

Evolution No Smoke

Evolution No Smoke ATEX

Evolution FLEX

Extraction arm for welding fumes and gases



Evolution No Smoke

Evolution No Smoke **wall-mounted**
Evolution No Smoke **cart-mounted**

Evolution No Smoke ATEX

Evolution No Smoke **ATEX wall-mounted**
Evolution No Smoke **ATEX cart-mounted**

Evolution FLEX

Evolution FLEX/**M**
Evolution FLEX/**T**



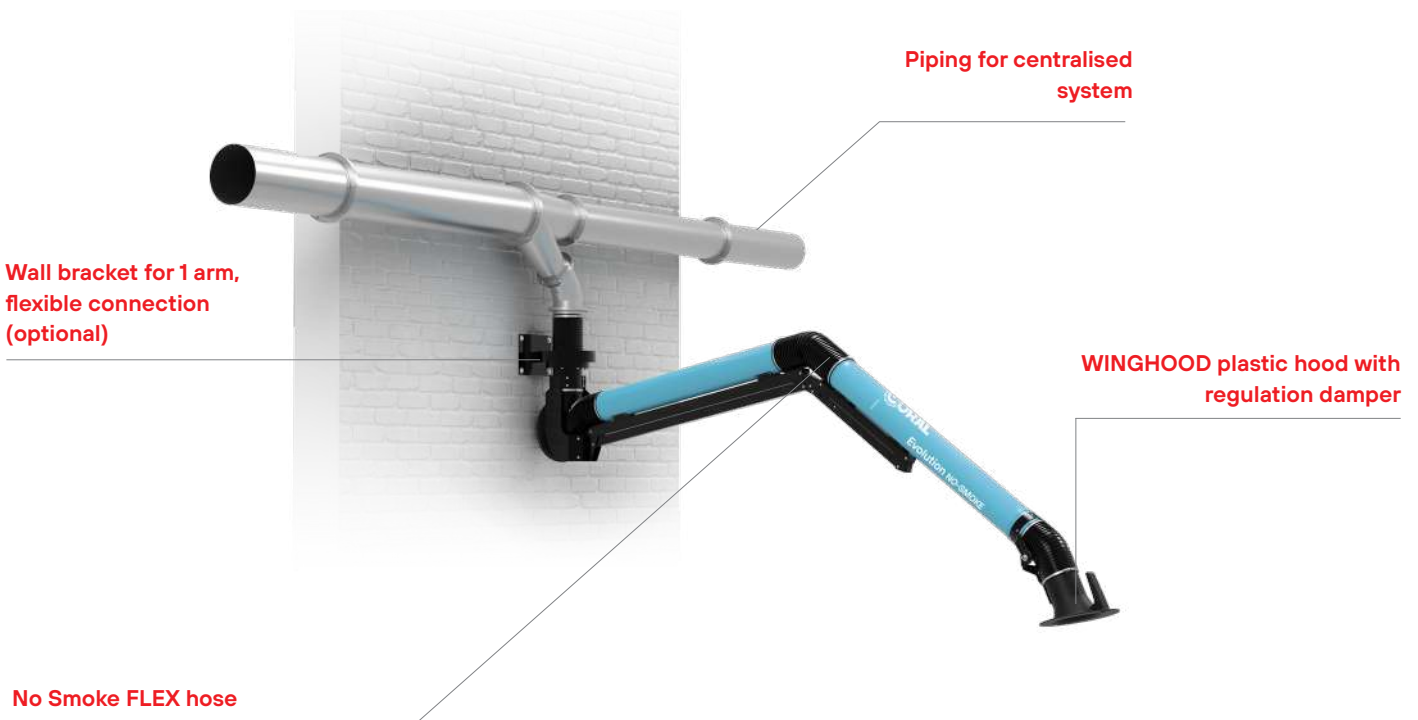
Innovative Air Solutions
For a cleaner future.

Design

The Evolution No Smoke range includes extraction arms with different features, adaptable to all kinds of work. The easy, smooth, one-handed movement of the arm allows the suction hood to be brought to any desired position, where it will remain permanently, extracting polluted air and safeguarding the health of operators. The Evolution No Smoke extraction arm is the best technical solution for extracting welding fumes, gases, vapours, aerosols, oil mists, dust, etc. Evolution No Smoke arms are available in different sizes and can be wall-mounted, cart-mounted or combined with centralised systems.

Evolution No Smoke

25 ^{Models}



Highlights

- **New Winghood** hood designed to improve suction efficiency by 30%.
- Patented external articulation that does not obstruct the passage of air and pollutants and allows comfortable adjustment and movement of the arm (up to 360°).
- **Built-in regulation damper**, to dose the required amount of air to be extracted and save energy.
- **Pipes** made of thick coated metal sheet.
- **Green solution:** ideal for energy saving and low noise, especially when combined with inverter on the fan.
- No obstructions to the passage of air, due to the **patented external joint system**, with less pressure loss.
- Can be **mounted with** extensions, cable ducts, wall or ceiling brackets.

