

SMALL BEADS, GREAT EFFECT



Reflective glass beads from SWARCO.



Road Marking Systems

SWARCO has been manufacturing reflective glass beads for road markings since 1969. There have been drastic changes in mobility over those five decades. Having said that, the vision we had back then is more true now than ever. Ensuring safety and comfort for all road users is fundamental to every road around the world.

The principle behind our reflective glass beads is as simple as it is brilliant: The micro glass beads which are embedded in the marking materials reflect the beam from the headlights back to the driver illuminating the road markings.

This enhances road safety substantially, in particular in the dark and in wet road conditions. In a nutshell, retro-reflective marking systems guide the traffic, keeping road users safe.

SWARCO is one of the world's leading manufacturers of reflective glass beads, with production facilities in Europe, the United States and Saudi Arabia. Our glass bead products can help you improve the reflective power of the markings on your roads and increase the safety of all road users.

“High-grade reflective glass beads increase the visibility of road markings significantly. This makes driving at night and in wet conditions much safer and easier. Adding a touch of quality to all our lives.”

Philipp Swarovski
Chief Operating Officer (COO)
Road Marking Systems

HARNESSING BEAM POWER FOR ROADWAY SAFETY

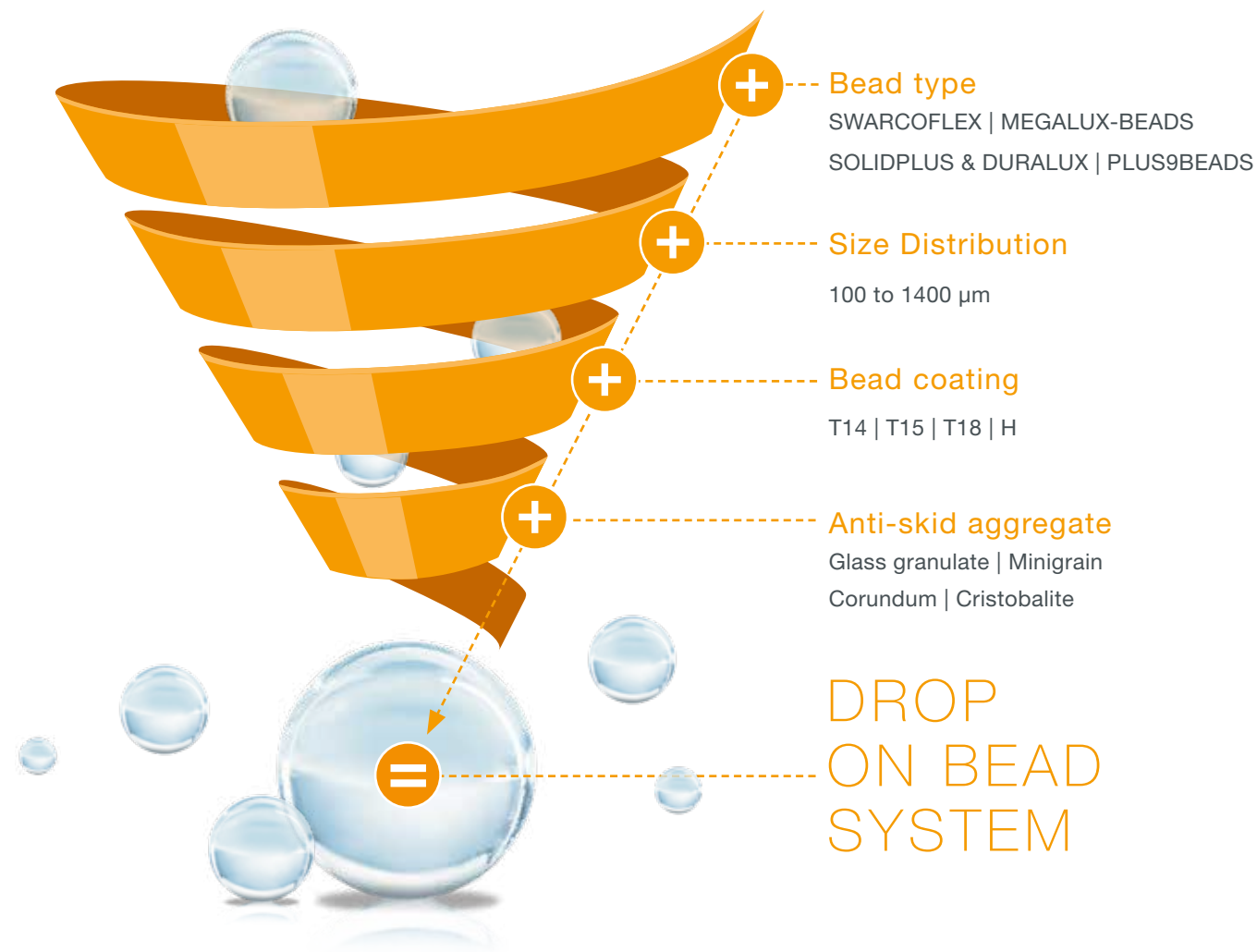


IT TAKES KNOW-HOW.

