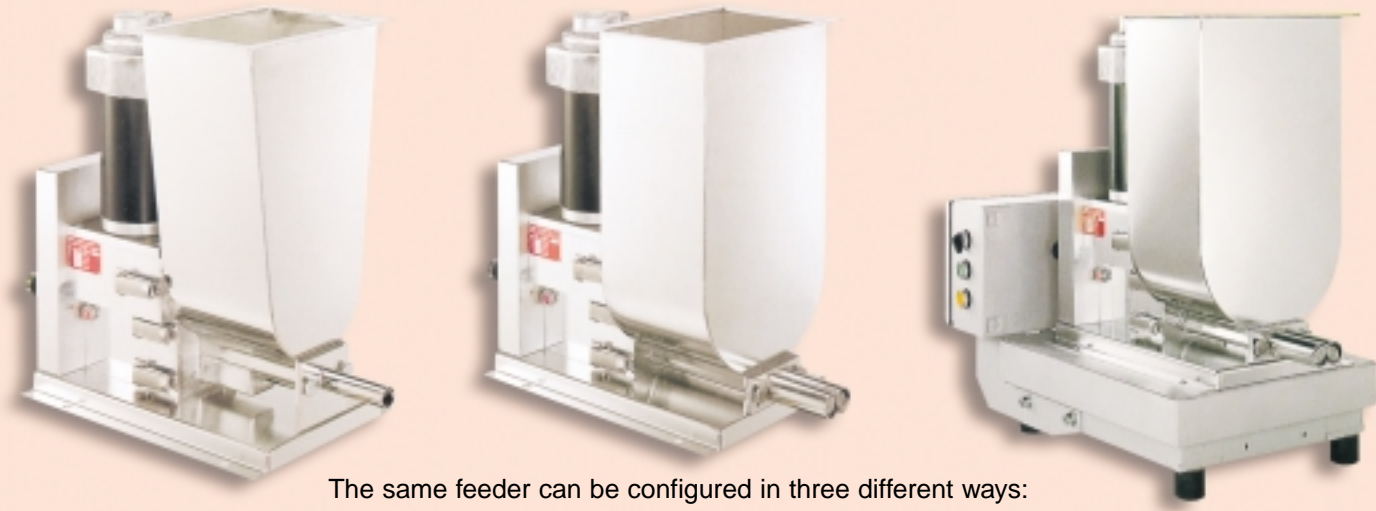


SPECIAL APPLICATION FEEDERS

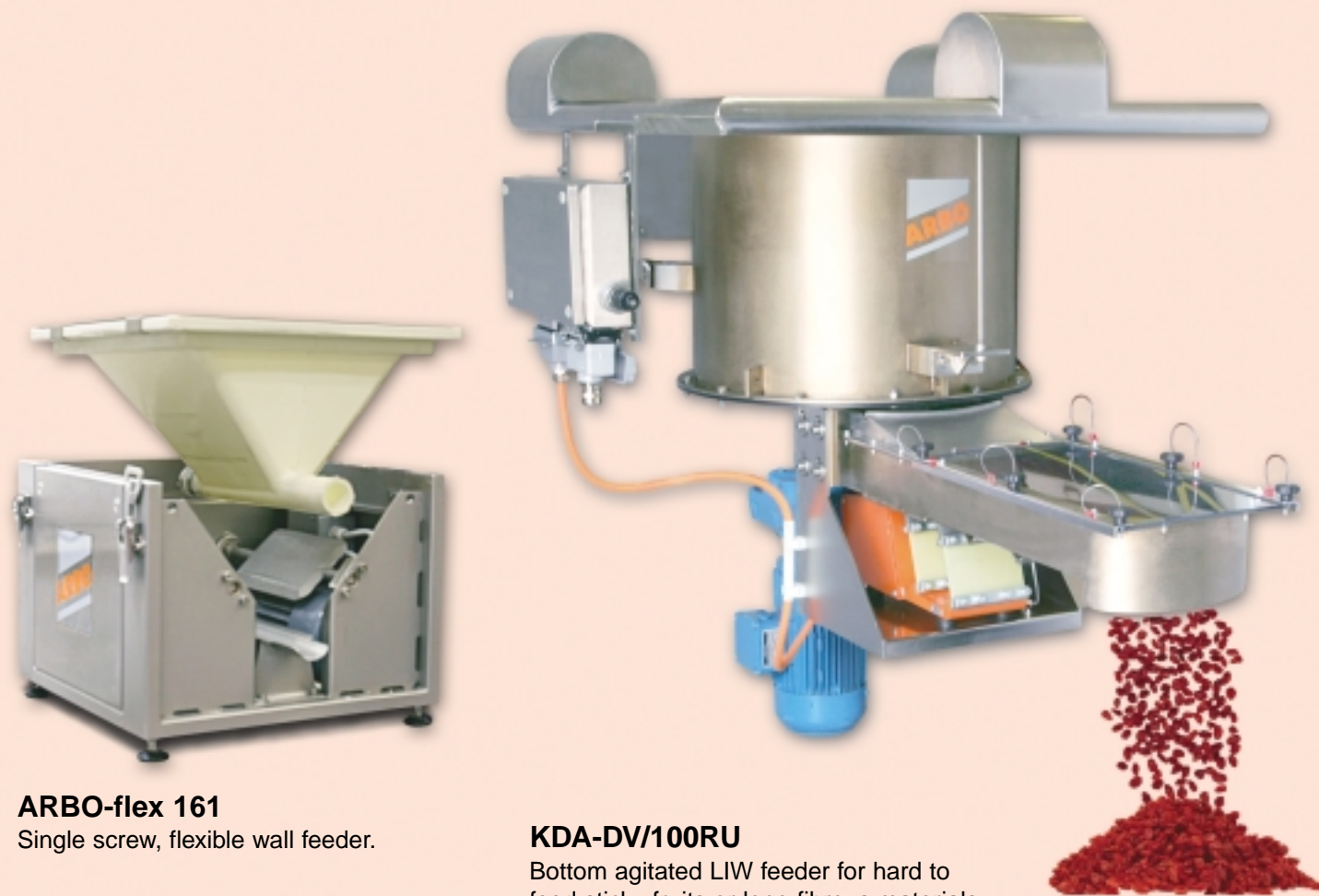


KDA-VS/28
Single screw volumetric

KDA-VS/28
Twin screw volumetric

KDA-VS/28
Single or Twin screw LIW

The same feeder can be configured in three different ways:



ARBO-flex 161
Single screw, flexible wall feeder.

KDA-DV/100RU
Bottom agitated LIW feeder for hard to feed sticky fruits or long fibrous materials.

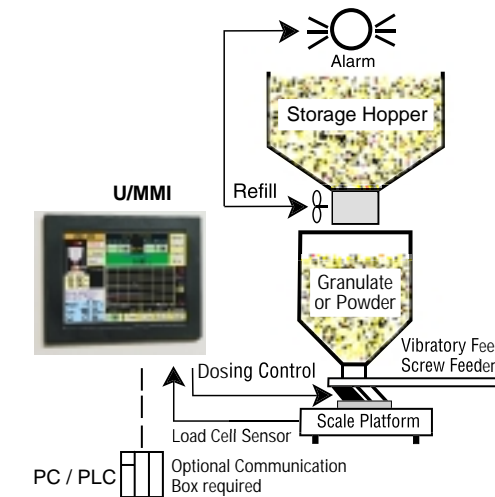
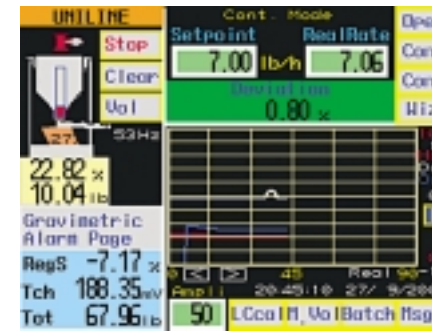
ARBO FEEDER CONTROL SYSTEMS

Leading the Industry with cutting edge control technology.

Single Feeder Controller Model U/MMI

Its 5.7" colour touch screen is considered the best operator interface ever made!

- New LIW control developed by ARBO uses "integral" controls, versus the old "differential" type.
- All feeder calibrations are set in less than one minute.
- Trending on-line: hopper value / control output / control accuracy.
- Universal SCR software selectable for vibratory or DC motor duty.