Applications



Welding fumes



Dust

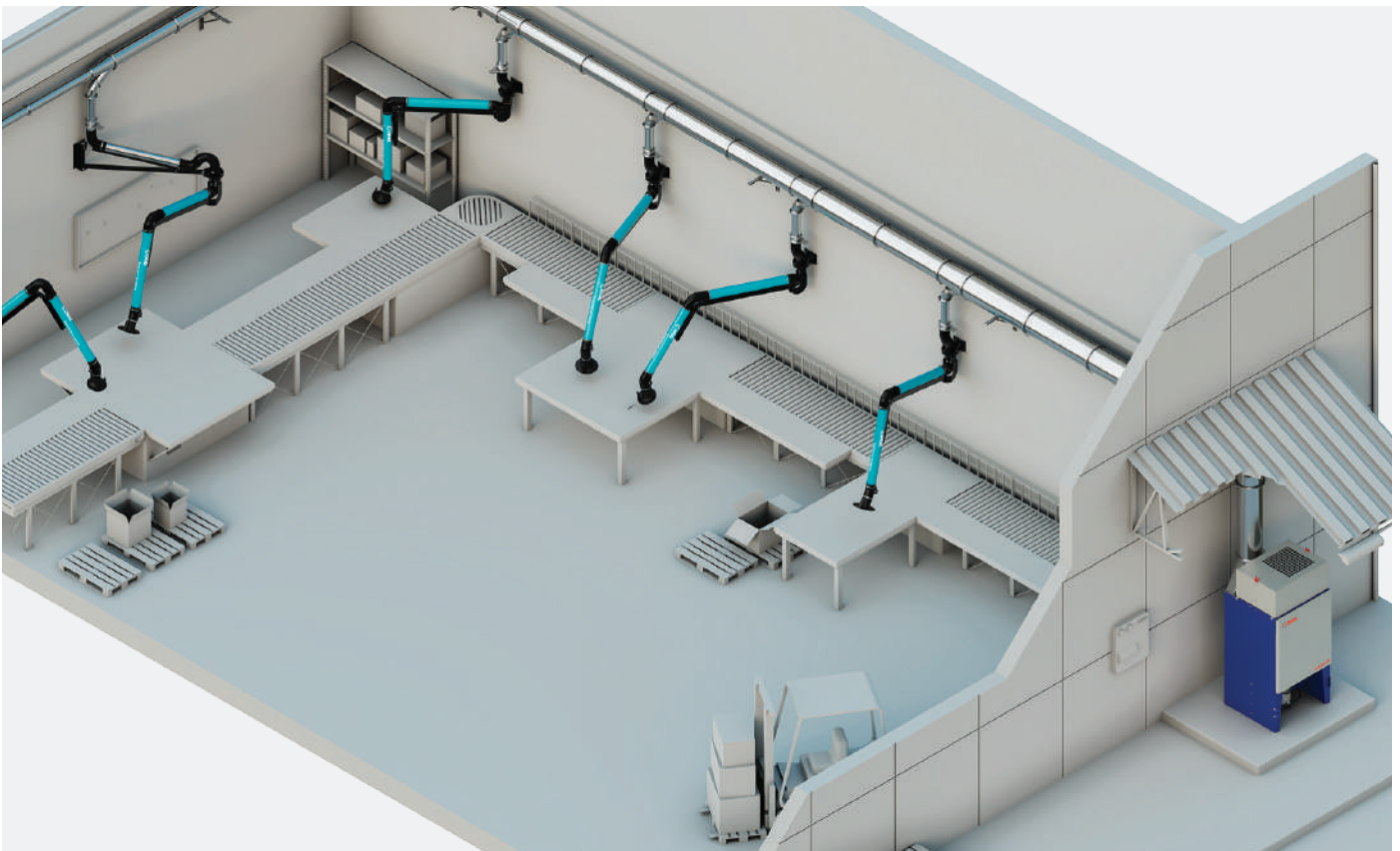


Gas

Clean air solutions

The extraction of noxious fumes from workplaces in the winter season creates a sharp drop in temperature in them. The Evolution No-Smoke is the ideal solution to this problem because of the built-in regulation damper, it is possible to

dose the required amount of air to be extracted. It is also possible to filter the polluted air with special filters supplied as an option and thus recycle it in the room completely toxicity free.



Operating principle

The polluted air is extracted through the articulated hood, passes through piping made of thick, scratch-resistant painted metal sheet (aluminium, stainless steel as optional), then reaches the high-efficiency fan or the centralised piping and from there to the air filtration system used in the specific application. The Evolution's piping and suction hood are connected to each other by means of special, patented external articulated joints and high-strength flexible hose, which allow for easy and comfortable arm movement. The Evolution is also equipped with a slewing ring that allows it to rotate even 360° when mounted on a prepared support. The flow of polluted air through the suction duct is not obstructed by joints or internal articulations. Due to the short length of the hose used in the elbows, this results in significantly lower pressure loss than other similar systems on the market. Lower pressure drop means lower fan power and therefore energy savings, lower crossing speed and consequently lower noise levels.



