Working with ease...

Pneumatic Conveying - Negative - Positive - Suction/Blowing

The principle of pneumatic conveying is simple. It is based on the fact that air in motion is capable of moving objects. When air is blown or sucked through a pipe, material can be conveyed at the same time.

Pneumatic conveying system

This method of conveying is widely used throughout industry to transfer granules, pellets and small moulded products.

Conveying of materials can be effected utilizing either a positive pressure air stream or a negative pressure air stream (vacuum) through our high capacity, low power consumption blowers.

Positive pressure conveying

The material to be conveyed is fed into the positive pressure air stream via a Venturi feeder unit for small throughputs or by a rotary valve/rotary air seal for higher throughputs. Route selection to multiple destinations can be made by diverter valves.

A discharge cyclone is normally placed at the end of the line to allow the material to separate itself from the air.

Negative pressure (vacuum) conveying

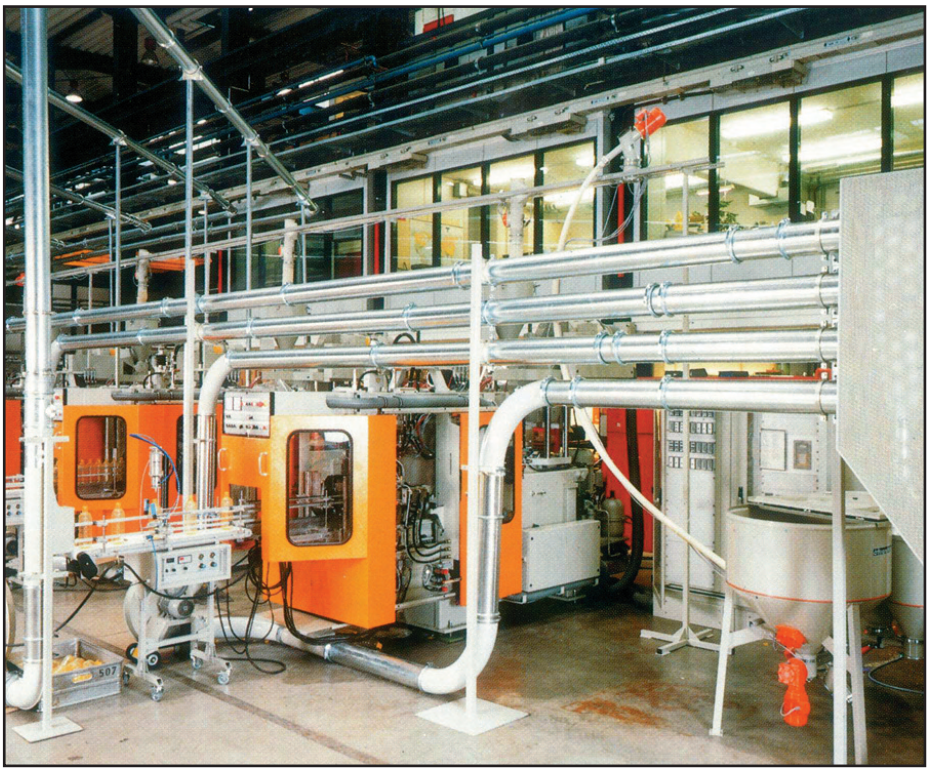
The material to be conveyed is sucked directly from containers or bulk storage by suction head into the transfer pipes and conveyed in the negative pressure air stream to the separation cyclone from which the conveyed material falls by gravity via a rotary valve or a Multiseparator, depending on the characteristics of the material, into the process or storage below.

Motive power

In both instances the air flow is generated by blower unit. In the case of the positive pressure system this is located before the feeder unit and effectively pushes the product down the pipes. For the vacuum system the blower unit is placed at the reception end of the conveying system and effectively pulls the material along the piping.

This equipment is specifically designed in a modular form with all components easily assembled and linked by quick release clamps, enabling fast, easy and low cost installation, without the need of specialist skilled labour.

A complete range of pipes, bends and accessories cater for virtually every known application in industry.



In this blow moulding plant our conveyors blow new bottles to packaging whilst waste (tops and tails) are blown to granulators for recycling.

The Blowers

These are available in nine sizes and are able to convey product horizontally, vertically and around corners. Maximum length is 200M and maximum capacity is 52 T.P.H. (material density 800kg/M3).

The Feeders

Product is introduced into the conveying tubes by three means, venturi, rotary valve or suction tube.

Accessories

Straight pipes, bends, diverters, hoppers, cyclones, batch weighers, separators, pre-cleaners etc. Assembly is just so easy with quick release or bolt on clamps.

