Ozone
Pollution Technology

Flexi Arms

. . . the world's first and only "all solid" Flexi Arm.

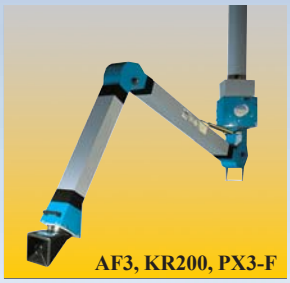
Flexi Arms

2, 3 and 4 metres

Continuing the Ozone tradition of product innovation is the stunning, new generation Flexi Arm. Our engineers have perfected this revolutionary, all-solid design years ahead of its time.

By using "solid" joints instead of flexible hose, the problems normally associated with arms have been eliminated. Flexible hose restricts airflow, becomes contaminated and is easily damaged - problems which affect both efficiency and maintenance costs.

With its all-solid design, the genuinely industrial Flexi Arm offers maximum strength and reliability. Through the use of aluminium and special polymers, weight has also been reduced making it effortless to use.


AF3, KR200, PX3-F

The unique joints provide remarkable flexibility, yet will remain precisely in any position. The evolutionary wrist joint bends backward and forward and also rotates due to its innovative ball-socket design. This flexibility allows the Arm inlet face to be positioned anywhere the operator wishes.

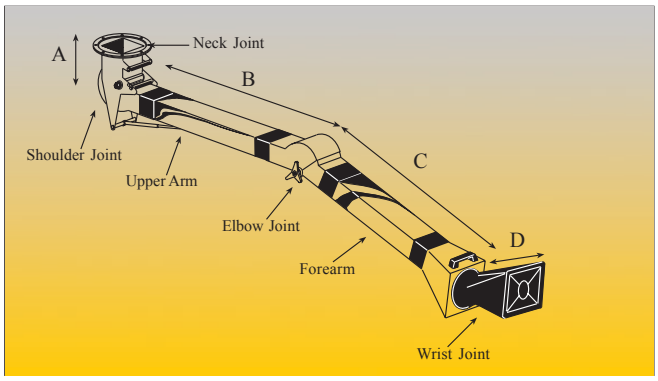
Because the joints are out of the polluted air stream, the Flexi Arm is uniquely suitable for dusts as well as fumes, gases and mists. Combined with its easy internal access feature, this makes the Arm a natural choice for corrosive pollutants, or when equipment must be decontaminated on a regular basis.

Designed as an integral part of the Ozone Pollution Technology range, Arms simply connect directly to mobile and fixed Extractors and filtered Cleaners, as well as Ozone Beams and Duct Kits. A Wall Bracket accessory is also available.

Mobile Cleaner **AF2, FS7**

The Ozone Flexi Arm sets a new benchmark for at-source pollution control. *Try one, and experience the working environment of the future.*

Flexi Arms



The low pressure drop design of the smoothly contoured Arm allows high airflows to be achieved by compact, power efficient extractors. In multi-arm systems, ducting design and extractor selection is now much simpler. Unlike conventional arms with flexible hose, the Ozone Flexi Arm does not "pinch" when folded up, so performance remains high no matter what position the arm is in.

Thanks to its efficient design, the Arm can capture pollutant and draw it sideways, away from the operator's breathing zone. The arm does not have to be positioned above the pollutant where it is likely to interfere with the operator. The internally flanged hood can be positioned flush against a bench or work surface to further increase the Arm's performance.


Inlet Hood

Adding to its versatility, the Flexi Arm can be customised by the operator. When a standard length Arm does not suit an application the upper and/or forearms can be shortened.

The Flexi Arm is complemented by some useful accessories. Dampers can be fitted into the wrist joint and between the Arm and connecting ductwork to balance airflow in a multi-arm system. Limit Stops can be attached to restrict the degree of rotation at the neck joint. This can prevent the Arm from striking walls or overhead lights for instance. The Light Kit accessory has a bright halogen low voltage globe and is located out of the airstream. It includes all cables, clips, transformer and operating switch. The Converter allows outmoded arms to be upgraded to Ozone Flexi Arms. It incorporates the mounting hole pattern of commonly used Arms.

Mounting an Arm on a Fixed or Hinged Beam significantly increases its working reach. The Arm swivels 360° so the area back under the Beam is also covered.

