

Welding Fume Filters

For precise capture and extraction of welding smoke

SRF K-10/K-15
SRF T-2/T-4
SRF SK
KAF-70/100
DUSTEX F

Application Range

Welding of:

Construction steel

Stainless steel
(Chrome-Nickel, etc.)

Coated sheet metal

Aluminium

Galvanized parts

Direct extraction at the welding torch

etc.



SRF K-10 in a metalworking application



DUSTEX F – as part of a central extraction system



SRF SK at a workstation



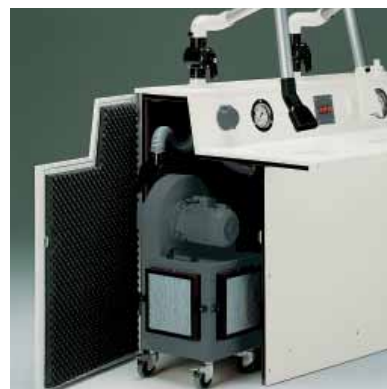
SRF K-15 with two extraction arms



Test Certificate:



SRF T-4 in a mobile extraction application



KAF-70 integrated in a soldering fume extraction application

Welding Fume Filters

Welding Fume Filters from ESTA – Introduction and Product Overview

Introduction



During welding fumes are generated that are hazardous to your health. The welding fumes can be captured and filtered with a welding fume filtration unit either directly through a nozzle with an extraction arm. The filtered air can then be returned into the workplace or exhausted to the outside.

Product Overview

Depending on the application ESTA offers different types of equipment for the extraction and filtration of welding fumes. The SRF K series is recommended for mobile welding fume extraction at one or two workstations. The compact and mobile design makes these units highly manoeuvrable so that they can be moved effortlessly to any extraction location. The high extraction performance of these units permits the extraction of welding fumes over a larger distance making the job easier for the welder. ESTA extraction arms with specially developed extraction hoods are used to capture the fumes.



Your Benefits at a Glance

SRF K-10

- Powerful capturing of the welding fumes
- Mobile for versatile use and suitable for continuous duty applications
- Compact and user friendly design
- Low operating costs through the use of cleanable long life cartridge filters
- Convenient disposal of the dust

Product Description

The mobile welding fume extractor SRF K-10 is suitable for all types of welding workstations. The unit generates such a high airflow volume that even large clouds of welding smoke can be extracted effortlessly. The smoke

filled air will be filtered with 99.9% efficiency and the clean air will be returned into the workplace.

The patented ESTA tilt-back mechanism of the filter housing makes the disposal of the dust, which is collected in a bag a breeze. Cleanable long life cartridge filters keep the operating costs of the unit low.



Mobile welding fume filter SRF K-10



SRF K-10 in operation

Technical Data

Welding fume filter model SRF		K-10
Max. airflow	m ³ /h	1.000
Intake diameter	mm	140
Max. negative pressure	Pa	2.400
Voltage	V	230
Motor	kW	1,3
Filter surface	m ²	10
Dimensions (L/W/H)	mm	946 x 761 x 1.361
Weight	kg	69
Order Number		
Standard model		55.203
Stand. model with BIA "W2" Test Cert.		55.234
Stand. model with BIA "W3" Test Cert.		55.235
Man. operated rotating filter cleaning		70 268 130
Autom. filter cleaning system		70 268 115
Autom. filter cleaning system, BIA*)-test.		70 272 115

BIA*) German Institute for Occupational Health and Safety



Tested according to BIA-test requirements for certificates W2 and W3

W2

W3

Features

Application Range:

- Intermittent and continuous duty operation
- Welding of all types of metals (Chrome-Nickel-Steel only with BIA Test Certificate)
- Soldering fume extraction

Special Features:

- Filter cleaning with compressed air gun (manually) or fully automatic
- Cleanable long life cartridge filters of dust classification M
- BIA Test Certificates W2 and W3

Data dependent on equipment type

Welding Fume Filters

Your Benefits at a Glance

SRF K-15

- High performance extraction at two extraction locations
- Mobile for versatile use and suitable for continuous duty applications
- Compact and user friendly design
- Low operating costs through cleanable cartridge filters
- Easy disposal of the collected dust

Product Description

The SRF K-15 is the big brother of the SRF K-10. This model is recommended for large amounts of welding smoke or for simultaneous extraction of two workstations.



