



*With passion  
for excellent lighting*

# *SCHUCH – A Family Business*

The invention of the incandescent lamp was just a few years past when Adolf SCHUCH founded the company in 1895. Fascinated by this new technology he worked on lighting solutions for areas with harsh ambient conditions, such as wet-rooms in breweries, leather factories and hazardous explosive atmospheres for petro-chemical industries and mining.

The company grew over generations due to innovative power and provision of its highly motivated and engaged employees, reaching an outstanding international reputation as a lighting specialist and becoming one of the leading enterprises in this business.

Standard products as well as customized lighting solutions adapted to specific demand cases of the end-users are the solid base of the SCHUCH product portfolio, used in industry, commercial areas and public communities where high IP rating is mandatory.

An extremely high vertical integration and the high quality standard paired with technical competence are typical for SCHUCH, beside reliability, continuity and awareness of responsibility for customers, business partners and employees.

Meanwhile successfully managed in the 5th generation as a family business.

**Competent, innovative and with passion for excellent lighting.**



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# SCHUCH – A Company With Tradition

## CHRONICLE

### March 1, 1895

A few years after the invention of the incandescent lamp, Adolf Schuch founded the company Adolf Schuch Elektrotechnische Fabrik in Worms at the river Rhein.

He started the production of waterproof porcelain lamp holders for incandescent lamps, as well as waterproof porcelain hand lamps with protective glass for local breweries, tanneries and chemical plants.

### 1906

Production of first street light fittings.

### 1910

The first explosion-protected mining light fittings were delivered to coal mines in the Ruhr region, the Saarland and South Africa.

### 1929

Explosion-protected light fittings were the basis of the whole manufacturing program. SCHUCH became a pioneer for explosion-protected light fittings.

### 1937

The company was registered as a limited partnership.

### 1945

Company's 50th Anniversary. Destruction of all company premises as a result of intense bombing of Worms.

### 1945-1948

Recovery of production. Launch of an improvised manufacturing program for night lamps, desk lamps, workplace and shop lamps, due to deficiency in raw materials.

### 1948

The production of explosion-protected light fittings, street light fittings and industrial and special-purpose light fittings of all types was restarted.

### 1949

Production of first light fittings for fluorescent tubes, as well as street light fittings for high pressure mercury lamps.

### 1952/1953

Fiberglass-reinforced polyester was used for the first time to produce housings for moisture-proof, explosion-protected and street light fittings. Introduction of own production of so-called "PREPREG" (preimpregnated fibres), as well as construction of an in-house moulding pressroom to produce fiberglass-reinforced polyester housings.

### 1957

As a result of the expansion of production demand, the company enlarged its working and storage areas by more than 14,000 m².

### 1964/1965

The production was mostly moved into a new modern plant in the Mainzer Strasse in Worms, which included GRP pressing, mechanical workshops and a fully automatic powder-coating line.

### 1969

New plant expansion to the total of 40,000 m². SCHUCH achieved a deep vertical integration and extensive technologies for design and production of highly-protected technical light fittings.

### 1970

Company's 75th Anniversary.



**1973**

Start of production of the legendary 161/162 series waterproof light fittings. A major milestone in the Company's history.

**1975**

A foamed polyurethane gasket was used in waterproof light fittings for the first time.

**1988/1989**

World's first approval to use an explosion-protected linear light fitting for a 2-pin fluorescent tube. SCHUCH became a pioneer for modern explosion-protected linear light fittings.

**1995**

Company's 100th Anniversary  
First certification as per DIN ISO 9001.

**1996**

The company was reorganized into a limited liability company.

**1999**

First certification of the Quality Management System for explosion-protected products as per Directive 94/9 EC.

**ab 2000**

The start of extending the standard manufacturing program, as well as special industry solutions for various application conditions in the industry.

**2005**

Production of the first light fitting with application of LED technology (emergency light fittings with batteries).

**2007**

Establishment of a new Engineering Department that specializes on LED equipment and LED light fitting design. Engineering and design activity focused on LED in all product ranges.

**2007/2008**

Production of first waterproof and industrial LED light fittings.

**2009/2010**

Production of first LED street light fittings.

**2011/2012**

Production of first explosion-protected LED light fittings.

**2014**

Modernizing of the main building for energy consumption optimization.

