A photograph of a vast field of golden wheat in the foreground, stretching to a flat horizon. The sky above is filled with large, white, puffy clouds, with a deep blue area at the top. A white rectangular box is superimposed on the left side of the image, partially covering the wheat and the sky.

***Blending and
mixing concepts
for consistent
flour quality and
Bühler's flour
services.***

Agenda.

- 1** Benefits of flour blending
- 2** Continuous flour blending system
- 3** Flour mixing with batch mixer
- 4** Flour services

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Benefits of flour blending.

- homogeneous and consistent flour quality
- tailor made flour according to bakers requirement
- Quick reaction time to individual customer requests
- Efficient way to produce a large variety of flours



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Continuous flour blending system.

Volumetric flour blending.

Characteristics:

- High throughput at low invest
- Low space requirements
- Low variety and high quality
- Simple recipes

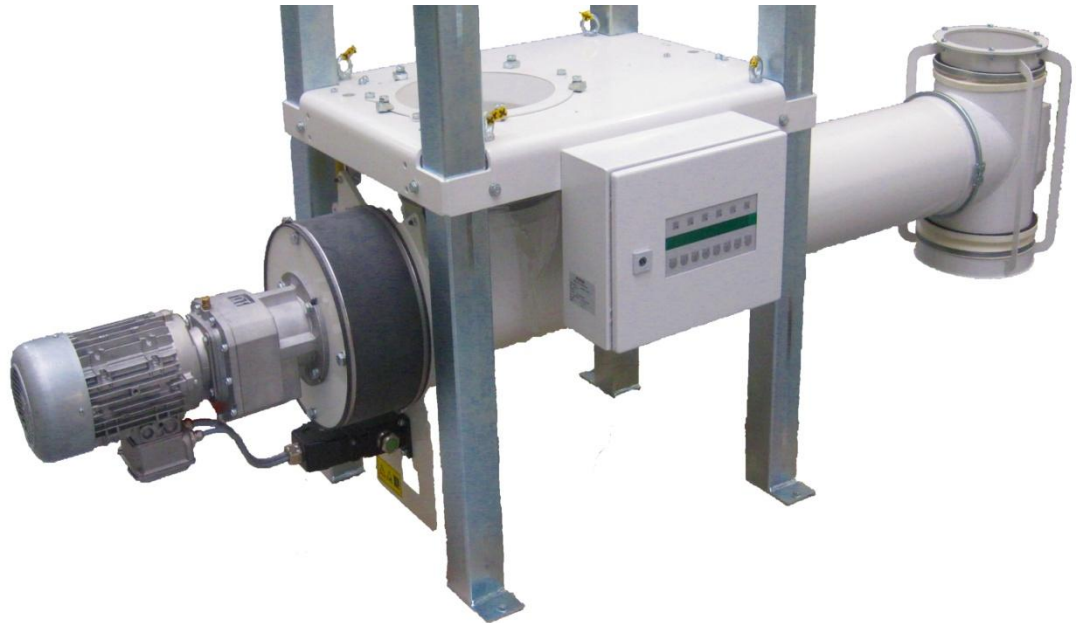


Continuous flour blending system.

Gravimetric feeding with Graviscrew MSDR.