- ① Arm slewing ring for Evolution No Smoke
- ② Flexible hose No smoke flex
- ③ Articulated support
- ④ Rigid pipe
- ⑤ Winghood plastic hood with adjustment damper
- ⑥ Junction

product range



Evolution No Smoke

Wall-mounted version.
Optional wall bracket

Diameter (mm)	Length (mt)	A.	I.	P.
0100	2,1 2,7		■	■
0125	3 4		■	■
0160	2 3 4		■	■
0180	3 4	■		
0200	3 4	■		
0250	3 4	■		

■ A. Aluminium ■ I. stainless steel ■ P. Pre-coated



Evolution No Smoke

Cart-mounted version

Diameter (mm)	Length (mt)	A.	I.	P.
A. I. 0100	2,1 2,7		■	■
A. I. 0125	3 4		■	■
A. I. 0160	2 3 4		■	■
A. 0180	3 4	■		
A. 0200	3 4	■		
A. 0250	3	■		

■ A. Aluminium ■ I. stainless steel ■ P. Pre-coated

Types of applications



Version with fan

Diameter (mm)	Length (mt)	kW
0100	2,1 2,7	0,37
0125	3 4	0,55
0160	2 3 4	0,55 0,75 1,1 1,5 2,2
0180	3 4	1,5 2,2
0200	3 4	1,5 2,2
0250	3 4	



Version with column support
(for 1 or 2 arms)

Column height (h)
3,5
3,5
3,5
3,5
3,5
3,5



Version with ceiling support

Diameter (mm)	Length (mt)
0100	2,1 2,7
0125	3 4
0160	2 3 4
0180	3 4
0200	3 4
0250	3 4



Sliding channel version (blindair)

Diameter (mm)	Length (mt)
0100	2,1 2,7
0125	3 4
0160	2 3 4

Bandiera

The **BANDIERA** extension patented No Smoke Evolution. Complete with rigid piping and bracket for wall fastening, together with the arm, they can reach lengths of up to 7,5 m.

All 1 m long extensions consist of NO SMOKEFLEX model hose and not rigid tubing as for the other sizes.

