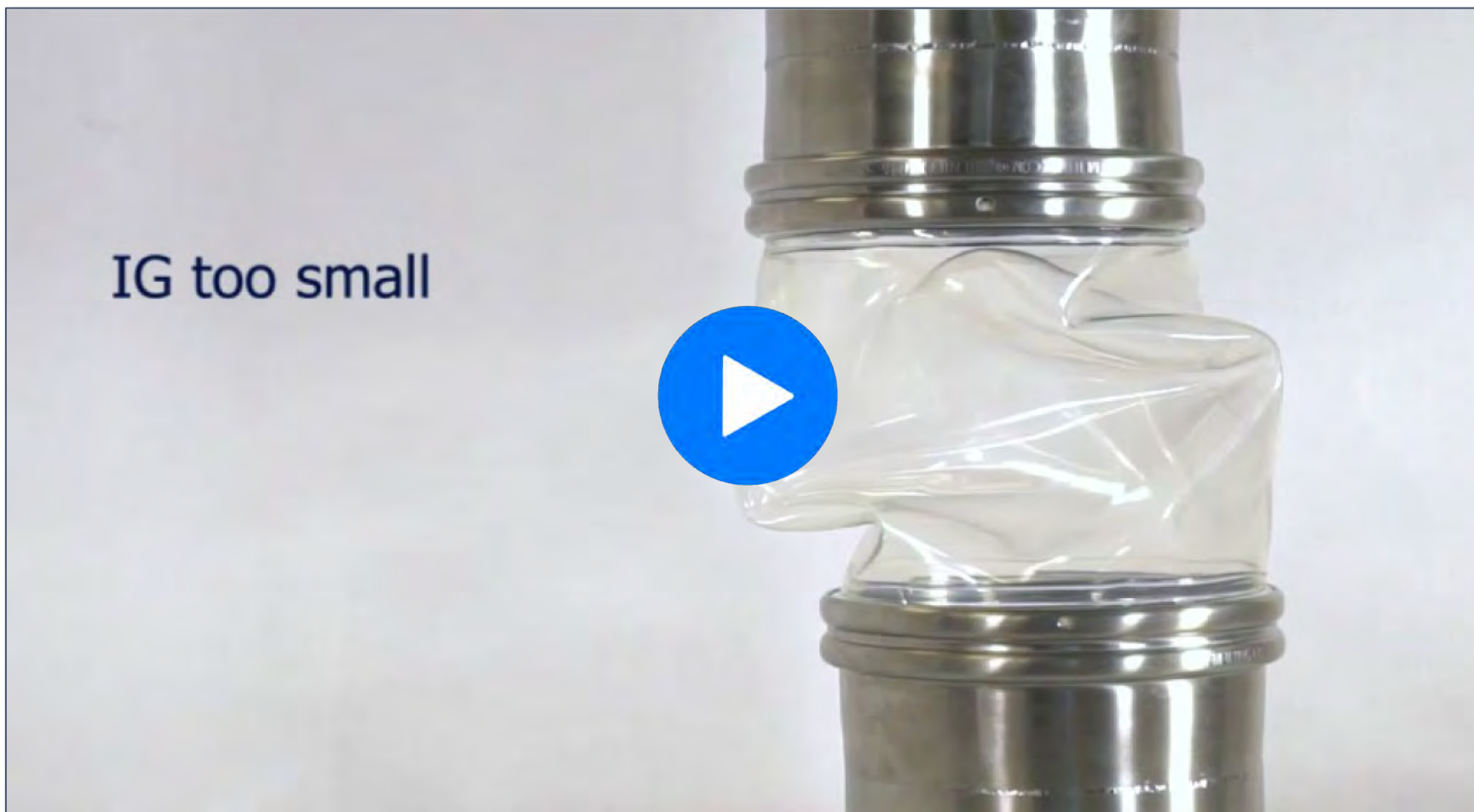
Installation Don'ts:

DON'T INSTALL WITH IG THAT'S TOO BIG



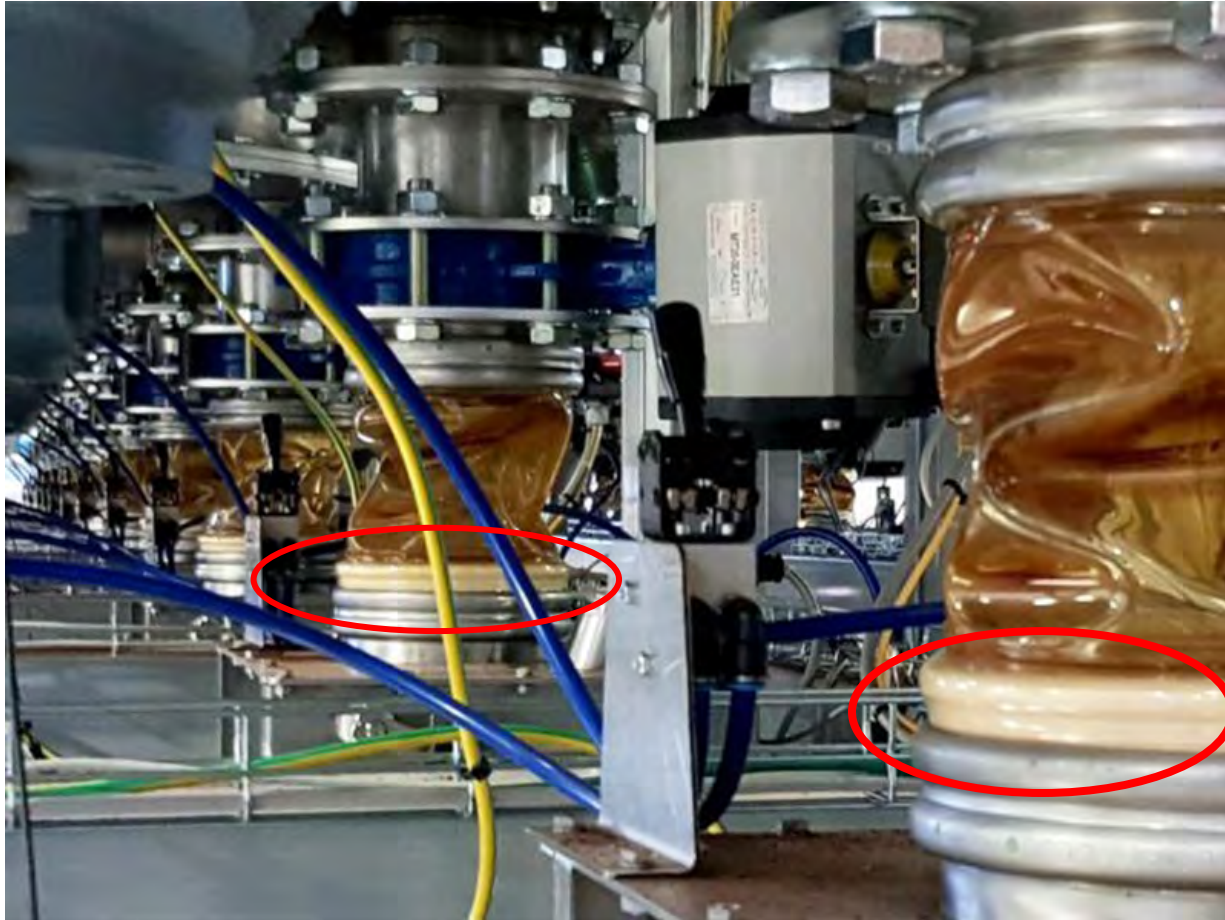
Installation Don'ts:

