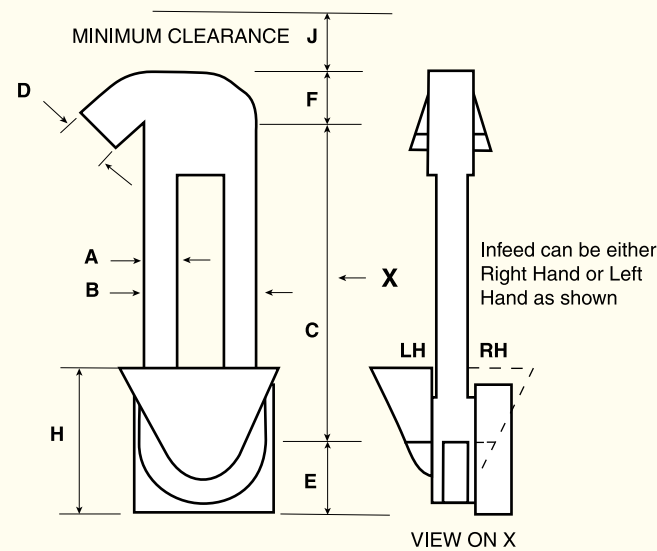


TYPICAL DIMENSIONS

	M75	M100	M160
A	76	102	168
B	365	485	650
C*	x150	x200	x250
D	175	200	250
E	250	330	460
F	200	260	350
H	800	900	900
J	180	220	360

* Multiples of



POWDERFLIGHT CONVEYING SYSTEMS

CONVEYOR CAPACITIES

During conveying, powders are subjected to turbulence and aeration, which in effect reduce their bulk density. Since we recommend no more than 50% to 60% loading by volume, a realistic output can be estimated by multiplying the swept volume given in the table, by the bulk density and dividing by 4. This will be a conservative figure which may well be exceeded in practice.

TEST FACILITY

All models of Powderflight Conveyors are available for tests with customers' materials at our test facility at Glossop.

SWEPT VOLUME: LITRES/MIN

R.P.M.	M75	M100	M160
90	330	730	2500
150	540	1190	4200
190	680	1500	5300
240	870	1900	N/A

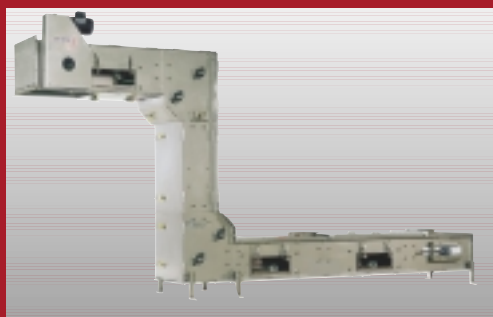
e.g. Talc at 0.8 kg/litre :
M100 at 190 rpm output :
 $\frac{1500 \times 0.8}{4} = 300 \text{ kg/min}$

(This figure has been exceeded by 30% on test.)

High Output with Versatility

- Dust-tight conveying.
- High output relative to power and cost.
- Minimum headroom required at discharge.
- No separation of blended products.
- Minimum attrition of fragile particles.
- No filtration necessary at discharge.
- Low noise level.
- Any angle of operation.

