



P&F160

POWER & FREE FLOOR CONVEYOR

The new P&F160 floor conveyor is based on exactly the same profile and drive system technology as the 140 system conveyors. This heavy duty conveyor is a self accumulating Power & Free system, setting a new benchmark when it comes to handling the largest, and heaviest, unbalanced jigs.

Developed for applications where the need for Power & Free technology is required in sections such as storage areas, ovens etc. where space is at a premium, but where general process areas only require fixed pitch operation. Supreme accuracy in guiding is secured by the 4 horizontal guide bearings as well as the fully adjustable "Free" track. Compared to traditional skid systems or roller conveyors, the P&FI60 operates with high reliability and smoothness. This is due to the limited use of drive units and sensors, requiring a minimum of effort and interference from the control system.

System advantages:

- Possibility to accumulate in line
- No need for expensive control systems for accumulation sections due to self accumulating design
- Operate at different process speeds on the same line
- Low maintenance less moving sensible parts require less attention
- Full flexibility complete freedom during the design stage as well as the advantages from traditional Power & Free systems (switching gates, accumulation zones etc.)



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TECHNICAL SPECIFICATIONS

The Power & Free floor conveyor, Type P&F160, consists of three CALDAN profiles. In the lower "Power" profile the cardan chain is driven by one or more drive units.

In the upper "Free" profiles the purpose designed trolley and wagon sets are driven by power chain carriers, which engages the in-wards pivotal links underneath the trolley.

The trolley body is made of 6 mm. laser cut and folded plates and is equipped with 4 sealed load carrying wheels and 6 sealed horizontal wheels for side guiding. The power chain carrier pitch is designed according to customer specification. Each trolley and waggon set can be separated from the power chain and accumulated in line.

The accumulation is carried out by lowering the power chain at the beginning of the accumulation zone.

Conveyance with loads in rise and fall sections is possible due to a uniquely designed link between the chain carriers and the trolley.

Chain carrier pitch: 7.08 / 10.62 / 11.81 inches (180 / 270 / 300 mm)

Max. temperature (surrounding): 482 °F

Max. load per 4-wheeled trolley: 551 Lbs (250 kg)

Max. load per wagon (load bar with two trolleys): | | 02 Lbs (500 kg)

Standard length, straight profile: 118.11 inches (3.000 mm) **Trolley bearings:** Closed and greased for low maintenance

Horizontal curves: Degree: 90° / 45° / 30° / 15° Radius: Min. 49.21 inches (1.250 mm) and larger

Vertical curves: Degree (depending on work-load): 30° / 15° Radius: 98.43 (59) inches (2.500 (1.500) mm)

Special dimensions on request.

Drive unit: Straight double sided version with caterpillar chain drives

Tension unit: Manual and pneumatic version Lubrication: Pneumatic fog or point lubrication automatic

Accumulation features: In line or 45°

Special features: Turning stations, drop sections, switching gates, transfer units and chain switches



