

# **Sulzer Mixpac systems for 2-component Construction Materials**

Metering – Mixing – Dispensing



# Sulzer Mixpac application systems for 2-component construction materials

**Sulzer Mixpac is the leading global manufacturer of 2-component mixing systems for construction applications using 2-component construction materials. With more than 20 years of experience in the field, Sulzer Mixpac can draw on its unique expertise and understanding of typical application markets for 2-component mixing systems.**

Progressive technologies are the hallmark of Sulzer Mixpac 2-component products and systems for the construction industry. Sulzer Mixpac is setting the standard in the field of multi-component mixing systems worldwide.

The unique pistons and mixers are examples of its cutting-edge technologies. Vented pistons guarantee filling of both 2-component materials at maximum speed without air bubbles. QUADRO™ mixers in turn stand for maximum mixing performance with a minimal loss of pressure.

This is only a small selection of the advantages that Sulzer Mixpac products and systems for 2-component applications are providing to the construction industry. Bonding, fastening and coating using 2-component systems have gained more and more importance in the construction industry over recent years. Stricter requirements with regard to the safety and durability of structures in the different areas of the construction industry are important reasons for this development.

Instead of using mechanical joints that corrode over time, adhesive bonding is being used for an increasing number of products such as windows and concrete elements. The use of protective coatings, for example moisture barriers, corrosion protection and anti-slip coatings, is becoming increasingly common.



*38 painters have been working non-stop since 1980 applying the necessary protective coating to the steel structure of the Golden Gate bridge in San Francisco, CA*

The use of the correct mixing and metering system is critical, especially in the case of 2-component mixing systems. The shelf life of the two components, the user-friendly application and, above all, the quality of bonding depend on it.







# System overview

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## MIXPAC™ B-system: Double Syringe

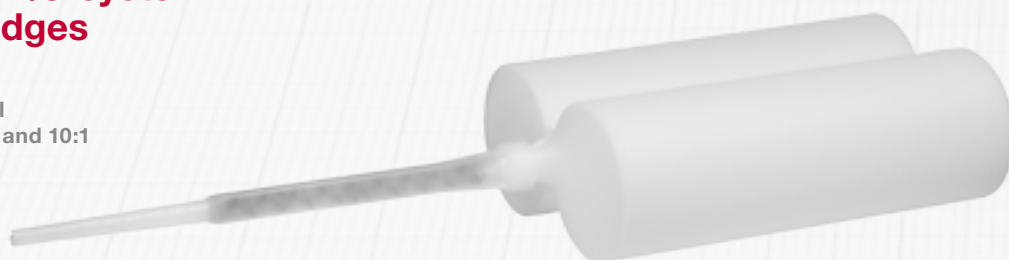
2-component double syringe  
25 ml volume  
Mixing ratio 1:1



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## MIXPAC™ C-system/J-system: Side-by-side cartridges

2-component cartridges  
Volumes from 235 ml to 1500 ml  
Mixing ratios of 1:1, 2:1, 3:1, 4:1 and 10:1



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## MIXPAC™ Q-system: Coaxial cartridges

2-component cartridge system  
Volumes from 75 ml to 380 ml  
Mixing ratio 10:1



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## MIXPAC™ Q-system: Peeler cartridges

2-component cartridge system  
Volumes from 265 ml to 280 ml  
Mixing ratios of 1:1, 2:1 and 10:1



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## MIXPAC™ and QUADRO™ Mixer for C-, J- and Q-systems

2-component mixer  
For different cartridges and mixing ratios



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## QUADRO™ High Flow mixer:

2-component mixer with accessories  
For high flow rates



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## Accessories

For MIXPAC™ and QUADRO™ mixers



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## MIXPAC™ valve piston

For MIXPAC™ side-by-side and  
coaxial cartridges



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## MIXPAC™ C-, J- and Q-systems: Air Assist Spraying