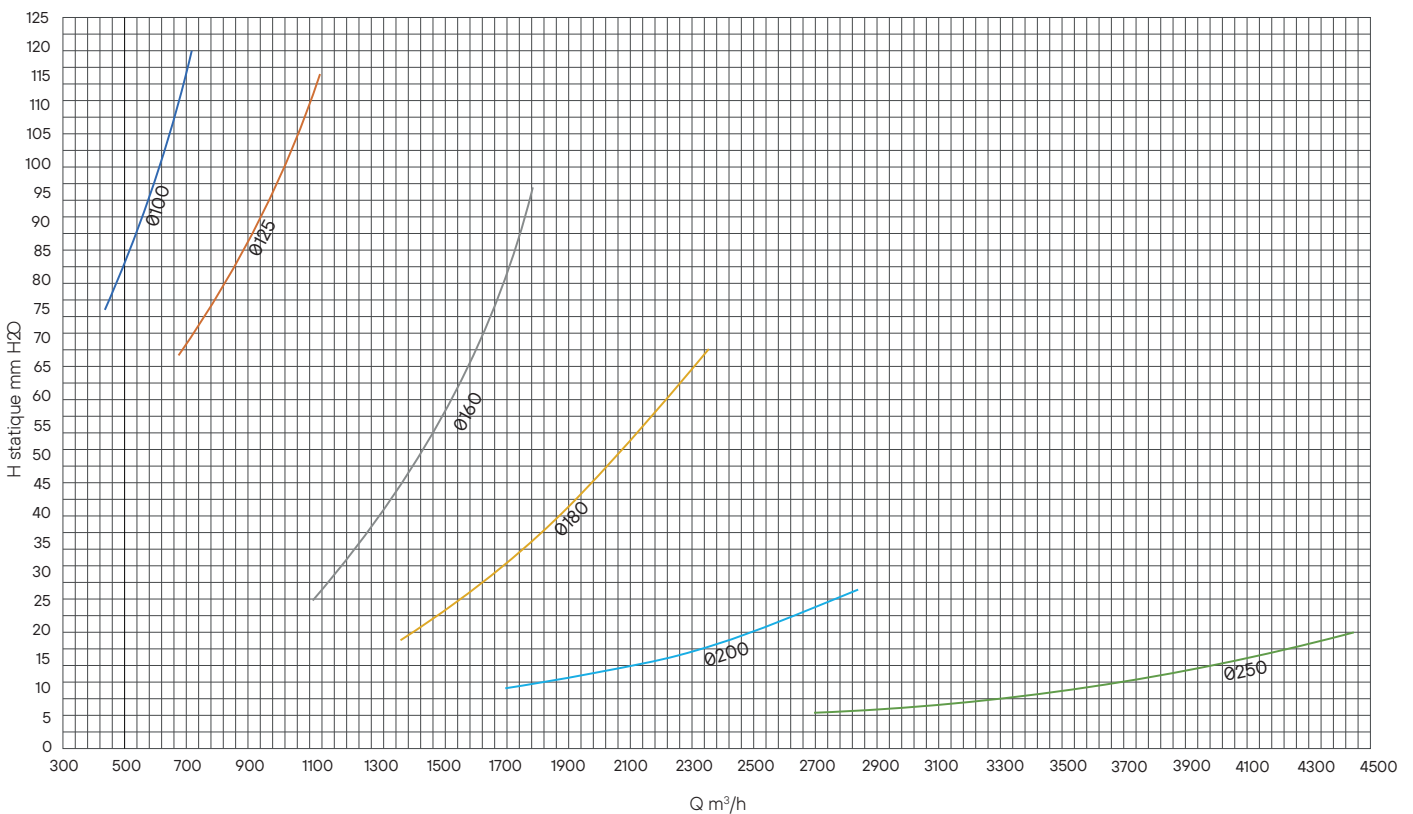


Diameter (mm)	Length (mt)
0100	1 2 3 4
0125	1 2 3 4
0160	1 2 3 4
0180	1 2 3 4
0200	1 2 3 4
0250	1 2 3 4

Technical features

Technical features		Model Evolution No Smoke												
		Ø100 2,1 mt	Ø 100 2,7 mt	Ø 125 3,0 mt	Ø 125 4,0 mt	Ø 160 2,0 mt	Ø 160 3,0 mt	Ø 160 4,0 mt	Ø 180 3,0 mt	Ø 180 4,0 mt	Ø 200 3,0 mt	Ø 200 4,0 mt	Ø 250 3,0 mt	Ø 250 4,0 mt
Maximum fl w rate (air speed 25 m/s)	m ³ /h	710	710	1120	1120	1800	1800	1800	2300	2300	2850	2850	4420	4420
Maximum static loss	mmh ₂ O	120	120	112	112	95	95	95	67	67	27	27	19	19
Recommended nominal fl w rate (air speed 21 m/s)	m ³ /h	600	600	920	920	1500	1500	1500	1900	1900	2400	2400	3700	3700
Nominal static loss	mmh ₂ O	97	97	90	90	59	59	59	40	40	18	18	12	12
Weight	Kg	18	20	25	27	30	33	36	35	37	46	50	60	65

Pressure losses referred to the extended Evolution No Smoke arm



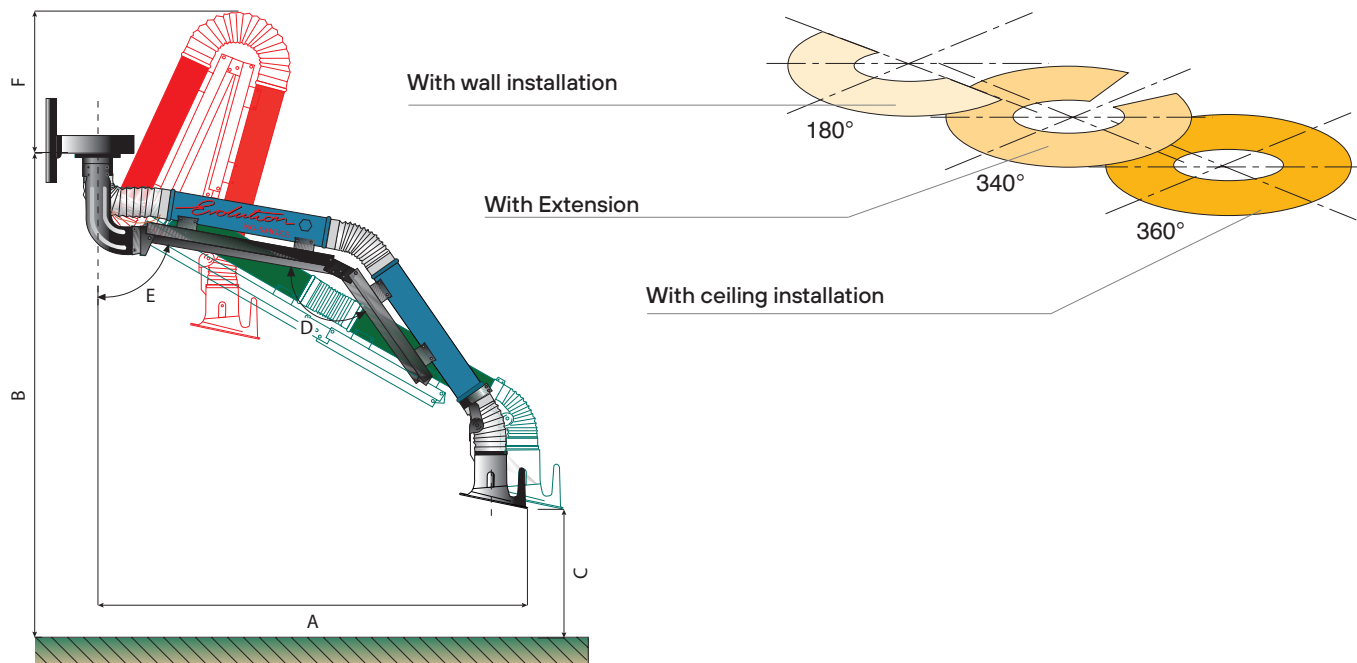
Air flow rate referred to Evolution No Smoke arm with NO SMOKE fan

