

DFC 330 balancer



A FlexLink standard solution

5070-2

High capacity balancing of product flow



The FlexLink balancer will increase the efficiency and uptime of the production line. It consists of 3 in-feed metering choke conveyors that feed a belt that has a series of diverter blades to direct products to their appropriate discharge lanes.

This unit provides the solution of dealing with a 3-lane log saw operating on 3 single roll wrappers. It balances 3 even in-feed lanes with 3 uneven discharge lanes, enabling production to continue on available wrappers even if one or two of the wrappers stop. It can also operate with reverse conditions, i.e. uneven in-feed and even out-feed (wrappers to bundlers/casepackers).

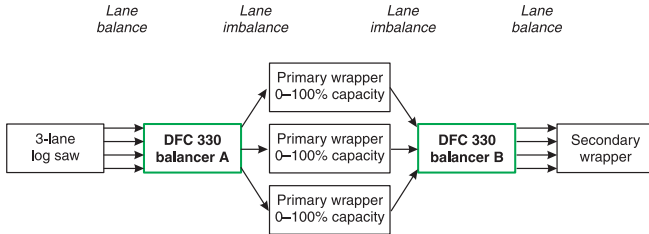
Standard features

- **Stand-alone unit:** The balancer does not depend on gaps in the incoming product flow or synchronisation signals from other machines (e.g. the saw) and can therefore be placed anywhere along the line. Continuous counting of rolls passing ensures lane balance of incoming flow
- **Continuous counting of rolls passing ensures lane balance of incoming or discharge flow**
- **Minimum backlog requirements**
- **Flexible operation:** Software setting of the number of discharge lanes.
- **Smooth operation:** Inverter controlled in-feed metering choke lanes ensures reliable and quiet operation.
- **Standardised control system:** The machine control system has spare capacity that can be used to control other equipment, e.g. infeed and discharge conveyors.
- **Quickly adjustable:** Quick release handles and hand wheels are used for speedy changeovers.
- **Easy to operate, low maintenance and service-friendly:** Standardised, modular design. Easily accessible for inspection and service.
- **Minimum floorspace requirements**
- **UL or CE certified**

DFC 330 balancer

General description

The following example shows the two most common applications of the balancer, namely to create an unbalanced output from a balanced input and to create a balanced output from an unbalanced input.



At every instant the three primary wrappers run with different speeds, ranging from stopped to 100% of its capacity, as indicated in the figure. The purpose of balancer A is therefore to at all times supply each of the wrappers with the amount of rolls required, i.e. to cause lane imbalance from lane balance.

Balancer B operates in reverse mode. It takes the unbalanced flow from the wrappers and redirects the flow, so that each of the four lanes to the secondary wrapper/bagger will carry the same amount of products. This will eliminate frequent stops due to improper lane balance.

Included in delivery

- SEW gear motors with inverters
- SICK photo eyes
- SKF bearings and actuators
- Siemens or Allen-Bradley control system
- SMC or Festo pneumatic system
- SMC or Festo pneumatic rotary actuators
- Fully enclosed according to CE regulations
- Steel ridged framing
- Habasit conveyor belts

Other motor types, belting types, product dimensions etc. are available on request.

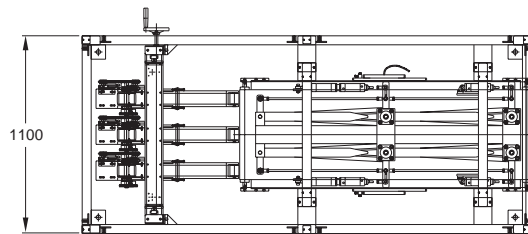
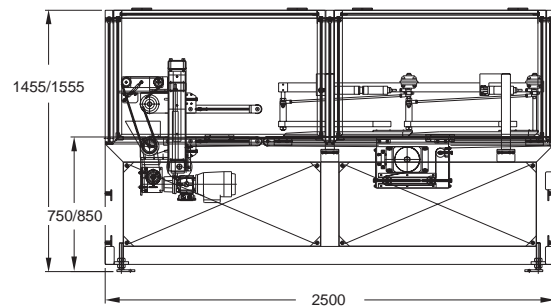
Technical specifications

Capacity 3:3.....	900 BRT/min
3:2.....	400 BRT/min
3:1.....	200 BRT/min
Conveyor height.....	750–850 mm
Product length.....	90–250 mm
Product diameter.....	Ø90–150 mm

Installation requirements

- Power supply: 3-phase 380/460 VAC, 50/60 Hz
- Optional control interface with environment:
 - Analogue speed control, 0–10 V
 - Potential free contacts
- Pressurised air system, min. 90 psi (6 bar)

Dimensions



FlexLink is a leading supplier of automation solutions for manufacturing and assembly processes. The Paper Converting Centre of Excellence is a unit within FlexLink with specialists on product handling equipment for the tissue paper industry. We deliver systems for cost-efficient flow management at all stages of the converting operation, from the core to the finished product. Our extensive offer ranges from component deliveries to turn-key installations and pre-assembled modular units for the most common requirements.