For MIXPAC™ side-by-side cartridges



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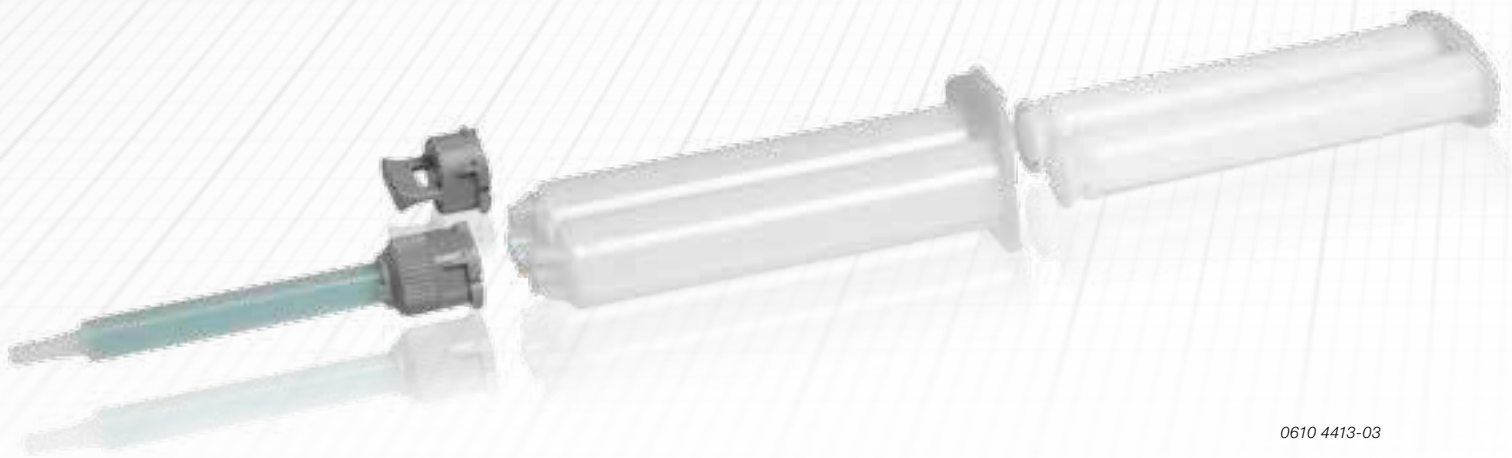
**2-component fields of application  
(professional application, Do It Yourself):**

- Chemical anchoring/dowelling
- Assembly using 2-component adhesives

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## MIXPAC™ B-system: Double Syringe

**2-component double syringe  
25 ml volume**



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**Product range:**

The B-system Double Syringe with a 25 ml volume and a mixing ratio of 1:1 is the ideal dispensing system for many 2-component materials in construction. The ergonomic design of the Double Syringe facilitates simple and flexible handling.

The patented interface and the compatible closure cap guarantee airtight closure of the cartridge and prevent undesirable cross-contamination.

This ensures clean and safe storage of the 2-component material in the cartridge.

For further information on the different models, please refer to the relevant data sheets on our homepage at [www.sulzerchemtech.com](http://www.sulzerchemtech.com), or contact us directly.

Product advantages	Customer benefits
Resealable patented interface	Quick mixer assembly Safe and easy to use Safe and clean storage
Rigid design	Precise metering – accurate application Ergonomic Excellent long-term stability and leakproof tested
QUADRO™ mixing technology	Excellent mixing performance Less backpressure Minimal waste volume
Individual configuration	Supports branding
Wide range of mixers	Optimal mixer for every application



