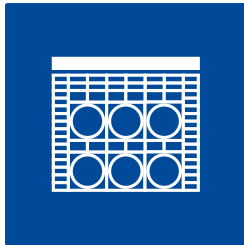


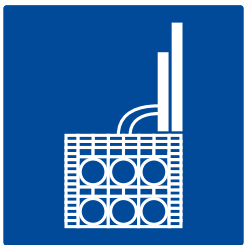
Did you know that the Alps are home to innovative patents with vision?

04 COMPANY
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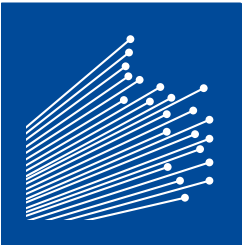
Langmatz icons



Polycarbonate manholes



Underground distribution systems



FTTx-Solutions for optical fibre networks



Outdoor cabinets and pedestals



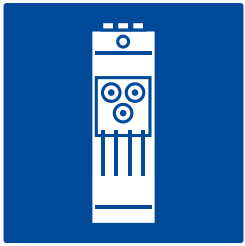
Building cable & pipe entry systems



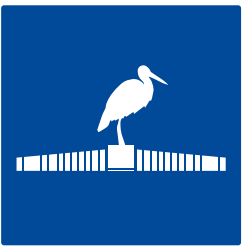
Products for tunnel construction



Street lights



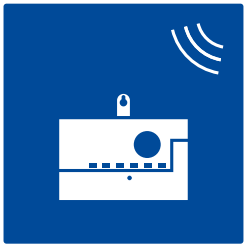
Fuse boxes



Bird protection equipment



Signal requesting devices



Radio ripple control receivers



When innovation meets performance, smart technical solutions are created for the world of telecommunication, power and traffic engineering.

Langmatz is an innovative plastic and metal processing company.

With numerous patents, we are constantly setting new standards.

Rooted in the Bavarian Garmisch-Partenkirchen region, we continuously develop high-quality products that meet international standards. We manufacture technologically advanced systems for infrastructure: manholes, underground distribution systems, solutions for optical fibre networks, signal requesting devices and much more – “Made in Germany” is our motivation as well as our obligation.

Our highly qualified employees are directly responsible for our success. Many of whom have been educated and trained by us in-house. We wouldn't be where we are today without their quality awareness, know-how and innovative spirit: at the top-ranking national position as a reliable system supplier for our customers. With our 50 years of experience in processing plastics and metals we gained market leadership for polycarbonate manholes, amongst others. In Europe, too, Langmatz is a prominent partner when it comes to the expansion of infrastructure and broadband networks.

Cooperative networking of all company business segments is important for our capacity to innovate in our present market segments: Research and development, design,

production and marketing all work hand-in-hand, continually developing new solutions and improvements to existing ideas. Thus, we are able to achieve a high rate of in-house manufacturing. This ensures flexible, economical and efficient production of state-of-the-art products – whether delicate or robust.

Furthermore, we are highly committed to developing future-oriented, ecological solutions: We achieve constant recognition for our environmentally-friendly and resource-saving use of materials with awards such as the German Materials Efficiency Prize, the WPC Innovation Prize and the Environmental Prize. In addition, we are also ranked amongst the top 3 in the category of “Recycling & Resources” of the GreenTec Awards, Europe's largest environmental and business award.

All of this is made possible through our national and international customer relationships in the areas of telecommunications, power and traffic engineering. Our customers are part of our innovative power. They motivate us to advancements and develop even better solutions.

What can we do for you?

Garmisch-Partenkirchen Production Plant



Administration and Development

- Company management
- Administration
- Development and design
- Product management
- Laboratory
- Mould and tool making
- Prototype construction
- Plastics manufacturing

Oberau Production Plant



Production and Manufacturing

- Work preparation
- Purchasing
- Plastics manufacturing
- Metal processing
- Product assembly
- Quality management
- Warehousing/Logistics

Garmisch-Partenkirchen Sales and Service Centre



Sales and Service

- National and international sales
- Marketing
- Customer projects development
- Customised production
- Product assembly
- Static load hydraulic press
- Langmatz World showroom

Our products, from development to delivery.

We work closely with customers in our market segments to develop innovative, high-quality products. From design to prototyping and mould making, to plastics manufacturing and metal processing, right through to product assembly, we handle every stage of the product engineering and creation process at our own plants.

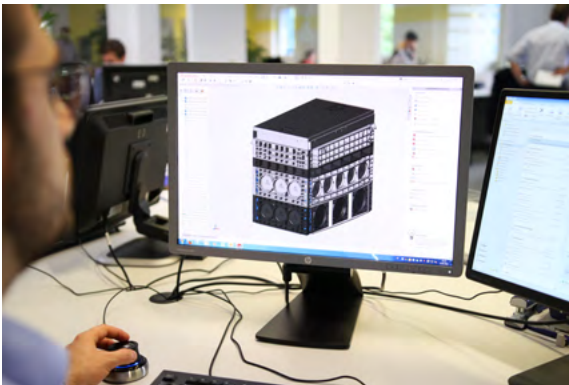
We use cutting-edge 3D printers to assist with development and manufacture the smallest runs to master quality standards.

And we can handle small and medium production volumes thanks to fast-build plastic moulds.

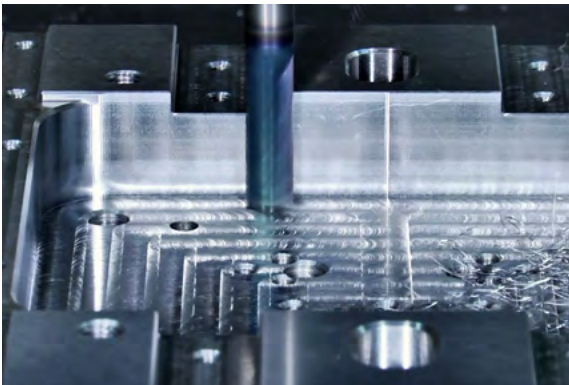
Our product and materials testing laboratory and QM system guarantee that our production output is always of the highest quality.

Our highly qualified employees, state-of-the-art production facilities and a high rate of in-house manufacturing ensure that every order is executed quickly and reliably.

