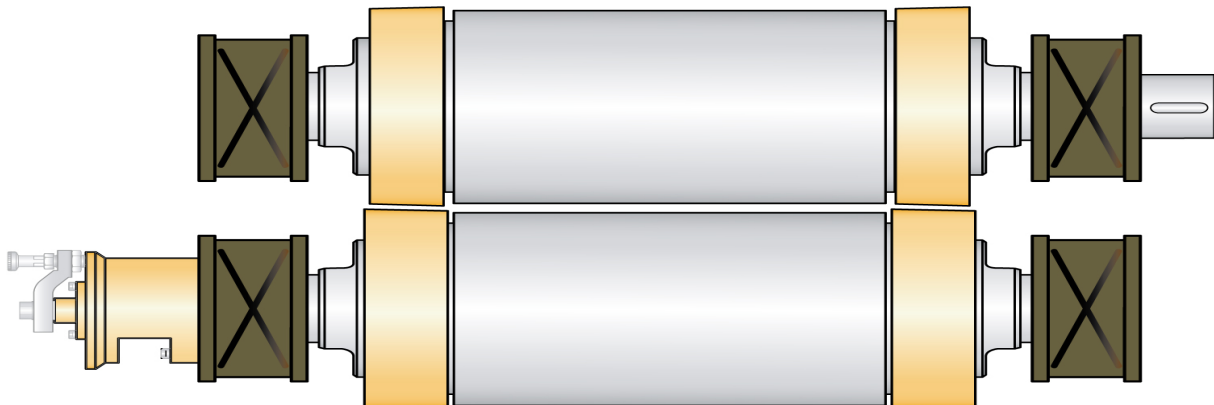


System Description of the UniMaTec Quick Adjustment for Sets of Top to Flat Rolls



The quick adjustment system we offer for sets of top-to-flat rolls is a patented system allowing to modify the required embossing nip within a few seconds. It makes e.g. a switch from 3- to 2-ply material and vice versa possible and allows to make the readjustment generally required.

The system functions with bearing races too, these being not only placed on the embossing roll as in the past, but also on the plain counter-roll. These bearing races have a conical shape at the outer diameter, with the slant of both bearing races of the embossing roll inclined in the same direction. The same goes for the bearing races of the plain counter-roll, but with the slant inclined in the opposite direction in this case. A special adaptation mechanism is now installed on the plain counter-roll, allowing shifting the roll laterally as compared to the embossing roll. A positive or negative adjustment of the embossing nip is achieved by shifting the roll this way.

The gradient of the conical races is very small in order both to eliminate axial forces and to make tiny nip modifications possible.

The adaptation mechanism is operated through an adjusting lever placed on the embossing frame on the operating side. The lever is equipped with a retention pin catching into a graduated disc. One graduation on this graduated disc corresponds to a 3.5- μm nip adjustment. The lever being self-catching, you don't need any tools for the adjustment, e.g. to loose or tighten a screw.

After 10 readjustments, which correspond to a nip adjustment totalling 0.035 mm, the bearing races of the plain roll have to be adjusted. Thanks to a special system this adjustment too is very easy and takes approximately 15 to 20 minutes. Afterwards 10 nip adjustments are possible again.