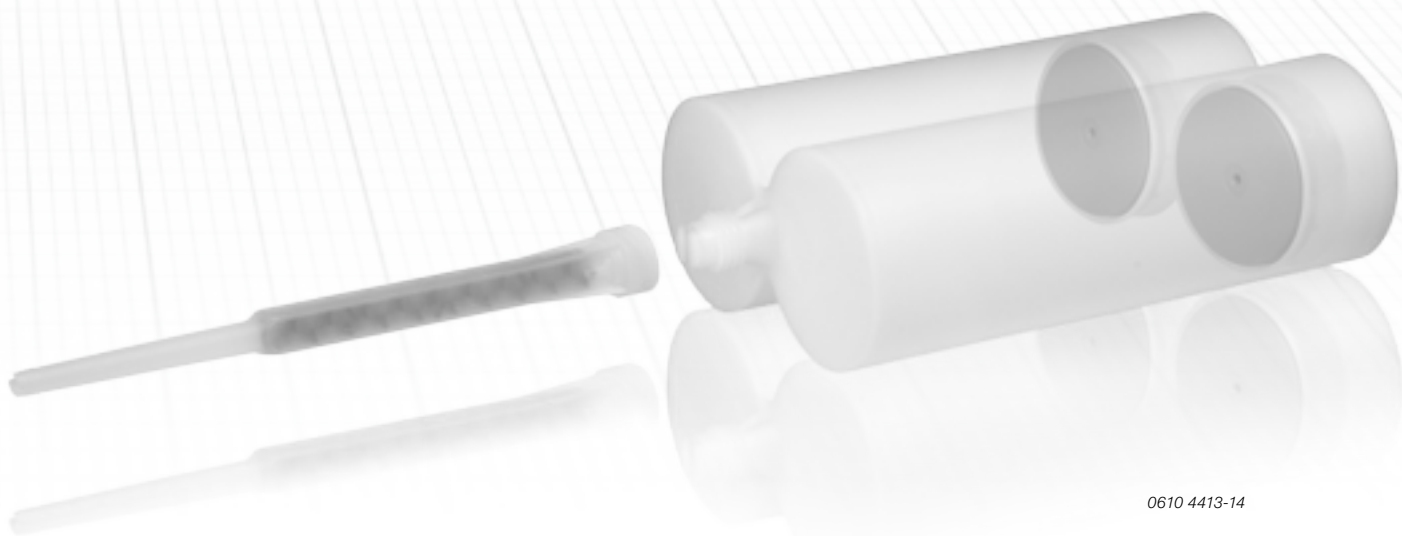
#### 2-component fields of application:

- Chemical anchoring/dowelling
- Protective coatings
- Flooring
- 2-component adhesives in construction

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## MIXPAC™ C-system/J-system: Side-by-side cartridges

**2-component cartridges**  
**Volumes from 235 ml to 1500 ml**



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#### Product range:

Type C and J side-by-side cartridges cover a wide range of 2-component applications in construction. Our cartridge systems are available in volumes ranging from 235 ml to 1500 ml, and in mixing ratios of 1:1, 2:1, 3:1, 4:1 and 10:1. All cartridges are available with our patented valve pistons.

Sealable and closed pistons are available with certain cartridges. For further information and to view a video showing how cartridges are filled using valve pistons, please visit our homepage at [www.sulzerchemtech.com](http://www.sulzerchemtech.com), or contact us directly.

Product advantages	Customer benefits
Rigid design	Precise metering – more accurate application Excellent long-term stability
Valve pistons	Safe and fast filling No air pockets
Leakproof tested	Safe storage and application of the 2-component material up to +40 °C
QUADRO™ mixing technology	Excellent mixing performance Minimal pressure loss High dispensing performance
Wide range of mixers	Optimal mixer for every application