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

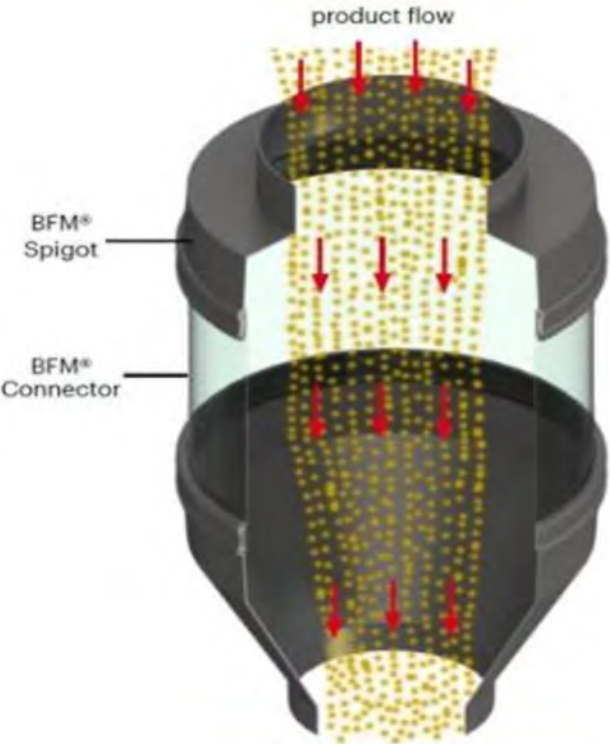


MATCON IBC LOADING

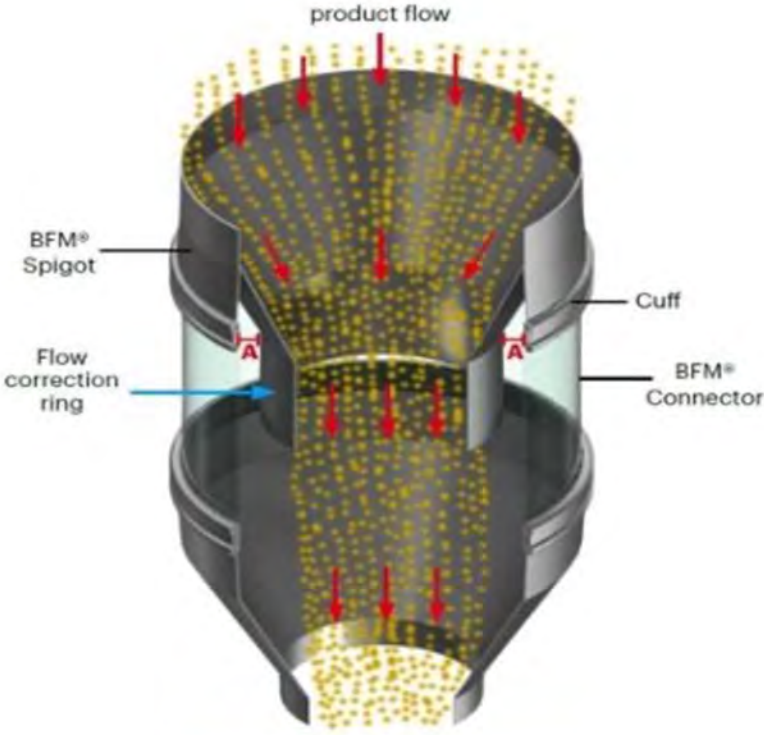


TWIN DISCHARGE TO BUTTERFLY VALVES

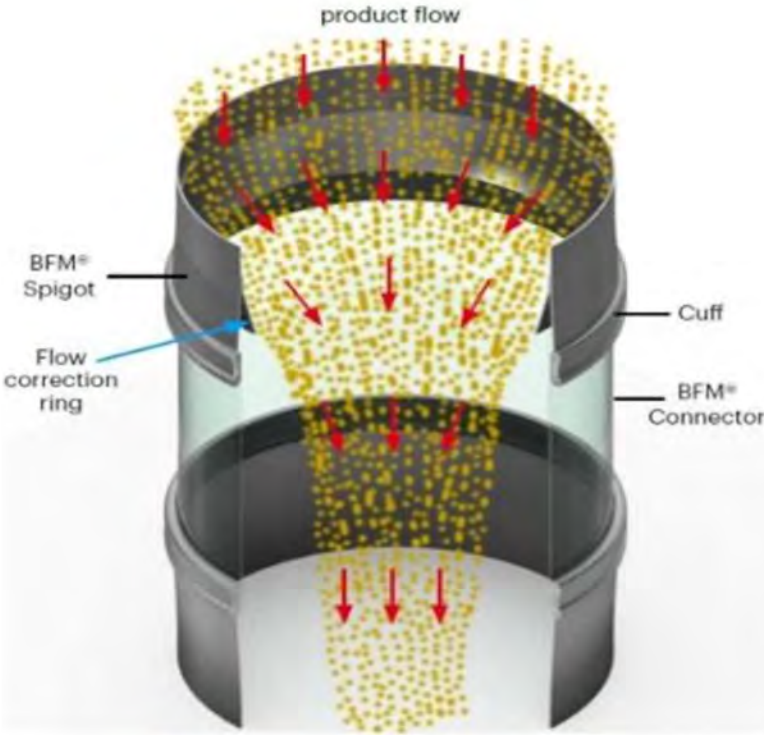
BFM® & FLOW CORRECTION



METHOD 1