**2015**

Energy audit at the factory in Worms.

**2016**

Installation of a new powder coating line in accordance to the current environmental safety aspects. Production of TRIANO XL high bay LED light fitting with luminous fluxes of up to 50,000lm. Launch of the Light-Management-System „LIMAS“. A unique remote control system for energy-saving and on-demand control of indoor- and street lighting.

**After 10 years of intensive research, development and engineering, SCHUCH has an ambitious program for LED light fittings within all product lines.**





# *SCHUCH – Quality, Consistency, Future-oriented*

## EVERYTHING IS UNDER CONTROL

From design to final assembly: the company located in Worms performs all the light fitting design, testing and production stages.

SCHUCH engineers use advanced CAD systems to design new light fittings as well as special thermal simulation programs in order to reach optimal temperature control for each LED light fitting. This is a decisive factor for LED service life and, therefore, it is one of the most important quality parameters of a good LED light fitting. Deep vertical integration in the light fitting production is typical for SCHUCH.

Die forming and cutting, bending and welding of metal parts and housings are performed using modern machining centers and welding robots in mechanical manufacturing.

A modern environment-friendly powder coating unit is used to paint metal light fittings with varnish of a standard or customized color.

Since 1955, all light fittings made of fiberglass-reinforced polyester are produced in an in-house moulding pressroom and then provided with polyurethane/silicone gaskets in a fully automated dispensing system.

The tools required for forming, bending and pressing are produced in the in-house tooling workshop.

Careful manual assembly of light fittings is performed in several assembly departments. Finally, each light fitting undergoes specific functional tests. Continuous quality control and internal audits at all production stages ensure a high quality standard for all SCHUCH light fittings.

Both light fittings and their components and materials are thoroughly tested in our accredited measuring laboratories.

Along with the lighting measurements, determination of luminous flux and representation in light distribution curves, light fittings are checked for emitted interferences and noise immunity in accordance with EMC Directive 2004/108 EC and the Electromagnetic Compatibility Act.

Dust and water chambers are used to check IP rating of the light fittings, including sealing tests underwater.

Heat measurements to check the maximum admissible ambient temperature, low temperature tests and material ageing tests performed in climatic chambers, especially for explosion-protected light fittings, finish the Test Program for SCHUCH light fittings.

This comprehensive philosophy allows SCHUCH to control all processes and to react promptly and flexibly to changing requirements.



## EXCELLENT QUALITY

SCHUCH light fittings are unique branded products "Made in Germany". The proverbial high quality standard which you can rely on.

This is proven by **Quality Certificate as per DIN ISO 9001**, which is continuously reconfirmed by VDE. Quality management covers all company activities, starting from design, engineering, production and final assembly to sale, and is valid for all product and manufacturing fields.

Being a manufacturer of explosion-protected light fittings and components, SCHUCH, moreover, is subject to an even stronger supervision by PTB with regard to **quality control as per DIN EN/IEC 80079-34**. The routine surveillance audits have been successfully carried out and reconfirmed by a certificate since 1999.

In recognition of the high quality of delivered products, SCHUCH was awarded, in 2009 for the first time, the **Quality Certificate according to KTA 1401** as a certified supplier to all large German power plants. For illumination of power plants, SCHUCH is the absolute market leader.

The regularly carried out audits mentioned above ensure meeting the strict quality requirements that SCHUCH committed itself to since the foundation of the company.

## 100% ORIGINAL SCHUCH

Every single light fitting of our product range is an original SCHUCH product. Designed and engineered by our own engineers, produced using own tools and 100% quality approved.

Unique and distinctive!

## COMMITTED TO ENVIRONMENTAL PROTECTION

As a manufacturing company, SCHUCH is aware of its eco-political responsibility.

By energy refurbishment of the main building, by using a new powder coating plant according to current environmental safety aspects and by conducting an energy audit at the whole plant in Worms, SCHUCH contributes a lot to the reduction of carbon dioxide consumption and the environment protection.

All SCHUCH products meet the **REACH and ROHS requirements**. For ensuring a professional disposal of the packing material and of old equipment, SCHUCH is connected to the **INTERSEROH Recycling System**.

Being a responsible family company, SCHUCH contributes to reducing environmental pollution and saving valuable natural resources.



