



USTER® JOSSI FIRE SHIELD
USTER® JOSSI METAL SHIELD
USTER® JOSSI COMBO SHIELD

Technical Data

February 2018

Scope of delivery USTER® JOSSI FIRE SHIELD

Basic equipment and parts

The USTER® JOSSI FIRE SHIELD will be delivered in a preassembled stage. The unit can be installed by the customer. The service engineer will do the final commissioning as well as the final set-up directly at the spinning mill/blowroom.

- Detection duct with spark sensors
- High Speed Diverter
- Collector bin
- Control unit
- Alarm unit (Hooter)
- Optional extinguisher system
- Connection cones for needed duct diameter

Documentation

The following documents will be supplied on delivery:

- Brief instruction
- Operating instructions of the USTER® JOSSI FIRE SHIELD
- Spare parts catalogue included in the operating instruction

Accessories

- Unit key available, this key opens the collector bin

Specification USTER® JOSSI FIRE SHIELD

General

Functions	USTER® JOSSI FIRE SHIELD is designed to detect and eject sparks in pneumatic conveying lines of spinning mills. An optional extinguisher is available to protect the system itself.
Control unit	Control unit of USTER® JOSSI FIRE SHIELD, equipped with buttons and LEDs
Detection production rate	Spark detection system up to 1200 kg/hour (depending on working diameter)
Operating temperature	5° to 50° C
Working diameters	Ø 220 (diverter small) Ø 300/Ø 350/Ø 400 (diverter large)
Power consumption	30 VA
Weight	App. 75 kg (small), 135 kg (large)
Material flow	Horizontal
Installation	In pneumatic conveying lines for the transport of tufted or fibrous material
Language	English

Operating languages on USTER® JOSSI FIRE SHIELD

USTER® JOSSI FIRE SHIELD

Features USTER® JOSSI FIRE SHIELD

Key actions

Avoidance of false alarms

SPARX avoids false alarms due to electrostatic discharge in case of cotton and MMF blends

Sensitivity, threshold

Defined sensitivity, no adaptation through the operator needed

High speed diverter

- Driven by a high-performance pneumatic drive with a reaction time of 60 ms
- 6 bar pressure for compressed-air recommended

Maintenance

- Easy access to the screens in the collector bin
- Easy access to the detection duct