Mobile welding fume filter SRF K-15



SRF K-15 with pipe system

Advantages (SRF K-10 and K-15)

- Low operating costs with cleanable long life cartridge filters of BIA dust classification M
- Compact design
- Highly mobile
- Pneumatic filter cleaning manually with compressed air gun or fully automatic
- Tough plastic housing
- Also suitable as soldering fume filtration unit (custom unit)
- Auto-start through welding arc possible
- Optional activated carbon odour filter

Data dependent on equipment type

Technical Data

Welding fume filter model SRF		K-15
Max. airflow	m ³ /h	2.000
Intake diameter	mm	2 x 140
Max. negative pressure	Pa	2.400
Voltage	V	400
Motor	kW	2,2
Filter surface	m ²	15
Dimensions (L/W/H)	mm	946 x 761 x 1.361
Weight	kg	74
Order Number		
Standard model		55.212
Stand. model with BIA "W2" Test Cert.		55.228
Stand. model with BIA "W3" Test Cert.		55.229
Man. operated rotating filter cleaning		70 269 130
Autom. filter cleaning system		70 269 114
Autom. filter cleaning system, BIA*)-test.		70 273 114

BIA*) German Institute for Occupational Health and Safety



Tested according to BIA-test requirements for certificates W2 and W3

W2

W3

Features

Application Range:

- Intermittent and continuous duty use
- Welding of all types of metals (Chrome-nickel-steel only with BIA Test Certificate)
- Soldering fume extraction

Special Features:

- Filter cleaning with compressed air gun (manually) or fully automatic
- Cleanable long life cartridge filters of dust classification M
- BIA Test Certificates W2 and W3

Data dependent on equipment type

SRF K-10
SRF K-15

Disposal of the Dust

By tilting the filter housing the extracted dust slides through the opening at the bottom in the sealable dust collection bag. This ensures removal of the dust without a mess.



Patented ESTA tilt mechanism



Convenient disposal of the dust

Wall Console

Metal bracket for wall mounting of the welding fume filter.

Order Number 60400001



Wall console for SRF K-10/K-15

Accessories and Attachments

Sensor Activated Auto-Start

With the help of an optical sensor the welding fume filter starts automatically when the welding arc is ignited.



SRF K-10 Order Number 70268127
SRF K-15 Order Number 70269127

Auto-Start through Welding Clamps

When the welding clamp is attached to the ground cable of the welding equipment the welding fume filter starts up automatically.



SRF K-10 Order Number 70268126
SRF K-15 Order Number 70269126

Extraction Hood with Integrated Lighting

An integrated halogen lamp inside the extraction hood provides optimal illumination of the welding area.



Order Number 15430

Welding Fume Filters

SRF K-10
SRF K-15

Filter Cleaning

Standard Cleaning Method (manually)

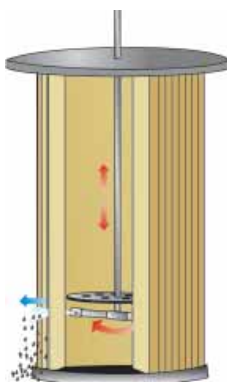
Quick and effective filter cleaning manually with a compressed air gun: The pleats of the cartridge filter are blown off with compressed air from the inside out. The smoke particles detach from the filter material and drop in the collection channel inside the filter housing.



Cleaning with compressed air

Rotating Cleaning System (manually)

A compressed air connection to the manually operated rotating cleaning system ensures equal cleaning of the filter pleats.