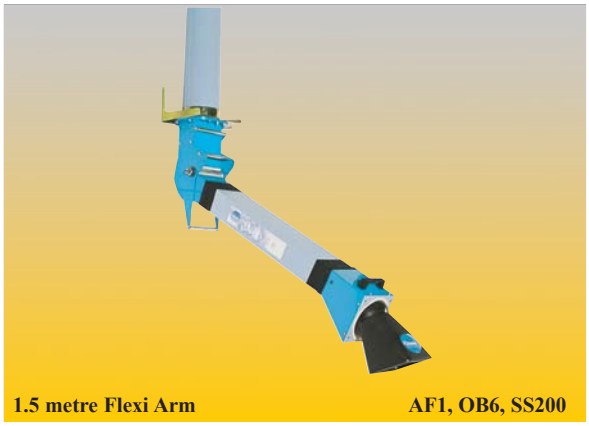

With wall extension AF3, BF3, PX3-F, KR200

Mounting two Flexi Arms on a Duct Kit, which in turn is directly connected to an Extractor, is an ideal system for side-by-side work stations.


2 x AF3, KD0, PX4-F, KR200

Flexi Arm 1.5 metre

There are times when working space is so restricted it is impossible to use a standard Flexi Arm. Small welding bays in technical colleges are good examples. In response to this Ozone has developed a customised shorter Arm. As the Arm requires less flexibility it does not have an elbow joint. The single, solid duct section can be shortened further by the operator, if required. Performance and reliability are not diminished and the Arm retains its unique wrist joint. With its all-solid design and protected joints, the Arm is the ideal choice for colleges and training workshops.


1.5 metre Flexi Arm AF1, OB6, SS200

Flexi Arms

. . . at last a long life Arm with no flexible hose.

Duct Kits

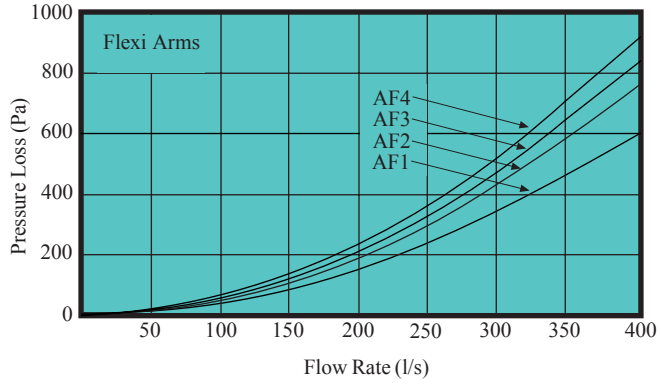
Multi-arm systems can be easily designed using an Ozone Duct Kit: from the simple two-arm KD0 kit pictured on the previous page to as many as four arms connected over a 6 metre distance by the KD4 kit. The Duct Kits have been sized to suit airflows of 200L/s per inlet, making them perfect for most welding fume or gas extraction applications.

Duct Kit Code	Max Arms	Length	Distance between swivel points of outermost arms	Duct Kit mounts to
KD0	2	0.6m	310 mm	PX4-F Extractor
KD1	2	1.5m	1160 mm	Wall
KD2	4	3.0m	2660 mm	Wall
KD3	4	4.5m	4160 mm	Wall
KD4	4	6.0m	5660 mm	Wall

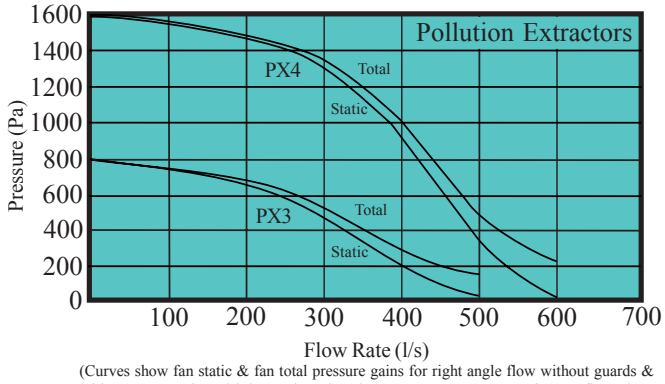
Extractors

For a one inlet system, the Flexi Arm connects directly to a PX3-F Pollution Extractor. This, in turn, connects to the mounting surface - an elegant combination, which is simple to install. A two arm system connects to the PX4-F extractor by using the Duct Kit. These Pollution Extractors come with Ozone's unique dual-flow feature which allows them to be configured to deliver right angle or in-line flow.

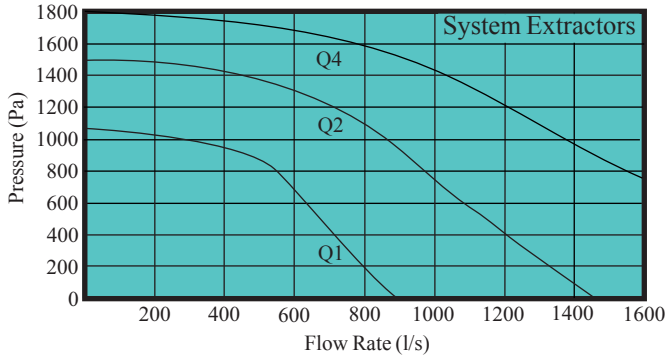
Larger systems, of 3 to 8 Arms, are served by System Extractors. Q1, Q2 and Q4 models are available in wall, roof or duct mounted configurations. These remarkably versatile products come complete with Spigots and mounting facilities, so that installation is simple.



