



Polycarbonate foundations

Electric charging columns

Our expertise for the networks of
today and tomorrow

www.langmatz.de/en



▲ Plastic granulate

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Langmatz –

Our expertise for the networks of today and tomorrow

The specialist for technical system solutions

Langmatz technical system solutions are considered the gold standard of modern infrastructure in telecommunications and energy networks. Langmatz customers include energy providers, local councils, public utilities, and telecommunication companies.

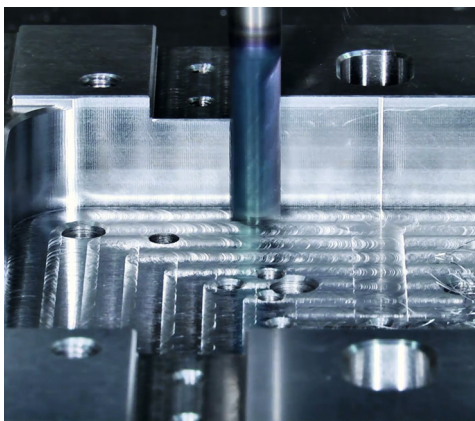
“Made in Germany” is our guiding principle. One of our greatest strengths is that we carry out all processes at our sites in Germany. From design and development supported by the latest 3D printing technology, prototype and mould making to production and installation.

Our quality management system (QMS) forms the daily basis for meeting our challenging goals. As standards are often not enough for us, we have evolved extensive testing processes and integrated special testing methods into our quality processes. These include regular checks in our material and product testing laboratory, which is equipped with a special static load hydraulic press for manholes.

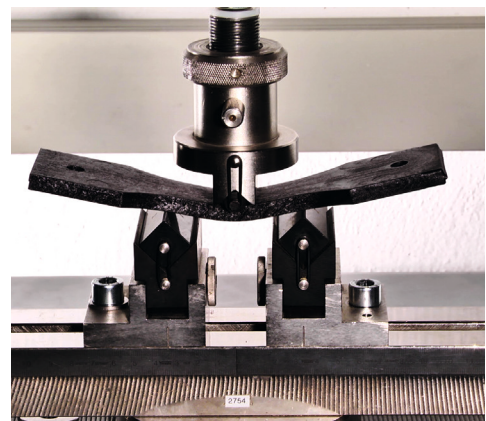
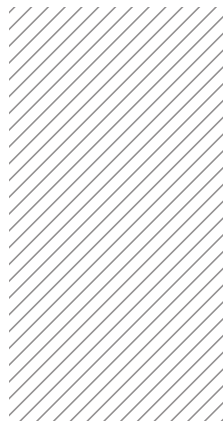
The core elements of our corporate strategy include qualified employees, national supply chains, and manufacturing in Germany with state-of-the-art production facilities.



▲ Injection moulding machines



▲ Mould and tool making



▲ Product and materials testing laboratory

Ongoing digitalisation requires technologically mature systems for the networked city of today. We are one of the most innovative companies in Germany and, as such, we are the perfect partner to implement your projects.

Your partner Langmatz –

Digitally networked environments are our future

A fundamental structural transformation is taking place in towns, cities and rural areas. Digitalisation, climate protection and the energy and mobility transition require new concepts for a functional urban infrastructure in which people enjoy living. This approach has given rise to the idea of the Smart City and the Smart Village – the vision of digitally networked environments. Langmatz has looked into

these requirements in detail and developed pioneering solutions for energy and data connectivity, as well as transport infrastructure. In doing so, we have placed great importance on ensuring that our systems boast a high level of security, can be integrated seamlessly into the townscape, and are particularly user-friendly.

We offer a broad-based portfolio of high-quality products for the many different requirements of the towns and cities of today and tomorrow:

- ▲ Polycarbonate manholes
- ▲ Underground distribution systems
- ▲ Outdoor cabinets and outdoor pedestals
- ▲ Building cable & pipe entry systems
- ▲ Fuse boxes
- ▲ Pedestrian signal requesting devices
- ▲ Radio ripple control receivers





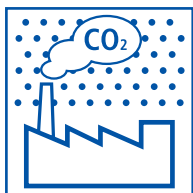
Urban infrastructure



Your partner Langmatz – For pioneering solutions

Smart City – What drives us

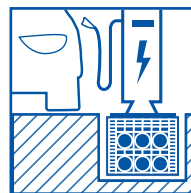
Cities, municipalities and utilities wish to improve the quality of life of citizens with new digital solutions. However, digital infrastructures and smart technologies require cabinets and housings that meet specific requirements. Together, we will find the right solution for your application.