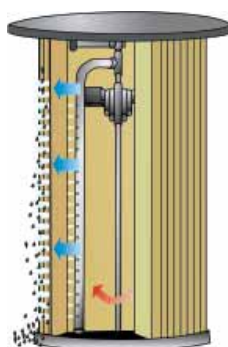
Rotational cleaning system (manually)

For standard models

SRF K-10 Order Number 70268130
SRF K-15 Order Number 70269130

Automatic Cleaning System

With the automatic cleaning method the filter cleaning process starts after the fan has come to a stop. In the case of models with BIA*) test certificate the necessity for filter cleaning is announced with an acoustic horn.



Automatic cleaning system

For standard models

SRF K-10 Order Number 70268115
SRF K-15 Order Number 70269114

For BIA tested models

SRF K-10 Order Number 70272115
SRF K-15 Order Number 70273114

BIA*) German Institute for Occupational Health and Safety

Your Benefits at a Glance

SRF T-2
SRF T-4

- Portable units that can be used in any location
- Compact and functional design
- Low operating costs with cleanable long life cartridge filters

Product Description

The compact and portable SRF T models capture the welding fumes directly at the source. Cleanable long life cartridge filters keep the operating costs of these units low.

A dust drawer makes disposal of the extracted dust easy and convenient.

Cone shaped nozzle
Order Number 94.740



Slotted nozzle
Order Number 94.741



Welding Fume Filters



Portable welding fume filter
SRF T-4/SRF T-2



SRF T-2 used in a mobile application

Technical Data

Welding fume filter SRF		T-2	T-4
Max. airflow	m ³ /h	200	400
Intake diameter	mm	50	2 x 50
Max. negative pressure	Pa	19.000	19.000
Voltage	V	230	230
Motor	kW	1,1	2,2
Filter surface	m ²	0,8	1,6
Dimensions (L/W/H)	mm	390 x 210 x 500	490 x 400 x 560
Weight	kg	15	27
Order Number		55.101	55.102

Features

Application Range:

- Outside work, assembly or construction sites
- Non-alloy steels and steel with low alloy content

Special Features:

- Integrated compressed air cleaning nozzle
- Cleanable long life cartridge filters of dust classification M

Welding Fume Filters

Your Benefits at a Glance

SRF SK-2.2 through SK-13.0

- High suction performance for direct extraction at the welding torch
- Simultaneous extraction from up to eleven workstations possible
- Rated for continuous duty operation
- Low operating costs with cleanable long life cartridge filters

Product Description

This high vacuum welding fume filter series SRF SK can extract welding fumes from several welding torches simultaneously if connected to a suitable pipe system. The high vacuum performance of these units guarantees

optimal extraction performance even over longer distances.

The SRF SK models are available in four models of increasing vacuum power. In addition the different models are available with different filter cleaning systems - manual cleaning with compressed air, fully automatic pneumatic cleaning or pulse-jet cleaning.



High vacuum power welding fume filter SRF SK-2.2



SRF SK-2.2 unit in operation

Technical Data

Welding fume filter SRF		SK-2.2	SK-5.5	SK-7.5	SK-13.0
Max. airflow	m ³ /h	300	480	850	1.100
Intake diameter	mm	50	70	100	125
Max. negative pressure	Pa	21.000	24.500	25.000	22.000
Voltage	V	400	400	400	400
Motor	kW	2,2	5,5	7,5	13,0
Filter surface	m ²	10	15	15	15
Dimensions (L/W/H)	mm	1.320 x 530 x 1.190	1.680 x 780 x 1.300	1.690 x 780 x 1.300	1.690 x 780 x 1.300
Weight	kg	150	230	230	230
Order Number					
Manual cleaning (compressed air)		55.146	55.161	55.147	55.148
Pneumatic cleaning		55.149	55.162	55.150	55.151
Pulse-jet cleaning		-	55.163	55.152	55.153

