Web Guiding Fundamentals - Terminal Web Guides

Blog Post

The web at the start and end of your converting line needs to be properly aligned to have a good conversion process and a well wound roll for your customers

It's an advantage to know what you are dealing with when aligning your web as it enters your converting process or is being wound into a processed roll. Here's some information that should be of help to you.

Web guides can be classified by their location on the converting line

There is a terminology for web guides based on their location within the converting line. Web guides that are at the unwind or rewind stands are referred to as Terminal Web Guides. Web guides that are located within the converting line, right before a critical process, are referred to as Intermediate guides.

Terminology to identify terminal web guides

Terminal web guides are used at the entry and exit of the converting machine. They are referred to as **shifting stand, shifting base, shifting base, shifting sidelay, roll positioning stands, uncoil/recoil, payoff and tension reel, unwind guide and rewind guide**. These last two terms are the most commonly used in the converting industry, but it is important to know all the other terms for identifying terminal web guides.

Difference between unwind and rewind web guides

Even though both unwind and rewind guides have the same components, the location of the sensor for edge or contrast guiding will differ. In the case of unwind web guiding systems, the sensor is located on a fixed point on the converting machine or the frame of the fixed frame of the unwind. The reason for this is that at the exit of the unwind stand, you want to position the web based on a fixed reference on the converting line. Your intent is to correct any winding defect on the roll, including misplacement of the roll on the unwind.

Unwind guide system

For the rewind side of the converting line, the sensor must be mounted on the shifting frame of the rewind. In this case, the winding roll chases the position of the web. so it technically is not guiding the web but the shifting stand to correctly position the web on the rewind roll.

Rewind guiding installation

An alternative guiding system for terminal web guides applications

There will be cases where the unwind and/or rewind stand is fixed. In that case the web must be guided to the required position. You have two options, convert your fixed unwind or rewind into a shifting stand, or install an intermediate guide (displacement or steering guide). If there is enough space and the stand is close enough to a critical process in the converting line, you could use a displacement or offset pivot guide, or a steering guide. You would pick the intermediate guide based on the probable entry span length resulting in your process. This is discussed in a future Fundamentals post.

Unwind and rewind guides are discussed in more details in our article "Unwind and Rewind Guides: Design and Installation Considerations"