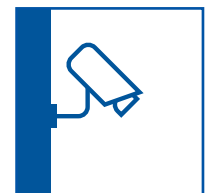
Air quality monitoring



Data communication



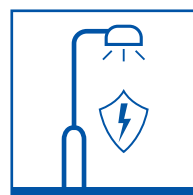
Charging infrastructure



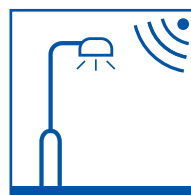
Public security



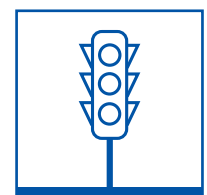
Intelligent parking



Intelligent lighting



Lighting control



Traffic control

Polycarbonate manholes – Our alternative to concrete

The importance of electric mobility charging infrastructure solutions will continue to grow in the future. Langmatz has the right cabinet for almost every application to rapidly establish a charging infrastructure. Langmatz offers an innovative polycarbonate charging column foundation for the flexible installation of all common charging columns or wall boxes. This foundation facilitates the forward-looking and cost-effective planned expansion of a charging infrastructure. This intelligent solution also provides the option of preparing the charging infrastructure today with one-off excavation work and no need for concrete. Then, at a later stage, charging columns can be installed to meet requirements.

At the start of the 1990s, Langmatz began designing polycarbonate manhole systems. This pioneering achievement laid the foundation for our rise to become the European market leader in polycarbonate manholes. Today, our manholes are used as cable draw manholes, telecommunication distribution points, and underground distribution systems worldwide. Unlike conventional polycarbonate manholes, the entire Langmatz manhole system is standard-compliant – the body as well as the cover. As our manholes have passed all the technical tests for European approval, we have an ETA (European Technical Assessment) which applies to all our polycarbonate manholes with cover as per DIN EN 124 (B 125 and D 400). Our manholes therefore also carry the coveted CE mark.

Manholes are the core component of the infrastructure. As secure housings for energy and data lines, Langmatz manholes are the central component of infrastructure projects, such as the extension of optical fibre and electricity networks, electric charging stations, and 5G. They impress through their low inherent weight, cost-effectiveness, rapid installation, and structural integrity. This makes them an efficient and versatile alternative to heavy concrete manholes, and enables our customers to use them in a wide range of applications.

Always the right material for the right product. At Langmatz, we possess a high level of expertise when it comes to materials. You can rely on the material we have selected always being right for the relevant product. High-quality polycarbonate (PC) is one type of plastic used in our production. And with good reason. PC has excellent rigidity, strength, heat resistance, and hardness, as well as very high resistance to weathering and radiation. It is a durable and lightweight material which has proven its worth in civil engineering applications.



Products for connection to the charging infrastructure – Prepare today, expand tomorrow

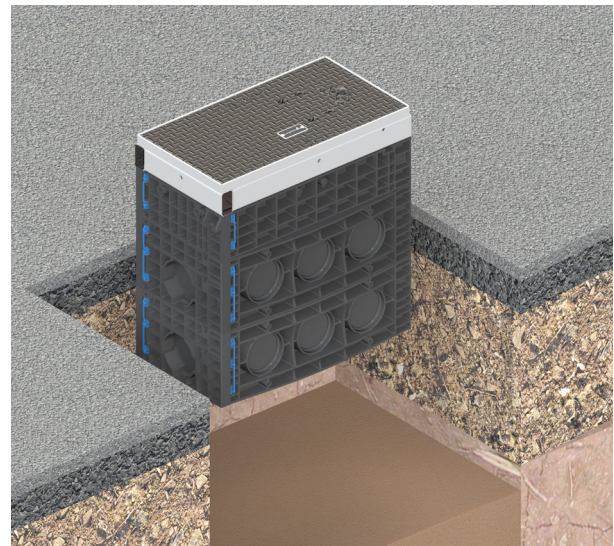
No one knows today the type of charging columns we will be using in future, and how many charging stations we will need. Langmatz offers a future-centric product solution with its EK980 charging column foundation. It will help to ensure the sustainable expansion of the charging infrastructure with a pioneering planning-based approach.