	No Smoke Fans											
	Ø 100 2,1mt	Ø 100 2,7 mt	Ø 125 3,0 mt	Ø 125 4,0 mt	Ø 160 2,0 mt	Ø 160 3,0 mt	Ø 160 4,0 mt	Ø 180 3,0 mt	Ø 180 4,0 mt	Ø 200 3,0 mt	Ø 200 4,0 mt	
kW 0,37	604	590										
kW 0,55			1100	1050								
kW 0,75			1250	1150	1760	1700	1630					
kW 1,1					1800	1760	2100	2000				
kW 1,5							2000	1900	2500	2450		
kW 2,2							2300	2050	3000	2850		

Nominal air flow rate in m³/h

Overall dimensions

Wall version



■ Working position ■ Extended arm ■ Folded arm

Depends on the application

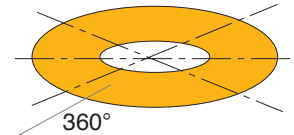
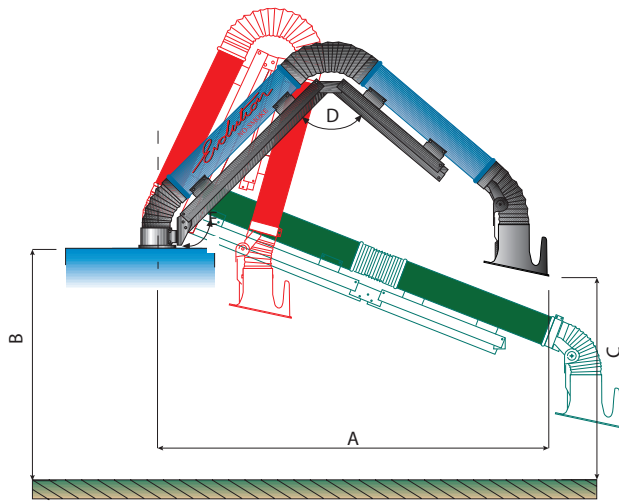
Working position	DIMENSIONS (mm)												
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø200 4,0	Ø250 3,0	Ø250 4,0
A	1700	2200	2400	3300	1700	2450	3300	2050	3115	2365	3200	2440	3350
B	2800	3000	3000	3000	2800	3000	3000	3000	3000	3000	3000	3000	3000
C	1600	1500	2200	1300	1600	1400	2000	1700	1300	1200	1400	1300	1500
D	1100	1100	1100	1200	1100	1450	1100	900	1150	1400	1150	1300	1100
E	1000	1000	1300	1000	1000	800	1200	1200	1050	800	1050	1100	1000

Extended arm	DIMENSIONS(mm)												
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø200 4,0	Ø250 3,0	Ø250 4,0
A	1850	2200	2600	3600	1850	2800	3600	2600	3720	2600	3730	2600	3750
B	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
C	1200	1200	2200	2000	1200	2300	1500	2250	2250	2200	2230	2230	2260
D	1450	1450	1800	1800	1450	1800	1500	1800	1800	1800	1800	1800	1800
E	780	780	900	900	780	900	900	900	900	900	900	900	900

Folded arm	DIMENSIONS (mm)												
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø200 4,0	Ø250 3,0	Ø250 4,0
A	580	600	780	962	580	900	1000	580	800	800	1000	800	1000
B	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
C	2000	2100	2000	2200	2000	2100	2100	1900	2050	1970	2000	1900	1950
D	100	100	50	100	100	100	100	00	50	100	100	150	150
E	1550	1550	1650	1500	1550	1500	1500	1500	1600	1500	1550	1650	1650
F	800	800	800	1350	860	850	1400	880	1430	900	1450	950	1500

Overall dimensions

Cart-mounted version



With cart-mounted installation

The covered area depends on the machine on which it is mounted

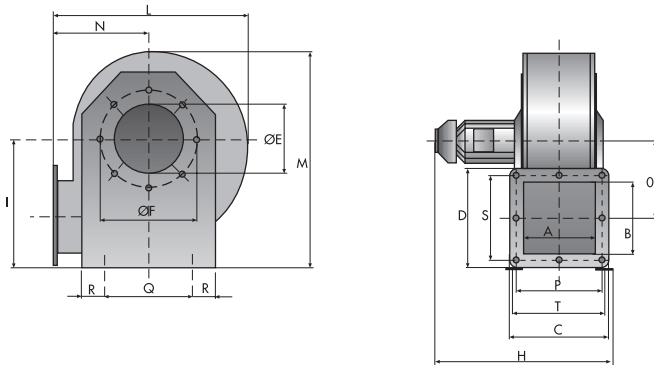
■ Working position ■ Extended arm ■ Folded arm