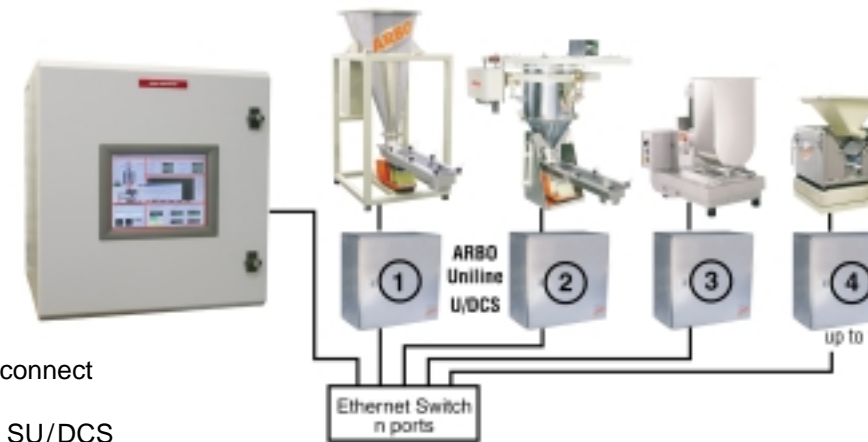


Multiple Feeder Controls Model U/DCS

"Plug & Feed" system features Ethernet connectivity to a supervisory unit model SU/DCS.

All UNILINE controllers are factory calibrated to their respective feeders and can be operated immediately. Units can be added or removed without reconfiguration or loss of calibration.

- Plug & Feed system - disconnect and reconnect without further calibration
- Ethernet connectivity to supervisory unit SU/DCS
- Connects up to 16 feeders
- Ratio controls by % or set points
- Hierarchy interlocks
- Extruder guide signal pacing all feeders



VOLUMETRIC FEEDERS

Type	Feeding Module	Size & Feed Rates (lbs/hr)*			
		80	110	165	220
KDA-VV/...	Vibratory Tray	0.5-500	25-2,500	50-5,000	100-12,000
ARBOflex	Single Screw	0.5-30,000 depending on feeder & screw selection			
KDA-VS/28	Single Screw	6-330 depending on screw selection			
KDA-VS/28	Twin Screw	0.5-220 depending on screw selection			

* for BD = 31 lbs/cu.ft.

LOSS-IN-WEIGHT FEEDERS

Type	Feeding Module	Size & Feed Rates (lbs/hr)*		
		35	100	300
KDA-DV/...	Vibratory Tray	10-1,200	40-4,000	100-12,000
KDA-DS/...	Single Screw	70-700	300-3,000	900-9,000
KDA-DS/...	Twin Screw	35-350	150-1,500	500-9,000
KDA-DP/...	Pump	20-1,000	100-5,000	240-12,000

Represented By: **MARTAGAN ASSOCIATES**
P.O. Box 56 - Fairport, NY 14550
Ph: 585-742-3700 - Email: bill@martagan.com

Arbo Engineering Inc.
3 Whitehorse Road, Units 4 & 5
Toronto, Ontario M3J 3G8

Tel: (416) 636-7057
Fax: (416) 630-9135
E-Mail: arbo@arbo-feeders.com
www.arbo-feeders.com