Drop-on beads that fit.

Drop-on beads are the cornerstones for the visibility of road markings at night. They create a high level of initial retro-reflection in new markings and make driving at night much safer. But which drop on beads systems are the right ones?

We can draw on our 50 years of glass bead and marking binder knowledge to provide recommendations on: bead type, size distribution, coatings and anti-skid particles that will best fit your needs. For optimum work results and safe driving.



EACH BEAD IS UNIQUE.

The combinations are varied and individual.

There are different types of reflective glass beads. Our smallest micro glass beads only measure a few thousandths of a millimeter, while the maximum diameter is 2 millimeters. Our product range consists of five different types of beads to satisfy all requirements.

SOLIDPLUS & DURALUX

Enhanced road safety.

Our high-performance glass bead, the SOLIDPLUS | DURALUX, achieves particularly high retro-reflective values of over 1000 mcd/m²*lx. The standard values are also exceeded a number of times over after several years of exposure to traffic. Suitable for all road marking materials.

Diameters from 212 to 1400 µm
Excellent retro-reflective values
Special durable glass composition

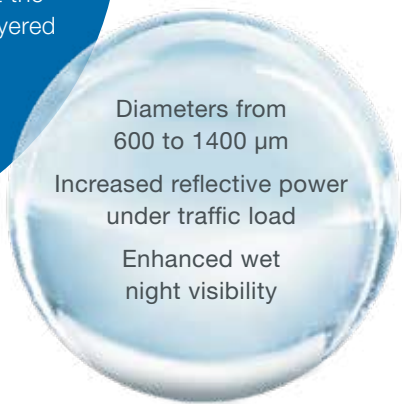


Larger beads for enhanced wet night visibility.

Our highly reflective MEGALUX-BEADS make marking systems more visible at night, in particular under wet conditions. This effect is achieved, firstly, by their crystal clear surfaces and, secondly, by the large diameter: Consequently, the bead protrudes out through the film of rain and is able to reflect the beam from the headlight. Suitable for thin-layered marking systems with increased requirements for visibility in the wet.

MEGALUX-BEADS

Diameters from 600 to 1400 µm
Increased reflective power under traffic load
Enhanced wet night visibility



The standard in reflective glass beads.

Our high-grade SWARCOFLEX standard glass beads achieve up to 100 percent higher levels of retro-reflection than standard glass beads. The product conforms to all national and international standards. Use in marking colors; in thermoplastic and thermal spray plastic; as well as in cold plastic and cold spray plastic.

SWARCOFLEX

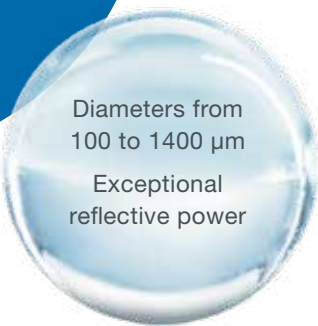
Diameters from 100 to 850 µm
Very good retro-reflective values

SWARCOLUX

Heavy-duty bead mix.

Our high-grade SWARCOLUX glass beads are mixtures of SWARCOFLEX and MEGALUX-BEADS. Thanks to the improved optical properties of the bead surface, they achieve very high levels of retro-reflection. Suitable for thin-layered marking systems with improved visibility in wet conditions.

Diameters from 100 to 1400 µm
Exceptional reflective power

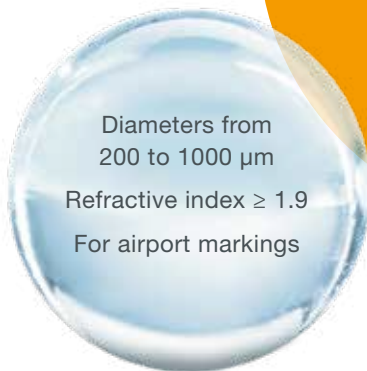


High-index beads in top-notch quality.

Our high-index glass PLUS9BEADS act as top-quality reflectors for airport markings. In our production process, high-quality raw materials are melted into high-grade reflective material and shaped into the finest micro-glass beads.

PLUS9BEADS

Diameters from 200 to 1000 µm
Refractive index ≥ 1.9
For airport markings



SOLIDPLUS & DURALUX

OUR POWER BEADS.