CAD-Assisted Design



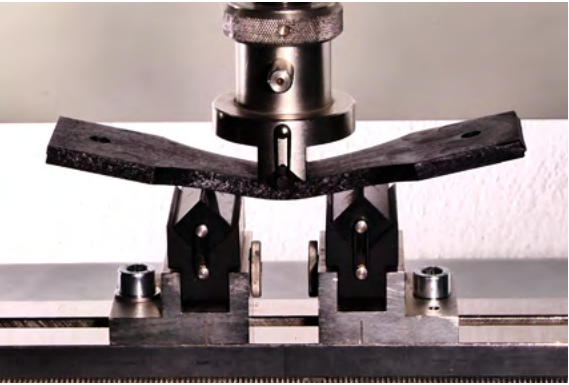
Mould and Tool Making



Sustainable Material Supply



Product and Materials Testing Laboratory



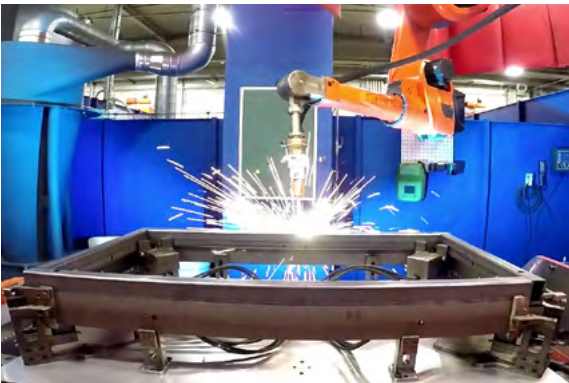
Quality Management



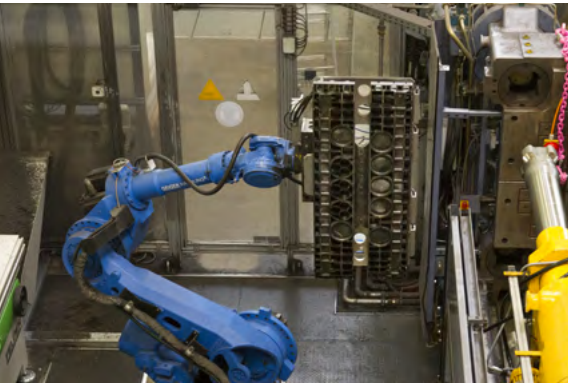
Product Installation



Metal Processing



Plastics Manufacturing



Anyone can produce something off-the-shelf. We strive to meet your wishes and requirements.

Langmatz custom manufacturing can make standard products into bespoke products. This means that we can meet customer-specific requirements – and produce small runs efficiently. Our in-house design department is on hand to help transform your ideas into reality. All we need are specifications, sketches or a requirements description. Our bespoke services cover three areas:

1. Custom mechanical manufacture

Langmatz customises standard components together with mechanical processing and extra features. Our wide range of standard components provides us lots of options in terms of meeting your needs.



2. Electrical fixtures

Langmatz develops electrical fixtures based on your specifications and integrates them into housings such as cable distributors and exchanges and underground distribution systems. We can even arrange to custom-fit fuse boxes and small outdoor and indoor cabinets and there's no time-consuming and costly administration work involved.



3. Customer-specific installation

Langmatz uses its existing product portfolio to manufacture according to your requirements. We make project-specific design variants and our customised production department installs them in the end product. In the process, based on your needs we can incorporate housing design, products that you supply and a diverse range of installation variants.





ecopolytec®
perfect by nature

Renewable raw materials in infrastructure products. Our contribution to the fight against climate change.

Infrastructure products play a major role in the comfort and safety of our environment in many areas of everyday life. Langmatz believes that they should be greener and more sustainable and we take that responsibility very seriously. Consequently, we began to develop environmentally friendly alternatives to fossil fuels. Using renewable raw materials is an effective way to reduce CO₂ emissions and to ensure that the materials of the future not only conserve the planet's resources but also provide a more reliable supply.

Langmatz ecopolytec® WPC (wood polymer composite), which we researched and developed over a number of years, has a foam-moulded structure. It contains 45 % locally sourced wood fibre material and so is largely composed of sustainable raw materials. This represents a permanent reduction of around one tonne of biogenic CO₂ per m³ of wood used in the product. What's more, ecopolytec® makes the manufacturing process greener by reducing energy requirements. And using it in infrastructure products makes them far less harmful to the environment. When we carried out a life cycle assessment and saw proof of what a difference the material would make to both climate protection and resource conservation, it was clear that ecopolytec® would be ideal for use in manhole systems.

When using it for 40 manholes, the new ecopolytec® material can save the same amount of CO₂ that a car would generate by driving once around the earth, unlike conventional plastics.

We ran extensive stability and durability tests. The results substantiated its suitability for both manhole systems and other infrastructure products and proved that it matched the

stability levels of the original material. Ecopolytec® manholes are now being used successfully.

This 100 % recyclable material complies with the guidelines of the European Commission on climate-friendly procurement processes according to Green Public Procurement 2020 (GPP 2020).

To further Langmatz's material development efforts, the Bavarian Research Foundation and SKZ, Germany's largest plastics institute, provided funding and technical support respectively. Besides being an ecological innovation, the discovery of a new material that is based on natural fibres, is a realistic substitute for man-made plastics and meets all the necessary requirements is a noteworthy research achievement.

It has received a great deal of recognition in professional circles around the world, including a place in the top three at the WPC Innovation Prize 2013. In 2015, our "Sustainable Raw Materials in Infrastructure Products" project was among the winners in the Recycling & Resources category at GreenTec Awards, Europe's largest environmental and business award.

In 2017, Ms Ilse Aigner, Bavarian State Minister of Economic Affairs and Media, Energy and Technology, presented the Ernst Pelz Award to Langmatz for the development and market launch of a manhole made with renewable, foam-moulded materials.



ecopolytec®
perfect by nature

Telecommunications are getting faster and faster. But who ties all these connections together?

Langmatz develops and manufactures infrastructure components for broadband networks.

Telecommunications are indispensable in today's world. We take functioning communication means for granted. Everyone is dependent upon the fact that trouble-free processes in the economy and in the infrastructure of cities and communities are assured.

We have a major stake in all of this. Our efforts go unnoticed by most, and yet we are constantly there for everyone. We offer a comprehensive and innovative product portfolio for broadband expansion ranging from the central office all the way to within buildings. Numerous future-oriented projects

have made us the leading partner, manufacturer and supplier of FTTx products.

Central office optical distribution frames, manholes, above-ground and underground distribution systems, building cable entry systems and fibre termination points and much more are the innovative technical systems with which we secure network functionality and reliability.

