

## 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)
<b>Filter</b>	
Material	cellulose fibres
Filter surface area	2 x 75 m <sup>2</sup> (2 x 807 ft <sup>2</sup> )

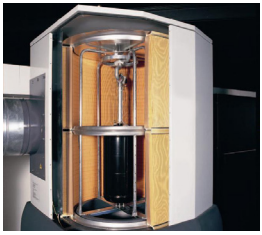
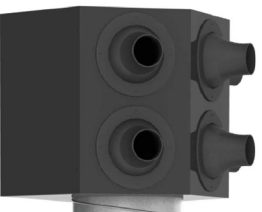
Filter class	L according to DIN EN 60335-2-69
<b>RoboCleanPlus filter cleaning system</b>	
Required compressed air quality	dry and oil-free according to ISO 8573-3 class 6
Required pressure	6 bar (90 psi)
Compressed air connection	quick connection coupling Ø 9 mm (CEJN 320)
Compressed air consumption	max. 150 nl/min. (5.3 ft <sup>3</sup> /min.) (depending on the degree of saturation of the filter)
Duration off-line cleaning cycle	90 minutes
<b>Performance</b>	
Fan type	radial
Unrestricted airflow	max. 12.000 m <sup>3</sup> /h (7,063 CFM)
Throw	max. 50 m (164 ft)
Speed of revolutions	2920 rpm at 50 Hz
<b>Electrical data</b>	
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
<b>Ambient conditions</b>	
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%

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

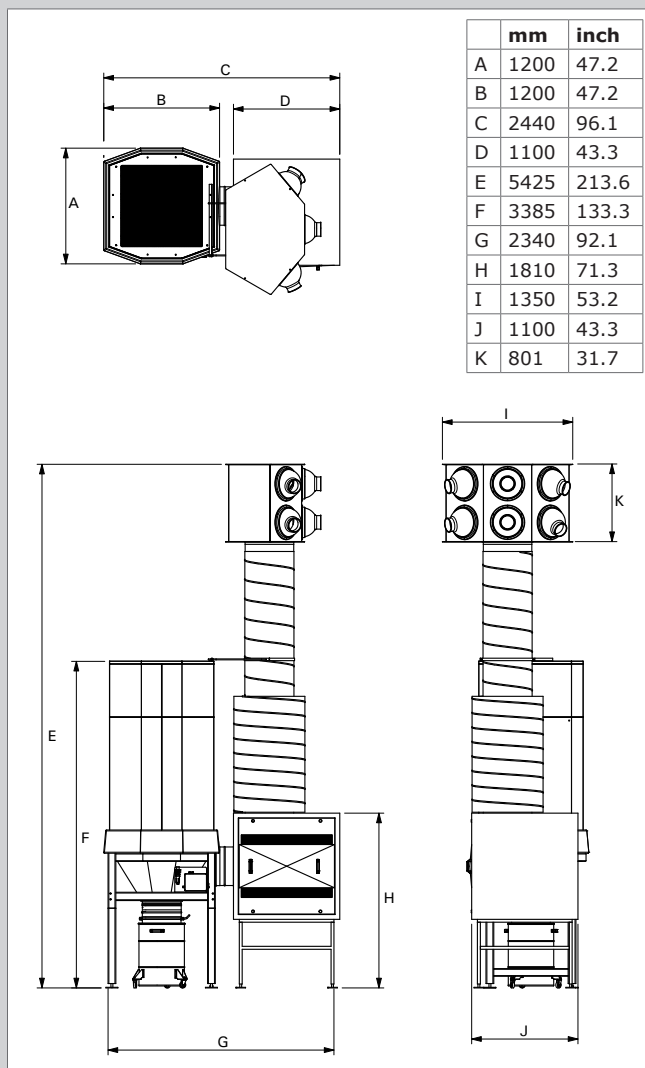
#### APPROVALS/CERTIFICATES

	
	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	

#### DIMENSIONS



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

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