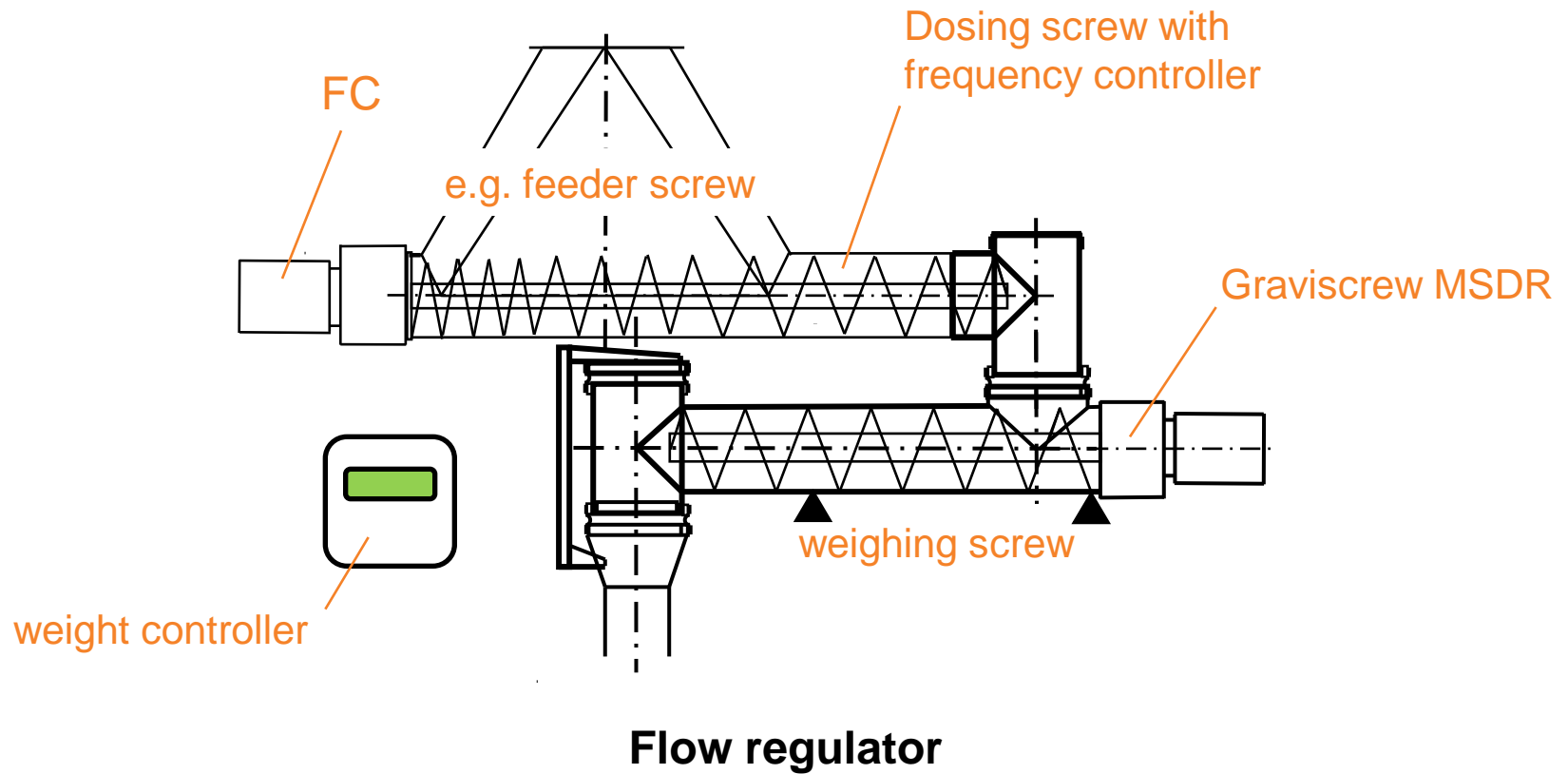
Characteristics:

- Gravimetric dosing and metering with continuous weight recording
- Low installation height
- Rugged design
- Accuracy approx. 1.5% if calibrated with a scale