Thus, we can place an intricate optical fibre management system efficiently in robust plastic and metal cabinets. Our intelligent solutions help to support global networks via fast information superhighway with all of these intelligent solutions.



Polycarbonate manholes



Underground distribution systems



FTTx-Solutions for optical fibre networks



Outdoor cabinets and pedestals



Building cable & pipe entry systems

Modern living requires energy. But who takes care of the energy flow?

Langmatz supplies to all the energy providers – from the smallest to the largest.

Modern life would simply come to a grinding halt without energy. That's why it is so important, for example, to get the electricity to where it is needed.

We develop and manufacture a wide range of products for the low-voltage and medium-voltage segment. This includes, amongst others, underground distribution systems, power connection pillars and fuse boxes. Our engineers specifically develop systems which can be discreetly integrated into the cityscape while guaranteeing optimal operator friendliness.

With our variety of different building cable & pipe entry systems, we bring power, water, natural gas as well as

telecommunications pipes and cables safely and cleanly into the building.

Street lighting with the latest LED technology ensures efficiency – with street lights which are customised to the respective cityscape.

For this, we offer a modern lighting management system with different versions of radio ripple control receivers – this not only ensures flexibility, but also saves energy.

We are also making an innovative contribution to nature and environmental protection. When we focus on technology and the future, we don't forget Mother Nature: to protect large birds from electric shock, we have developed various types of bird protection equipment.



Polycarbonate manholes



Underground distribution systems



Outdoor cabinets and pedestals



Radio ripple control receivers



Fuse boxes



Street lights



Building cable & pipe entry systems



Bird protection equipment



Polycarbonate
manholes



Underground
distribution systems



Outdoor cabinets
and pedestals



Tunnel construction
products



Signal
requesting devices

Traffic keeps the world moving. But who keeps traffic flowing safely?

Langmatz is the organising force behind modern traffic infrastructure. Ensuring safety.

Today's traffic users can rely on an infrastructure that guides them safely and reliably through even the most complex situations.

We are a major contributor to this one, which is absolutely indispensable for so many cities and communities. Our portfolio includes products for safety on roads and rails, from bicycle/pedestrian traffic signals and signal requesting devices to track terminal boxes and manhole covers for tunnels.

Traffic is one of those areas in which many complex processes must function together seamlessly. Drawing upon the ambitious efforts of our engineers, we continuously develop

and improve materials and designs, and thus we create solutions that provide protection in a tough environment using safety-relevant technology.

Our passion in this area also helps drive innovations in this business segment. Our modern traffic light push button with acoustic signals animates both children and adults alike to actually use the crossing light. Furthermore, we haven't forgotten the blind and visually-impaired either – we've also integrated Braille into the plastic surface.

These efforts follow a consistent path: trams and trains should continue to be safe and reliable, and pedestrians, car drivers and bike riders should always be able to move about in traffic safely and effectively.



Polycarbonate Manholes

Perfect structural integrity - rock steady load performance

Advantages

- Proven stability of the entire structure, including the cover, with loads of up to 40 tonnes
- Covers certified to DIN EN 124
- Traffic load approved to DIN EN 1991-2
- High-quality polycarbonate and 3D ribFrame® technology for high durability and resistance
- Fast installation thanks to low net weight, a modular design and installation-ready delivery
- Cost-effective installation without expensive machinery
- Easy pipe and cable entry through predefined break points in the frame
- Open frame elements for building on top of existing routes
- Integrated height adjustment for a flush street surface



19 POLYCARBONATE MANHOLES



Langmatz polycarbonate manholes are used in different versions as cable draw manholes, telecommunication distribution points and underground distribution systems.

They are a durable and flexible alternative to concrete manholes, with lots of practical advantages.

A sample from Langmatz's extensive manhole portfolio

Clear dimensions from 250 mm to 2.200 mm.

EK 378 Manhole



Design:
with paveable cover

Clear dimension:
400 x 800 mm

EK 328 Manhole



Design:
with chequered stud plate cover

Clear dimension:
800 x 800 mm

EK 508 Manhole



Design:
with two-part cast iron cover

Clear dimension:
800 x 1,165 mm

EK 728 Manhole



Design:
with three-part concrete-lined cover

Clear dimension:
800 x 1,825 mm



Underground Distribution Systems

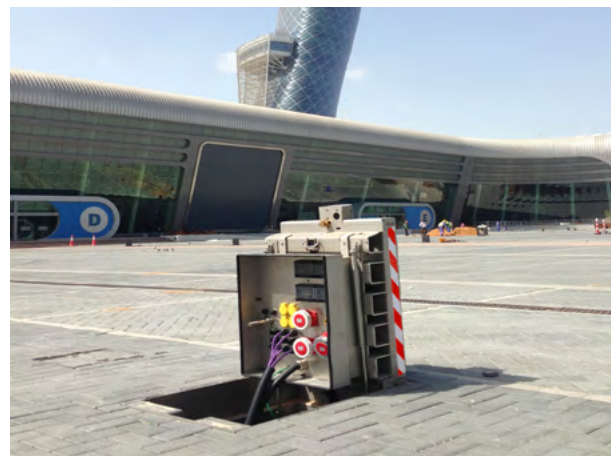
New solutions for creative urban planning and marketplace design

Advantages

- Wide field of application with different standard variants, customised electrical socket combinations, fixtures and supply media
- Flood proof compartment for reliable fixture protection
- Easy access in all weathers via a specially patented locking mechanism
- High-grade materials for excellent durability and weather-resistance
- Cover opens easily and quickly thanks to stainless steel gas springs
- Load class up to D400 acc. to DIN EN 124 with 3D-ribFrame® technology



Practical examples



21 UNDERGROUND DISTRIBUTION SYSTEMS

Langmatz 



Langmatz underground distribution systems are modern distribution systems for electricity, water and telecommunication lines. As they are sunk into the ground, they're protected from flooding, dirt and vandalism.

These are solutions suitable for urban landscapes in the age of contemporary marketplace design and urban renewal.