Depending on the requirements, charging columns can then be retrofitted using the relevant adapter plates. The efficient installation of charging columns is an important decision-making criterion in charging infrastructure projects. Our solution now provides the option of preparing the charging infrastructure without the need for concrete, and then equipping it with charging columns at a later stage in line with requirements.

The benefits of the innovative polycarbonate foundation: It boasts a range of adapter plates that already have the specific hole patterns factory-drilled in them and so are ideal to accommodate all popular charging and wall box columns.

Low transport and installation costs

No crane is required for installation, as the foundation weighs only 55 kilogrammes. The EK980 charging column foundation is delivered ready to install and requires no concrete base nor concrete backfilling. It can therefore be used quickly and simply on site. The column mount can be configured individually and replaced at any time. It is modular in design, with flexible predetermined breaking points for cable entries, and provides the option of simplified and standardised strain relief and earthing of the power cables. The foundation is made of high-quality polycarbonate featuring 3D-ribFrame technology to ensure the durability of the construction and simple installation.



Future-proof investment

The EK980 charging column foundation enables car parks to be developed cost-effectively with a single excavation by either installing an adapter plate or cast-iron cover that can withstand the weight of vehicles (load class up to D400). Conduits are routed through the empty foundation and securely sealed with a cast-iron cover.

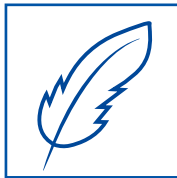




Unique construction –

Maximum flexibility and uncompromising quality

The advantages of the QualityBox at a glance:



▲ **Low inherent weight:**

Polycarbonate charging column foundations are much lighter than concrete or steel foundations. They are therefore easier and faster to transport.



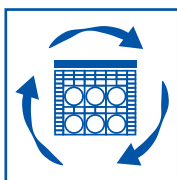
▲ **Durability:**

Polycarbonate foundations are resistant to moisture, corrosion and UV radiation. They therefore have a longer lifetime and require only minimal maintenance.



▲ **Cost-effectiveness:**

Our charging column foundations are quicker and simpler to install than concrete foundations, and require less maintenance and repair, saving costs in the long term. You can install the foundations at an early stage, and then only need to fit the corresponding adapter plate when you have decided to build the charging column.



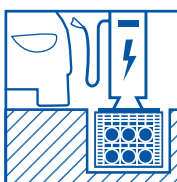
▲ **Environmental friendliness:**

Langmatz polycarbonate charging column foundations are manufactured from recycled materials and can also be recycled at the end of their life. They also generate fewer CO2 emissions in production and transport than concrete or steel foundations.



▲ **Predetermined breaking points**

Pipe inlets into the manhole are simplified by the installation-friendly predetermined breaking points.



