



# P&F400

#### **POWER & FREE OVERHEAD CONVEYOR**

The flexible Power & Free system with a load capacity up to 3.500 kg.

Simple and reliable accumulation of wagons in in line, 45° and in 90° buffer zones.

Smooth trolley transfer from one conveyor circuit to another minimizes the use of transfer units, thus lowering systems costs.

Unique trolley- and accumulation stop design ensures an instant and a highly reliable separation of wagons in the accumulating zones.

The use of modular components offers total flexibility and liberty in configuring the conveyor circuit layout.

Consequent use of tested quality components giving confidence in operation even in very harsh working environments.

Noiseless accumulation by means of non friction disengagement of the trolleys from the conveyor chain drive.







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#### **TECHNICAL SPECIFICATIONS**

The Power & Free conveyor type P&F400 consists of two CALDAN straight profiles. In the upper "Power" profile a cardan chain is driven by one or more drive units.

In the underlying "Free" profile the wagons are driven by power chain carriers, via pivotal pawls attached to the front and back of the trolley. Both the chain carrier pitch and the accumulation distance is designed according to customer request.

The wagons can, according to handling requirement, be separated and accumulated either in line, or at 45° or 90° within accumulation zones. When routed into a closed accumulation stop, or when reaching the "tail" of the previous trolley, the trolley's accumulation lever is lifted and the pawl units are lowered. Hereby the trolley is disengaged from the chain carriers.

Conveyance with loads in up to 45° rise and fall sections - depending on the load - is possible due to a uniquely constructed link between the chain carriers and the trolley pawls.

### Chain carrier pitch:

180 / 270 mm

Max. temperature (surrounding): 250° C

Max. load per trolley (4-wheeled):

Max. load per wagon:

(load bar with 2/4 or 8 trolleys): 1.000 / 2.000 / 3.500 kg

Standard length, straight profile: 3.000 mm

Trolley wheels / chain bearings:

Open or sealed and greased version

## Horizontal curves:

Degree: 90° / 45° / 30° / 15° Radius: 700 / 1.000 mm

### Vertical curves:

Degree (depending on work-load): 15° / 30° / 45° Radius: 2.500 mm

## Drive unit:

Straight version with double sided caterpillar drive or 90° version with driving wheel. Gear motor with fixed or variable speed

#### Tension unit:

Manual or pneumatic / weight-loaded

## Switching gate:

Manual, pneumatic or electrical version

### Vertical drop- and lift section:

Available in guided / floor mounted version or unguided and suspended from the ceiling

### Accumulating stop:

Pneumatic or electrical version

#### Pneumatic lubrication:

Semi- or fully automatic version. Point- or fog lubrication of the cardan chain and / or the trolleys

## Special designs:

E.g. turning stations

## Accumulation possibilities:

Automatic. In-line, 90° and 45°