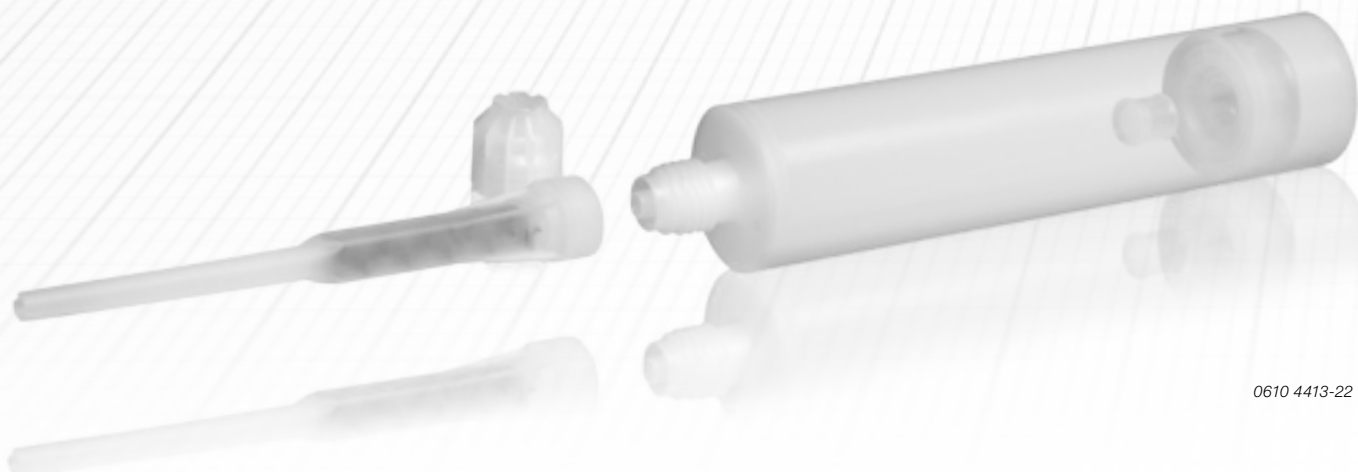
#### 2-component fields of application:

- Chemical anchoring/dowelling
- 2-component adhesives in construction

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## MIXPAC™ Q-system: Coaxial cartridges

**2-component cartridges**  
**Volumes from 75 ml to 380 ml**



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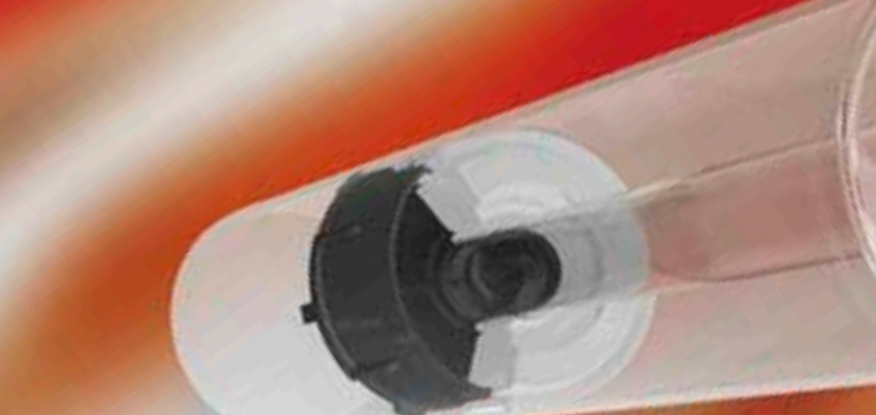
#### Product range:

Q-system coaxial cartridges are used especially for chemical anchoring/dowelling. The standard product offering includes volumes from 75 ml to 380 ml with a 10:1 mixing ratio. All cartridges are available with our patented valve pistons.

Sealable and closed pistons are available with certain cartridge models. For further information and to view a video showing how cartridges are filled using valve pistons, please visit our homepage at [www.sulzerchemtech.com](http://www.sulzerchemtech.com), or contact us directly.

