



Advantages of Electronic Nip Impressions

Most of us know that nip impressions are a very important tool to avoid common problems such as wrinkling caused by an uneven nip of any kind and also an uneven web profile caused by an uneven process nip. Still, nip impressions may be one of the most neglected of converting machine PM's. One reason is that static nip impressions using paper-like products can be a bit time consuming to set up. Another reason is that reading nip impressions and particularly quantifying nip pressure uniformity takes even more time. This is where electronic nip impressions, such as the Sigma-Nip®, have an advantage.

While the setup of both paper-like and electronic nip impressions is roughly similar, primarily just laying down the sensor under the open nip after locking/tagging out the machine, reading and quantifying uniformity of electronic nip impression is much faster. Indeed, readings can be made even before opening

the nip as would be needed for paper-like products. You could, therefore, vary loading cylinder pressures and get many nip profile measurements with a single test setup. Calibration of the sensor at the start of the test and quantification of nip uniformity at the end are both automatic. You get values immediately without the need for a secondary operation such as scanning the light density of the nip impression, transferring the readings to a spreadsheet and then graphing the results. Another advantage of electronic nip impressions are that the sensor can be used over and over again, instead of the single use of paper-like products.

So, while *any* nip impression is better than no nip impression for avoiding some preventable causes of waste, delay and customer complaints, electronic nip impressions provide the much needed pressure values almost automatically.

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