



P&FI40

POWER & FREE FLOOR CONVEYOR

The new P&FI40 floor conveyor is a heavy-duty power & free floor conveyor offering first class reliability for next generation demands. The P&FI40 is designed to meet the expectations of international clients, setting a new benchmark when it comes to handling the largest, and heaviest, unbalanced jigs. 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&FI40 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:

- Renowned and industry-proven CALDAN build quality ensuring high reliability rates.
- 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
- Simplified plant design - compact profile design minimizes restriction in airflow in spray booths, flash offs and ovens.
- Goose neck design - unique CALDAN design scheme, which prevents wash fluids from entering the conveyor system.
- Less cleaning - a compact design minimizes overspray dust settling on the conveyor thereby stopping dust from travelling through the entire system.





P&F140

TECHNICAL SPECIFICATIONS

The Power & Free floor conveyor, Type P&F140, 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.

The trolley body is made of 6 mm. laser cut and folded plates, and is equipped with 4 sealed load carrying wheels and 4 sealed horizontal wheels for side guiding.

Both the power chain carrier pitch and the accumulation distance are designed according to customer specification. Each trolley and wagon set can be separated from the power chain and accumulated in line, 45° or 90° zones. When reaching a closed accumulation stop or when reaching the tail of the previous trolley, the accumulation lever is lowered and the trolley pawl units are lifted.

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

Chain carrier pitch:
180 / 270 / 300 mm

Max. temperature (surrounding):
250° C

Max. load per 4-wheeled trolley:
250 kg

**Max. load per wagon
(load bar with two trolleys):**
500 kg

Standard length, straight profile:
3.000 mm

Trolley bearings:
Closed and greased for low maintenance

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

Vertical curves:
Degree (depending on work-load):
30° / 15°
Radius: 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, 45 or 90°

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