Underground Distribution System EK 880



- Flood-protected swivelling equipment compartment with NH switch disconnector fuses
- Swivel cover and stainless steel gas spring mechanism for one-man operation

Underground Distribution System EK 800



- Modular electrical socket combination in a flood-protected, swivelling equipment compartment
- Cable outlet flaps and step protection for safe operation

Underground Distribution System EK 428

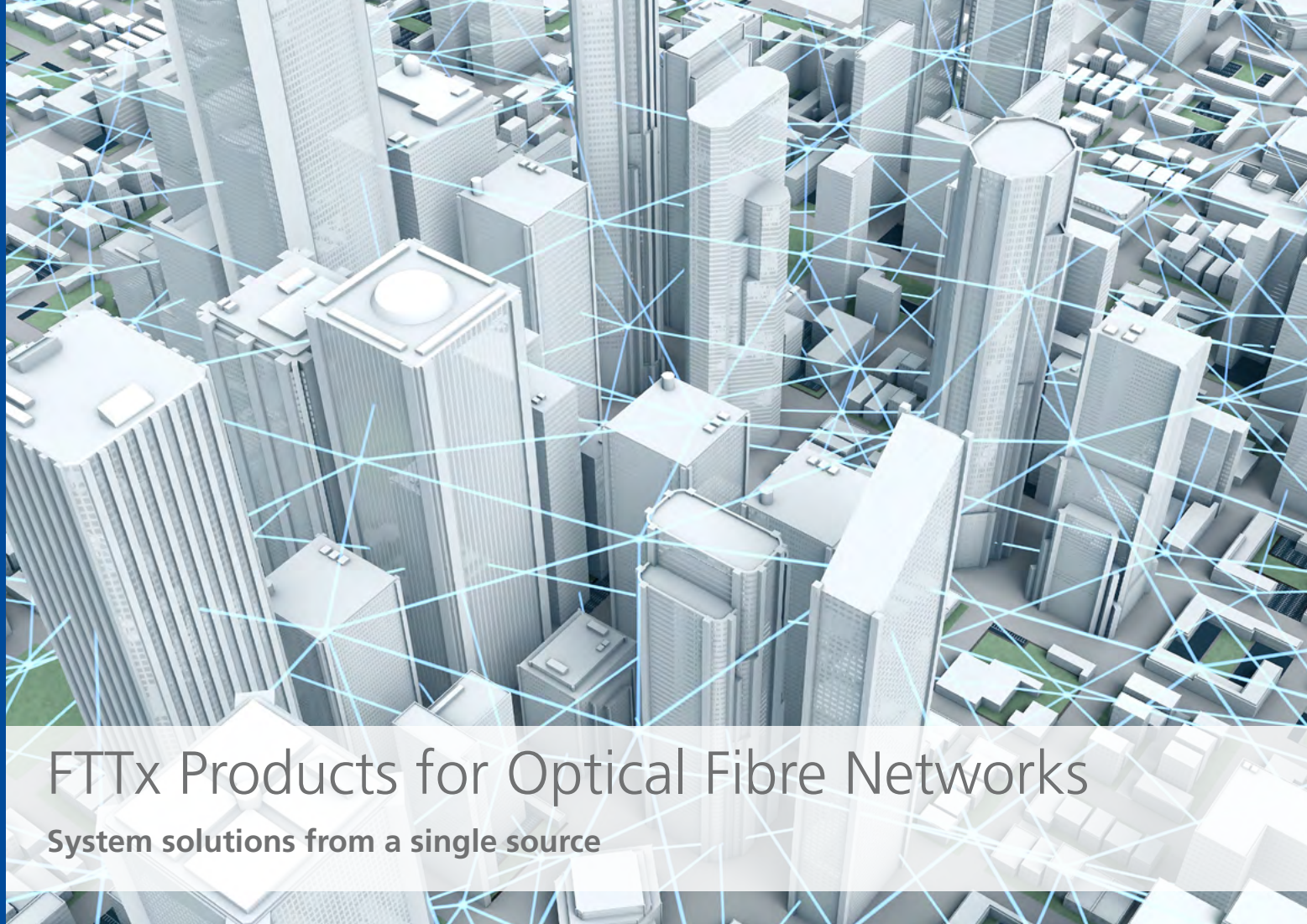


- Underground optical distribution point with swivelling telescopic fibre enclosure bracket
- Well-organised internal cable guides

Underground Distribution System EK 810

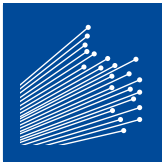


- Flood-protected equipment compartment fitted with active components
- Integrated ventilation technology for cooling



FTTx Products for Optical Fibre Networks

System solutions from a single source



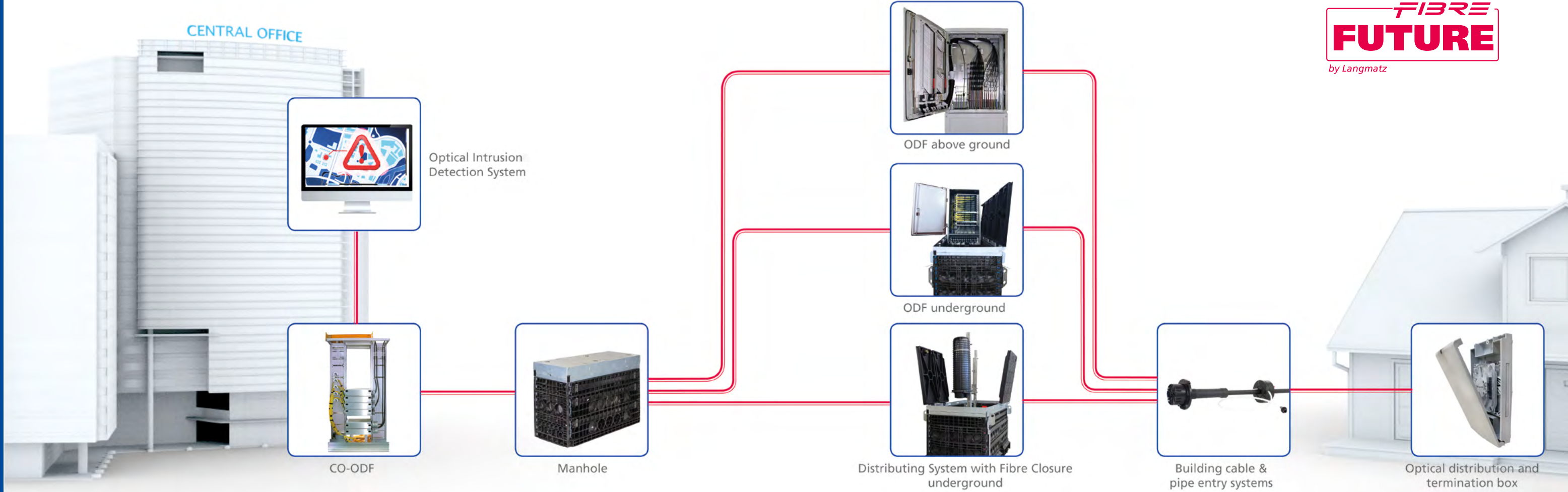
Langmatz offers an integrated portfolio for the expansion of FTTx optical fibre networks from the central office to the consumer.