Product advantages	Customer benefits
Rigid design	Precise metering – accurate application Ergonomic Excellent long-term stability
Valve pistons	Safe and fast filling No air pockets
Leakproof tested	Safe storage and application of the 2-component material up to +40 °C
QUADRO™ mixing technology	Excellent mixing performance Minimal loss of pressure
Wide range of mixers	Optimal mixer for every application





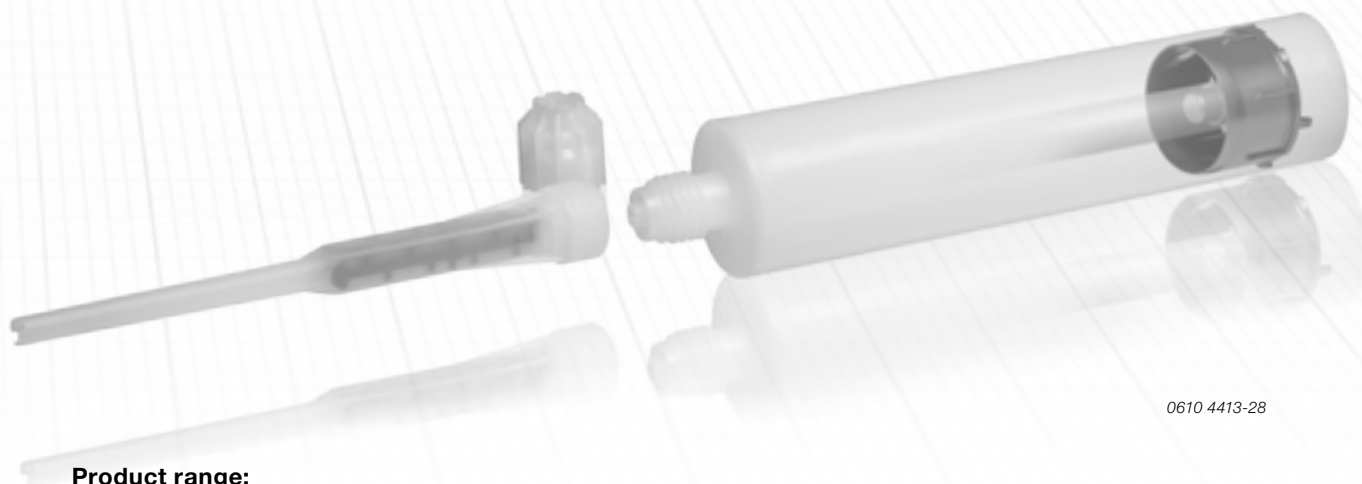
## 2-component fields of application:

- Chemical anchoring/dowelling
- 2-component adhesives in construction

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# MIXPAC™ Q-system: Peeler cartridges

2-component cartridges  
Volumes from 265 ml to 280 ml



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## Product range:

The 265 ml Q-system Peeler cartridge is available in mixing ratios of 1:1 and 2:1. The 280 ml cartridge is available in a mixing ratio of 10:1. They are compatible with the most common 1-component dispensers. For this reason, the Peeler is ideal for a wide range of industrial and construction applications, especially chemical anchoring, structural adhesives and processing of 2-component PU adhesives.

The Peeler cartridge consists of a cartridge body and

an internal tube, allowing both 2-component materials to be fed in separately. Likewise, there are inner and outer sealing pistons.

For further information on the different models and to view an instructional video, please visit our homepage at [www.sulzerchemtech.com](http://www.sulzerchemtech.com), or contact us directly.

Product advantages	Customer benefits
Precise metering	As the two components are mixed at a constant ratio, this ensures that the strength of the bond also remains constant
Low application force (particularly in combination with the QUADRO™ mixer)	User-friendly and precise Less time-consuming
Compatible with 300 ml single-component dispensers	Wide range of potential applications
Cartridge can be filled nose and back	Saves time and money during filling process
Reliability of cartridges	Pressure resistant, no "blow-by" effect Complete cartridge contents can be used without cross-contamination Reliable transportation
Economical and ecological	Minimal waste material in cartridge

## 2-component fields of application:

- See system descriptions

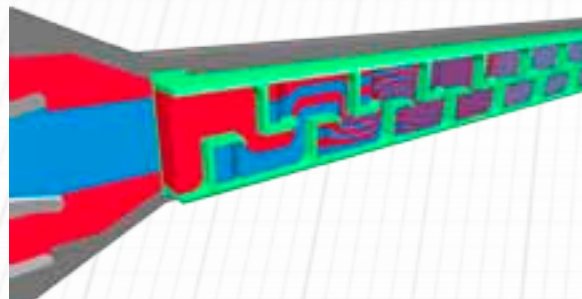


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## QUADRO™ mixers

### Static mixers for 2-component materials

Sulzer Mixpac provides a suitable QUADRO™ mixer for virtually all applications in the industrial and construction sectors.



