

# POWER FACE DIVERTER

Baggage Handling System Design, Engineering, Manufacturing and Installation

G&T's power face diverter is an industry proven baggage sorting solution that meets a wide range of airport demands.



#### Introduction

Recognizing a need to divert baggage to EDS screening lines and maintain efficient bag orientation, G&T enhanced its tried and true, industry-approved Sortation Pusher to develop the G&T Power Face Diverter.

Because the backbone of the G&T Power Face Diverter is built on proven technology, airports around the world can rest assured that the same high-level of performance, long life, and ease of maintenance will be delivered with each unit supplied in their new baggage handling system.

Further, because the G&T Power Face Diverter is built on the same heavy-duty frame as the G&T and BAE Pushers, an immediate retrofit can be made to divert baggage with a lighter touch.

#### **Product Description**

The G&T Power Face Diverter is a motorized baggage sorting device designed for use in any pushing or diverting application where more precise control of a power face diverter arm is required. It is designed with the same superior quality, reliability, rugged durability and high capacity as the G&T Sortation Pusher and the BAE Super Pusher.

In addition, G&T's exclusive drive geometry makes it quiet, exceptionally rigid and vibration resistant. The physical size, shape and mounting footprint allow it to be used in new applications as well as an upgrade to an existing pusher line with minor modification to the existing conveyors.

#### **Housing and Diverter Arm**

The housing is constructed of hot-rolled steel with a framework of .25 in. hot-rolled steel angle. The diverter arm is aluminum construction with a driven laced power face belt that allows for efficient set-up, adjustment and maintenance.

#### **Drive Assemblies**

There are separate drive assemblies for the diverting arm motion and the power face belt allowing for independent adjustment of the arm motion and belt speed. The G&T Power Face Diverter offers a wide range of throughput, belt speed and bag spacing. In addition, being a single arm design, it eliminates the pinch points and necessity for critical timing inherent in a dual-paddle design.

#### **Electrical Controls**

Each unit includes VFD motor controls for belt motor speed control, which enable it to be easily integrated into any sortation line. The unit is completely pre-wired and UL labeled in the factory.

#### Maintenance

Maintenance is accomplished from the back of the unit allowing the main-line to operate while adjustments are made. This is a distinct advantage over competitive units which require main-line shut down to perform maintenance. Maintenance is simplified with less moving parts and simple construction.

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## **Technical Specifications and General Descriptions**

Characteristics	
Width (Overall)	29.75 in.
Length (Overall)	72 in.
Height	30 in. (with 21 in. sideguards)
Weight	1200 lbs.
Housing Material	Hot-rolled steel, side plates are 3/16", paddle mount plate is 1/4", reducer mount plate is 3/8" (with .25 in. x 2 in. x 2 in. hot-rolled steel angle framework)
Drive Motor(s)	SEW 2HP, 230/460VAS, 3PH
Drive Reducer Type	SEW FT47 Hollow shaft Reducer
Paddle Belt Drive Gearmotor	SEW Gearmotor, ¾ HP, 230/VAC, 3PH, Class H, Inverter/Vector Duty
Diverter Arm Height	12 in. to top of PF Belt
Diverter Arm Length	58 in. center to center on drive and idler pulleys
Diverter Arm Material	Welded aluminum construction with precision machined pulleys and self-aligning bearings
Power Face Belt	Self-aligning; laced TMIPH135-LR
Diverter Arm Stroke	39 in. reach @ 45 degree extension
Max Sort Rate	40 to 42 bags per minute @ 300 FPM
Max Throughput	60 bags per minute @ 390 FPM in extended position
Sort Capacity	Baggage conveyed on 39 in. conveyor, can be modified to support other widths
Maintenance Distance	12 in. back and side clearance
Min. Bed Height	6 in.
Min. Clearance Between Inline Units (Multiple Sort Line)	80 in. from end of one PFD to the start of the next
Min. Parallel Transfer Elevation Drop	4 in.
Min. 45 Degree Transfer Elevation Drop	0 in. to 2 in. drop
Min. Perpendicular Transfer Elevation Drop	0 in. drop, sideguard has to be extended to meet paddle
Min. Take away Conveyor Speed	Must be equal to or be greater than the main-line speed where PFD is mounted
Parallel Transfer Plate Width	7 in. to 12 in. is preferred
Recommended Conveyor Bed Length	99.5 in.
Min. Distance from a Power Turn	27.5 in.

### **Features and Benefits**

- Ability To Intercept Bag In Motion Independently Controlled Belt Driven Power Face and Divert Motors
- Direct Fit Pusher Retrofit Application Common Components Easily Maintained and Maintenanced
- Ease of Adjustment



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