Support and guiding rollers are used in parcel sorting plants and baggage handling systems. Faigle has developed rollers which are specially optimised for these applications. A sorting plant chassis is usually designed with 2 support and 2 lateral guide rollers. The rollers must meet very stringent requirements. Low rolling resistance in operation and low start-up resistance after long periods of standstill are key energy efficiency features of the plant. High concentricity minimises noise and vibration in sorting plants. In some cases, one of the requirements is electrical conductivity. The rollers must be resistant to impacts, remain wear-free and function reliably for several years.

A support and guiding roller can have a 1- or 2-component design. On a 1-component roller, the tire made of PAS-PU H is fitted directly onto a ball bearing. A 2-component roller consists of a polyamide hub and a tire made of PAS-PU H. The ball bearing is firmly cast in the hub. This design is preferred for larger diameters or when the roller is exposed to high axial forces. All Faigle support and guiding rollers feature high damping properties, high abrasion resistance, low start-up torque, low rolling resistance and excellent concentricity due to the ground running surface. PAS-PU H is resistant to hydrolysis which is the feared decomposition of plastic caused by humidity. All the materials used can be made antistatic or electrically conducting.
SUPPORT AND GUIDING ROLLERS

SPECIFICATIONS

- D 80 – 120 mm
- d 12 – 20 mm
- B 20 – 35 mm
- b 10 – 16 mm
- Tire hardness 75 – 95 Sh A or 54 – 65 Sh D
- Load-bearing capacity 300 – 2,000 N
- Speed 0 – 4 m/s

CUSTOMER BENEFITS

- Longer service life due to very high resistance to wear
- No decomposition of rollers due to hydrolysis
- Low start-up resistance due to low flattening of rollers after long periods of standstill
- Noise and vibration in the system are reduced by excellent concentricity and good damping properties
- Cost-efficient production using injection moulding