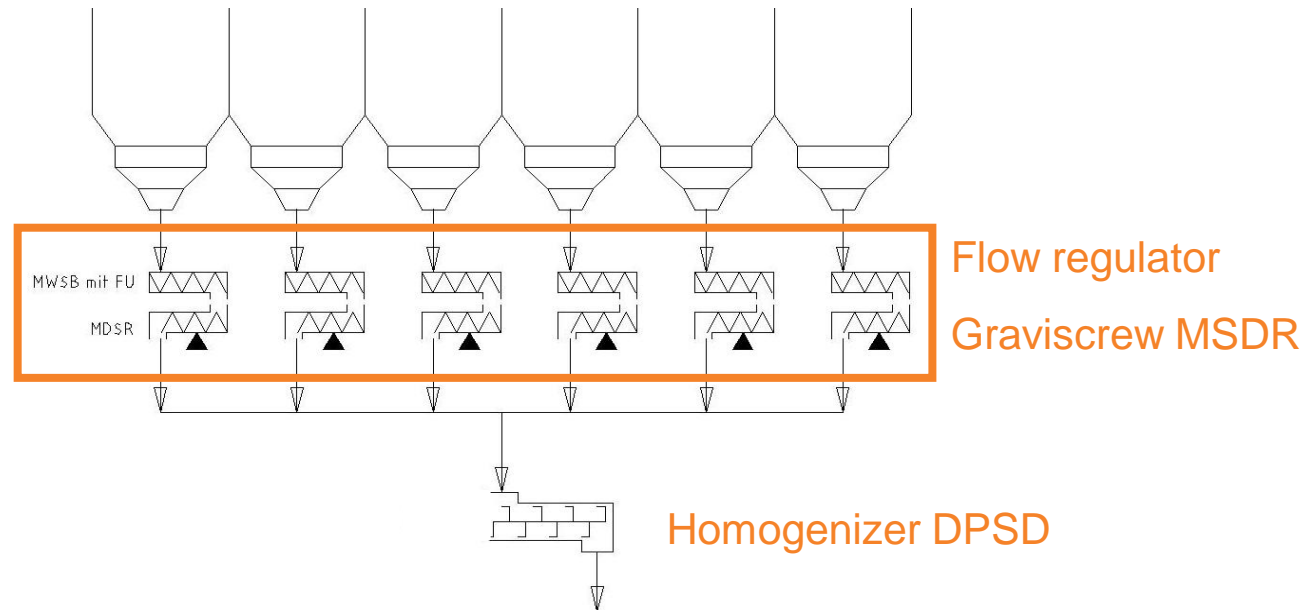
Graviscrow MSDR.

Function as flow regulator.



Application of Graviscrew MSDR.

Continuous blending flow regulation with weight recording.



Easy upgrade of existing finished product silos

Differential dosing scales.

