

EDS

ENVIRONMENTAL DILUTER SYSTEM

The EDS is a free-standing general filtration system that prevents accumulation of welding fume by continuous filtration of polluted air. The EDS consists of a central filter unit, a fan in sound-absorbing case, an outlet unit with adjustable outlet nozzles, a silencer and a system control panel with frequency inverter and PLC.

The filter unit is provided with a spark arrester and filter cartridges. It contains the *RoboCleanPlus* system for automatic sectionwise cleaning of the filter cartridges by compressed air. The dust and dirt particles end up in the dustbin underneath. The fan speed is pressure controlled.



APPLICATIONS

The EDS is intended to be used for the following applications:

- MIG-MAG/GMAW welding
- TIG welding
- FCAW welding
- stick/MMAW welding



Do **not** use the EDS for the following applications or in the following circumstances:

- oil mist
- extraction of hot gases (more than 45°C/113°F continuously)
- sucking cigarettes, cigars, oiled tissues and other burning particles, objects and acids
- explosive environments of explosive substances/gases



SPECIFICATIONS

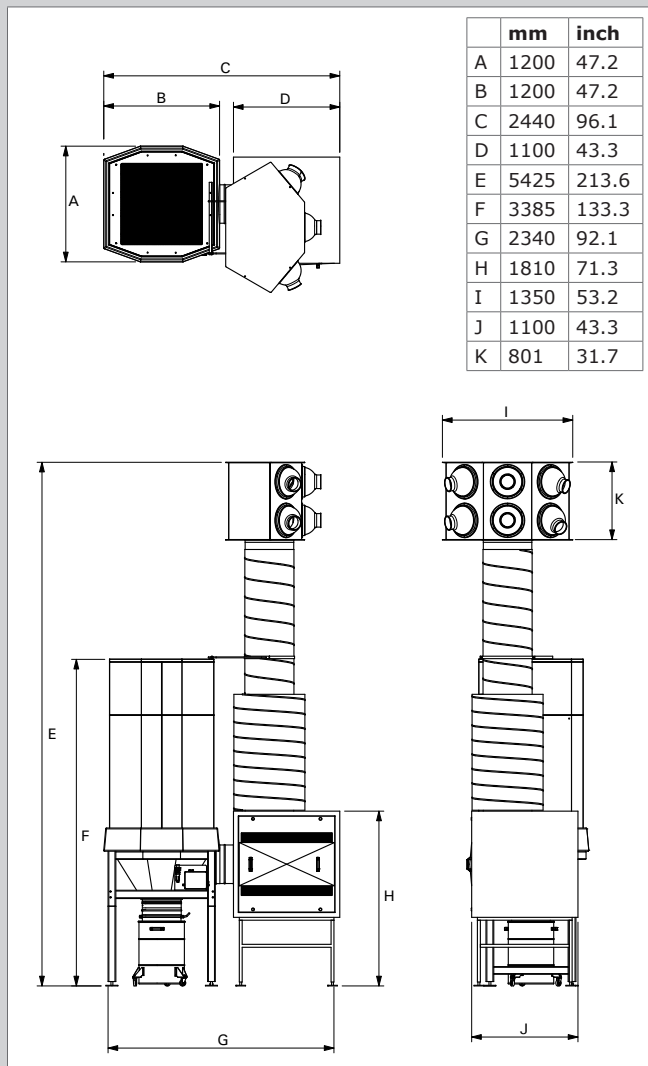
Physical dimensions and properties

Inlet diameter:	
• filter unit	• Ø 400 mm (15.75 in.)
• fan (interior diameter)	• Ø 401 mm (15.79 in.)
Outlet diameter:	
• filter unit	• Ø 400 mm (15.75 in.)
• fan (internal diameter)	• Ø 501 mm (19.72 in.)
Material:	
• filter housing	• steel
• base	• LMDPE (linear medium density polyethylene)
• frame	• steel
• fan	• steel
• fan housing	• steel with aluminium profiles
• outlet unit with nozzles	• zinc-plated steel and aluminium
• silencer	• zinc-plated steel
Colour:	
• filter housing	• grey RAL 7035
• filter base	• grey RAL 7024
• frame	• black RAL 9005
Weight (net)	800 kg (1764 lbs)
Capacity of dustbin	100 litres (26 gallon)
Filter	
Material	cellulose fibres
Filter surface area	2 x 75 m ² (2 x 807 ft ²)

Filter class	M according to DIN EN 60335-2-69
RoboCleanPlus filter cleaning system	
Required compressed air quality	dry and oil-free according to ISO 8573-3 class 6
Required pressure	6 bar (90 psi)
Compressed air connection	quick connection coupling Ø 9 mm (CEJN 320)
Compressed air consumption	max. 150 nl/min. (5.3 ft ³ /min.) (depending on the degree of saturation of the filter)
Duration off-line cleaning cycle	90 minutes
Performance	
Fan type	radial
Unrestricted airflow	max. 12.000 m ³ /h (7,063 CFM)
Throw	max. 50 m (164 ft)
Speed of revolutions	2920 rpm at 50 Hz
Electrical data	
Power consumption fan	7,5 kW (10 HP)
Connection voltage	400-690V/3~/50Hz
Insulation class fan	F with PTC
Nominal current	13,9 A
Protection class	IP 54
Ambient conditions	
Operating temperature:	
• min.	5°C (41 °F)
• nom.	20°C (68 °F)
• max.	45°C (113 °F)
Max. relative humidity	75%
Outdoor use allowed	no
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 80%

■ Scope of supply	
Central filter unit SCS-D - Air inlet module - Spark arrester - Frame - Dustbin - Dustbin flange - Bush - Fan - Frame fan - Silencer - Duct 1,5 m (5 ft) / Ø 500 mm (19.7 in.) - Outlet unit with 6 nozzles - System control panel	
■ Order information	
The system consists of the following article numbers:	
<ul style="list-style-type: none"> 7456100000 9850060080 7900022200 9850070030 9824000150 7906060210 7900024000 	<ul style="list-style-type: none"> SCS-D / Central filter unit, incl. control box CB-SCS/ PMD FCC-150 / Filter cartridges SCP-7.5kW/SCS / System control panel Diluter / Outlet unit CK-EDS / Fixing material SIF-1200/RI / Fan in sound absorbing case PT-1000 / Pressure transmitter
■ Shipping date	
Gross weight (incl. pallet):	<ul style="list-style-type: none"> pallet 1: 260 kg (573 lbs) pallet 2: 155 kg (342 lbs) pallet 3: 295 kg (650 lbs) pallet 4: 150 kg (331 lbs)
Packing dimensions:	<ul style="list-style-type: none"> pallet 1 (SCS-D, dustbin, frame): 120 x 170 x 220 cm (47.2 x 66.9 x 86.6 in.) pallet 2 (outlet unit, spark arrester): 120 x 120 x 170 cm (47.2 x 47.2 x 66.9 in.) pallet 3 (fan, frame fan, system control panel): 120 x 120 x 200 cm (47.2 x 47.2 x 78.7 in.) pallet 4 (silencer, duct, connection material): 80 x 120 x 200 cm (31.5 x 47.2 x 78.7 in.)
Harmonized Tariff Code	8537.1091.90
Country of origin	the Netherlands

DIMENSIONS



APPROVALS/CERTIFICATES

	On fan motor and frequency inverter
	Directive 2011/65/EC (RoHS) valid as of 8 June 2011

FEATURES

RoboCleanPlus automatic filter cleaning system	
Adjustable outlet nozzles	

Product type	EDS
Article no.	refer to order information
Product category	general filtration systems
Version	240614/E

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