(Curves show total system pressure loss including entry loss at wrist joint & transition loss at neck joint to 200mm Ø downstream duct, for typical working position: shoulder & elbow at 120° & wrist in standard position).

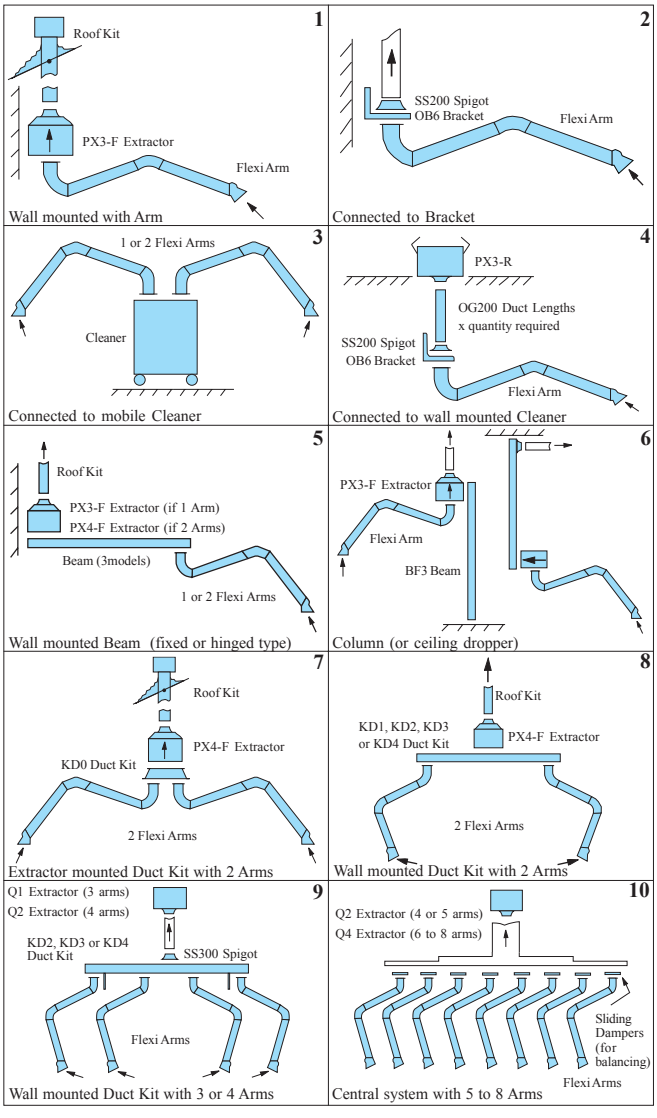


(Curves show fan static & fan total pressure gains for right angle flow without guards & with 200mm Ø ducted inlet & ducted outlet, BS848 type D test. Other configurations yield higher or lower curves).



(Curves show fan static pressure gain for a vertical discharge roof unit, with 300mm Ø ducted inlet and free outlet, BS848 type C test. Fan total pressure curves are almost identical).

Applications

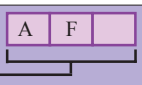


Ozone products are shown in blue. All necessary connections are included with the products, so they simply bolt together. The "words" in each box fully describe the set of Ozone products to be ordered for a complete system. See Accessories section for codes.

Data Table

Flexi Arm Code →		AF1	AF2	AF3	AF4
Nominal Length (m)		1.5	2	3	4
Weight (kg)		11	13	15	16
Dimensions	A (mm)	265	265	265	265
	B (mm)	1240	1155	1770	2160
	C (mm)	-	790	1230	1840
	D (mm)	290	290	290	290
Rec. mounting height (above floor) for bench use (m)		2.0	2.1	2.6	3.1
Recommended Flow Rate (L/s)		200	200	200	200
Pressure Loss (Pa) at 200L/s		150	190	210	230
Suitable for hanging Arm or standing Arm		Yes	Yes	Yes	Yes

How To Order Flexi Arms



Choose Flexi Arm code from above table

Then choose Accessories from the diagrams opposite.

Example 1 : Application 1 on previous page with 4m Arm. Order: PX3-F, AF4, KR200.

