

RF4.0

INTELLIGENT STRAIGHTENING DEVICE

Eliminates errors in the profile longitudinal geometry

The specialist for your roll forming technologies

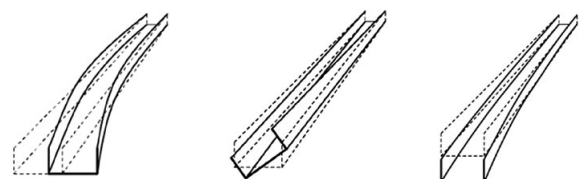
Ever since it was founded in 1949, DREISTERN GmbH & Co. KG has always set exceptional standards in the field of roll forming. We have established ourselves as one of the market leaders worldwide through the application of the very latest technologies in roll forming machines, our comprehensive know-how concerning roll forming units, and our ability to provide complete process integration. More than 2,000 units from DREISTERN are in use, producing more than 8,000 different profiles, more than 40 patents have already been applied for.

We work for companies from these sectors, among others

- Automotive & transport
- Electrical industry
- Construction industry
- Storage & logistics
- Furniture industry
- Roll forming plants

STRAIGHTENING DEVICES ARE ESTABLISHED

Straightening devices have been established in roll forming systems for a long time. Its basic task is compensating any deviations in the longitudinal direction, especially camber, bow and twist.



CAMBER

TWIST

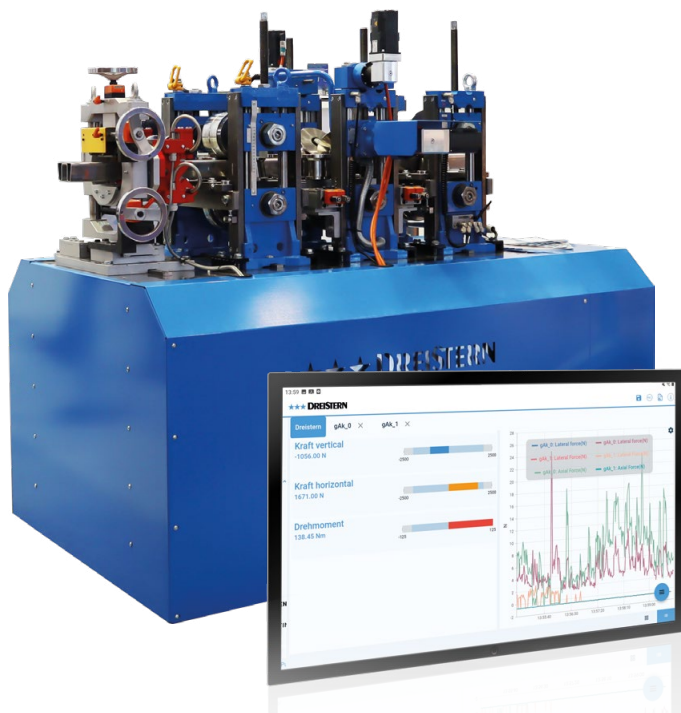
BOW

The cause of these geometry defects are strains in the longitudinal profile direction being distributed irregularly across the cross-section, which „relax“ again after the forming process. To correct these defects, one or more straightening devices are used in roll forming systems, usually at the end of the roll forming line. These stress the profile so that inverse longitudinal strains are applied, which can compensate the deviations caused in the roll forming process.



THE INTELLIGENCE

Sensors are used in the axes of the straightening device, which can detect the acting axial and vertical loads. If the longitudinal geometry changes, these forces will change also. Changing geometries can therefore be detected early. In this case, the force applied by the straightening device can be readjusted in order to guarantee the profile straightness.



NEW

The aim of the new, intelligent straightening device is:

- To identify changes in the process straight away
- To make operating personnel aware of need for action
- To provide information about the cause of the problem and the most effective countermeasure
- To prevent material waste, to increase efficiency and to save resources

THE APP

The sensor values are presented in a specially developed App. Apart from the integrated target range adjustment, it supports the operator by evaluating the sensor signals so that they are transferred into three characteristic signals. These three measured values are connected to the three basic defect types „bow“, „camber“ and „twist“. The information on the App gives the operator a direct hint on the causes of the current defect and guides him through the process optimization.

Benefit from our roll forming expertise

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