Features

Application Range:

- Intermittent use and continuous duty applications
- Direct extraction at the welding torch
- Non-alloy steels and steel with low alloy content

Special Features:

- Filter cleaning with compressed air gun, pneumatic or pulse-jet cleaning system
- Cleanable long life cartridge filters of dust classification M

Data dependent on equipment type

Your Benefits at a Glance

KAF-70
KAF-100

- Especially recommended for the extraction of soldering fumes
- Compact and functional design
- Mobile for versatile use
- Odour eliminating activated carbon filter

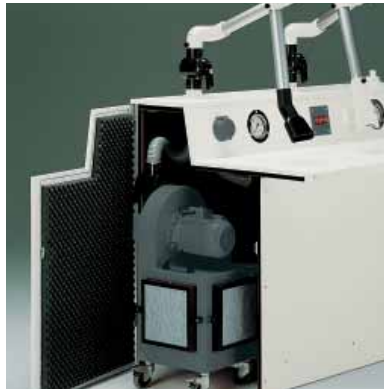
Product Description

The KAF series is recommended for the extraction of fine dust or soldering fumes. The secondary activated carbon filter eliminates odours. Mobile unit with four casters for versatile use.

These models are available in three-phase current or in alternating current. Both models are suitable for continuous duty applications.



Soldering fume filter KAF-70 and KAF-100



KAF-70 can be positioned under a work table



Articulated extraction arms 50 D, Order number 50.080

Technical Data

KAF		-70	-100
Max. airflow	m ³ /h	500	700
Intake diameter	mm	50	2 x 50 od. 1 x 100
Max. negative pressure	Pa	1.100	1.100
Voltage	V	230	230
Motor	kW	0,55	0,55
Dimensions (L/W/H)	mm	385 x 465 x 735	485 x 485 x 920
Weight	kg	30	42
Order Number		07.071 L/S	07.101 L/S

Features

Application Range:

- Extraction of single and multiple workstations
- Laboratories and precision mechanical work
- Fine dust and soldering fumes

Special Features:

- Manual filter cleaning
- Activated carbon filter cassette

Data dependent on equipment type

Welding Fume Filters

Your Benefits at a Glance

Modular Welding Fume Extraction System DUSTEX F

- High performance welding fume extraction from multiple locations, from welding cells or from large extraction hoods
- Customer specific design of the system
- Modular for future expansion
- Low operating costs with cleanable long life filter cartridges

Product Description

The DUSTEX F model series is recommended for simultaneous extraction of welding fumes from multiple workstations. The modular design of this system can be easily adapted for large quantities of welding smoke,

which can be extracted through a suitable pipe system. This modular system can also be easily expanded later on if necessary.

The DUSTEX models are equipped with cleanable long life cartridge filters to keep the operating costs low. The filter cleaning is performed automatically during operation with a pulse-jet cleaning system.



DUSTEX F



Central welding fume extraction system
DUSTEX F

Technical Data

DUSTEX		F-60	F-64	F96	F-144
Max. airflow	m ³ /h	6.100	7.300	10.300	13.200
Intake/outlet diameter	mm	280/315	315/355	355/400	450/500
Max. negative pressure	Pa	3.800	3.800	4.400	4.800
Voltage	V	400	400	400	400
Motor	kW	5,5	7,5	11	15
Filter surface m ² /cartridges		60/4	64/4	96/6	144/9
Collection container	Litre	50	50	50	50
Dimensions (B/W/H)	mm	1.400 x 1.350 x 3.380	1.400 x 1.350 x 3.410	1.820 x 1.450 x 3.860	1.850 x 1.900 x 3.910
Weight	kg	540	540	740	880
Order Number		663.060	663.064	663.096	663.144

Features

- Application Range:**
- Central systems with multiple extraction locations
 - Large extraction hoods or cells, e.g. robotic welding stations
 - All types of steel
- Special Features:**
- Pulse-jet filter cleaning system
 - Cleanable long life cartridge filters of dust classification M

Data dependent on equipment type

Your Benefits at a Glance

Accessories & Attachments

- Designed for the ESTA product range
- Can accommodate most customer requirements
- High quality and durability

Welding Fume Filters



Product Description

Order No.