Enhanced performance.

- Retro-reflective values of over 1000 mcd/m²*lx
- Standard values are still far exceeded after many years in use
- Special glass composition creates exceptional robustness
- Excellent retro-reflection in non-white marking systems as well
- Also ideal for zebra crossings, construction sites and accident black spots



Enhanced cost-efficiency.

- Successfully trialed worldwide in long-term tests
- Suitable for all kinds of marking materials
- Long service life and reduced workload on remarking
- Increased safety with optimized price/performance ratio



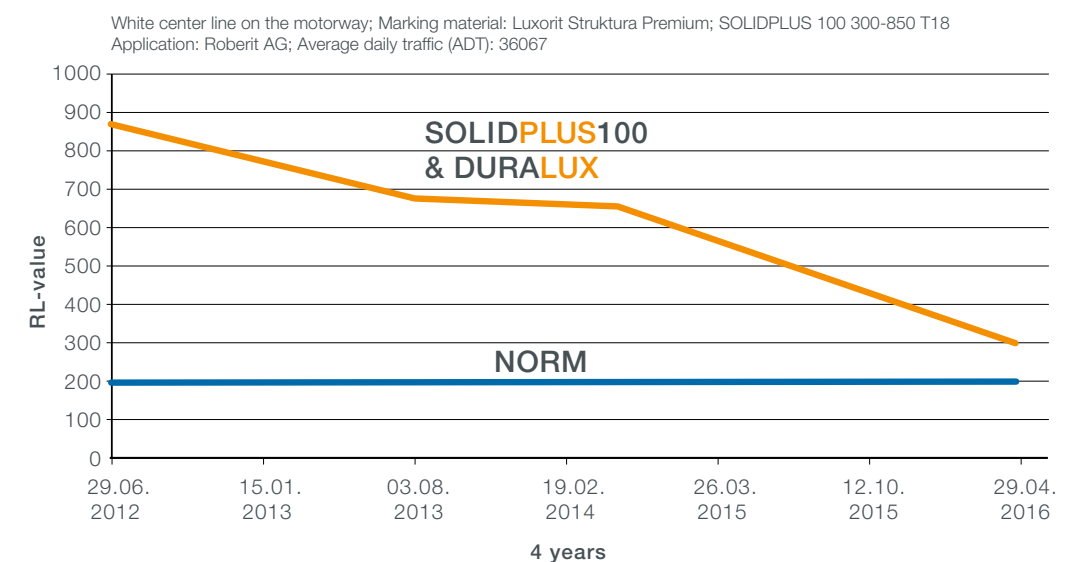
Enhanced safety.

- Unrivalled retro-reflection over long periods
- Significantly brighter road markings in fog, at night and in wet conditions
- Safer driving thanks to much more widely illuminated visual axes



Enhanced innovation.

- Market innovation from the Competence Center for Glass Technology and Marking Systems of the SWARCO Road Marking Systems Division
- Unique glass recipe resulting from many years of research and development



Source: Robert AG, reflectance measurement.

Reflective glass beads from SWARCO.

swarco
Road Marking Systems

PLUS9BEADS

OUR HIGH-INDEX BEADS.

Special beads for airport markings: Our high-index glass PLUS9BEADS have a refractive index of at least 1.9 and retro-reflective values of up to 1500 mcd/m²*lx, making them ideal for the most challenging marking requirements. The specially developed glass composition of high-grade raw materials is not suitable for road markings due to the physical properties, only exclusively for airports.

Used in conjunction with high-grade marking materials, PLUS9BEADS guarantee optimum reflection even in the most difficult lighting and visibility. Their strengths are reflected at night or in rain and fog, in particular. This makes our high-index glass beads the first choice for marking tasks on demanding sites like airstrips or helicopter landing pods.





Road Marking Systems

**SHOWING THE WAY, WORLDWIDE.
SWARCO ROAD MARKING SYSTEMS**

Nearly 50 years ago we started out with the manufacture of tiny reflective glass beads. Today we have grown into the world's largest systems provider for road markings. Making roads safer and saving lives on a daily basis. Our high quality products and services, safely direct traffic flow from A to B, every day and night. On all roads, in any weather, and all from SWARCO.

We prepare for the future, by fusing knowledge with innovation at our Competence Center for Glass Technology and Marking Systems. So, even with smart and autonomous driving, we continue to blaze the trail of premium road markings to the world. Jump in and drive with us; we will be happy to help you find your ideal road marking solutions.

SWARCO ROAD MARKING SYSTEMS
A division of the SWARCO Group
The Better Way. Every Day.

www.swarco.com/rms