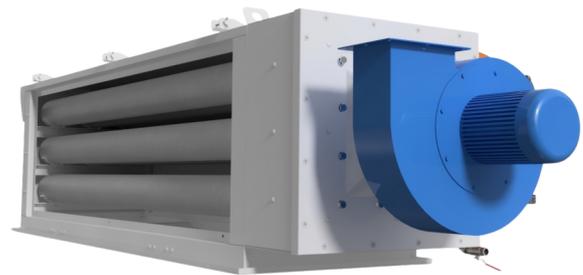
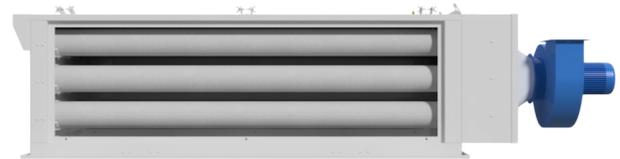


Uni-f™



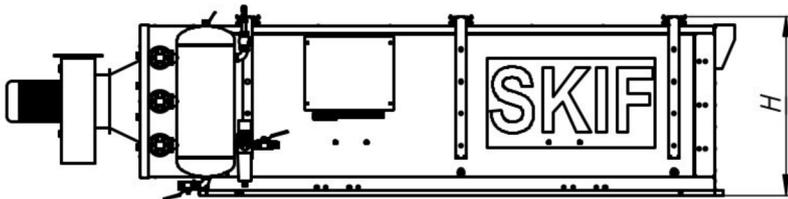
- SKIF Uni-f™ is an industrial bag filtration system designed for localized aspiration systems operating at the point of dust generation under high dust loads and continuous industrial processes.
- The dust-laden air is directed into the filtration chamber, where solid particles are separated through high-efficiency filter sleeves. The captured dust is collected and fully returned to the technological process without product loss.
- The system ensures stable filtration performance at high dust concentrations, maintaining consistent airflow parameters and reducing residual dust emissions in accordance with IED 2.0 requirements.
- Optimized filtration velocity and balanced regeneration provide reduced pressure losses and stable long-term operation under continuous industrial load.
- The purified gas flow reduces environmental impact and protects downstream equipment, minimizing wear and extending overall system service life.
- The system is fully compliant with current EU directives on machinery safety, explosion protection and industrial emissions, including IED 2.0.

Typical configuration and dimensional layout of SKIF Uni-f™ localized filtration systems.

Compliance with EU directives:

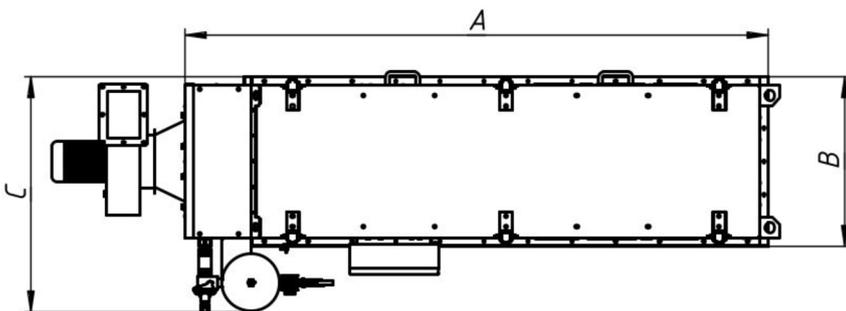
- 2006/42/EC – Machinery Directive
- 2014/35/EU – Low Voltage Directive
- EN ISO 13849 – Functional Safety
- 2014/34/EU (ATEX) – Explosion Protection
- Active and passive explosion suppression systems
- IED 2.0 – Directive (EU) 2024/1785

Parameter	Standard value	Optional / On request	Notes
Filtration area	3.5–37.7 m <sup>2</sup>	—	Model dependent (6–40 sleeves)
Residual dust level at outlet	≤ 5 mg/m <sup>3</sup>	10 / 15 / 20 mg/m <sup>3</sup>	Depending on dust characteristics
Dust type / material	Grain, wood, mineral dusts	Aggressive / food-grade	Specified per project
Execution	Standard	ATEX Category	Directive 2014/34/EU