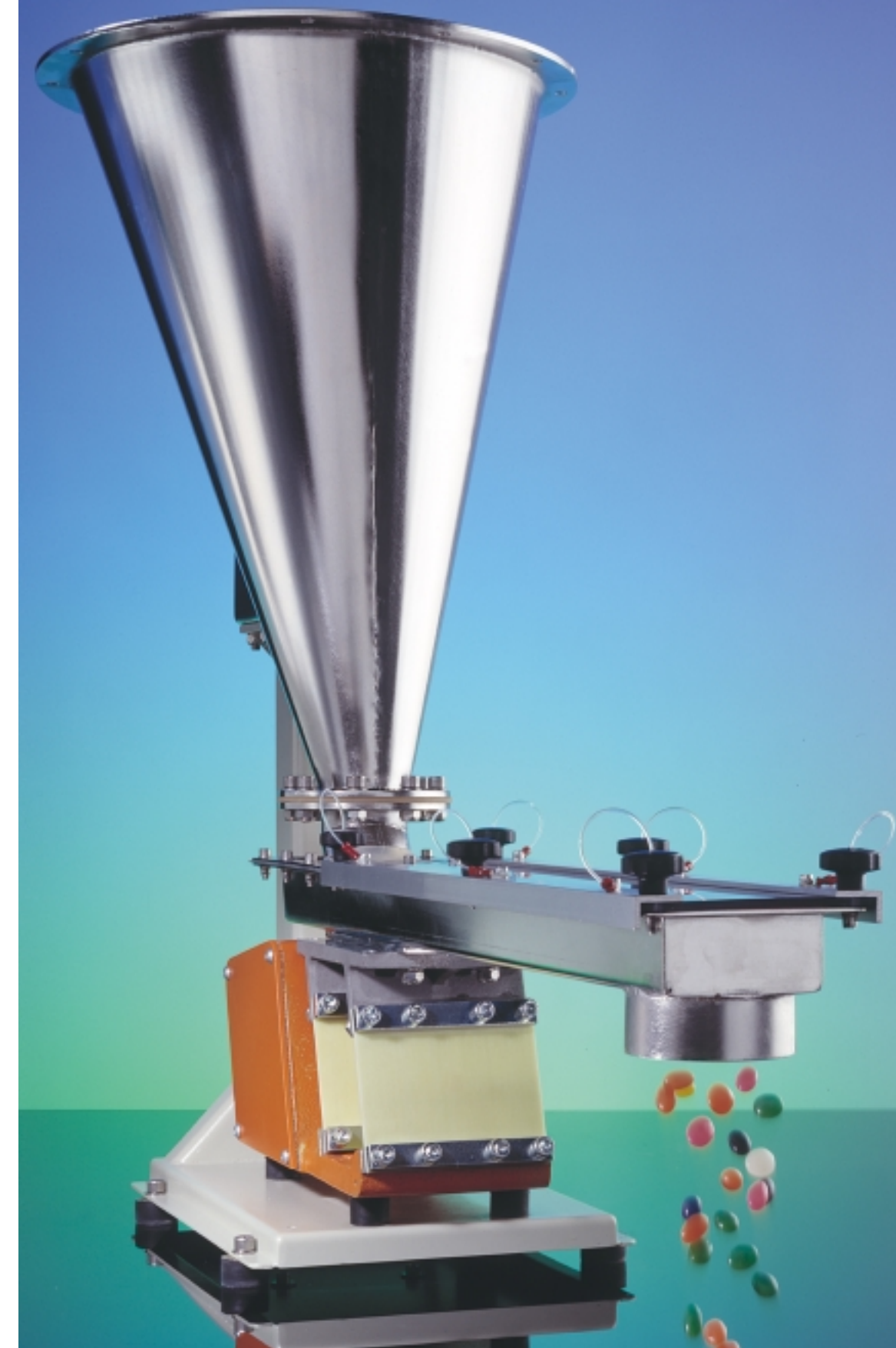
ARBO Analogtechnik S.A. is a Swiss feeder manufacturer, established in 1974.

ARBO Engineering Inc. was established in 1993 to service the North American industry with sales, engineering and testing facilities.

ARBO invented the closed loop, resonant frequency vibratory feeder. This type of feeder is recognized as the feeder of choice for many applications, ranging from pelletized and friable materials which are not ideally fed by screw or belt feeders, to difficult materials such as fibers and those possessing inconsistent particles. Excellent accuracies (even at very short sampling intervals), consistent material discharge and 1000:1 turn-down ratios are common features with the ARBO resonant vibratory feeders.

ARBO is proud to offer a full and diversified product line for feeding and dosing applications including:

- Vibratory tray feeders
- Flexible wall feeders
- Single and twin screw feeders
- Belt loss-in-weight feeders
- Liquid feeders
- Weighbelt feeders
- Volumetric and gravimetric control systems



The patented ARBO vibratory tray feeder is ideal for many applications, where it replaces single and twin screw feeders. In addition to excellent accuracy, it has the added advantage of being maintenance free. Since ARBO vibratory feeders have no moving parts, expensive spare parts and maintenance-intensive components such as motors, gears, screws, bearings etc. are eliminated. Vibratory tray feeders are extremely gentle on your materials: no product degradation, no heat due to friction (temperature rise of product), and best of all, they are easy to clean!

Most vibratory drives currently on the market operate at a constant frequency (the mains frequency). As such their leaf springs are tuned in such a way that the unit's frequency is slightly higher than the mains' frequency (60 Hz). The feed rate is controlled by varying the vibration amplitude. Such devices are not very linear and usually achieve a 10:1 turn-down ratio at best. Compare this to ARBO's 1000:1.