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In principle, every mixer in the QUADRO™ product portfolio can be used. In this way, Sulzer Mixpac offers the perfect solution for a diverse range of applications.

QUADRO™ mixers offer a unique option to allow 2-component materials to be applied into drill holes or into other hard-to-reach areas during chemical anchoring. These mixers may also be adapted as required by using other Sulzer Mixpac accessories.

#### Product advantages

Short mixer featuring reliable mixing technology

#### Customer benefits

Minimal pressure loss - lower back pressure  
Precise and fatigue-free dispensing  
Waste volume reduced by up to 50%  
Withstands very high operating pressures  
For use with 2-component products that are difficult to mix  
Precise metering at high dispensing rates  
Optimal homogenous mixing of the two components

## 2-component fields of application:

- See system descriptions

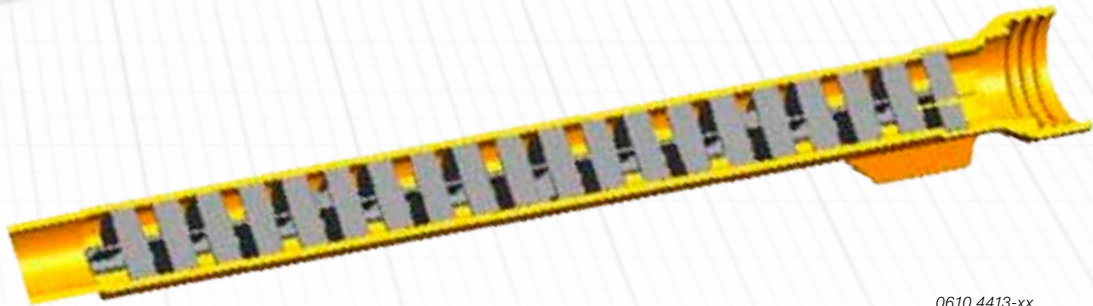
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# QUADRO™ High Flow mixers

2-component mixer with accessories  
for high flow rates



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The QUADRO™ High Flow mixer was developed for dispensing large amounts and high-viscosity products. The patented QUADRO™ mixing technology uses a large mixer diameter and open mixer structure to minimize the required application pressure.

For applications with 2-component materials of particularly high viscosity and/or particularly long injection op-

erations (e.g. chemical anchoring), an attachable extension that uses integrated helical mixing technology is available as an option.

QUADRO™ High Flow mixers are available in four configurations, based on the application requirements. Our extension tube is available with or without a helical mixing element installed.

Product advantages	Customer benefits
QUADRO™ technology	Pressure-reduced, precise and fatigue-free dispensing For use with 2-component materials that are difficult to mix Optimal homogenous mixing of the two components
Modular design	Can be customized for different applications
Withstands high application pressure	Effortless dispensing of high-viscosity 2-component materials



## 2-component fields of application:

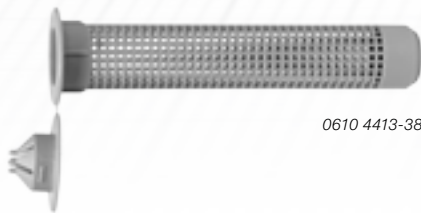
- Chemical anchoring/dowelling
- 2-component adhesives in construction

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## Accessories

### Compatible accessories – exact optimization

Various applications can be simplified and optimized by additional adjustment of the 2-component dispensing systems. Sulzer Mixpac offers application-specific accessories that are compatible with most Sulzer Mixpac systems.