Connections to the blowroom control

- Stop fan
- Ready/Trouble
- Fire alarm, stop machine

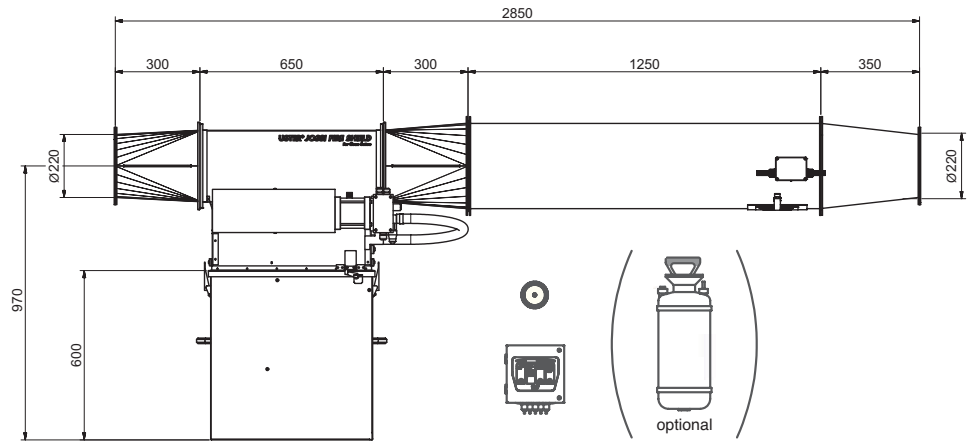
Contact load

250 VAC/2 A

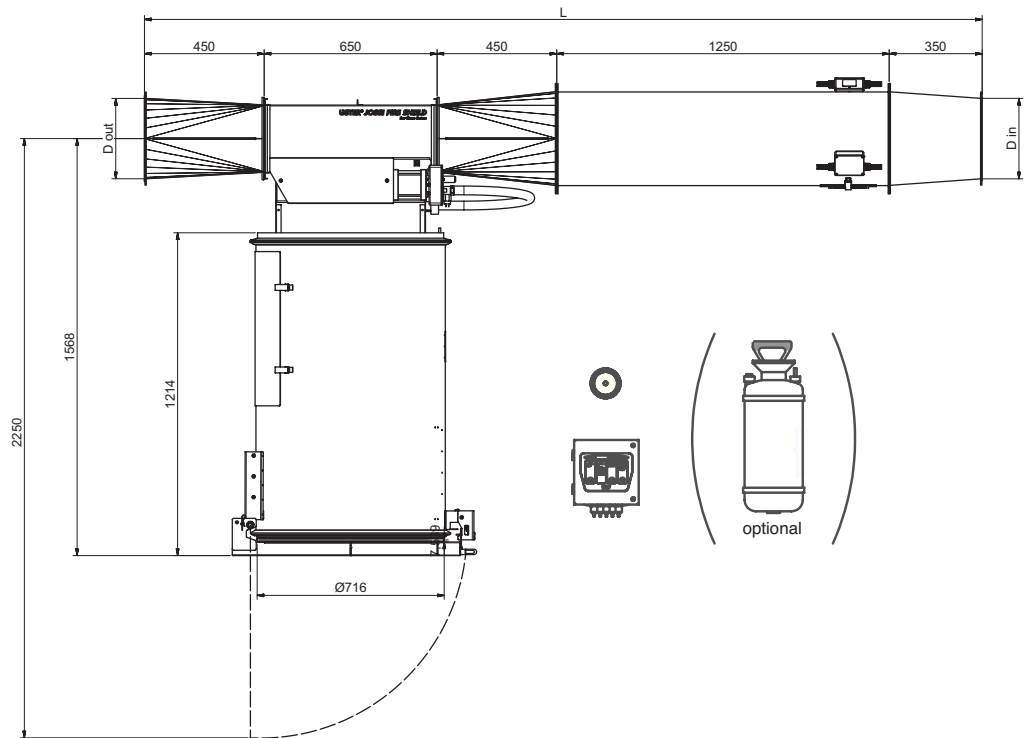
USTER® JOSSI FIRE SHIELD

Technical drawing of USTER® JOSSI FIRE SHIELD

Diverter small:
250 HP



Diverter large:
370 HP



Piping (D in/D out) [mm]	L [mm]
Ø 300	3 150
Ø 350	2 800
Ø 400	3 150

Scope of delivery USTER® *JOSSI METAL SHIELD*

Basic equipment and parts

The USTER® *JOSSI METAL SHIELD* will be delivered in a preassembled stage. The unit can be installed by the customer. The service engineer will do the final commissioning as well as the final set-up directly at the spinning mill/blowroom.

- Metal sensor
- High Speed Diverter
- Collector bin (short or long) with attached control unit and alarm light
- Floor supports
- Connection cones for needed duct diameter

Documentation

The following documents will be supplied by the delivery:

- Brief instruction
- Operating instructions of the USTER® *JOSSI METAL SHIELD*
- Spare parts catalogue of the USTER® *JOSSI METAL SHIELD*

Accessories

- Unit key available, this key opens the collector bin
- Testing rod for metal sensor