ARBO's System (called RVS for Resonant Vibration System) moves the working frequency of the tray assembly (including the material on the tray) to the resonant frequency (between 35 to 70 Hz!). A specially developed amplitude sensor measures the amplitude of the vibration and feeds it back to the SCR. The sensor is mounted in the vibratory drive, a sealed unit which does not require any maintenance.

The SCR has a double function:
1) it varies the frequency of the system to find the resonance point and;
2) it maintains the amplitude of the vibration at the desired set-point. The RVS ensures a turn-down ratio of 1000:1. The same tray can feed 5000 lbs/hr or 5 lbs/hr or any value in between, without any mechanical changes!

Swiss quality, innovative technology and customer driven, engineered solutions are the advantage of ARBO feeders.

VOLUMETRIC VIBRATORY TRAY FEEDERS



KDA-VV/110
Medium size, universal vibratory tray feeder.

KDA-VV/80S
Special feeder for powders. Hopper vibrates in tune with the tray.

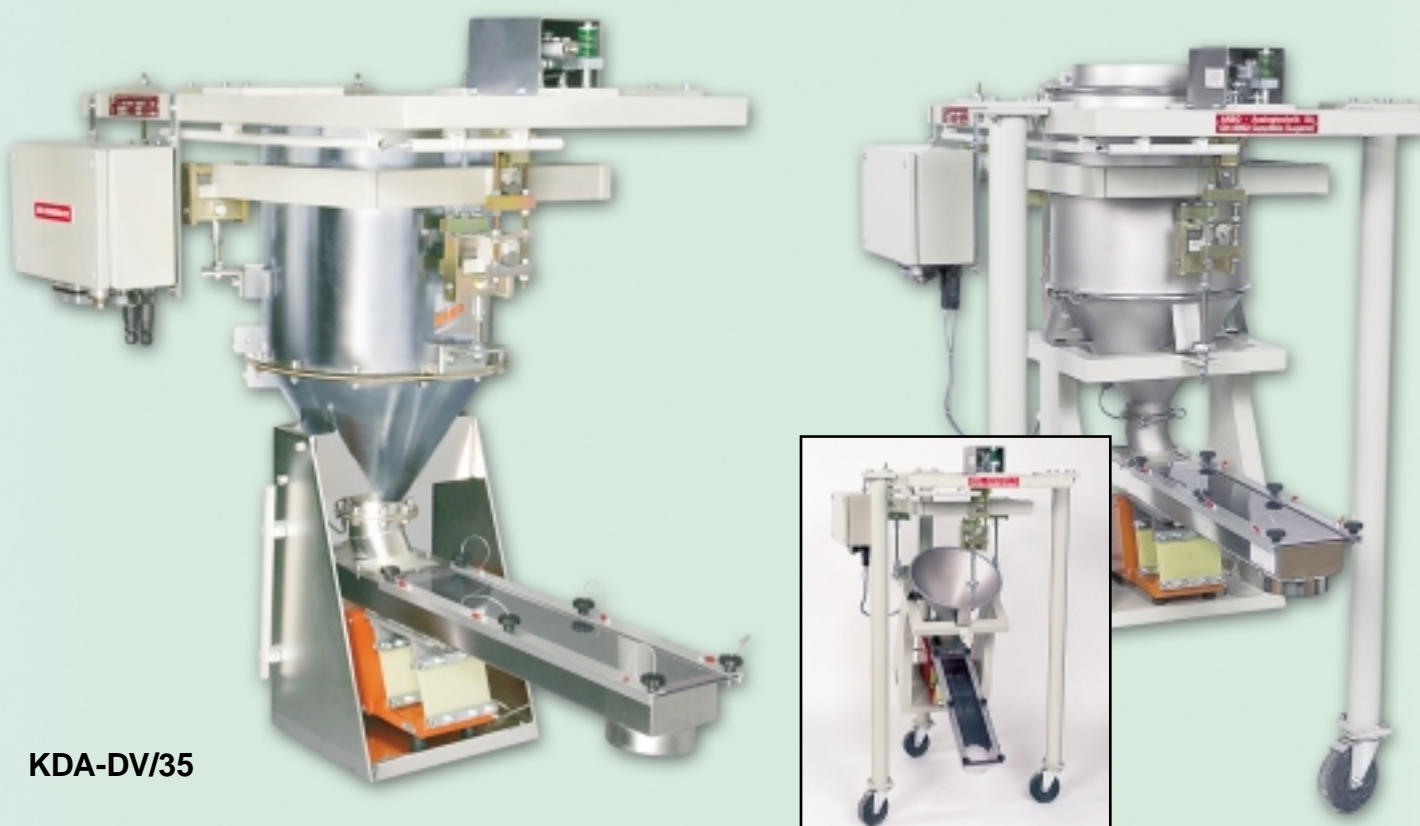


KDA-VV/220
Very large capacity vibratory tray feeder.