Extraction Arms

		SRF K-10	SRF K-15	SRF T-2	SRF T-4	SRF SK-2.2	SRF SK-5.5	SRF SK-7.5	SRF SK-13.0	KAF-70	KAF-100
Extraction arm with square hood design, Ø 140 mm, length 2m	14.204	•	•								
Extraction arm with square hood design, Ø 140 mm, length 3m	14.304	•	•								
Extraction arm with specialized square hood (600 x 600 mm), Ø 140 mm, length 2m	14.203	•	•								
Extraction arm with specialized square hood (600 x 600 mm), Ø 140 mm, length 3m	14.303	•	•								

Hoods/Nozzles

Plastic moulded hood square design, Ø 140 mm	030.00.201	•	•								
Specialized square hood made of metal, square design (600 x 600 mm), Ø 140 mm	94.222	•	•								
Funnel shaped nozzle flexible, with magnetic mounting foot	94.740			•	•	•	•	•	•		
Slotted nozzle 200 mm wide, with magnetic mounting foot	94.741			•	•	•	•	•	•		
Extraction arm 50 D overall ext. 900 mm, with angled extraction opening	50.080									•	•

Welding Fume Filters

Your Benefits at a Glance

Accessories & Attachments

- Designed for the ESTA product range
- Can accommodate most customer requirements
- High quality and durability

	Product Description	Order No.	SRF K-10	SRF K-15	SRF T-2	SRF T-4	SRF SK-2.2	SRF SK-5.5	SRF SK-7.5	SRF SK-13.0	KAF-70	KAF-100
	Miscellaneous											
	Lighting kit installed in the extraction hood	15.430	•	•								
	Optical sensor installed in the extraction hood, for auto-start of the welding fume filter unit	702.68.127 702.69.127	•		•							
	Welding clamp attaches to the grounding connection for auto-start of the welding fume filter unit	702.68.126 702.69.126	•			•						
	On/off switch integrated in the extraction hood	702.68.128 702.69.128	•				•					
	Protective welding shield with integrated fume extraction slots	94.743				•	•	•	•	•	•	
	Extraction hose length 5 m, including connector cuff	45.500					•	•	•	•	•	
	Extraction hose sold by the meter	45.501						•	•	•	•	
	Protective welding shield with swivel arm for a working range of 6 m, connection Ø 125 mm, length of swivel arm rail 3 m, 9 m extraction hose length Ø 125 mm, balancer, available as wall mount unit or with floor standpipe	92.204	•	•								
	Protective welding shield with swivel arm same as 92.204, but with length of swivel arm rail of 4,5 m	92.205	•	•								
	Wall mount bracket for wall mounting of the welding fume filter	604.00.001	•	•								
	Activated carbon filter additional filter to eliminate odours	702.68.129 702.69.129	•									
	Exhaust air outlet for exhausting the filtered air outside, Ø 180 mm for exhausting the filtered air outside, Ø 280 mm	702.68.111 702.69.111	•									

Welding Fume Filters

Your Benefits at a Glance

**Welding/Grinding
Downdraft Tables**
for connection to a
mobile or stationary
extraction system

- Extraction directly at the work-station
- Compact solution
- For variable use
- Easy disposal of coarse dirt

NEW



Worktable for welding and grinding

Description

The ESTA worktable is a complete solution for welding and grinding. It is adjustable in height and of rugged and safe construction. The hinged side panels can be swung out of the way to accommodate larger work pieces.