Applications

- Loading/unloading silos, IBC's etc.
- Conveying pellets, granules, compounds etc. to machines, production lines, bagging stations and storage facilities.
- Process waste handling
- Ventilation/fume handling

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Pneumatic Conveying

Lean Phase Pneumatic Conveyors

Direct Drive Suction Blowers

Code Standard	Code Multiair	Kw	Current Consumption A	Max. Air Flow Rate m3/h	Max. Press mm wg	Total Weight kg
CTRL20	C1020	1.5	3.4	1900#)	250	35
CTRL40	C1040	3	6.3	2600#)	350	67
CTRL55	C1055	4	8.5	2600#)1800	650	76
CTRL75	C1075	5.5	11.5	3200	650	96

with venturi fitted

V-Belt Drive Blowers

Code Standard	Code Multiair	Kw	Current Consumption A	Max. Air Flow Rate m3/h	Max. Press mm wg	Total Weight kg
CTRL100	C2100	7.5	15.5	1800	950	129
CTRL150	C2150	11	21.5	1800	1300	157
CTRL200	C2200	15	29	1800	1700	195
CTRL300	C2250	22	41.5	1800	2300	324
CTRL500	-	37	69.5	3500	3500	468

Multiair Blowers
With inbuilt sound attenuation.

Direct Drive
Code C1020, C1040, C1055, C1075

Belt Drive
Code C2100, C2150, C2200, C2250

The "Multiair" blowers have inbuilt sound attenuation, specifically for waste handling and sound sensitive areas.

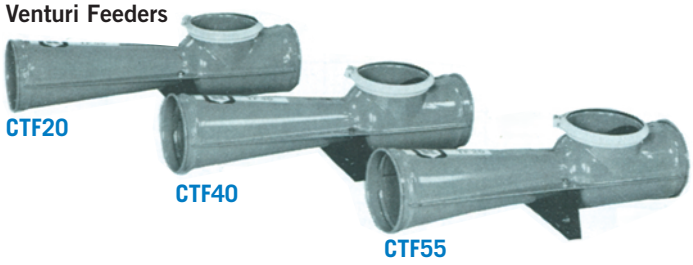
Feeders

These intake arrangements may be located anywhere in the pipeline. They are self-cleaning, resistant to abrasive materials, and operate practically dust free.

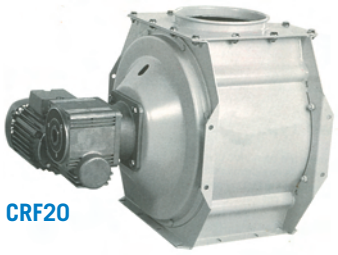
Venturi type: CTF are used as an alternative to CRF rotary valves but have a lower capacity. Venturis are suitable for CTRL blowers type 20/40/55/75 and Multiair versions C1020, C1040, C1055 and C1075.

Rotary valves types: CAD, CAE, CRF20 and CRF40 are used for metering, vacuum conveying, dosing, pressure conveying and suction/pressure conveying. Both models are suitable for vertical feed and with the addition of an additional connection, can be converted to horizontal feeding. The speeds are 70, 50, 30 or 20rpm (CRF20) and 70, 50 or 35 (CRF40) which are achieved by selecting different gearmotor drives. Variable speeds can be achieved by the use of variable frequency drive (inverter).

Venturi Feeders



Rotary Valve Feeders



Accessories - 160mm diameter

Code	Description	Code	Description
C22000780	Quick release clamp	C22000690	30° 2 way diverter
C22000000	Bolt on clamp	C22000697	30° 2 way diverter
C22010011	60mm straight pipe	C22000639	Cylinder for above
C22010010	300mm straight pipe	C22000682	15° 3 way diverter
C22010008	600mm straight pipe	C22000461	90° branch line
C22010007	1000mm straight pipe	C22000323	45° branch line
C22010006	2000mm straight pipe	C22000702	Pipe support bracket
C22010076	3000mm straight pipe	C22000685	Shutter
C22010681	Telescopic 100mm	C22000012	Exhaust head
C22010680	Telescopic 500mm	C22000698	Exhaust cyclone
C22020140	5° bend	C31000047	Dust cyclone
C22020118	15° bend	C21000639	2000 flex pipe steel
C22020113	30° bend	C21000645	2600 flex pipe poly
C22020108	45° bend	C21000650	3800 flex pipe poly
C22020103	60° bend	C22000470	600mm inlet hopper
C22020096	90° bend	C22000013	380mm H. ext. hopper