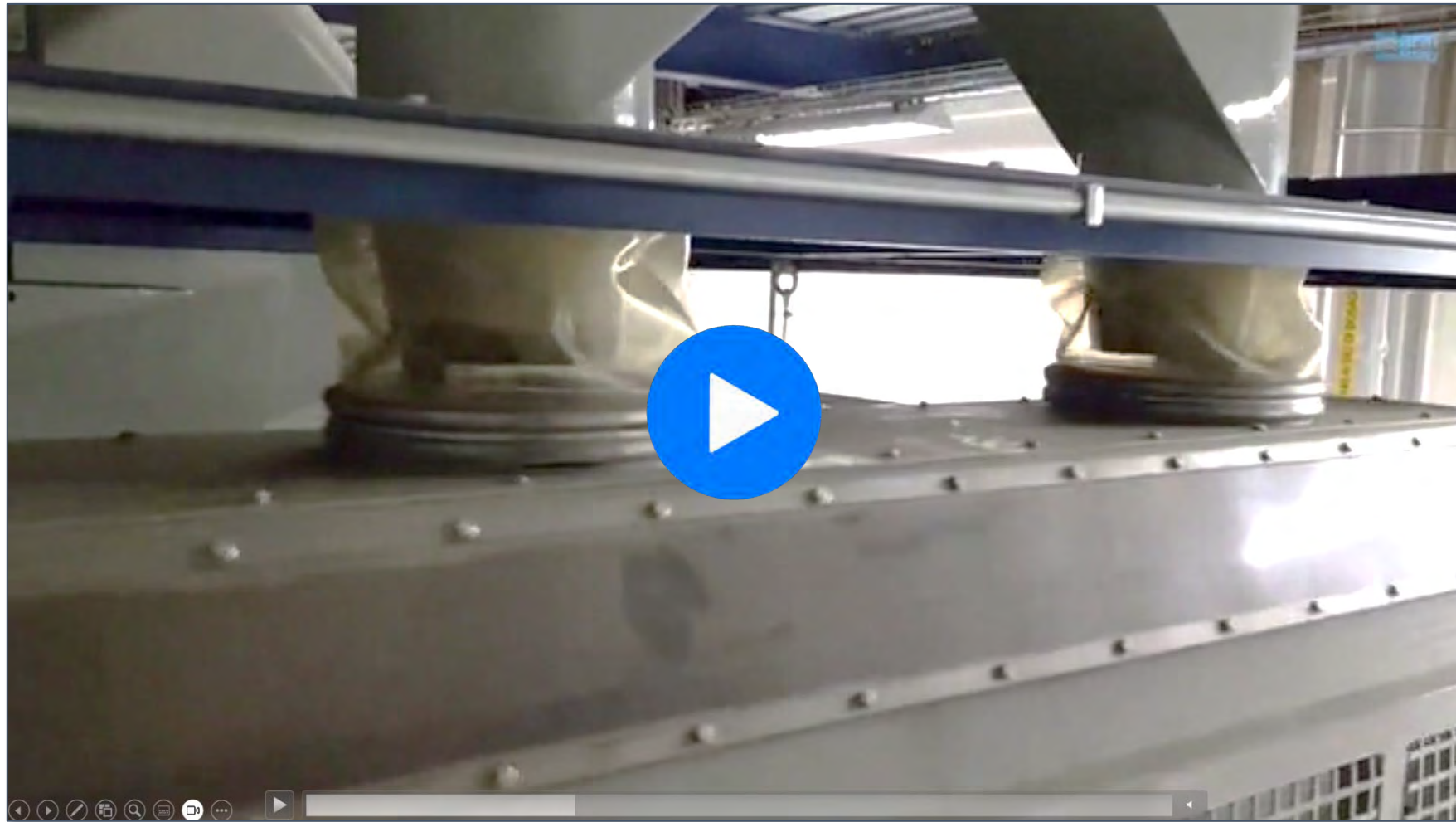


METHOD 2



METHOD 3

BFM® & FLOW CORRECTION



06

Q & A

Thanks for Attending

 **BFM fitting**

BFMfitting.com



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BFM fitting by BFM Global Ltd



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