Working position	DIMENSIONS (mm)										
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø250 3,0
A	1450	1800	2250	3200	1450	2250	3200	2250	3200	2250	2300
B	*	*	*	*	*	*	*	*	*	*	*
C	*	*	*	*	*	*	*	*	*	*	*
D	900	900	900	900	900	900	900	900	900	900	900
E	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350

Extended arm	DIMENSIONS (mm)										
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø250 3,0
A	1650	2300	2600	3700	1650	2600	3700	2600	3700	2600	2650
B	*	*	*	*	*	*	*	*	*	*	*
C	*	*	*	*	*	*	*	*	*	*	*
D	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
E	900	900	900	900	900	900	900	900	900	900	900

Folded arm	DIMENSIONS (mm)										
	Ø100 2,1	Ø100 2,7	Ø125 3,0	Ø125 4,0	Ø160 2,0	Ø160 3,0	Ø160 4,0	Ø180 3,0	Ø180 4,0	Ø200 3,0	Ø250 3,0
A	400	370	580	604	400	640	600	526	550	710	760
B	*	*	*	*	*	*	*	*	*	*	*
C	*	*	*	*	*	*	*	*	*	*	*
D	00	00	00	00	00	00	00	00	00	00	00
E	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800

Overall dimensions



No Smoke Fans	DIMENSIONS (mm)																	
	A	B	C	D	ØE	ØF	H	I	L	M	N	O	P	Q	R	S	T	dB(A)
HP 0,5 / Ø 100	140	185	200	245	105	150	392	242	351	409	182	114	170	170	52	215	183	73
HP 0,75 / Ø 125 - Ø 160	140	185	200	245	162	216	392	242	351	409	182	114	170	170	52	215	183	75
HP 1 / Ø 160	160	160	220	220	152	216	432	287	429	477	212	162	190	198	53	190	204	80
HP 1,5 / Ø 160	160	160	220	220	152	216	432	287	429	477	212	162	190	198	53	190	204	81
HP 2 / Ø 160	180	180	240	240	153	216	502	378	535	619	257	227	210	278	48	210	223	82
HP 2 / Ø 180 - Ø 200	200	200	260	260	205	268	522	412	601	685	286	258	230	320	47	230	243	82
HP 3 / Ø 160	180	180	240	240	153	216	502	378	535	619	257	227	210	278	48	210	223	84
HP 3 / Ø 180 - Ø 200	200	200	260	260	205	268	522	412	601	685	286	258	230	320	47	230	243	84

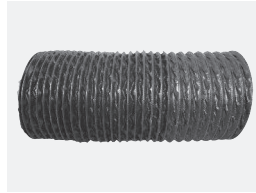
General Components



Plastic hood WINGHOOD with adjusting damper for Ø160 mm



Aluminium hood for Ø100/125/180/200/250 mm



No Smoke Flex Hose

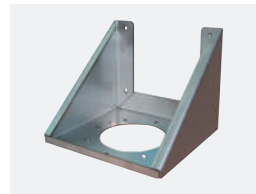


Slewing ring for EVOLUTION NO SMOKE arm

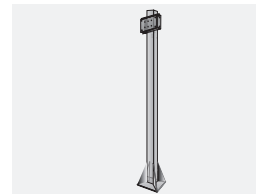
Optional



Wall bracket



Stainless steel wall bracket



Column support for 1 NO SMOKE fan



NO SMOKE series fan without rotating bearing



Wall bracket for fan



Control panel for arm fan



Painted metal hood for Ø125 mm (Ø160 mm on request)



Stainless steel cap for Ø100/125/160/180/200/250 mm



WINGHOOD plastic hood. Complete with light and spark arrester



Aluminium hood complete with light and spark arrester net



RAC Smooth fittings for NO SMOKE fans



Air outlet pipe set for EVOLUTION NO SMOKE fan and arm



MOBIL TOWER self-supporting, non-extracting arm



TRIAXE joint for Ø125-Ø160 arm hood NO SMOKE

Gallery



Evolution No Smoke ATEX

CE II 3DST1 Independently tested
in accordance with regulation 2014/34/EU
Suitable for organic, inorganic and metallic powders.



Evolution No Smoke ATEX

Evolution No Smoke **ATEX** wall-mounted
Evolution No Smoke **ATEX** cart-mounted

Design

ATEX 2014/34/EU certified suction arm designed for suction of ATEX classified dust and substances in potentially explosive environments

Evolution No Smoke ATEX

13 Models



Rigid AISI 316 stainless steel piping

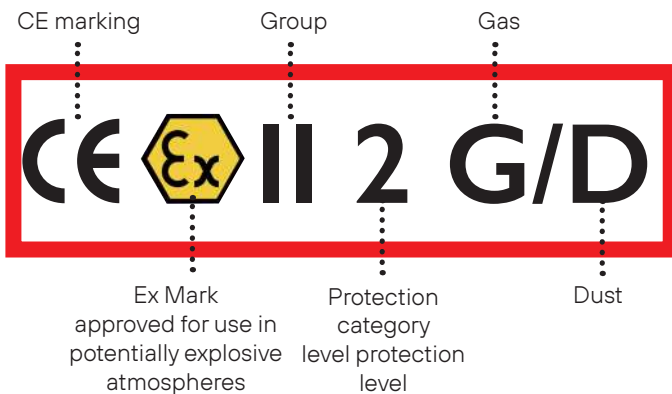
Antistatic hose (with $R < 10^9 \text{ Ohm}$, $-20^\circ < T < 90^\circ \text{C}$)

