

---

## Linear drives by IEF-Werner with metal belt cover: clean room compatible up to class 1

---

Press contact:  
IEF-Werner GmbH  
Stefanie Günter  
Wendelhofstr. 6  
78120 Furtwangen  
Tel. +49 7723/925-118  
Stefanie.Guenter@IEF-Werner.de  
[www.ief.de](http://www.ief.de)

Agency:  
a1kommunikation Schweizer GmbH  
Dr. Matthias Schweizer  
Tel. +49 711/9454161-0  
[info@a1kommunikation.de](mailto:info@a1kommunikation.de)  
[www.a1kommunikation.de](http://www.a1kommunikation.de)

Linear drives by IEF-Werner with metal belt cover:

## Clean room compatible up to class 1

IEF-Werner GmbH has expanded its standard programme to include linear drives with metal belt covers. On the one hand, the metal belt protects against incoming dirt or particles and, on the other hand, prevents the release of particles into the environment of the linear unit. This makes the drives suitable for clean rooms according to ISO 14644 from class 1 to 8. The Fraunhofer Institute for Production Technology and Automation has tested and certified this.

Furtwangen, 07.06.2021 – The cleanliness requirements of linear units have increased significantly in recent years - especially for users in the pharmaceutical and medical technology industries. Here, these components provide parts for the production in an increasingly clean environment or pick them up again for further processing steps. "Depending on the application, we have so far been able to implement cleanroom suitability between ISO class 6 and 8 with our axes," Thomas Hettich, product manager at IEF-Werner GmbH, explains. "In order to improve this significantly, we have equipped selected linear units from our range with a metal band cover in order to be able to map the widest possible range of applications." These are the spindle drive of the profiLINE 70 MB series, the toothed belt drives Module 65/15 MB and 115/42 MB as well as the direct drives euroLINE 140 and 200. The metal belt cover is made of corrosion-resistant steel with a smooth, easy-to-clean surface. It is held in position by means of a magnetic strip and clamped to the end plate or to the deflection heads. The metal belt can be easily replaced without having to dismantle functionally relevant components.

"The cover encapsulates the linear unit. That is why hardly any particles get into the axis nor does it significantly release particles into the environment," Hettich describes. This means that users can now also use these linear drives in clean rooms according to ISO 14644-1 from class 1 to 8 and according to GMP standards for pharmaceutical and medical technology. This has been tested by the Fraunhofer Institute for Manufacturing Engineering and Automation (IPA) and certified in accordance with DIN EN ISO 14644-1.

"The axes are also suitable for painting lines or for dusty ambient conditions. That means in all applications where moving parts need to be covered," Hettich explains.

To enable the user to install more than just individual axes, IEF-Werner has launched the profiLINE 70 MB and the 65/15 MB and 115/42 MB modules at the same time. In this way, individual axes can be combined to form multi-axis systems with metal belt covers.

Depending on the application, all linear units described here are also available with an optional extraction system. The assembly is available with several connection options. "We can, on the one hand, extract particles from the axis with it and, on the other hand, blow fresh air into the axis as an air barrier to prevent dust from entering. This is useful for painting lines, for example," the IEF expert describes. The extraction is easy to handle, requires little power and the user can also use it for a three-axis system.

The profiLINE 70 MB spindle drive achieves cleanroom class 6 without extraction at a speed of 0.2 m/s. With extraction, it meets the requirements for ISO class 1 at the same speed. The Module 115/42 MB and 65/15 MB toothed belt drives, for example, can be used without extraction at a speed of 0.5 m/s up to ISO class 5 - with extraction up to class 1.

The certificate issued by the IPA with a description of the test conditions and the respective axis setup is available at <https://www.ief.de/en/products/components/linear-drives/metal-strip-cover/>

3.774 Characters (incl. blanks)

**Meta-Title:** IEF-Werner offers linear units with metal belt cover up to cleanroom class 1

**Meta-Description:** IEF-Werner's linear axes with metal belt cover are suitable for clean rooms in accordance with ISO 14644 from class 1 to 8. This has now been certified by the Fraunhofer Institute for Manufacturing Engineering and Automation.

