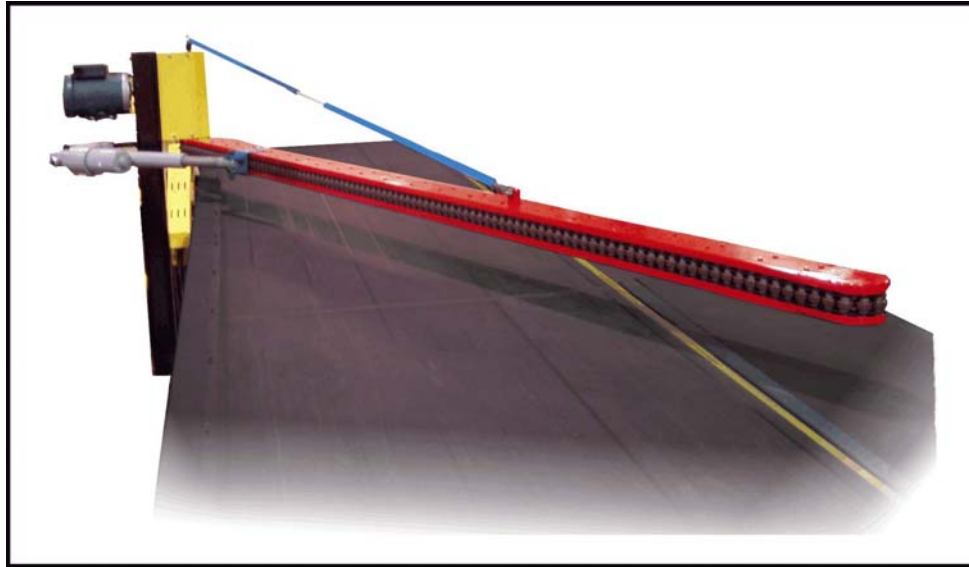


# PFD-S

POWERED FACE DIVERTERS



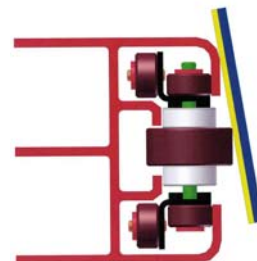
PERFORMANCE • SIMPLICITY • RELIABILITY



## Portec PFD Technology

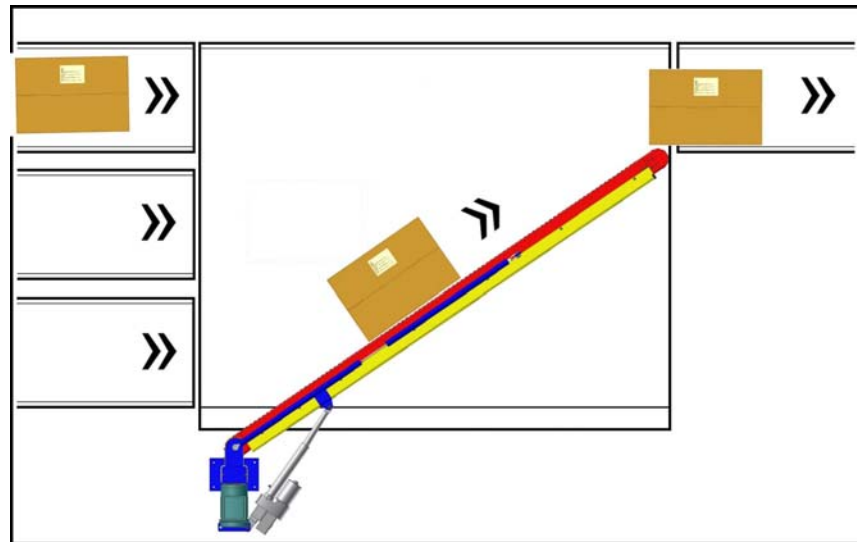
Portec introduces a new concept in powered face diverting. A Straight Powered Face Diverter (PFD-S) extends to combine multiple product flows. The Portec PFD-S presents the product outflow to the adjoining takeaway conveyor in perfect alignment. The Portec PFD-S with an actuator retracts to allow straight product flow. The cantilever design can easily be added to an existing system. The powered accumulation chain on the diverter face is low friction for gentle product handling. The speed multiplier design allows the product to move 2.5 times faster than the chain for quiet and reliable operation, even at high product speeds. The Portec PFD-S simplifies conveyor system layouts for better throughput.

- **Powered accumulating face**
- **Perfect product alignment**
- **Retractable or fixed arm**
- **Reliable chain drive**
- **Easy installation**
- **High throughput operations**
- **Cantilever design for arms up to 10' (3048 mm) length**



Cross-section of PFD arm against a 9° tapered tote

## Powered Face Diverter Technology



Merge multiple  
lines to one

Portec PFD-S mounted above a Portec Belt Merge®

## Standard Features

- **Powered Face Chain** Tsubaki Double Plus® accumulation chain with alignment wheels and premium bearings.
- **Conveying speed range** The standard drive unit is capable of powered face speeds of 60-2000 fpm (.3-11m/s) using an AC inverter motor controller. The chain speed multiplier factor of the Double Plus chain means that the product speed is 2.5 times faster than the chain speed. The diverter face speed does not have to perfectly match the conveying system speed because of the accumulation feature of the chain.
- **Motor** 1 hp Continuous Constant Torque Inverter Duty Vector Motor; WC143TC TENV frame; 230/460v 3ph/60hz (Call for 50 hz motors)
- **Gear reducer** Boston Gear Right-90 Series; 2:1 ratio
- **Arm dimensions** Lengths are available from 36-240" (915-6096 mm). Arm lengths up to 120" (3048 mm) do not need additional support. With prior engineering approval, unsupported arms up to 240" (6096 mm) are available.
- **Height** The standard support pedestal is available for heights from 6-72" (150-1830 mm).
- **Installation** The Portec PFD-S diverter pedestal has a 8"x12" (203 x 305 mm) base plate, that is anchored to the floor. The arm may be mounted with the wheels approximately 2.5" above the conveying surface.
- **Actuators** Optional electro-mechanical (11-15 sec. cycle time) or pneumatic (.4 sec cycle time) actuators are available. A fixed arm is standard.
- **Product Types** The PFD-S is capable of diverting rigid or semi-rigid products with a vertical side or slightly tapered side of at least 3" (75 mm) high. Flat envelopes or bags are not generally good applications for the PFD-S. Tote boxes with a 5 degree tapered side will have a .08" (2 mm) clearance from the aluminum arm.