Langmatz has been supplying systems for years. We make indoor and outdoor distribution systems, configured manhole systems, building cable entry systems and fibre termination points. We can provide a complete, customised solution for your FTTx optical fibre expansion.

Advantages

- A coherent concept with inter-compatible products
- A host of expansion options based on customer requirements
- High-grade plastics and metals for long service life
- Compliant with required IP protection classes
- Infrastructure protection and monitoring systems

Simplified architecture for an FTTB/H infrastructure with the complete solution from Langmatz



FTTx solutions for optical fibre networks



Optical intrusion detection system

- Monitoring for outdoor cabinets and manholes
- Early detection of faults or unauthorised access so that countermeasures can be initiated immediately
- Retrofitting option for existing outdoor cabinets and manholes (regardless of manufacturer)



Central office optical distribution frame (CO-ODF)

Connections between optical fibre line cables and system cables

- Splice assembly: Aluminium housing, supports up to 54 E&MMS (singlemode and multimode) splice cassettes
- Patch assembly: Aluminium housing, supports up to 96 E&MMS adapters/pigtails
- Suitable for SC, LC and E2000 adapters/pigtails



Polycarbonate manhole

- Cable draw manhole, available with various covers
- Cable overlength storage box
- Low net weight for fast installation



Optical distribution frame (Outdoor ODF), above ground

- Suitable as a splice or patch distributor for GPON or P2P optical fibre networks
- Network distributors available in a wide range of sizes for Ø 5, 7, 10 and 12 mm micropipes
- Two separate working levels for optical fibre splice cassettes and micropipes



Underground optical distribution frame (Underground ODF)

Underground distribution system with flood-protected swivelling equipment compartment

- Supplied ready for installation with 19-inch patch assembly
- 16RU installation rack
- 1RU patch assembly for up to 48 adapters/pigtails



Underground distribution system for fibre enclosures

Underground distribution system with telescopic swivelling fibre enclosure bracket

- Adaptable to all common fibre enclosures
- Optional strain relief for micropipes
- Single-person manhole cover handling



Building cable & pipe entry system

- Configured for 1 micropipe Ø 7-14 mm or 2 micropipes Ø 7 mm
- Options: with or without foam filled cavity sealant
- Sealing element with tried and tested stationary silicone seal ring system



Optical distribution and termination box (ONT)

- Suitable for network termination and as a floor distribution box when installed in series
- Can be used with pigtail adapters or direct fusion splice connections
- Suitable for Ø 5, 7, 10 and 12 mm micropipe entry



Outdoor Cabinets and Pedestals

Powerful technology, versatile expansion

Advantages

- Polycarbonate material for extreme durability and UV-resistance
- Injection moulded using thermoplastic foam casting for excellent thermal insulation
- Pre-defined breaking point technology on the pedestal for easy replacement of accidentally damaged outdoor cabinets
- A comprehensive range of practical and field-proven options
- Expansion options for a diverse range of connection and transmission components
- Optional flood-protection solutions available

Practical examples



Langmatz outdoor cabinets and pedestals are highly versatile in terms of expansion and therefore have a wide range of applications as cable distribution cabinets, outdoor cabinets and optical distribution frames or feeder pillars.

We use state-of-the-art production methods which allow us to accommodate a diverse range of customer requirements for the telecommunication, power engineering and traffic engineering sectors.

Outdoor Cabinet EK 245 | CDC 82



- Applications: telecommunication, traffic engineering
- Cabinets compliant with Deutsche Telekom standards

Outdoor Cabinet EK 73



- Applications: power engineering, telecommunication and traffic engineering
- Cabinets compliant with DIN EN 61439-5

Outdoor Cabinet EK 430 | Feeder Pillar (EnAs)



- Applications: e.g. feeder pillar, installation of switching components for street lighting, etc.
- Resistance class DIN EN 1627 RC2

Outdoor Cabinet EK 223 | Low-Level Distribution Column



- Applications: power engineering, traffic engineering
- Pole, wall or free-standing installation



Building Cable & Pipe Entry Systems

For reliable electricity, water, gas and telecommunication supplies

Advantages

- Versatile application with up to five utility cables
- Sealing technology suitable for a variety of masonry (mortar installation, core holes and/or waterproofing treatments)
- Sealing elements with tried and tested stationary silicone seal ring system
- Reliable sealing for a variety of utility cable and pipe cross-sections
- Easy installation with Langmatz torque screws for optimum sealing results

Practical examples



Langmatz building cable & pipe entry systems are guaranteed to provide buildings with reliable electricity, water, gas and telecommunication supplies.

We supply a range of building cable & pipe entry systems for buildings with or without basements, tried and tested over decades.

Multi-utility-line Building Cable & Pipe Entry System (DVGW-approved (German Gas & Water Assn) to VP 601)

2, 3, 4 or 5-Line Building Cable & Pipe Entry System EK 409



Designed for 4 utility lines

- For buildings without basement
- Sealing elements configured in a row
- Easy to adjust to floor height using reinforcement frame (included with delivery)

4-Line Building Cable & Pipe Entry System EK 449



Designed for core-hole sealing

- For buildings with basement, dry installation
- Utility lines can be installed in any position
- Reliable sealing which also handles cable or pipe diameter tolerances

Building Single Cable & Pipe Entry Systems

1-line Building Cable & Pipe Entry System EK 559



- For telecommunication: ducting pipe for at least 2 micro-pipes and 1 copper cable, Ø 8-18.5 mm
- Gas- and water-pressure-tight up to 0.2 bar

1-line Building Cable & Pipe Entry System EK 459



Designed for exterior wall sealing

- For telecommunication: ducting pipe for 1 micropipe Ø 7-14 mm or 2 micropipes Ø 7 mm
- Optional foaming hose to seal the gap through the house wall