AISI 316 stainless steel suction hood

Highlights

- Rigid ducting, bolts, slewing ring, damper and suction hood in **AISI 316 stainless steel sheet**.
- **Perfect for food**, aviation, pharmaceutical and chemical applications.
- **Suitable materials** for complete earthing of electrostatic charges.

- **Compatible for use** in zones 21, 1 and with dust classified T3 ATEX regulations according to the identification string in question and certified by a third party. For NON metallic organic and inorganic dust.



eurofins | Product Testing



Application



Organic, inorganic and metallic powders.



Gas

Bandiera ATEX

Patented 'BANDIERA ATEX' extension for Evolution No Smoke boom. Complete with antistatic hose (with $R < 10^9$ Ohm, $-20^{\circ} < T < 90^{\circ}C$), rigid AISI 316 stainless steel tubing and bracket for wall anchoring. Flag and arm can reach lengths of up to 7.5 m.

All 1-metre-long extensions are composed of antistatic hose and not rigid tubing as for the other sizes.



Diameter (mm)	Length (mt)
0100	1 2 3 4
0125	1 2 3 4
0160	1 2 3 4
0180	1 2 3 4
0200	1 2 3 4
0250	1 2 3 4

Technical features



Evolution No Smoke ATEX

Diameter (mm)	Length (mt)
0100	2,1 2,7
0125	3 4
0160	2 3 4
0180	3 4
0200	3 4
0250	3

Technical features	Dust Evolution No Smoke	
	Pmax, bar	Kst, bar.m.s ⁻¹
PVC	6,7 - 8,5	27 - 98
Polyethylene	7,4 - 8,8	54 - 131
Epoxy resin	7,8 - 8,9	108 - 174
Lignite	8,1 - 10,0	93 - 176
Cellulose	8,0 - 9,8	56 - 229
Pigments	6,5 - 10,7	28 - 344
Aluminium	5,4 - 12,9	16 - 750
Flours	8,0 - 9,8	56 - 229
Carbon dust	6,5 - 10,7	28 - 250
Sugar	4,7 - 9	16 - 200

Kst values for some dusts of industrial interest

Technical features	Explosion class	
	Kst, bar.m.s ⁻¹	Type of explosion
St0	0 0	none
St1	< 200	weak
St2	>200-300	strong
St3	>300	very strong

Correlation between Kst values and the explosion class of a powder

General Components



Rigid INOX AISI 316 tube



AISI 316 stainless steel extractor hood



Antistatic hose (with R<109 Ohm, -20°<T<90°C)

An ATEX version of the Evolution made entirely of AISI 316 stainless steel is available on request.

Evolution FLEX



Evolution FLEX

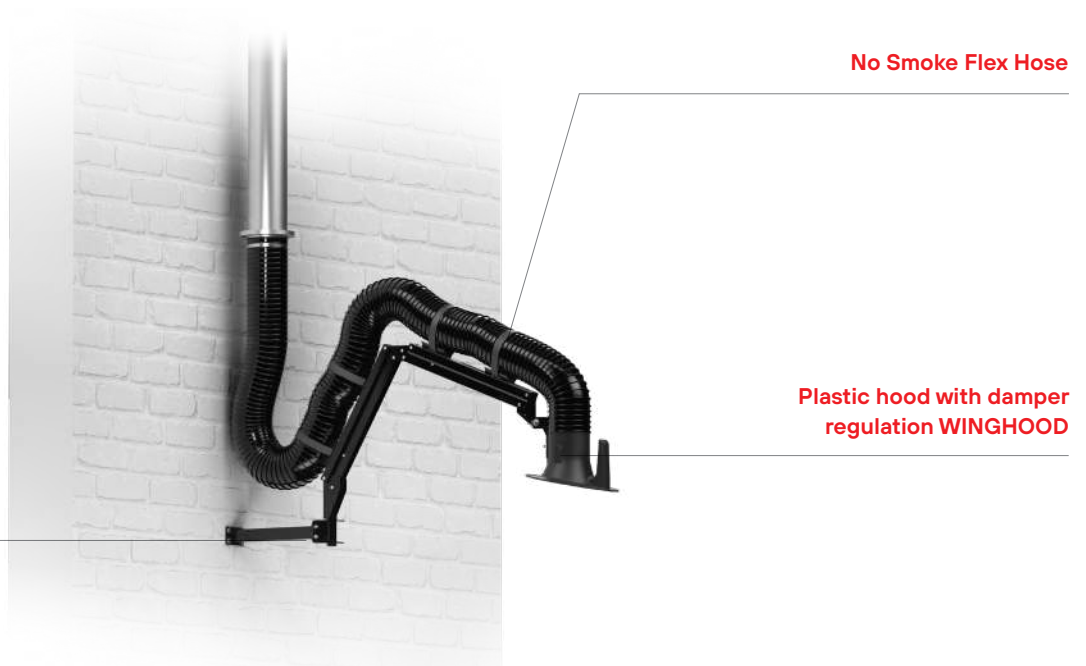
Evolution FLEX/M
Evolution FLEX/T

Design

Evolution Flex extraction arm equipped with a fully flexible, high-strength hose that allows easy and comfortable arm movement, making it easy and straightforward to reach the source of pollutants.