Loss-in-weight principle with high accuracy



MWBO

for main components

1 - 60 m³/h



MSDA

for minor components

0.2 - 6 m³/h

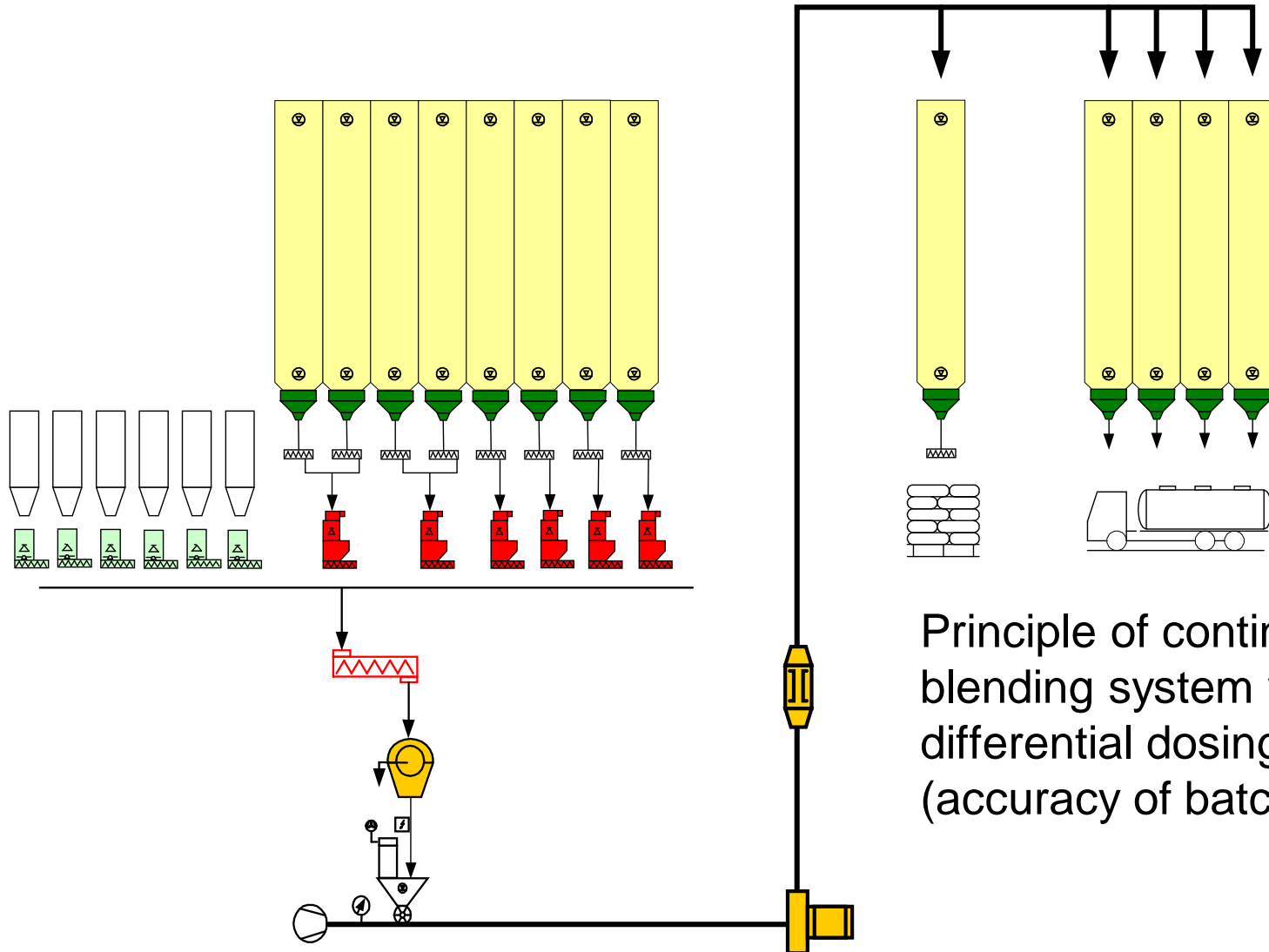


MSDA

for micro components

0.2 - 1000 dm³/h

Blending system with loss-in-weight feeder MWBO.



Principle of continuous
blending system with
differential dosing scales
(accuracy of batch scales)

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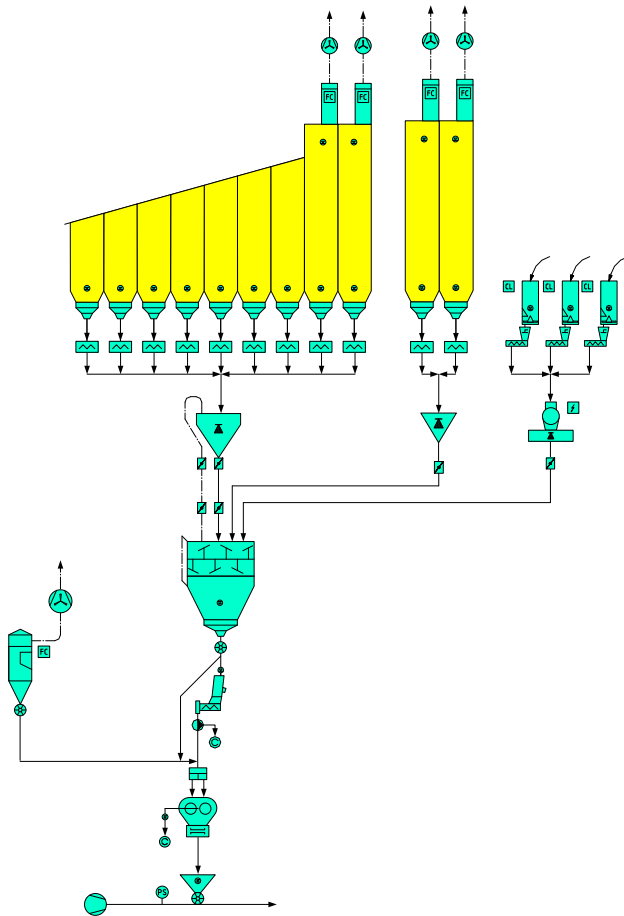
Batch blending plant.