Products for Tunnel Construction

For safer tunnels

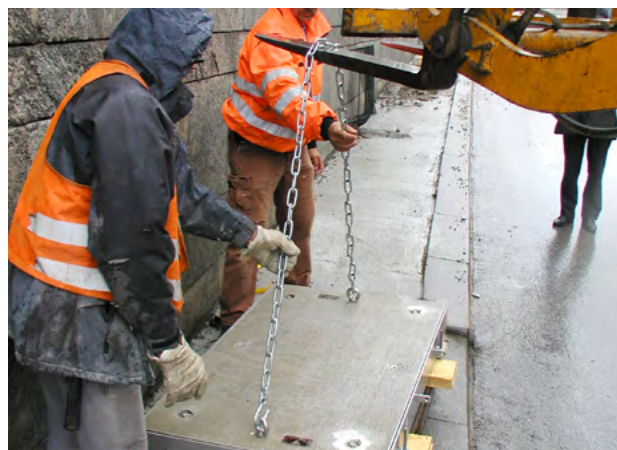
Cable and manhole covers for culverts | Advantages

- Durable manhole covers made from stainless steel components, high-grade concrete and replaceable silicone seal
- Covers fire-tested at MPA Dresden (independent fire protection competence centre)
- Compliant with DIN EN 124
- Residual load capacity after the effects of fire compliant with DIN EN 124
- Easy access to manhole compartment via removable cross-bars on multi-part covers

SOS emergency call button | Advantages

- Compliant with the Three-Senses principle:
 - Visual feedback front and side
 - Acoustic feedback at 85 dB in compliance with German Guidelines for the Equipment and Operation of Road Tunnels (RABT)
 - Recognisable symbol and "Emergency Call" information
- Large-surface push-button with 2 floating contacts

Practical examples



31 PRODUCTS FOR TUNNEL CONSTRUCTION

Langmatz 



Langmatz manhole covers, manhole covers for culverts and emergency call buttons are used in tunnel construction and renovation.

Our covers meet all fire protection and safety requirements for tunnels and are easy to handle and install.

Manhole Cover EK 444



- Tested compliant with DIN EN 124
- Load class D400 or B125
- Designed in accordance with Germany's additional technical terms of contract and guidelines for civil engineering works (ZTV-ING), Part 5
- Meets fire protection requirements for EI 90 classification under DIN EN 13501-2 and F90 under DIN 4102-2 (for sizes 300–1,300 mm)
- Functional integrity of cable installation compliant with DIN 4102-12 for 90 minutes (≥ 100 mm between cable installation and underside of cover)
- Fire tests compliant with DIN 4102-2 for standard temperature curve when burning on both sides (for sizes 300–1,300 mm)
- High-grade C40/50 commercial grade concrete mix
- Stainless steel screw connection or lock
- Continuous height adjustment for easy surface levelling
- Fast, easy attachment of transport lugs
- Surface water tight

Manhole Covers for Culvert EK 506



- Stainless steel or galvanized steel
- DIN EN 124 test category B125
- Choice of non-slip or smooth surface
- Hinged cover with 2-way locking mechanism
- Continuous height adjustment for easy surface levelling

Emergency Call Button EK 534



- Protection class II, protection rating IP 55
- Compliant with RABT and BASt (German Federal Highway Research Institute) requirements
- Large-surface push-button with braille
- Voltage: 24, 40 and 230 V AC/DC
- Illuminating SOS panel



Street Lights

Traditional and modern lighting design

Advantages

- High-grade polycarbonate for high resistance and low maintenance
- Low net weight for easy transport and installation handling
- Optimal thermal management and outstanding light distribution guaranteeing top-class light quality
- Interchangeable lighting modules
- The latest LED modules for high energy efficiency

Practical examples



33 STREET LIGHTS



Langmatz street lights combine traditional design with modern LED lighting technology and meet all the requirements for lighting design in public areas.

Impressively flexible and high-quality, our lights are built with solid workmanship and designed for low maintenance.

Street Light EL 77 | Bavaria LED



- Energy efficiency class A+ (lamps)
- Mounting adapter for pole diameters of 60 mm and 76 mm (included with delivery)
- Interchangeable high-grade PMMA panes (textured or transparent)
- LED fittings available for 180° and 360° lighting
- Require up to 80 % less power than conventional lighting with similar light quality
- Control electronics integrated in LED fitting

Street Light EL 306 | ParasoLIC LED



- Energy efficiency class A+ (lamps)
- Mounting adapter for pole diameters of 60 mm and 76 mm (included with delivery)
- Quick release fastener (bayonet fitting) for tool-free access to lamps
- LED fittings available for 180° and 360° lighting
- Require up to 80 % less power than conventional lighting with similar light quality
- Control electronics integrated in LED fitting



Fuse Boxes

Fast installation, perfect protection

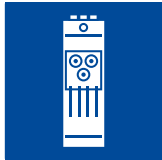
Advantages

- Suitable for all common inner street light pole diameters and mains configurations
- A variety of clamping methods (push, slide and bolting clamps) for flexible access area clamping
- Reliable installation and optimum outlet clamping with spring clamps or screw type terminals
- Custom expansion (e.g. with RCDs, integrated plug connections, surge protection devices, miniature circuit breakers, series terminals, etc.)

Practical examples



35 FUSE BOXES



Langmatz fuse boxes are used for connecting the power from the street lighting mains to the light itself.

Their application versatility and tried and tested features are guaranteed to impress.

Fuse Box EK 480 | The Standard



- Sliding clamp technology for simple access area assembly
- Spring clamp technology for fast outlet assembly

Fuse Box EK 480 | With Surge Protection Device



- Integrated multi-pole surge arrester in the outlet section
- Load circuit interruption in the event of a fault, such as a lighting strike

Fuse Box EK 340 | The Mini



- Suitable for inner pole diameters from 79 mm
- Sliding clamp technology for simple access area assembly

Fuse Box EK 580 | The Flexible



- Suitable for multifunctional applications
- Casing lengths: 243, 288 and 368 mm
- Cover heights for inner pole diameters of 100 and 106 mm

Bird Protection Equipment

Saving our feathered friends from power lines

Advantages

- Voltage-, UV- and weather-resistant protective cover material with flame protection and excellent electrical insulation properties
- Simple installation with plastic torque bolts
- Clip technology – cost-effective and reliable when working under voltage
- Wind-tunnel tested for winds of up to 155 mph (250 km/h)
- Can be installed on any common type of insulation

Practical examples



Langmatz bird protection equipment is used to protect large birds against electric shock.

It complies with the VDE User Rule for the protection of birds against live power lines, thus helping nature conservation.

