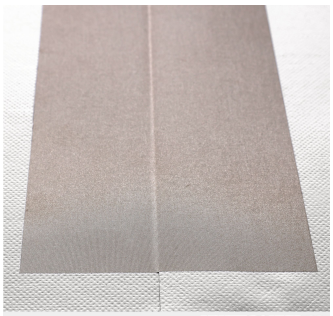
YSHIELD® HNX100 | Shielding tape for web edges | Width 100 mm | 50 meter

Self-adhesive shielding tape for optimizing the shielding effectiveness of overlapping web edges.

YSHIELD® HNX100

The ideal solution for optimized shielding of slits, gaps, holes or overlaps between sheets. Compared to smooth metal tapes made of aluminum or copper, this fabric tape with a rough surface shields much better.

- **Shielding attenuation: 76 dB**
- **Lenght: 50 m**
- **Width 100 mm**
- Thickness 0.11 mm
- For bonding, we recommend our **FVR10** bondig scrapper
- Materials: Polyester, copper, nickel. Backside conductive acrylic glue with high adhesive strength



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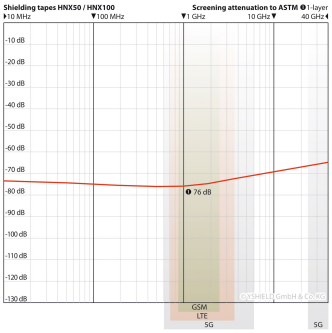

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HELP: Optimize shielding attenuation with shielding tapes

On large surfaces, shielding materials must be overlapped at the edges. Depending on the adhesive and the nature of the material, a small gap is created through which radiation can penetrate. No measures are necessary for simple shielding up to 60 dB. **However, if the very high shielding attenuation of high-end materials such as A300, A190, K150 is to be exploited to the maximum, it is necessary to use a shielding tape for web edges.** Professionals already know this, of course.

Professional EMC laboratories usually use EMC copper tapes with “electrically conductive” adhesive for their measurements. This is because the term “electrically conductive” suggests that the adhesive layer also does not allow any radiation to pass through. However, the adhesive is by no means “electrically conductive”, but only “electrically contactable”. There are a few tiny carbon or metal particles in the adhesive which, under sufficient pressure, make electrical contact between the top and bottom layers, but allow radiation to pass through unhindered.

We have carried out many tests over a long period of time and would like to show you the results using a small series of tests:

1. A190 without overlap. Shielding **112 dB**.
2. A190 two sheets glued overlapping. Shielding **61 dB**.
3. A190 with EMC tape from a well-known manufacturer. Shielding **70 dB**.
4. A190 with commercially available aluminum adhesive tape. Shielding **68 dB**.
5. A190 with our HNX50 shielding tape. Shielding **111 dB**.

Result: Smooth shielding tapes made of copper or aluminum allow the radiation to pass through the adhesive layer with almost no reduction. **With our HNX50 and HNX100 textile shielding tapes, the radiation is greatly impeded by the rough surface as it passes through the adhesive layer.** This can massively increase the shielding attenuation at the edges of level crossings.