Where to use

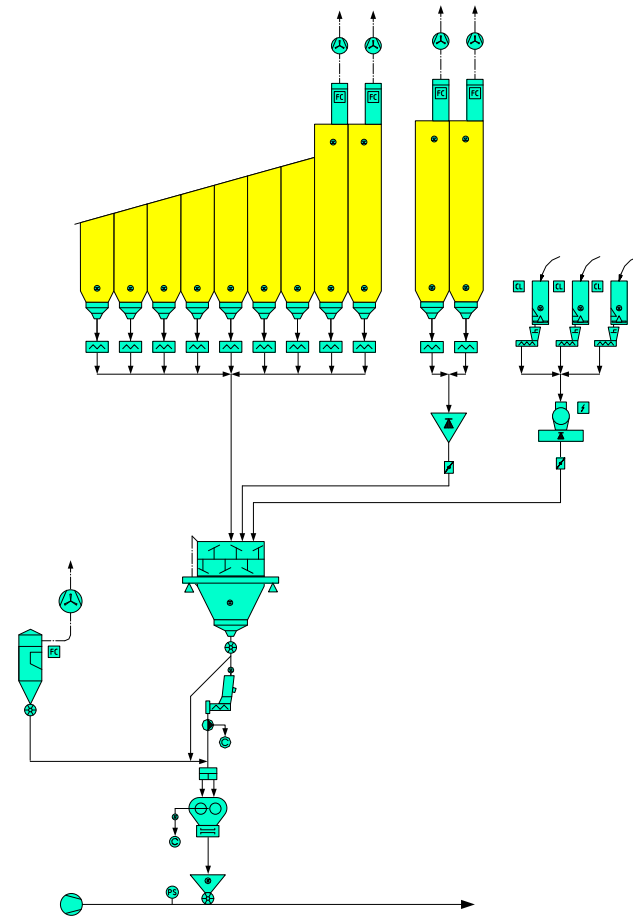
- Capacities up to 40 t/h
- Ideal for large varieties of recipe changes
- Recipe with many components (macro, minor and micro components)



Overview batch mixing concepts.



3-stages blending with weigher



2-stages blending with integrated weigher

Bühler's new MRMA Sanimix.

Achievement	Paddle Mixer (MKMA-P)	Chopper Mixer (MRMA-C)
Application	Dry mixes	Specialty mixer with solids dissolution
Useable volume	<div><div></div><div>500ℓ</div></div> <div><div></div><div>1000ℓ</div></div> <div><div></div><div>2000ℓ</div></div> <div><div></div><div>4000ℓ</div></div>	

High Sanitation.