Protective Cover EK 517



- Can be installed on post insulators
- Simple installation with clips

Protective Cover EK 617



- Can be installed on single or double strain insulators

Protective Cover EK 617/10



- Can be installed on head fittings
- Certified by GWT-TUD GmbH at Dresden Technical University



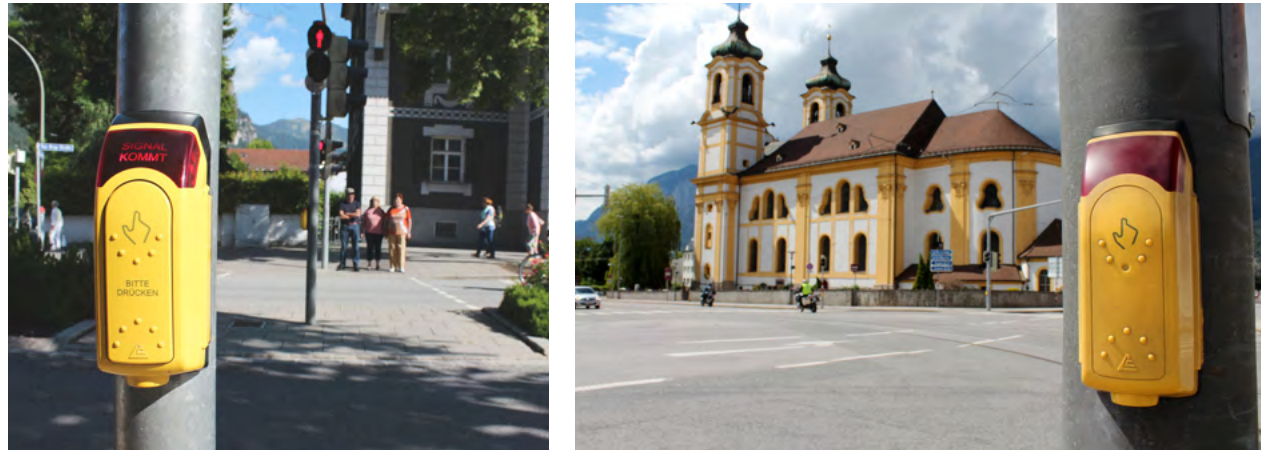
Signal Requesting Devices

For a safe crossing

Advantages

- Audible orientation and crossing signal volumes can be controlled based on time of day and traffic noise
- All system parameters laptop-configurable
- Tested mechanical strength and a compact design for excellent protection against vandalism
- Can be adjusted to fit perfectly on any pole
- Detailed crosswalk description for the visually impaired via braille type bold relief symbols which can be configured on site
- Voice prompts and signal tones can be enabled and configured individually

Practical examples



Using Langmatz signal requesting equipment, pedestrians and the visually impaired can cross the street safely, assisted by acoustic and tactile signals that meet the latest requirements of DIN 32981.

Signal Requesting Device easyguide EK 424



- Universal voltage power supply for 20-253 V AC/DC
- Push-button or sensor version

Signal Requesting Device basicguide EK 524



- Universal voltage power supply for 20-253 V AC/DC
- Tactile signalling

Signal Requesting Device crossguide EK 533



- Universal voltage power supply for 20-253 V AC/DC
- Responds to traffic noise in compliance with DIN 32981

Acoustic Signalling Device EK 98 | doubLIC



- Acoustic signal equipment for the visually impaired at traffic lights
- Responds to traffic noise in compliance with DIN 32981



Radio Ripple Control Receivers

The future of lighting and energy management

Advantages

- Regionally adjusted automatic switching times to optimise street lighting energy costs
- Low-cost installation and maintenance
- Excellent reception quality for reliable operation
- Receivers can be controlled across network boundaries
- Custom programming for tariffs and special switching

Practical examples



41 RADIO RIPPLE CONTROL RECEIVERS

Langmatz 



Langmatz radio ripple control receivers provide wireless and accurate-to-the-second lighting control for public areas in cities and communities.

Their cutting-edge load management and intelligent tariff switching save energy and therefore make a valuable contribution to protecting the environment.

Radio Ripple Control Receiver EK 893 | Load management/energy feed-in systems



- Can be fitted with up to 6 mechanical relays (25 or 40 A)
- Sturdy 3-point attachment

