



New Revolution Mid-Gate

The Revolution Mid-Gate brings the benefits of our full-size Revolution Gate to small and medium capacity lines and tight equipment layouts:

1. Accurate proportional feed.
2. Closes completely without product spillage or breakage.
3. Quick response.
4. Safe for operators – no pinch points.
5. Eliminates product leakage and cross-contamination.
6. Can be located anywhere on the conveyor pan, not just at the end.
7. Two Mid Gates can be used with one FastBack drive and pan.

Benefits

- Does not leak or dribble product when closed.
- Proportional feed from full-open to full-close and all positions in between.
- Ultra-quick response; open to close in less than 1.5 seconds.
- Does not break product when opening or closing.
- Minimal drop height to reduce breakage.
- Servo control accuracy – no cable position sensor.
- Opens and closes easily for cleaning
- Motor disengages when the cover opens providing a safe work environment.
- Only three removable parts - Easy to clean and maintain
- Removing the spool provides access to the motor drive system for ease of maintenance.
- Gates can be located anywhere on pan
- Use up to two Revolution Mid-Gates per FastBack drive and pan.

Application & Retrofit-ability

- Fantastic for small and medium capacity distribution systems.
- Can be single lane or dual lane distribution systems with gates accessed from opposite sides.
- A new pan can be used with an existing FastBack drive, to retrofit this gate design to any currently operating FastBack 260E drive.

Capability/Operating Principles

- The maximum cross sectional area of the Mid -Rev Gate pan is 88 square inches (0.06 m²); therefore the maximum capacity at various product bulk densities and travel rates are: 4.0 lbs/ft³ (65g/l) at 30 ft/min (9m/min) = 4400lbs/hr (2000kg/hr) or 10lbs/ft³ (160g/l) at 30ft/min(9 m/min) = 11,000 lbs/hr (5000 kg/hr)
- Two Revolution Mid-Gates per FastBack drive
- Servo Drive

Limitations

- Not suited for high volume lines – see throughputs above

Technical Specifications

- 48V servo motor
- 1.5 Sec – open/close time
- 1,100 ft³/hr (31 m³/hr) max capacity
- Weight per gate section : 106 lbs. (48kg)
- Length of gate: 29 in.(735 mm)
- Cross section of gate : 15 in (380mm)

FAQ

Q: How many Mid-Gates can be put on a single FastBack drive?

A: On normal center lines for weighers up to 3.5m, install two(2) Mid-Gates per FastBack drive – see attached layouts.

Q: What material are the covers made from:

A: The covers are an integral part of the structure and are made from special urethane such as is used on the current Revolution Gate.

Q: Can a Fastback drive have both a Rev Gate and Rev Mid-gates ?

A: No. The Rev gate pan is an 18" (457 mm) diameter round pan . The new Mid-Gate uses a 15" (380 mm) diameter round pan. In this situation we can simply use two Rev Mid-Gates.

Q: Does the Rev Mid-gate use an inverter?

A: No, Rev Mid-Gates are servo driven.

Q: Does the Rev Mid-Gate use the position transducer cable?

A: No: The Rev Mid-Gate uses a servo drive with integral position sensor.

Q: How much does the spool weigh ?

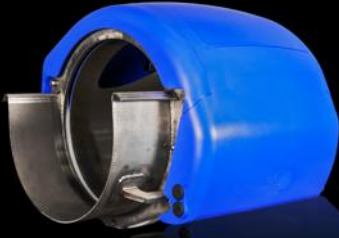
A: 14.5 lbs (6.6 kg)

Q: Is the Mid-Gate approved for chicken and meat applications?

A: It is designed for this type of use, but has not been reviewed by that industry. It will require the (optional) wash down servo motor

Q: How often should the spool be removed and the seals and spool cleaned ?

A: For most dry products we anticipate once per 7 days. For heavily oiled or seasoned product , clean as needed. For wet, IQF or AMI applications, please follow industry guidelines



Side View



Door Opening



Two Lane System

Manufacturing

- Currently manufactured in Galesburg, IL USA

Sanitation

- Spool, wear shoes – No tools removal for sanitation, warm water and mild detergent.
- Frame, housing – Wipe down.
- When using water on the blue parts and wear shoes do not exceed 120°F (48°C).
- Use only mild detergent on the blue parts.
- No direct water spray on the servo drive.

Maintenance Support

- Cleaning on a regular basis.
- Watch for wear on the shoes.

Spare Parts

- 31176482 - SPOOL ASSY, 400MM MID-REV, OVERMOLD, RH
- 31166374 - SPOOL ASSY, 400MM MID-REV, OVERMOLD, LH
- 31169768 - WEAR SHOE ASSY, MID-REV GATE
- 20584011 - CAM FOLLOWER, 2", SST, INT#IT-0178A-1013
- 31172565 - GEAR SPUR, 18T, 6DP, TAPER LOCK, NYLON
- 20583954 - DRIVE SYSTEM, MIDGATE, OCTL#K0001100
- 20584057 - CABLE, POWER, 16/4, TPE, IGUS#CF35-15-04
- 20584262 - CABLE, CAT5E, 10FT, CONT.FLEX, IGUS#D543088

Warranty Information

- 1 Year warranty

NEW PRODUCT DRAWINGS

- ELD blocks available 2nd Qtr 2014