Engineering notes:

- Designed for localized industrial operation
- Suitable for high dust concentrations
- Optimized filtration velocity and stable pressure drop
- Configurable for ATEX classified zones



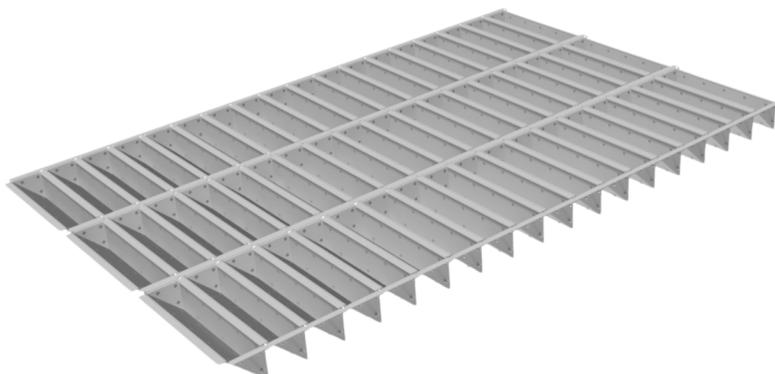
Centrifugal fans tailored for Uni-f™ localized filtration systems

Depending on the required airflow rate, pressure, and dust characteristics, the selection of the centrifugal fan is adapted to the specific needs of your application.



Parameter	Value	Notes
Fan type	Centrifugal	Integrated or remote configuration
Typical airflow range	Model-dependent	Based on filtration area and velocity
Pressure class	Low to medium	Localized filtration
Execution	Standard / ATEX	Directive 2014/34/EU
Application	Grain, wood, mineral dust	Specified per project

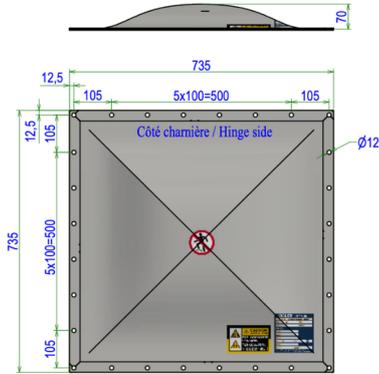
To further increase aspiration efficiency and reduce uncontrolled air ingress, SKIF systems can be equipped with localized dust suppression elements.



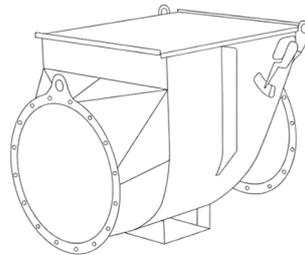
SKIF Flex-Flap

- Reduces uncontrolled air ingress
- Stabilizes aspiration performance
- Decreases required airflow volume
- Lowers fan load and energy consumption

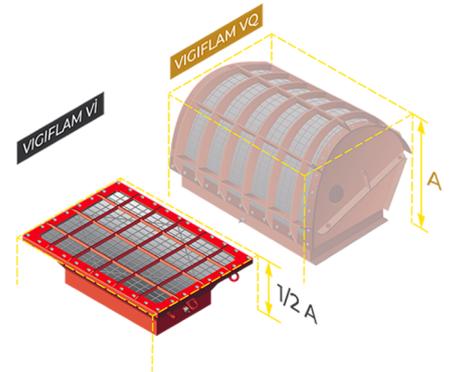
Explosion Safety Solutions Integrated into SKIF Aspiration Systems  
 Integrated explosion protection solutions for enhanced safety and ATEX compliance.



Explosion Vent Panels



Explosion Isolation Valves



Flameless Venting Device

- Designed for controlled explosion pressure relief in accordance with EN 14491, suitable for dust applications up to St 3.
- Provides mechanical isolation of explosion propagation in duct systems for dust explosions up to Kst 250 bar·m/s.
- Enables indoor explosion venting with integrated flame arresting technology for safe pressure release without external flame discharge.