▲ **Flexibility:**

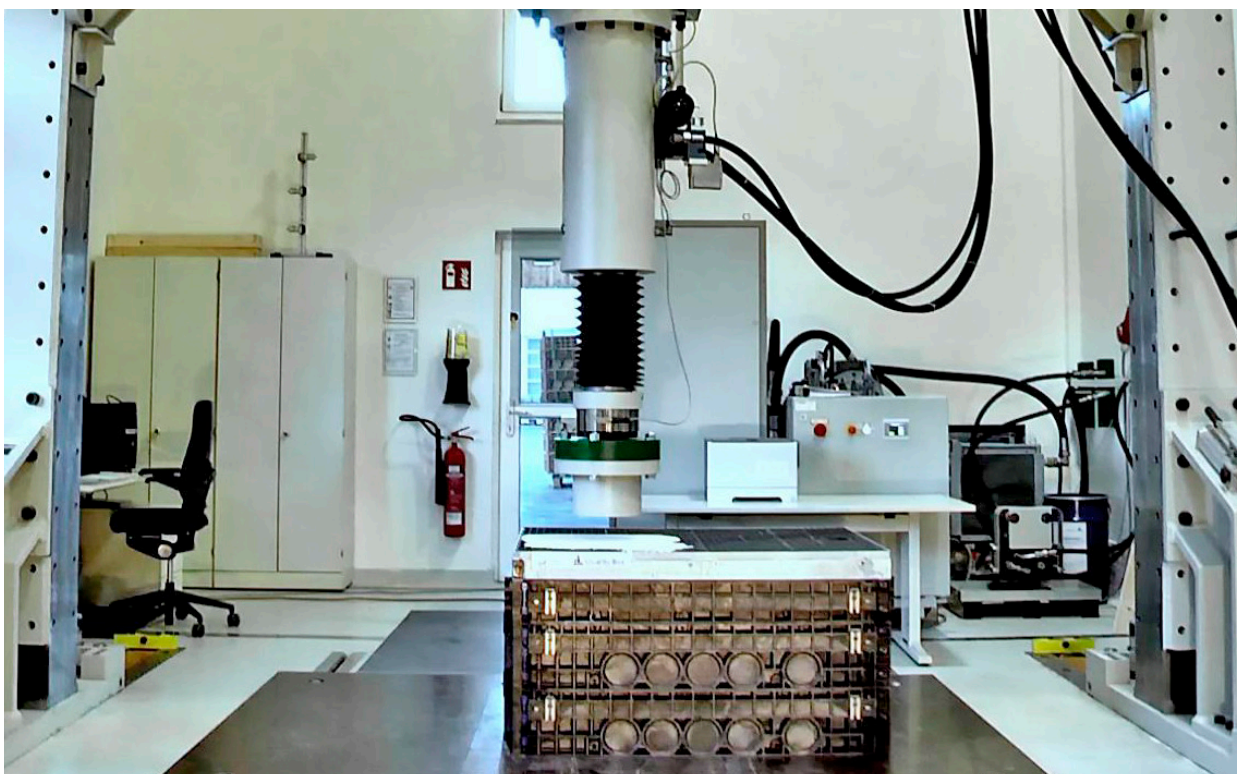
Langmatz charging column foundations are compatible with most common charging columns. This is provided for by an innovative range of cover plates, which is constantly being extended.

Overview of all compatible charging columns:



From development to production – Ultimate end-to-end quality assurance

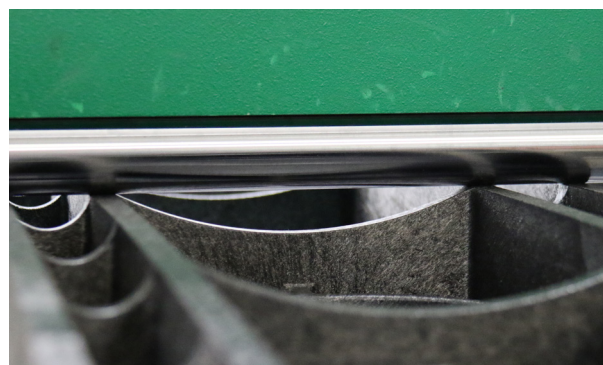
We develop innovative high-quality products in collaboration with our customers. To achieve this, we rely on state-of-the-art technology in our development work, including the use of the latest 3D printers. Langmatz has also established integrated end-to-end quality assurance processes extending from development to production. We therefore aim to continuously test our manholes to ensure that they meet all load classes. These complex tests are conducted in our Material and Product Test Laboratory, and start right from the development process. The findings acquired are incorporated into the production of every last element. Quality assurance of continuous manhole production is provided for by a daily, random 3-point bending test.