Multiple ESTA welding tables connected to an extraction and filtration system

Advantages

- Strong sheet metal construction
- Sufficient leg room
- Galvanized metal grating
- Height adjustable (± 100 mm)
- Dust collection drawer for coarse dirt and debris
- Variable extraction port (right or left hand side)
- Hinged side panels can be swung backwards
- Rear wall extraction
- Cover for optimal air flow

Technical Data

Welding a. Grinding Table with extraction fan	A 880	A 1280	A 1680	A 2080
Work surface (L/W) mm	800 x 700	1200 x 700	1600 x 700	2000 x 700
Extraction port diam. mm	160	160	200	200
Dimensions (L/W/H) mm (Standard-Model)	880 x 840 x 800	1280 x 840 x 800	1680 x 840 x 800	2080 x 840 x 800
Dimensions (L/W/H) mm (with side panels/ back wall extraction)	880 x 840 x 1600	1280 x 840 x 1600	1680 x 840 x 1600	2080 x 840 x 1600
Order-No.				
Standard	44.010	44.020	44.030	44.040
with side panels	44.011	44.021	44.031	44.041
with side panels a. back wall extr.	44.012	44.022	44.032	44.042

Features

Application Range:

- Welding, grinding, deburring of all types of metals
- Also suitable for other applications (e.g. plastics processing, gluing processes)

Special Feature:

- Complete solution
- Expandable components
- Side panels
- Back wall extraction
- Cover on top (lid)

Welding Fume Filters

Your Benefits at a Glance

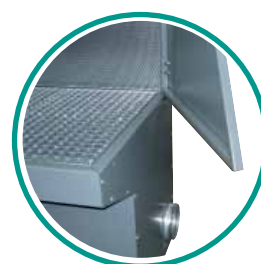
**Welding/Grinding
Downdraft Tables**
with extraction fan to
discharge the extracted
air outside

- Operate independently from a central extraction system
- Extraction directly at the workstation
- Compact solution
- For variable use
- Easy disposal of coarse dirt

NEW

Description

This model series has a built in extraction fan, which permits the use as a welding and grinding table independent from a central extraction system. Consequently the AV series has an even wider application range.



Side panel swung back for larger work pieces



Welding table with side panels and back wall

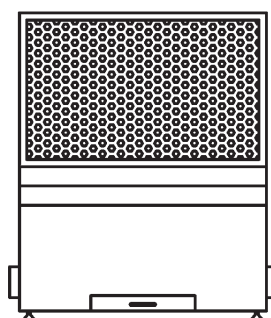
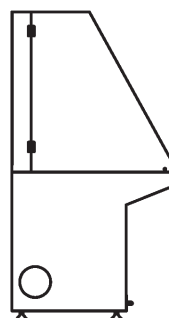


Table A 1280



The RG-200 fan supplies the necessary extraction performance

Technical Data

Welding a. Grinding Table with extraction fan	AV 880	AV 1280	AV 1680	AV 2080
Work surface (L/W) mm	800 x 700	1200 x 700	1600 x 700	2000 x 700
Extraction port diam. mm	160	160	200	200
Dimensions (L/W/H) mm (Standard-Model)	880 x 840 x 800	1280 x 840 x 800	1680 x 840 x 800	2080 x 840 x 800
Dimensions (L/W/H) mm (with side panels/ back wall extraction)	880 x 840 x 1600	1280 x 840 x 1600	1680 x 840 x 1600	2080 x 840 x 1600
Order-No.				
Standard	44.110	44.120	44.130	44.140
with side panels	44.111	44.121	44.131	44.141
with side panels a. back wall extr.	44.112	44.122	44.132	44.142

For the technical data of the RG-200 (extraction fan) see page 76

Optional Features

- Mobile unit on casters
- Lighting installed in the cover
- Version with T steel grating, wooden grating
- Customer specific dimensions available
- Rotary table that can be positioned on the grating
- Surface reinforcement for mounting a vise

Custom Unit

- Complete solution with integrated extraction fan and filter for applications where the exhaust air must be returned into the work area