Evolution Flex

12 models



Highlights

- **Extremely versatile:** it can be mounted on the wall (Evolution Flex/M), or directly on the work station (Evolution Flex/T).
- Equipped with patented **Winghood hood** with adjustment damper.
- Ideal in the **chemical and electronic industries.**

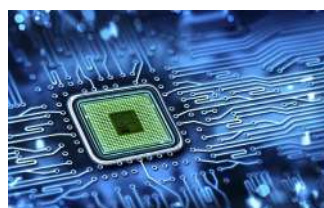
Application



Welding fumes



Chemistry



Electronics

Product range



Evolution FLEX/M

Arm complete with semi-articulated hood, plastic with Winghood adjustment damper, wall-mounted swivel bracket and NO SMOKE FLEX hose.

Diameter (mm)	Length (Min-Max)
Ø100	460 1580
Ø125	490 1610
Ø160	530 1650



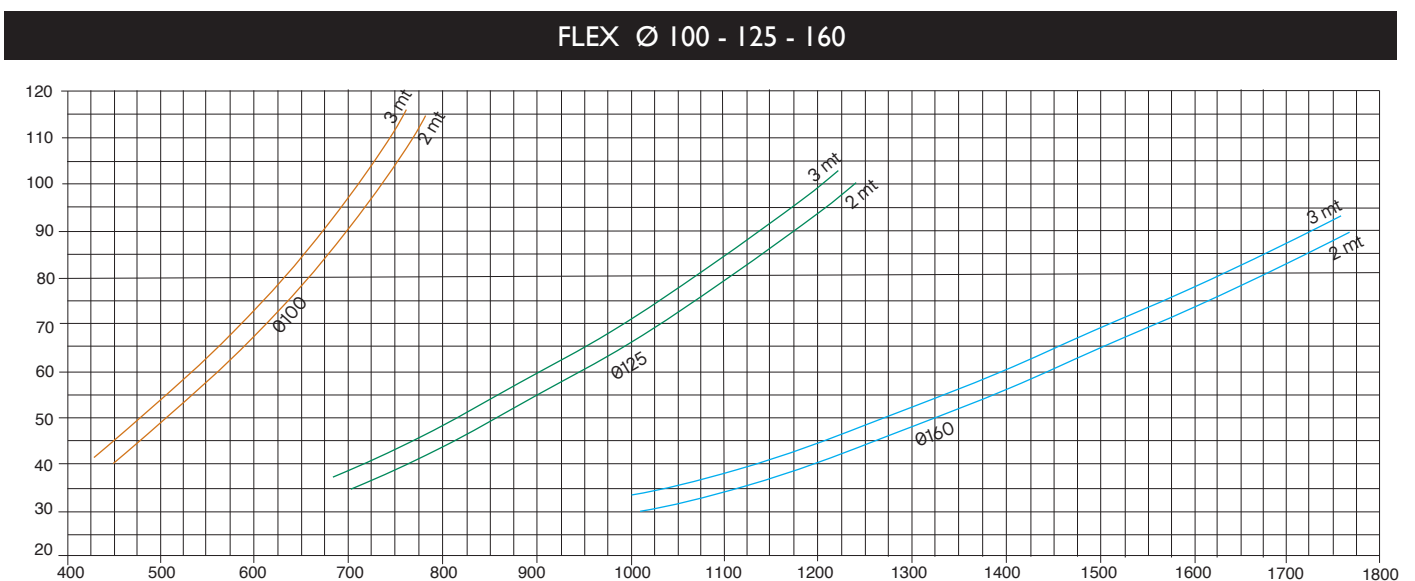
Evolution FLEX/T

Arm complete with semi-articulated plastic cap with Winghood adjustment damper, table swivel bracket and NO SMOKE FLEX hose.

Diameter (mm)	Length (Min-Max)
Ø100	460 1580
Ø125	490 1610
Ø160	530 1650

Technical features

Pressure losses referred to the extended Evolution Flex arm



All images and values on this catalogue are indicative and can be subject to modification and improvements. CORAL reserves the right to change them without previous advice.



Made in Coral

Coral manufactures 100% of all the components that are part of an industrial extraction system within their facilities in Volpiano, just outside of Turin. The quality of materials that we use and our industry experience guarantee a production of high level in everything we make.

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For a cleaner future