OTHER PRODUCTS FROM THE UNITRAK POWDERFLIGHT RANGE



'TipTrak' bucket elevator



'Bagstander' FIBC Discharge System



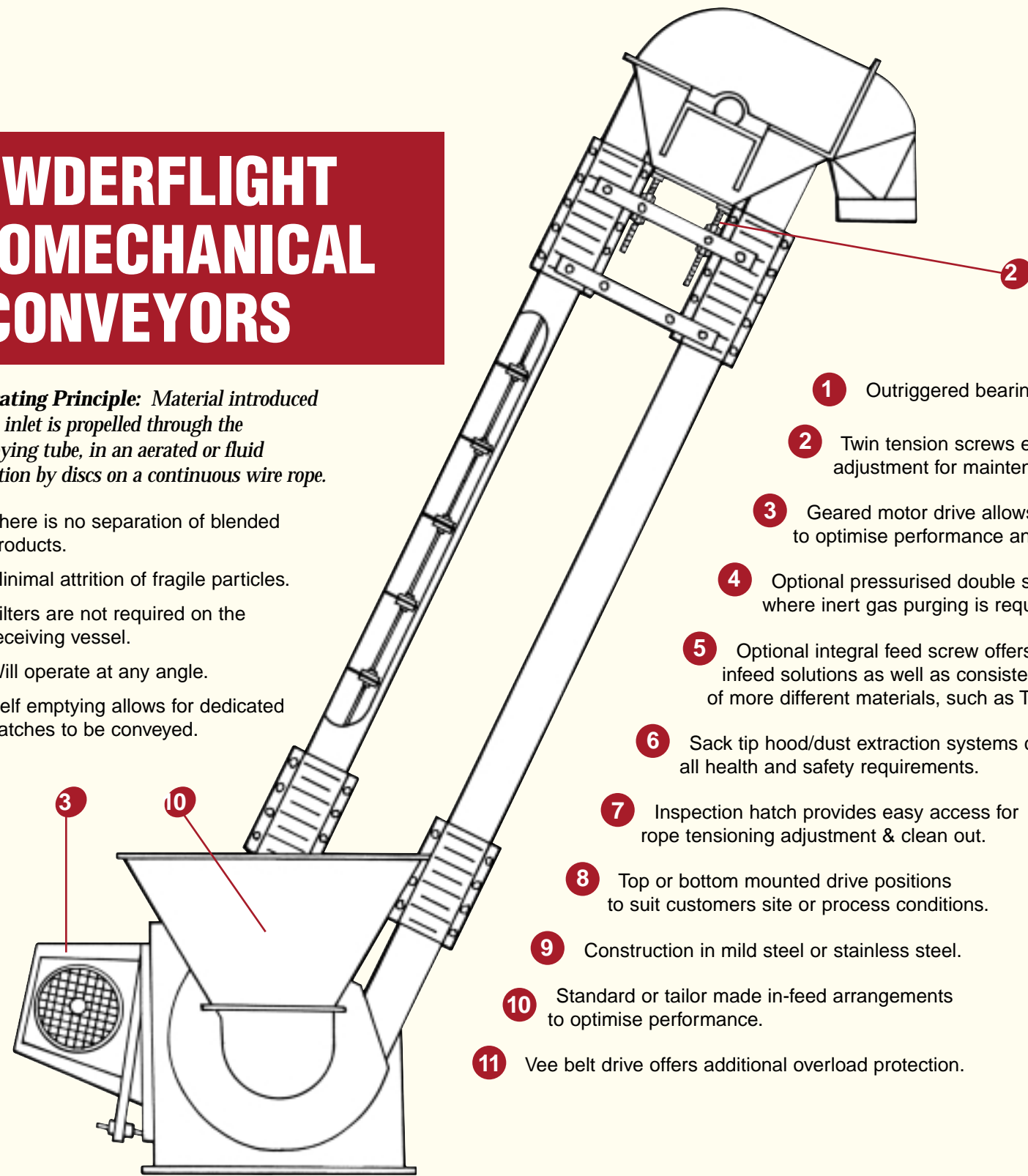
'Screwfeeder' with agitated in-feed hopper



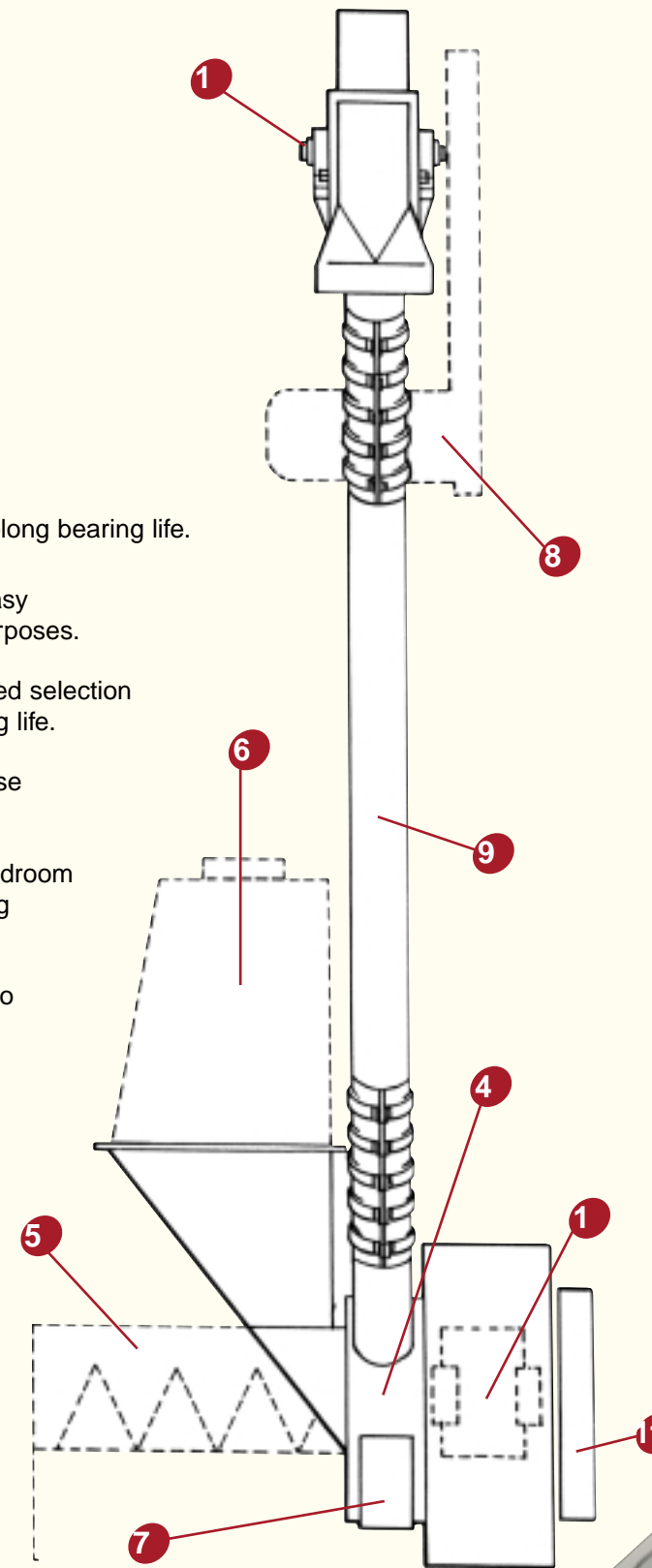
POWDERFLIGHT AEROMECHANICAL CONVEYORS

Operating Principle: Material introduced at the inlet is propelled through the conveying tube, in an aerated or fluid condition by discs on a continuous wire rope.

- There is no separation of blended products.
- Minimal attrition of fragile particles.
- Filters are not required on the receiving vessel.
- Will operate at any angle.
- Self emptying allows for dedicated batches to be conveyed.



- 1 Outriggered bearings to prolong bearing life.
- 2 Twin tension screws ensure easy adjustment for maintenance purposes.
- 3 Geared motor drive allows for speed selection to optimise performance and prolong life.
- 4 Optional pressurised double seal for use where inert gas purging is required.
- 5 Optional integral feed screw offers low headroom infeed solutions as well as consistent feeding of more different materials, such as TiO₂.
- 6 Sack tip hood/dust extraction systems conform to all health and safety requirements.
- 7 Inspection hatch provides easy access for rope tensioning adjustment & clean out.
- 8 Top or bottom mounted drive positions to suit customers site or process conditions.
- 9 Construction in mild steel or stainless steel.
- 10 Standard or tailor made in-feed arrangements to optimise performance.
- 11 Vee belt drive offers additional overload protection.



Materials Handled

- | | |
|--------------------|-------------------------|
| Adipic acid | Melamine powder |
| Aluminium chloride | Milk powder |
| Aluminium oxide | Moulding powder |
| Asbestos fines | Perlite |
| Barytes | Phthalic anhydride |
| Bentonite | Pigments |
| Bran | Plastic chips |
| Brown sugar | Plastic granules |
| Calcium carbonate | Potato flour |
| Carbon black | Refractory powder |
| Cement | Resins |
| Coffee beans | Salt |
| Coffee grounds | Sand |
| Crop seeds | Silica |
| Curry powder | Snuff (Tobacco fines) |
| Custard powder | Soap granules |
| Dehydrated foods | Sodium sulphate |
| Detergent powders | Soya flour |
| Dog biscuits | Starch |
| Flocculents | Sterilising powder |
| Gelatine | Sugar beet pulp dust |
| Gram flour | Talcum powder |
| Granulated sugar | Tile dust |
| Gypsum | Titanium dioxide |
| Icing sugar | Urea prills |
| Iron oxide | Water treatment powders |
| Lead oxide | Wheat flour |
| Lead shot | Yeast extract |
| Limestone powder | Zinc oxide |
| Magnesium oxide | Zirconium sand |

The Laminar Disc:
A 3-part disc with nylon 'bosses' and polyurethane centre.

The Powderflight Disc:
A 2-part easily replaced disc.



Mobile conveyors feeding cone blender.



M100 & M160 feeding ISO containers with plastic granules.



Vertical conveyor feed from sack tipping station with screw feeder outlet and integral dust extraction system.



Manual sack tipping into mixer using vertical conveyor and integral feed screw.



Horizontal/vertical multi-path conveyor.