▲ Load class testing at Langmatz in Garmisch-Partenkirchen



▲ 3-point static load hydraulic press at Langmatz in Oberau



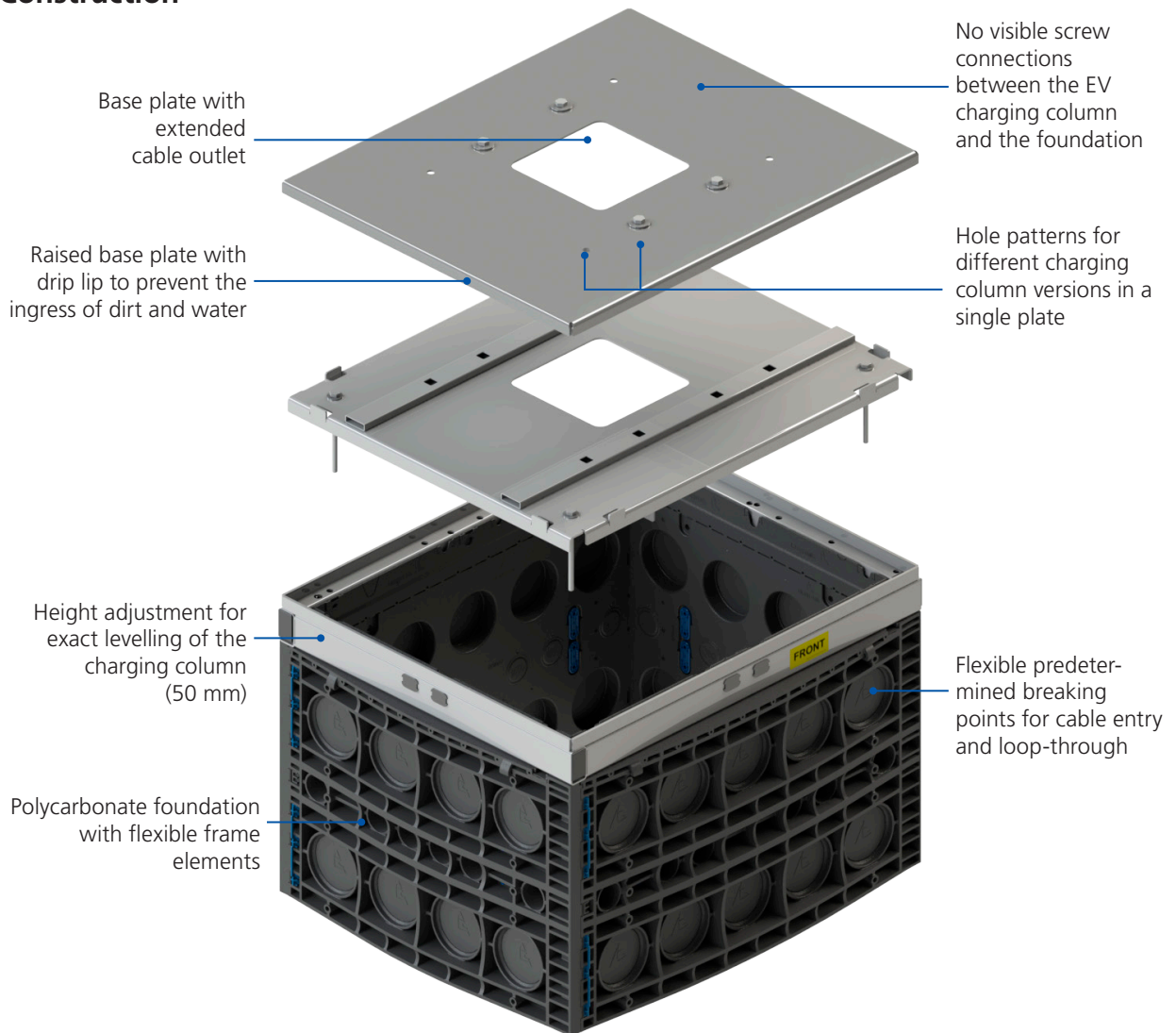
▲ Regular 3-point bending test every 2 hours

EK980 polycarbonate foundation – for DC charging stations

Technical data

Clear dimensions	650x800 mm
External dimensions	810 x 950 x 645 mm (W x L x H)
Total weight	Approx. 110 kg
Body material	Polycarbonate (PC)
Frame material	Steel (hot-dip galvanised)
Base plate/ adapter plate material	Steel (hot-dip galvanised)
Compatible charging columns	Alpitronic, ABB, Siemens, Kostad, EnerCharge, etc.