Specification USTER® JOSSI METAL SHIELD

General	Functions	USTER® JOSSI METAL SHIELD is designed to detect and eject metal particles in pneumatic conveying lines of spinning mills. Speed sense, much less of the transported material is ejected thanks to sensitive recognition of speed and size of the detected metal particle. Small and fast particles: shorter activation, larger and rather slow particles: longer activation.
	Display	At USTER® JOSSI METAL SHIELD front panel of the control unit
	Detection production rate	Metal detection system up to 1200 kg/hour (depending on working diameter)
	Operating temperature	5° to 50° C
	Working diameters	Ø 220/Ø 300 Ø 350/Ø 400
	Power consumption	50 VA
	Weight	App. 175 kg (short), 235 kg (long)
	Material flow	Horizontal
	Installation	In pneumatic conveying lines for the transport of tufted or fibrous material
	Operating languages on USTER® JOSSI METAL SHIELD	21 languages German, English, Chinese, Turkish, Italian, Spanish, French, Polish, Portuguese, Czech, Korean, Russian, Taiwanese, Portuguese, Greek, Croatian, Hungarian, Dutch, Norwegian, Romanian, Swedish

USTER® JOSSI METAL SHIELD

Features USTER® JOSSI METAL SHIELD

Key actions

Adaption of ejection time

- Cotton saving through automatic adaption of ejection time
- Ejection time is automatically calculated by the system, based on speed and size of the metal particle

Sensitivity, threshold

Easy adaptation of the sensitivity through the operator

High speed diverter

- Driven by a high-performance pneumatic drive with a reaction time of 60 ms
- 6 bar pressure for compressed-air recommended

Maintenance

Easy access to the tuft screen of the collector bin

Connections to the blowroom control

Ready/Trouble

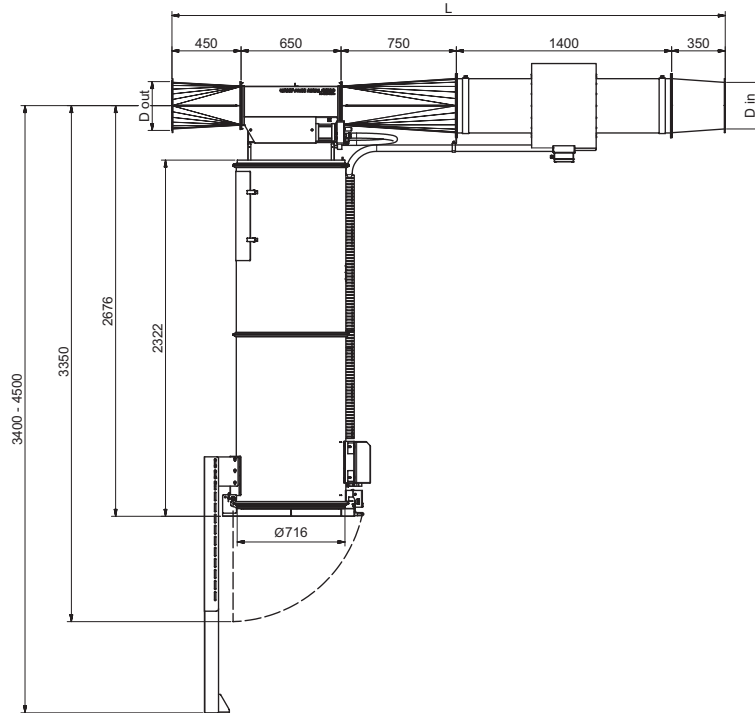
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250 VAC/3 A