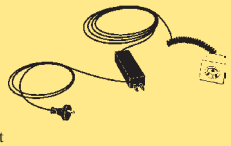
Example 2 : Application 7 on previous page with 2m Arms. Order: PX4-F, KD0, KR200, 2 x AF2.

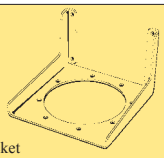
Note: if ordering for overseas, also specify phase, voltage and frequency.

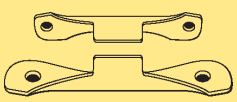
Technical and Safety notes

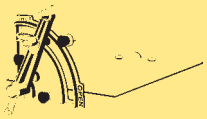
1. The Arm's neck joint suits mounting with 8 x M6 bolts on a 255mm PCD.
2. Best practice is to connect each Arm to an individual extractor and to achieve a minimum 200L/s flow rate.
3. Designing a multi-arm system: a) choose flow rate per arm; b) read pressure loss for 1 arm from graph; c) find total flow rate based on arms needed to operate at same time; d) design connecting duct to achieve correct transport velocities; e) calculate total pressure loss = arm loss + duct loss + exit loss from system + contingency; f) plot (total flow rate, total pressure loss) point and select nearest Extractor whose total pressure curve exceeds this.
4. Do not operate products before reading Instruction Manuals.
5. This brochure describes **standard** products, designed for use in non-hazardous areas and for use with nuisance pollutants which are not: explosive, flammable, hot/incendiary, mixtures of sparks and combustibles, corrosive or toxic. If risk of toxic pollutants (concentrations in breathing zone above exposure standards/TLVs), also consider: ducting outside, product after-filters, outlet monitors, or personal respirators. Requests for non-standard products or particular capture/filtration efficiencies or filters, must be stated in writing on customer's final order and if accepted will be restated on Ozone's invoice.
6. Customers should consult and comply with all National and State laws/regulations/standards when using pollution control products. This includes electrical, manual handling, safety, hazardous substance and waste disposal practices.
7. Personal respiratory protection may also be required if pollutant concentrations in the operator's breathing zone exceed exposure standards/TLVs.
8. It is impossible to list all the potential safety issues associated with pollution control. Ozone is a supplier of standard products, not a consultant or contractor. We rely on the customer and their agents to safely select products, design connected systems, and install/operate/maintain these products and systems, to suit **their** pollutant. Customers should consult and comply with relevant National and State laws/regulations/standards.
9. Flexi Arm patents are pending.

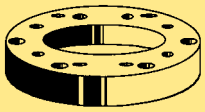
How to Order Accessories

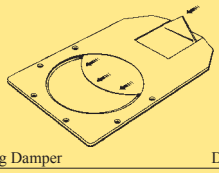

Light OL7

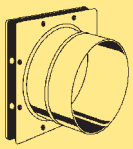

Arm Bracket OB6


Limit Stops OF7


Arm Damper DF200


Converter ON200

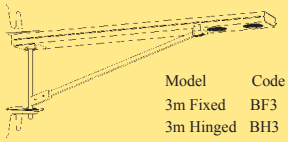

Sliding Damper DS200


Spigots

Diameter	Code
150mm	SS150
200mm	SS200
300mm	SS300

Includes weather proofing and mounting brackets

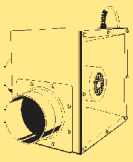

Roof Kit KR200


Beams

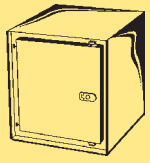
Model	Code
3m Fixed	BF3
3m Hinged	BH3
6m Hinged	BH6


Column or ceiling Dropper BF3

Nos. of Arms	Code
1	PX3-F
2	PX4-F
3	Q1
4 or 5	Q2
6, 7, or 8	Q4


Extractors

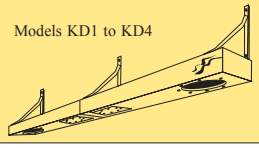
Mobile or fixed, for 1 or 2 Arms. Various filter types


Cleaners

Model KD0


Duct Kits

Models KD1 to KD4



Length	Code
0.6m	KD0
1.5m	KD1
3.0m	KD2
4.5m	KD3
6.0m	KD4

Useful Conversions
1m = 1000mm = 3.38 feet
1kg = 1000g = 2.20 pounds
1Pa = 0.102mm water = 0.004 inches water
1L/s = 3.60m³/hr = 2.12cfm
1kW = 1000W = 1.34hp

Ozone Pollution Technology,
Sydney Head Office, 212 Silverwater Road,
Silverwater NSW 2128, Australia.
Phone 02-9748 7748
Fax 02-9748 7749
Email sales@ozonetec.com
Website http://www.ozonetec.com