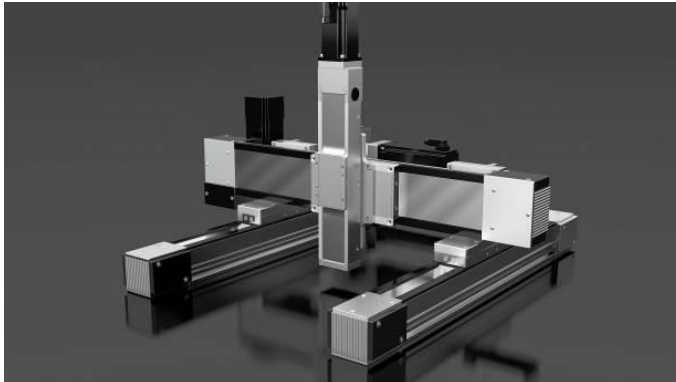
**Keywords:** IEF-Werner; linear drives; metal belt cover; clean rooms; ISO 14644; class 1 to 8. Fraunhofer Institute for Manufacturing Engineering and Automation; profiLINE 70 MB; Module 65/15 MB; Module 115/42 MB; euroLINE 140; euroLINE 200

# Press information

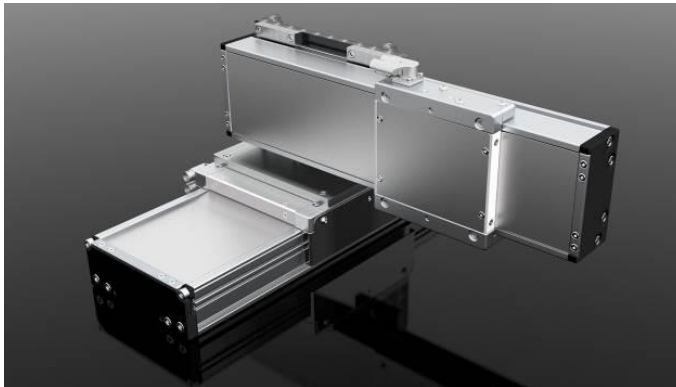
Linear drives with metal belt cover

4 - 5

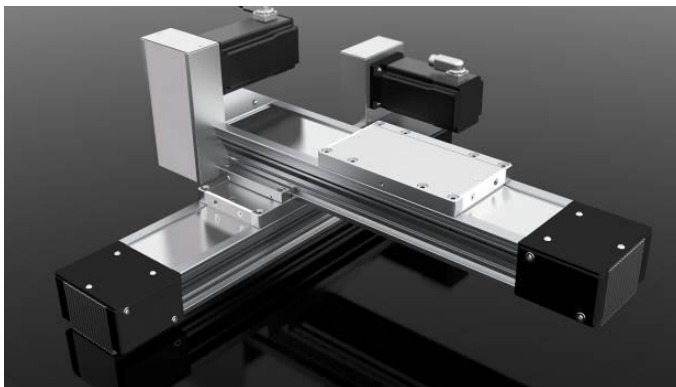
Captions:



Picture 1: The cleanliness requirements suitability of linear units have increased significantly in recent years - especially for users from the pharmaceutical and medical technology industries.



Picture 2: IEF-Werner has equipped the direct drives euroLINE 140 and 200 with a metal belt cover.



Picture 3: The module 115/42 MB in a cross application.

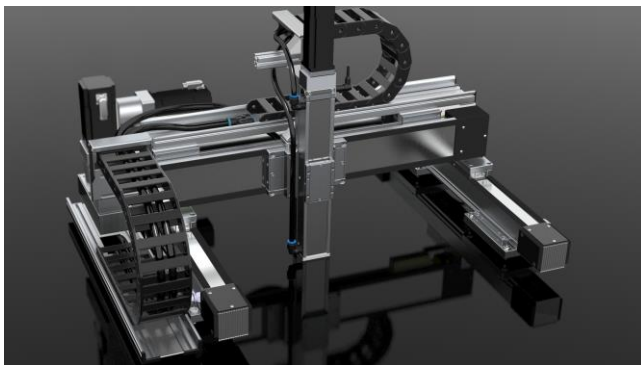
# Press information

Linear drives with metal belt cover

5 - 5



Picture 4: Now available with metal belt cover: the module 115/42 MB, the module 65/15 MB and profiLINE 70 MB.



Picture 5: The suction unit is easy to handle, requires little power and the user can also use it for a three-axis system.

Images: IEF-Werner GmbH