Radio Ripple Control Receiver EK 593 | Lighting control



- Can be fitted with up to 3 mechanical relays (25 or 40 A)
- Pole-mountable

Radio Ripple Control Receiver EK 793 | Smart metering connection



- Fitted with 1 mechanical relay (25 A)
- Top hat rail installation

Remote Antenna EK 695

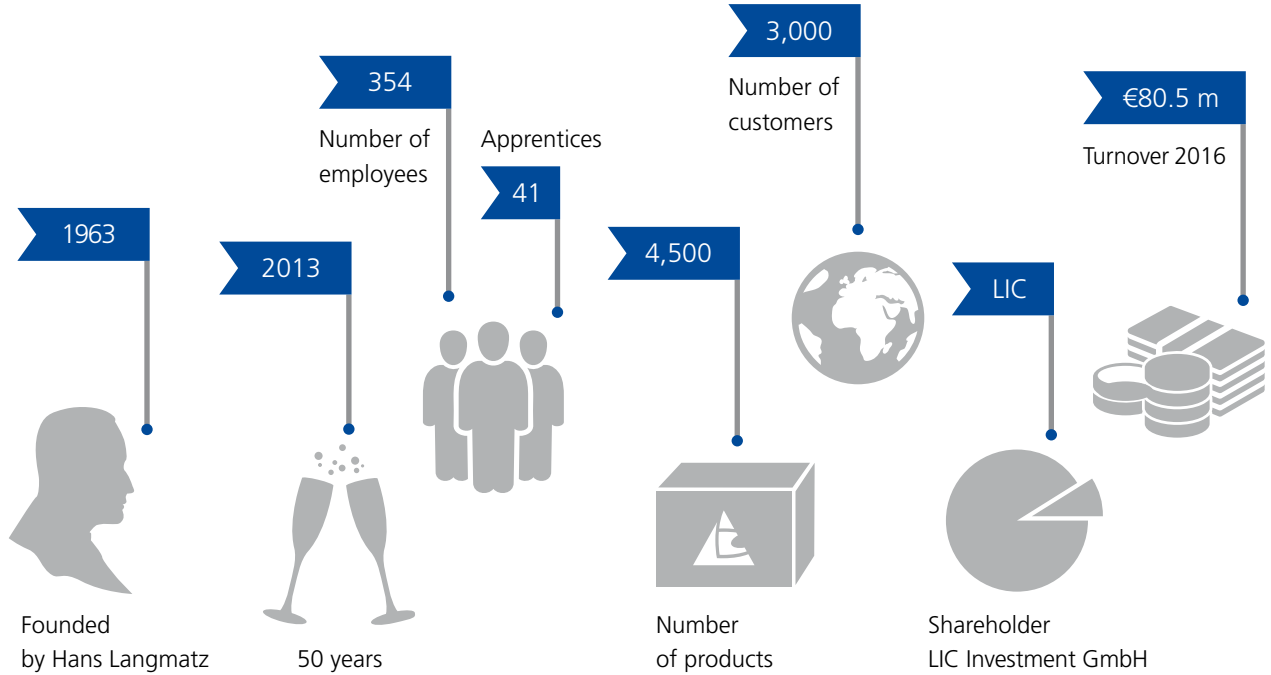


- For all radio ripple control receivers
- Protection class II (double insulated), protection rating IP 54

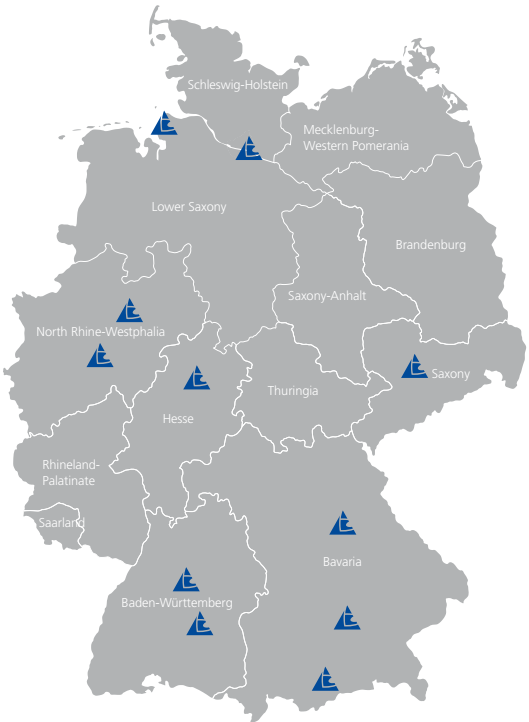
Other products for the telecommunication, power engineering and traffic engineering sectors are available to browse on our website at www.langmatz.de.



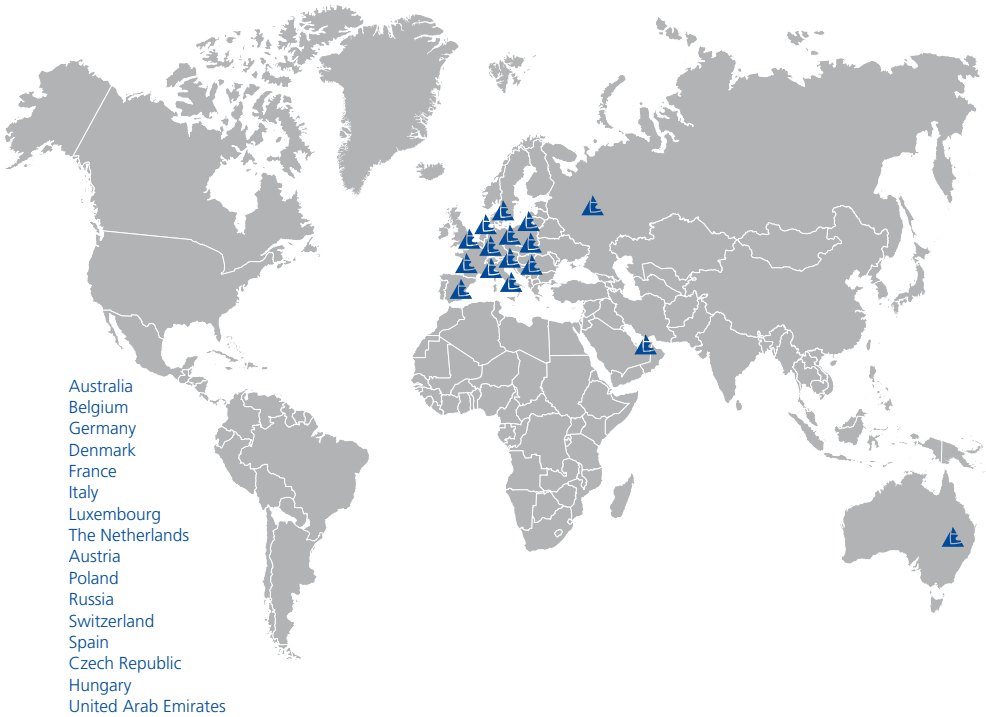
Langmatz facts and figures



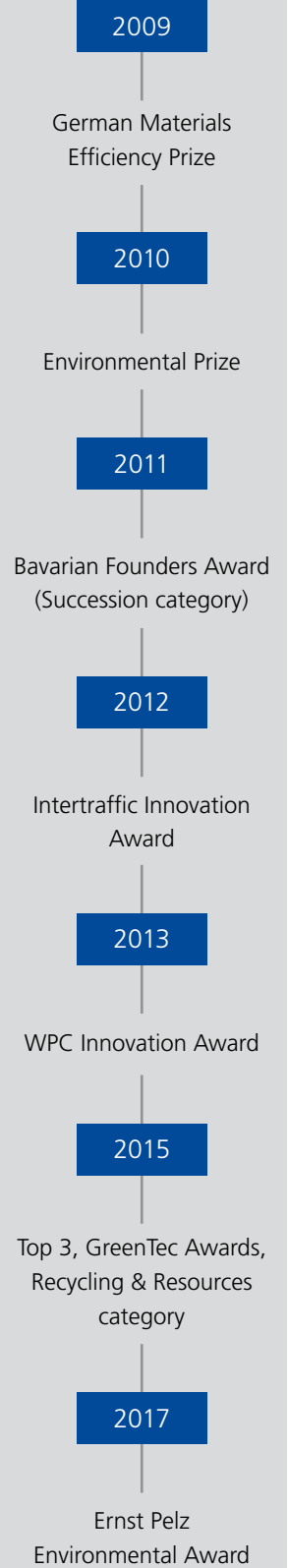
Our representatives in Germany



Our representatives worldwide



Awards





Garmisch-Partenkirchen
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Oberau
Production Plant
Langmatz GmbH
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