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The "**perforated sleeves**" support chemical anchoring to brick walls.



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The "**flow restrictor**" prevents self-emptying when using low-viscosity adhesives. For side-by-side and Peeler cartridges.



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The "**retaining nut**" is used for attaching the mixers to the cartridges.



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"**Ribbon adapter**" – the wide tips can be cut to the required width for the respective adhesive.

## 2-component fields of application:

- See system description

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## C-, J- and Q-systems: Valve pistons

For MIXPAC™ side-by-side  
and coaxial cartridges

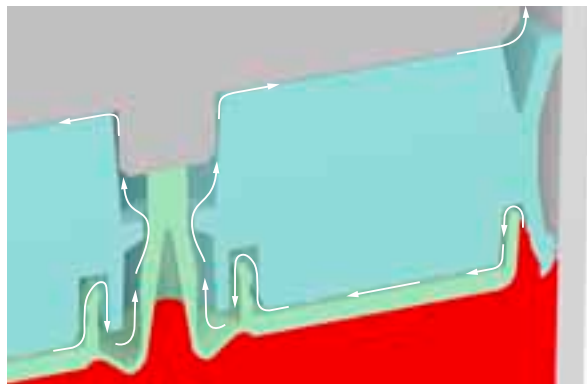


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Typically, the pistons are inserted into the two cartridge bodies after filling. The pistons seal the cartridge and are then pushed towards the outlet during dispensing. It is important that filling and venting is simple, and that the cartridge is leakproof. Along with the standard closed and sealable piston types, Sulzer Mixpac offers a new piston technology: The patented valve pistons for side-by-side and coaxial cartridges.

### Safe and fast filling – saves time and money

The self-venting valve pistons from Sulzer Mixpac allow excess air in the cartridge to escape during the insertion process. Sulzer Mixpac is setting a high standard for 2-component side-by-side cartridges with this unique technology that allows faster and safer filling of cartridges.



For further information on the different models and to view an instructional video, please visit our homepage at [www.sulzerchemtech.com](http://www.sulzerchemtech.com), or contact us directly.