- Smooth surface, no gaps, no pockets no corners
- All parts in stainless steel
- No product cross-contamination



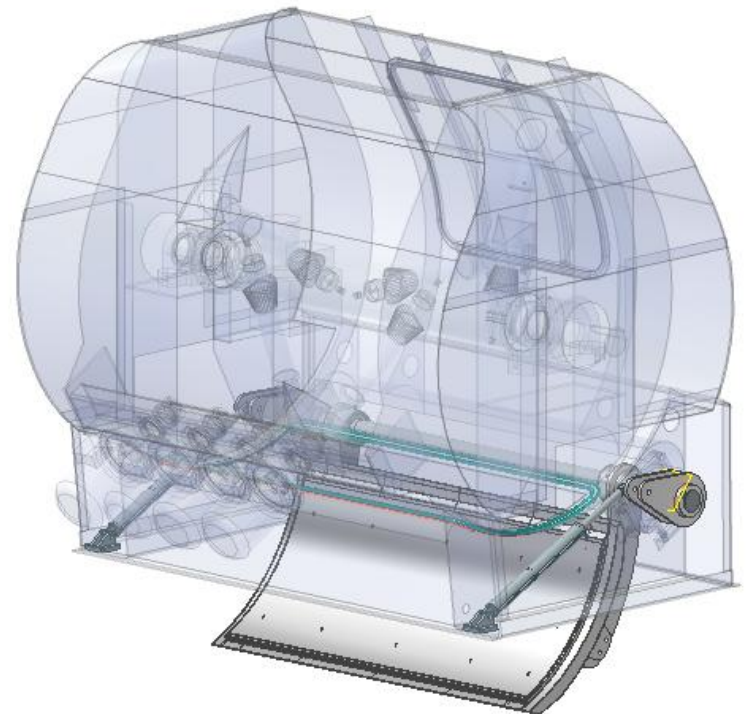
Access for cleaning.

- Large service door
- Easy access to all areas inside the mixer
- Fast opening and closing
- Short cleaning time



Quick emptying time.

- Emptying time less than 20 sec
- Residue free discharge
- Mixer opening over the entire bottom length
- Bottom flap drive element are placed outside the mixing chamber (no contact with product)



Premix – Mix line with 3 mixers.



Sanimix MRMA-4000-C.



Agenda.

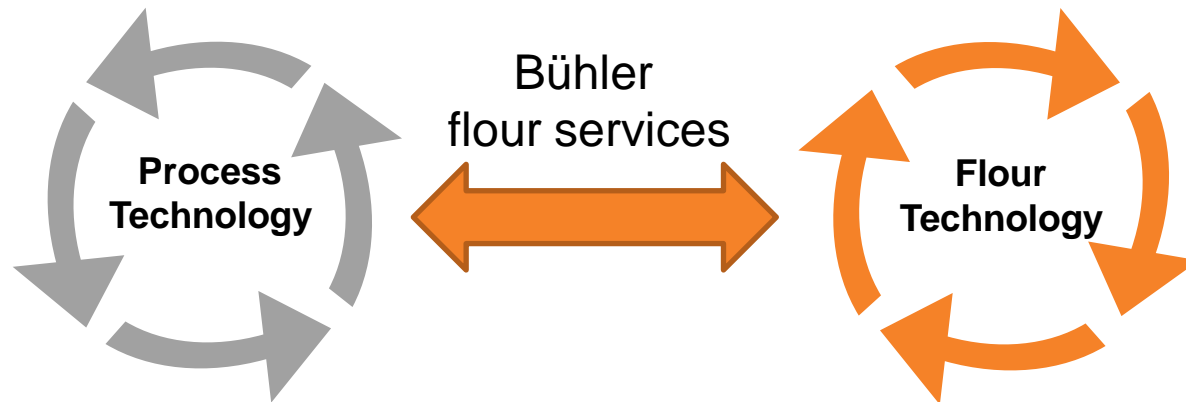
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Flour services.

Tailor made flour.

Equipment / Technology / Training

**Product improvements /
Application / Training**



Total solution partnership

Bakery Innovation Center.



Flour blending plants.

Benefits for the miller.

- Homogeneous and consistent flour
- Tailor made to customer requirements
- Specialty flour carry higher margins



www.buhlergroup.com