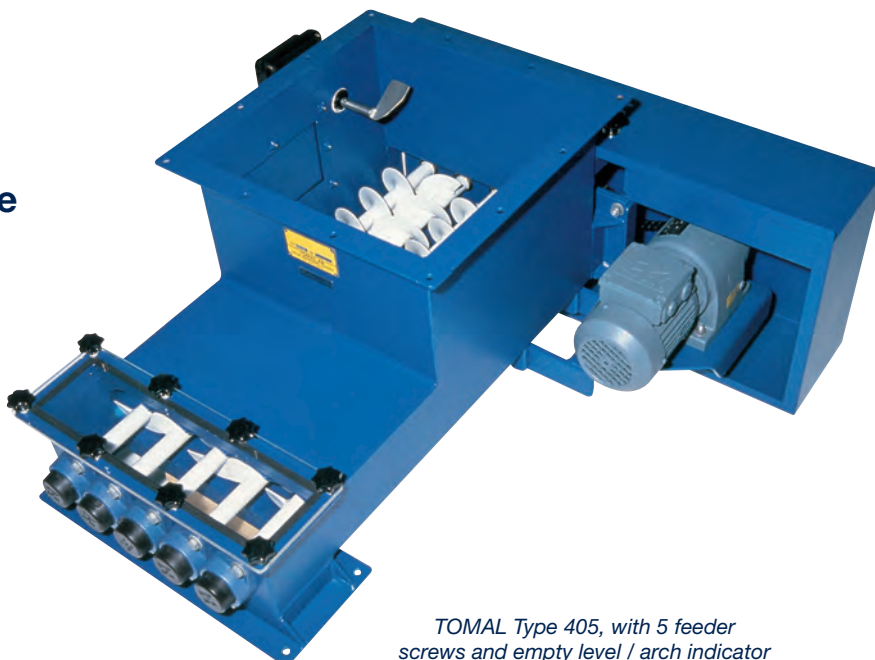


TOMAL Multiscrew Feeders

Tomal feeders are volumetric multiscrew feeders for safe discharge and accurate metering of solids.

With their unique construction Tomal multiscrew feeders are the ideal metering devices for both granular and archforming materials.



TOMAL Type 405, with 5 feeder screws and empty level / arch indicator

Advantages

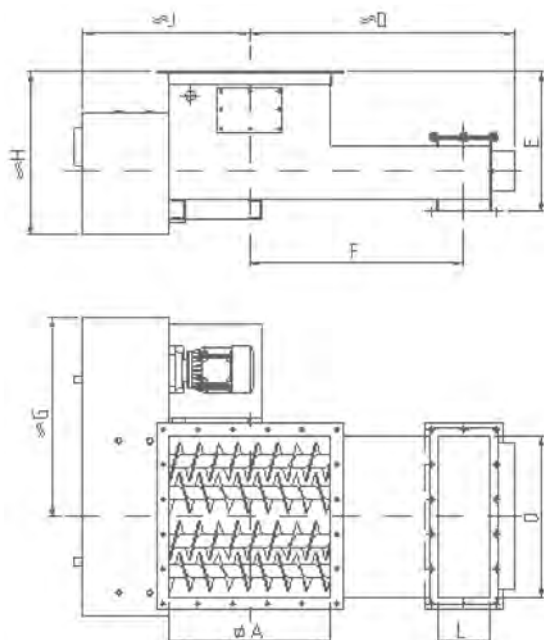
- High metering accuracy
- Large active contact area
- Safe silo discharge
- Linear discharge curve
- Self-cleaning feeder screws
- Robust and low-wear construction

TOMAL feeders can be applied across a broad range of batch or continuous process plants. Typical applications are found in the water treatment, pulp and paper, mining, chemical and other industries; in fact, wherever accurate and reliable metering coupled with safe discharge of solids is a top priority.

Examples of typical materials

- | | | |
|--------------------------|----------------------|--------------|
| ■ Lime | ■ Aluminium Sulphate | ■ Wood Flour |
| ■ Polymer | ■ Talcum | ■ Salt |
| ■ Fluoride | ■ Magnesium Sulphate | ■ Soya Beans |
| ■ Ferrous Sulphate | ■ Magnesium Oxide | ■ Cinnamon |
| ■ Potassium Permanganate | ■ Dye | ■ Graphite |
| ■ Urea | ■ Limestone | ■ Gypsum |
| ■ Bentonite | ■ Sodium Bicarbonate | ■ Cement |
| ■ Starch | ■ Activated Carbon | ■ Iron Oxide |
| ■ Sodium Hydrosulphite | ■ Fly Ash | ■ Zinc Oxide |

Technical data / dimensions



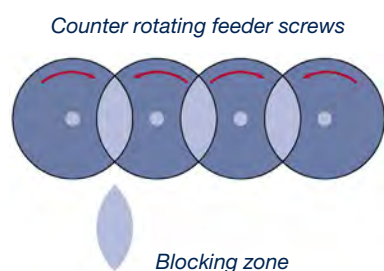
Feeder Type	182	224	302	403	405	475	624	626	627	1004	1254
A	180	220	300	400	400	700*	620	620	620	1000	1250
D	340	410	575	995	625	775	1030/1210	725	725	1485	1975
E	215	310	330	530	380	380	540	485	415	620	745
F	260	325	450	800	500	650	822/1000	600	600	1225	1652
G	300	370	450	660	550	550	760	660	660	980	1135
H	265	360	440	610	460	440	580	560	465	635	785
J	275	272	350	535	460	550	590	530	600	980	1075
L	60	80	100	200	100	100	200	100	100	280	350
O	120	220	180	436	400	400	620	2*230	620	1000	1250
Nos of Screws	2	4	2	3	5	5	4	2*3	7	4	4
Active contact area	1,8	4,8	5	17	16	28	38	2*15,8	38	100	156
Max Cap m³/h	0,06	1	2,5	18	6	6	25	2*4,5	10	90	220

* All measurements in mm

High metering accuracy

A number of interacting counter-rotating feeder screws are able to create blocking zones between them (refer diagram below).

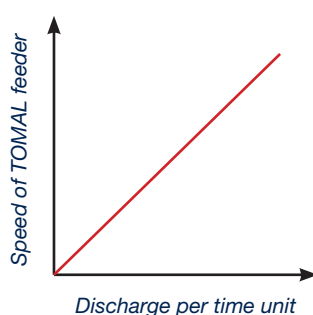
This feature ensures extremely high metering accuracy with the added benefit that the screws become self-cleaning.



Linear discharge curve

The discharge curve is linear (refer diagram below).

Assuming the material has constant volume weight, the metering accuracy will be better than $\pm 1\%$, ensuring accurate control of both continuous and batch processes.



Safe silo discharge

TOMAL's multiscrew design ensures that material is discharged over the entire active area of the feeder. This prevents the material from bridging and maintains the principle of "first in, first out".

Low level monitoring is available as an option for materials prone to bridging. An automatic arch-breaking system can be activated on detection of a void (refer diagram below).