Construction

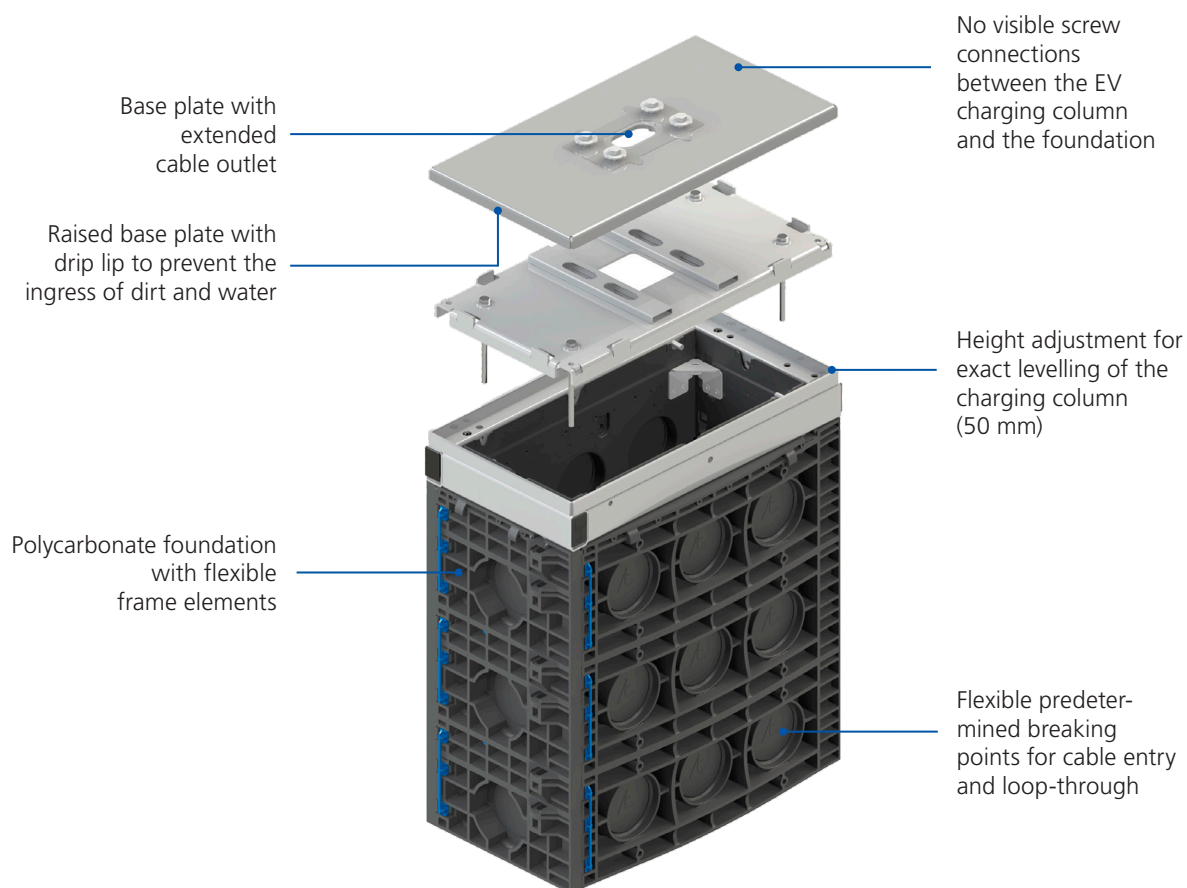


EK980 polycarbonate foundation – for charging columns and wall box columns

Technical data

Clear dimensions	250x550 mm
External dimensions	400 x 695 x 793 mm (W x L x H)
Total weight	Approx. 58 kg
Body material	Polycarbonate (PC)/polypropylene (PP)
Frame material	Steel (hot-dip galvanised)
Base plate/ adapter plate material	Steel (hot-dip galvanised)
Compatible charging columns	Mennekes, KEBA, ABL, Technagon, Compleo, etc.

Construction



Awards



2009
German Materials Efficiency Prize
"From vehicle roof to manhole"



2010
Environmental Prize
"From vehicle roof to manhole"



2011
Bavarian Founder Award
"Succession" category



2012
Intertraffic Innovation Award
"Charging at the light pole"



2013
WPC Innovation Award
"Product Development & Product Design" category



2015
In the Top 3 – GreenTec Awards,
"Recycling & Resources" category



2019
Inno4wood Innovation Award



2021
Top Employer German SMEs 2021



2022
F.A.Z. Institute



Notes





Our expertise for the networks of today and tomorrow

www.langmatz.de

We will gladly send you further detailed product information for your planning.

Please contact your local Langmatz representative or our head office.
Data sheets and other information can be found on our website:

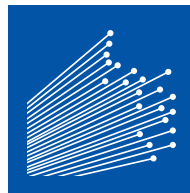
www.langmatz.de/en



Polycarbonate manholes



Underground distribution systems



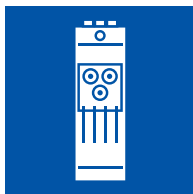
FTTx solutions for optical fibre networks



Outdoor cabinets and outdoor pedestals



Building cable & pipe entry systems



Fuse boxes



Pedestrian signal requesting devices



Radio ripple control receivers

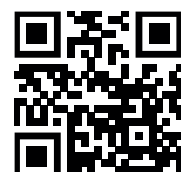
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