

Strip guiding in front of a side trimmer with three-roll steering unit type SRHT

Application:

In the case of high strip tensions and/or thick strip it is recommended that a strip guiding system with a three-roll steering unit type SRHT is used for correcting strip travel without deflection of the strip. Achieving a good steering effect necessitates sufficient friction between strip and rolls. The degree of friction is determined by the roll diameter and the dive in position of the mid-roll.

Functional principle:

The swivelling frame with the three rolls is guided by two steering levers so that a suitable relationship between the angle formed between the strip and the roll axis (I portion) and lateral displacement of the strip (P portion) is achieved.

In addition to obtaining the exact position of the strip at the exit, a centring effect is also achieved at the entry span. The application shown here with a very short entry distance can only be realised in combination with an upstream strip guiding system.

The most stringent requirements concerning exact guiding of the strip are imposed in the area of side trimmers.

On the one hand, the width of the edge to be cut off must be kept as small as possible, and on the other hand, there must be a defined minimum width to prevent the cut edge from tearing off. For exact sensing of the strip position, the high-precision inductive strip centre sensing system type SMI-HE as shown here or the HF alternating light measuring system, impervious to ambient light, is recommended.