## 2-component fields of application:

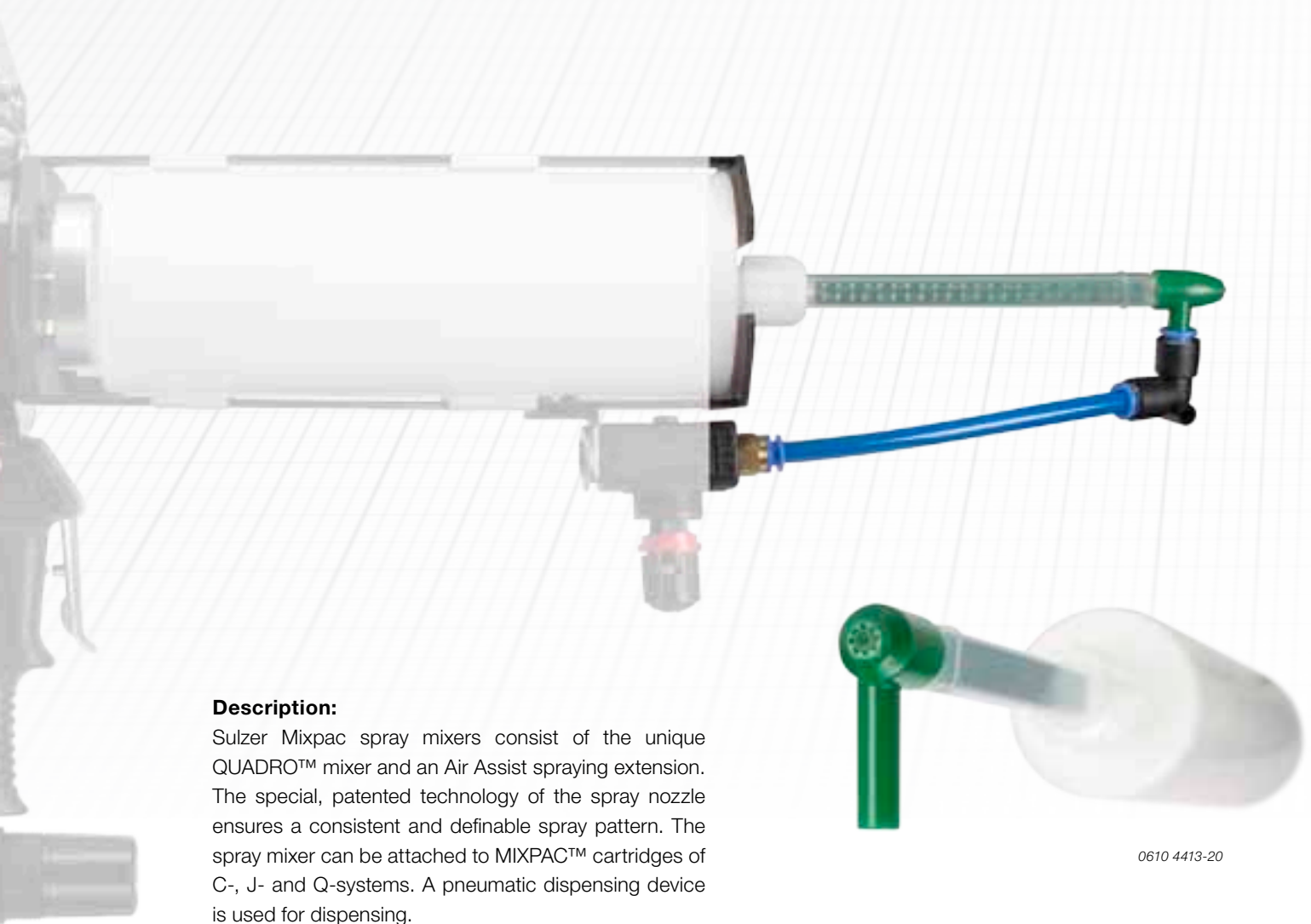
- Marine
- Civil engineering



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## MIXPAC™ Q-system: Air Assist Spraying

For MIXPAC™ side-by-side cartridges



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### Description:

Sulzer Mixpac spray mixers consist of the unique QUADRO™ mixer and an Air Assist spraying extension. The special, patented technology of the spray nozzle ensures a consistent and definable spray pattern. The spray mixer can be attached to MIXPAC™ cartridges of C-, J- and Q-systems. A pneumatic dispensing device is used for dispensing.

Product advantages	Customer benefits
Clearly defined spray geometry	Minimum overspraying resulting in an extremely low loss of material and clean application
Consistent spray geometry	Quick and efficient application Uniform thickness of layers



## Comments

**Headquarters**

Sulzer Mixpac Ltd  
Ruetistrasse 7  
9469 Haag, Switzerland  
phone +41 81 772 20 00  
fax +41 81 772 20 01  
mixpac@sulzer.com  
www.sulzerchemtech.com

**USA, South America,  
Canada and Mexico**

Sulzer Mixpac USA Inc.  
8 Willow St.  
Salem, NH 03079, USA  
phone +1 603 893 27 27  
fax +1 603 893 37 37  
info@SulzerMixpacUSA.com  
www.sulzerchemtech.com

**UK and Ireland**

Sulzer Mixpac UK  
Henson Way  
Kettering, Northants NN168PX, UK  
phone +44 1536 31 29 90  
fax +44 1536 31 29 85  
mixpac@sulzer.com  
www.sulzerchemtech.com

**Asia Pacific**

Sulzer Mixpac China  
68 Bei Dou Lu, Minhang  
Shanghai 200245, China  
phone +86 21 6430 68 68  
fax +86 21 6430 66 88  
mixpac@sulzer.com  
www.sulzerchemtech.com

Presented by:

