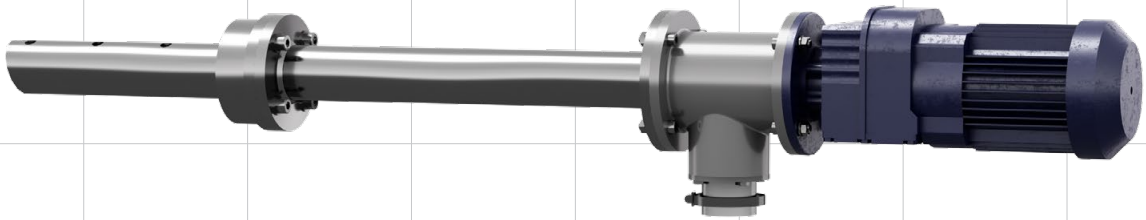
Screw Sampler



QCX® PSS101/102 SCREW SAMPLERS

The Screw Sampler is designed for spot and continuous sampling of materials from a chute. It is suited for fine powder samples, as well as granular flowable bulk materials with a grain size up to 2 mm and a maximum temperature of 120°C (optional 240°C).

Being compact in size, the Screw Sampler can be used in various positions and is easy to adjust to the most optimal position. This increases its ability to produce highly representative samples when compared to bulkier options. It's also versatile and enables sampling under different pressure conditions.

Furthermore, the Screw Sampler comes in a flexible, future-proof modular design. It is compatible with automation systems, which easily permits correct timestamps and high-level process control, and it is safe, protecting your operators from exposure to harsh conditions.

ADVANTAGES

- **Highly representative sampling**: correct installation and optimal positioning is easily achieved thanks to the compact size. This allows you to consistently achieve representative sampling.
- **Robust**: compatibility with various other automatic sampling systems provides a robust solution to suit any setting.
- **Automation**: the sampler seamlessly integrates with your automated QCX system and other automatic sampling systems to maximise your sampling accuracy and efficiency. It also gives you a future-proof solution ready for fast extensions and upgrades.

COMPACT AND VERSATILE TO SUIT ANY SETTING

How it works

The Screw Sampler has an electrically driven, horizontally installed conveyor screw to sample material from the feed section of material chutes.

The turning direction is reversed before the sample is taken. This removes excess material to minimise cross-contamination between subsequent samples.

The sampler can prepare average or spot samples, manually or automatically. The sampled material falls down the connected sample chute into the sample container, or for a solution with mixer, into the mixer. The material is subsequently collected in a plastic container or goes through a dosing unit into an automatic sending station.

Possible configurations

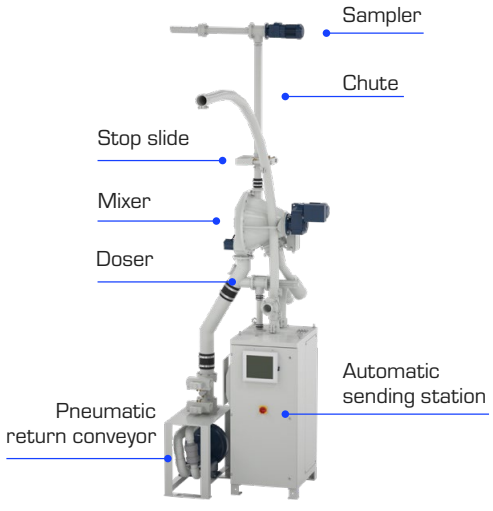
Semiautomatic screw sampler - Spot (PSS101)
The Screw Sampler can be used for manual sample collection whereby designated sample containers are provided for ease of use.

Automatic screw sampler with sending station – Composite (PSS102 + PTS102)
Automatic sample collection saves time and streamlines process control. This is achieved via integration with a mixer and an automatic sample transport sending station. Excess material returns via gravity or a pneumatic return conveyor.

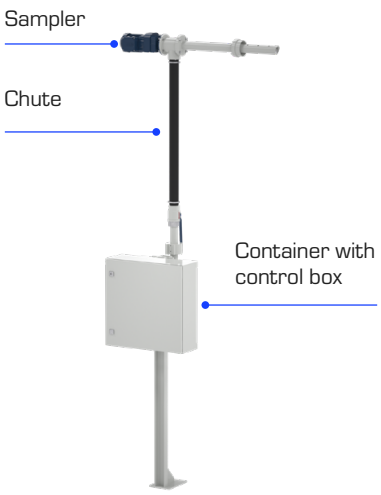
Specification

Sampler length	Up to 1,500 mm, longer on request
Sample material	Dry, non-sticky, up to 120°C, top size 2 mm (optional 240°C)
Sampling location	Vertical chute with free falling material
Sample type	Spot and incremental sample
Primary sampling	Continuous or up to 30 samples/hour
Power supply	3 x 380 – 500 V; 50/60 Hz
Compressed air supply	0.6 - 1.0MPa (Quality 2.4.2 as per ISO 8573-1)
Operating conditions	Temperature: -10°C to 40°C, optional -20°C to 50°C Humidity: 0 – 100%
Weight*)	Approx. 25 kg
Dimensions (H x W x D)*)	Max. 1,900 X 170 X 200 mm

*) Primary sampling unit only. Request technical drawing for weight and dimensions of entire sampling solution



PSS102 +PTS102



PSS101

FULLER TECHNOLOGIES

fuller-technologies.com

Copyright © 2026 FULLER Technologies. All Rights Reserved. FULLER is a registered trademark of FULLER Technologies. This brochure makes no offers, representations or warranties (express or implied), and information and data contained in this brochure are for general reference only and may change at any time.

C 05-26 800-18-END