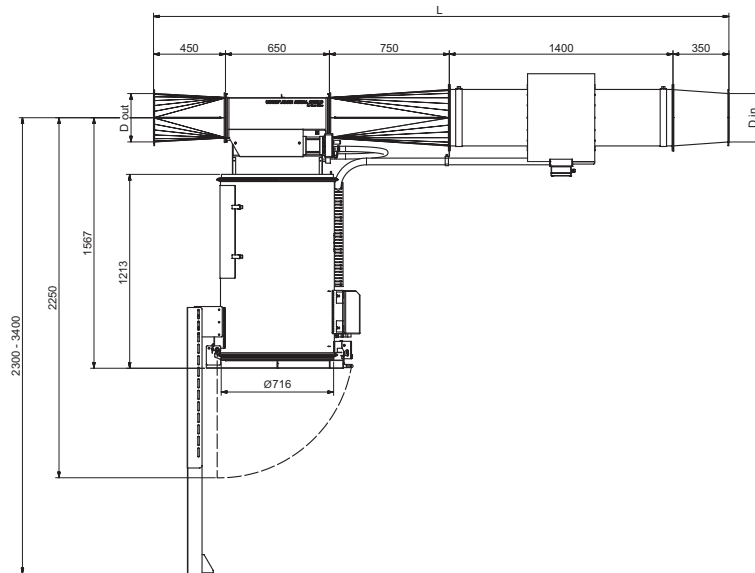
USTER® JOSSI METAL SHIELD

Technical drawing of USTER® JOSSI METAL SHIELD

Long version



Short version



Piping (D in/D out) [mm]	L [mm]
Ø 220	3 600
Ø 300	3 600
Ø 350	3 250
Ø 400	3 600

Scope of delivery USTER® JOSSI COMBO SHIELD

Basic equipment and parts

The USTER® JOSSI COMBO SHIELD will be delivered in a preassembled stage. The unit can be installed by the customer. The service engineer will do the final commissioning as well as the final set-up directly at the spinning mill/blowroom.

- Detection sensors for sparks and metal
- High Speed Diverter
- Collector bin (short or long) with attached control unit and combined alarm light and hooter
- Floor supports
- Connection cones for needed duct diameter

Documentation

The following documents will be supplied by the delivery:

- Brief instruction
- Operating instructions of the USTER® JOSSI COMBO SHIELD
- Spare parts catalogue of the USTER® JOSSI COMBO SHIELD

Accessories

- Unit key available, this key opens the collector bin
- Testing rod for metal sensor

Specification USTER® JOSSI COMBO SHIELD

General

Functions

USTER® JOSSI COMBO SHIELD is designed to detect and eject sparks and metal particles in pneumatic conveying lines of spinning mills.

Speed sense, much less of the transported material is ejected thanks to sensitive recognition of the size and speed of the detected metal particle. Small and fast particles: shorter activation. Larger and rather slow particles: longer activation.

Display

At USTER® JOSSI COMBO SHIELD front panel of the control unit

Detection production rate

- Spark detection system
- Metal detection system
- Up to 1200 kg/hour (depending on working diameter)

Operating temperature

5° to 50° C

Working diameters

Ø 220/Ø 300
Ø 350/Ø 400

Power consumption

60 VA

Weight

App. 185 kg (short), 245 kg (long)

Material flow

Horizontal

Installation

In pneumatic conveying lines for the transport of tufted or fibrous material

Operating languages on USTER® JOSSI COMBO SHIELD

21 languages

German, English, Chinese, Turkish, Italian, Spanish, French, Polish, Portuguese, Czech, Korean, Russian, Taiwanese, Portuguese, Greek, Croatian, Hungarian, Dutch, Norwegian, Romanian, Swedish

USTER® JOSSI COMBO SHIELD

Features USTER® JOSSI COMBO SHIELD

Key actions

Avoidance of false alarms

SPARX avoids false alarms due to electrostatic discharge in case of cotton and MMF blends

Adaption of ejection time

- Cotton saving through automatic adaption of ejection time
- Ejection time is automatically calculated by the system, based on speed and size of the metal particle

Sensitivity, threshold

Easy adaptation of the sensitivity through the operator

High speed diverter

- Driven by a high-performance pneumatic drive with a reaction time of 60 ms
- 6 bar pressure for compressed-air recommended

Maintenance

- Easy access to the spark detection
- Easy access to the screens in the collector bin

