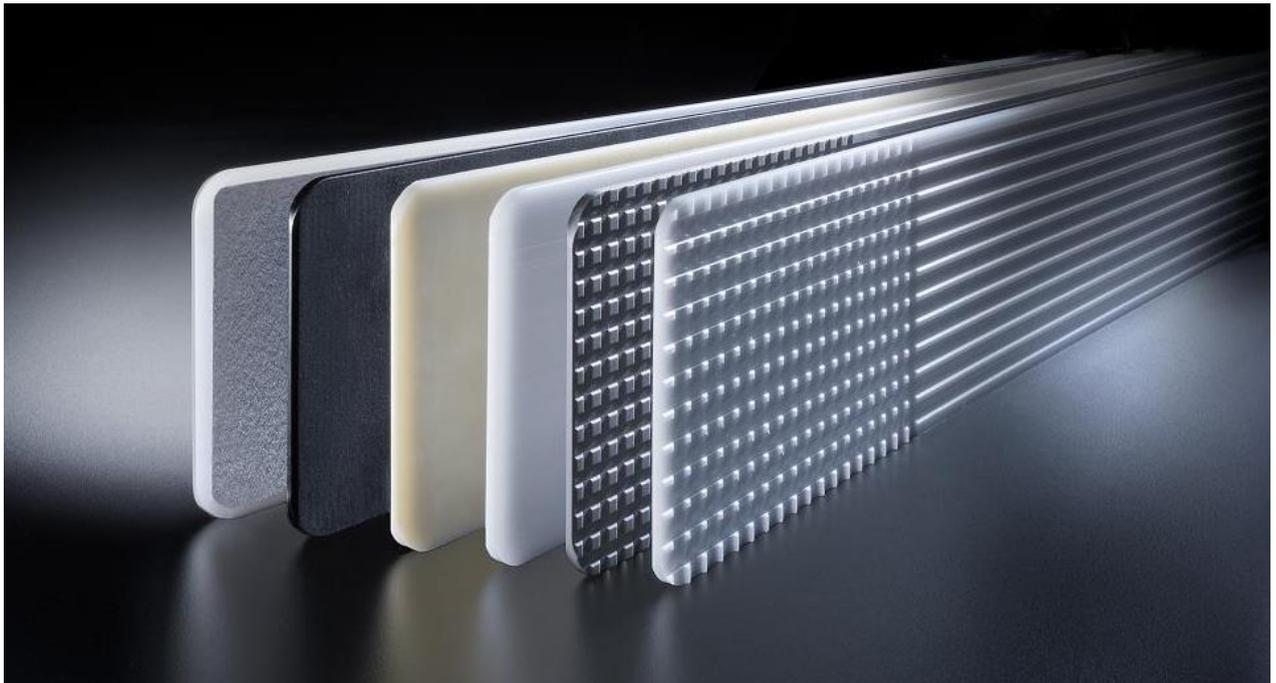


Feed plate – fact sheet



Content

1	Introduction	2
2	Characteristics	2
2.1	Material / Color	2
2.2	Structure	3
3	Feed plate catalog	3

1 Introduction

A feed plate, also referred to as feed surface, is the exchangeable bottom of the anyfeeder's feeding channel. This plastic plate is a wearing part and has to fulfill 3 different functionalities:

1. Light-diffuser for the backlight, if a backlight is installed
2. Create a good contrast between parts and background in toplight-applications
3. Stop the parts from moving after a feeder-motion so that the image acquisition can be triggered as quickly as possible

So, these points need to be considered for each part to be processed on the feeder individually and with respect to your application, in order to select a suitable feed plate.

2 Characteristics

A feed plate is specified by several characteristics (and identified by the explicit part number):

- Material
- Color
- Structure
- Finish

2.1 Material / Color

For Backlight-applications the feed plate must be translucent so that the light from behind can be seen by the camera and the shape of the part that blocks the light appears dark. The POM white material is translucent for light as well as the POM-ESD material, which is beige in color.

For toplight-applications with parts that appear bright in the camera image and therefore a dark background is desired, a black feed plate is usually the best choice.

A gray colored feed plate is mostly used for reflective parts that produce a camera image where some areas within the part are bright and some areas are dark.

The following materials are available:

- POM white (translucent)
- POM black (opaque)
- PVC gray (opaque)
- POM-ESD beige (ESD*, translucent)
- POM-ELS black (ESD*, opaque)

*) ESD: Plastics with electrically conductive properties that can dissipate electrostatic charges and by that improve the feeding behavior of certain parts.

2.2 Structure

A distinct surface structure (other than flat) can be necessary to stop rolling or wobbling parts quickly after a feeder-motion has terminated.

Flat (no structure)

Flat feed plates are used when the parts settle quickly enough by itself after a feeding (shaking-) action. This usually applies to all parts that are not round (not a disc or a cylinder).

Grooves

Feed plates with longitudinal grooves are used when the parts are round like a disc and tend to wobble after a feeding action. On a grooved surface the wobbling stops much quicker than on a flat surface.

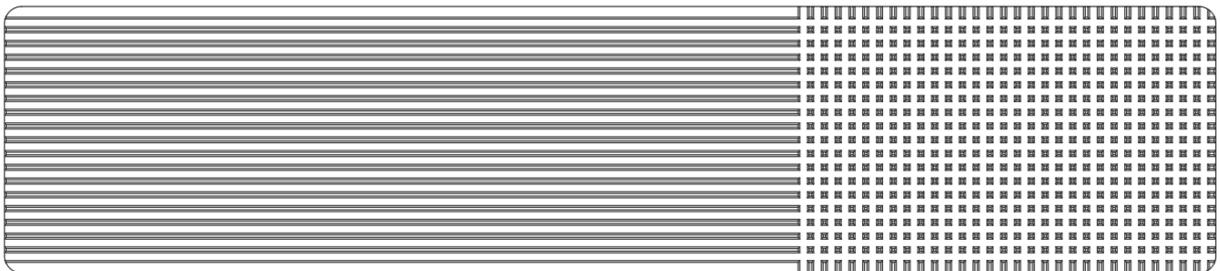
The following picture illustrates a feed plate with grooves:



Bumps

Feed plates with bumps are used with cylindrical parts that roll straight on a flat surface. The bumps result from grooves in longitudinal and crosswise direction. The bumps are only present in the working area because they would interfere the purge process at rear.

The following picture illustrates a feed plate with bumps:



All structures (grooves and bumps) are available in 3 different spacing:

- 'fine'
- 'medium'
- 'coarse'

Which type to use is strongly depending on the size and specific geometry of the parts and cannot generally be described. If you need help we will gladly assist you with the decision.

3 Feed plate catalog

For detailed ordering information and structure dimensions of all available feed plates for the individual anyfeeder models please see our comprehensive feed plate catalogue.