For feed rates please consult the table on the back page.

LOSS-IN-WEIGHT VIBRATORY TRAY FEEDERS

These feeders are usually mounted hanging from a mezzanine, with excellent access all around. Static weigh frames with 3 load cells are available for all sizes (see model KDA-3DV/100).



KDA-DV/35

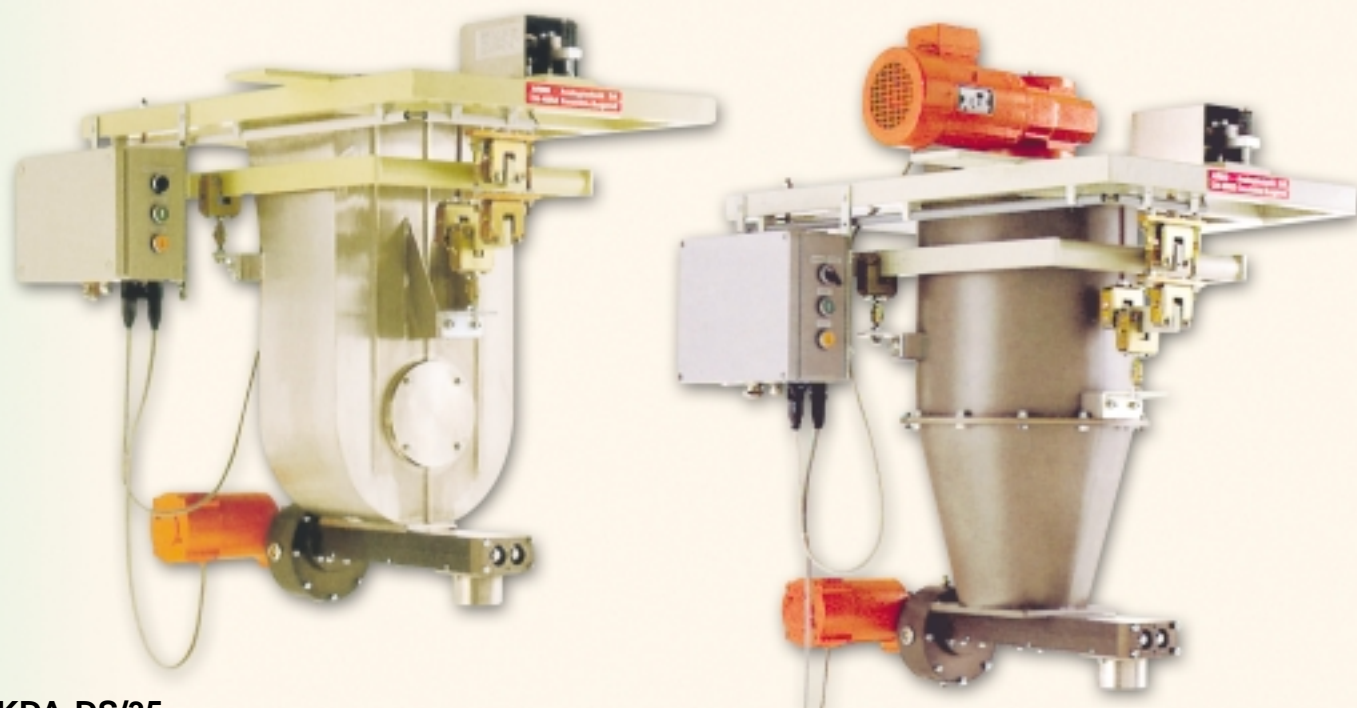
KDA-DV/35QC



KDA-3DV/100

KDA-DV/300

LOSS-IN-WEIGHT SINGLE OR TWIN SCREW FEEDERS



KDA-DS/35
With horizontal agitator

KDA-DS/35
With vertical agitator



KDA-DS/100
Ideal for TiO_2 and similar, hard to feed materials.

KDA-DS/300
The largest twin screw feeder in the world with 4" DIA twin concave screws.