Connections to the blowroom control

- Stop fan
- Ready/Trouble
- Fire Alarm, stop machine

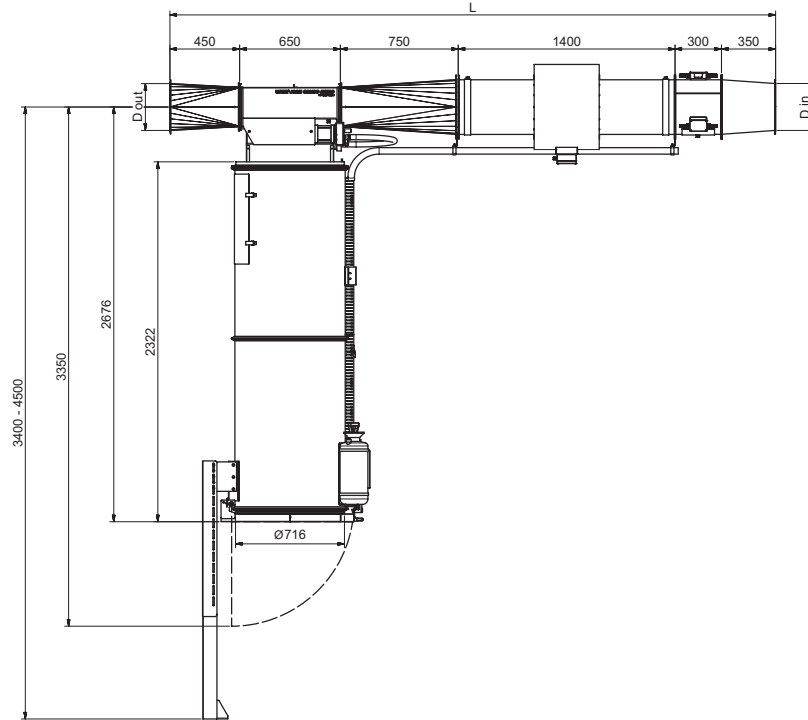
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250 VAC/3 A

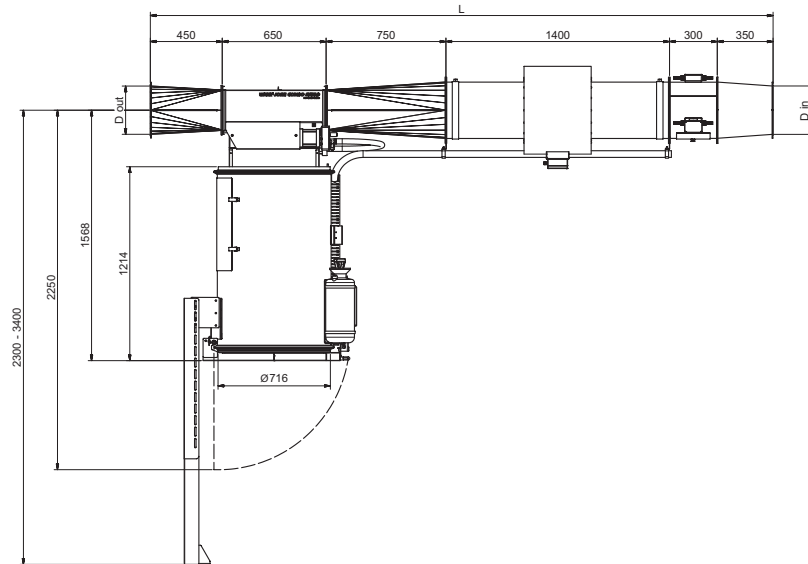
USTER® JOSSI COMBO SHIELD

Technical drawing of USTER® JOSSI COMBO SHIELD

Long version



Short version



Piping (D in D out) [mm]	L [mm]
Ø 220	3 900
Ø 300	3 900
Ø 350	3 550
Ø 400	3 900

Uster Technologies has made all possible efforts to ensure that all information is accurate at the time of publication. Hereby it is declared that alterations to the product may be possible at any time. In these cases the information contained in this technical datasheet is subject to change without notice.

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