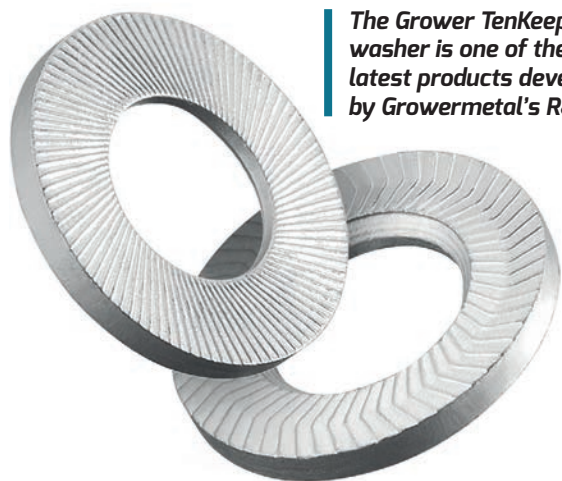




SAFETY, PERFORMANCE & FLEXIBILITY MERGE IN GROWERMETAL'S RAIL RANGE

While the global industry of fasteners is preparing for the comeback of trade fairs, **Growermetal** is seizing the occasion to show its wide range of safety washers for railways, which constitute one of the most significant and challenging sectors for the Italian company...



The Grower TenKeep® washer is one of the latest products developed by Growermetal's R&D lab

The last few years changed the way safety washer manufacturers approach their different array of sectors, redefining new strategies to organise and rethink their modus operandi.

If the pandemic deeply affected the fastener industry, stopping fairs and forcing companies to shift and change adapting to a new kind of normal, since 2020 established businesses like Growermetal have also had the opportunity to improve their organisation and develop their services, in order to suit the needs of the evolving scenario.

Now, with the ending of the state of emergency in Italy and the easing of the pandemic restrictions across the world, Growermetal is ready to return and join in trade fairs. Among the next appointments in the show calendar, participating at InnoTrans is going to be particularly significant.

Under the slogan "The future of mobility in times of climate →



→ change”, the 13th edition of the world’s leading trade fair for transport technology and mobility will take place from 20 to 23 September 2022 on the Berlin Exhibition Grounds. So, the Italian manufacturer will have the chance to show not only its productive model, which is evolving towards greater sustainability, but also its expanded range of safety washers for the rail industry and spring washers for the railway industry.

The Italian company has extensive experience and know-how in the production of railway washers. Between the many solutions offered by the wide portfolio of products of the company, railway track spring washers were developed specifically to secure railroad track assemblies.

Thanks to their unique geometry, Growermetal’s single and double coiled spring washers prevent the rail loosening from railroad ties, withstanding the intense shocks and absorbing the dynamic loads produced by passing trains.

Available in many different sizes, these products are manufactured according to the UIC 864-3, UNI 6217 and NF F 50-001 standards and are broadly used in the railway industry throughout Europe. Also available from Growermetal are the single coil springs in accordance with the standard of the American Railroad Engineering Association (A.R.E.A. 1967) with high spring force for the US and american markets.

Flawless coating with Delta-Protekt KL100

After being qualified by the German railway company Deutsche Bahn for the supply of double washers for railway equipment according to DBS 918 006 for over 20 years, in 2020 the Deutsche Bahn approved the Delta-Protekt® KL100 zinc flake coating from Dörken® on Growermetal’s railway double coiled springs. This zinc flake coating allows the washers to reach outstanding anti-corrosion resistance, with more than 720 hours in neutral salt spray tests, according to ISO 9227.

This surface coating is therefore particularly suitable for applications with high humidity, ensuring the perfect adhesion of the coating during the product lifetime.

Range overview

Providing an extensive variety of products is a key factor for a company in terms of flexibility. That’s why Growermetal has studied its safety washers in different designs, high-quality materials and dimensions, including several surface treatments and coatings to cover a wide range of areas in the railway area.

In addition to the single and double coiled spring washers, the series for railroad tracks includes many other solutions:

- Conical elastic Contact and Sperrkant washers are ideal in fastening connections used in electromechanical applications requiring vibration resistance and parts subject to temperature variation, as they are designed to create an elastic pre-load in a bolted-joint connection, reducing the risk of unwanted loosening.
- Conical elastic washers for bolts prevent loosening of assemblies by the elastic compensation of expansion and contraction and the elimination of play.
- Flat washers for bolts are ideal for the broader uses, as they prevent surface damage from nuts and bolts and provide a greater load bearing surface.



Growermetal's spring washers prevent the rail loosening from railroad ties

The “ultimate evolution” with Grower TenKeep®

As a continuously growing company, part of Growermetal’s resources are invested in creating innovation, throughout the development and research of advanced geometries and fastening technologies.

Grower TenKeep® washer is the latest product introduced in the safety washer assortment of the company, created inside the R&D laboratories. Announced in the market in 2019, this security washer was rewarded with the Route to Fastener Innovation Competition award at Fastener Fair Stuttgart in the same year and is an example of a product offering maximum performance, even in the most extreme applications.

As proved by several tests, extreme vibrations and dynamic loads don’t affect the tightening of Grower TenKeep®, which shows an exceptional grip thanks to its two surfaces with knurls of different geometry and a working principle based on friction.

This leads to many advantages, including defined and uniform friction conditions, a higher degree of untightening torque (+40% minimum) and no slips or damages during the tightening and untightening of the washer, which contributed to the good response of the market to the product.

These results, together with the other benefits offered by the safety washers series, give an added value to the company, which is looking forward to show its solutions in-person to all its present or future customers.

www.growermetal.com

CHALLENGING EXCELLENCE



Geometry.

**Flexible solutions, better materials
and cutting-edge designs.**

That's how Growermetal has been setting new quality standards in the fastener industry.

Our advanced range of products includes safety, spring and flat washers, with over 4.500 standard washers according to DIN, ASME, NFE and other international standards. More than 2.500 special items are manufactured as per customer's specifications or drawing. And when it's time for a new challenge, Growermetal is ready to develop a completely new geometry: research that has led us to the ultimate innovation of Grower TenKeep®.