# *Explosion-Protected Light Fittings*

## *Impressive innovation strength in extreme conditions*

For more than one hundred years SCHUCH has been considered as an expert in lighting in extreme environments. Applications in explosive gases and dust environments set stringent requirements.

With the results of its own intensive research and design work, as well as more than 100-year experience, SCHUCH still acts as an innovator in this challenging field. Thus, SCHUCH has decisively influenced the development of conventional explosion-protected linear luminaires, as well as of the relevant standards. Explosion-protected linear luminaires with 2-pin technology are inseparably associated with SCHUCH.

Using the new LED technology, SCHUCH sets new benchmarks with its innovative solutions. Worldwide, SCHUCH has one of the widest ranges of lighting products providing protection against explosive gases and dusts.





## SCHUCH AS A PIONEER

### 1910

The first SCHUCH mining light fittings illuminate the coal mines in the Saarland and in the Ruhr region.

### 1929

SCHUCH disposes of an extensive range of explosion-protected and mining luminaires. The product line of explosion-protected light fittings is a major sector within the entire manufacturing program.

### 1952/53

Starting application of fiberglass-reinforced polyester housings in the sector of explosion-protected light fittings.

### 1953

First approval of an explosion-protected linear luminaire for single-pin fluorescent tubes.

### 1985

After substantial development work, SCHUCH makes an application to the Physikalisch-Technische Bundesanstalt (PTB) in Braunschweig for testing an electronic control gear (ECG) with regard to its explosion protection according to EN 50014 and EN 50017.

### 1988

SCHUCH got the world's first certification of an explosion-protected electronic control gear for 2-pin fluorescent tubes. SCHUCH produces the world's first explosion-protected lamp holder for 2-pin fluorescent tubes with "increased safety" protection method in the market.

### 1989

World innovation: SCHUCH presents the first explosion-protected linear light fitting with an ECG for standard 2-pin fluorescent tubes. A pioneering solution that enables to generally use conventional fluorescent tubes in explosion-protected light fittings. Thus, SCHUCH became the forerunner of modern explosion-protected linear light fittings.

### 1998

Introduction of the world's first explosion-protected linear light fitting with an ECG and an "end-of-life" cut-off system. World's first approval to use an explosion-protected ECG with an "end-of-life" cut-off system. It was immediately accepted as a mandatory standard requirement. This was another important milestone that had documented SCHUCH's innovative strength.

### 2010

First explosion-protected linear light fitting for Zone 2 and Zone 22 with application of energy-saving T5 lamp technology.

## LED-TECHNOLOGY

### 2011

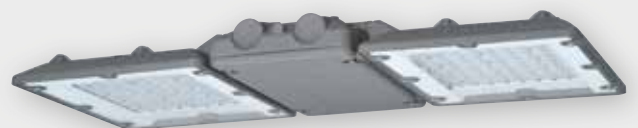
Approval of the first explosion-protected LED floodlights, emergency light fittings and compact light fittings.

### 2014

The LED product program was supplemented by linear LED light fittings, high bay LED light fittings and LED floodlights for Zone 2/22.

### 2016

World's first explosion-protected linear light fitting for Zone 1/21 using an innovative LED casting technique.





# *Waterproof Light Fittings*

## *Quality knows no compromises*

Waterproof light fittings have a wide scope of applications. Thus, a lighting system shall meet various requirements, from simple storage rooms to industrial applications with extreme ambient conditions and temperatures, mechanical and chemical impacts.

Requirements are as various as solutions which SCHUCH offers, being an experienced specialist in this field. As a result, a very wide range of light fittings has been designed for special applications at workshops and in production areas.

Numerous excellent references in all industry branches witness SCHUCH's innovative strength, competence and reliability. Our customers appreciate the proverbial high quality of SCHUCH products for over 100 years.

Our customers can also rely on it with regard to all light fittings with the new LED technology. Quality knows no compromises.



## FROM WATERPROOF PORCELAIN LIGHT FITTINGS TO WATERPROOF LED LIGHT FITTINGS

### 1895

Foundation of the company. Production of the first waterproof porcelain lamp holder for incandescent lamps. Production of first porcelain and hand light fittings with protective glass for damp locations, namely for breweries, leather and chemical industries.

### 1949

Production of first waterproof light fittings without diffusers for fluorescent tubes.

### 1952/53

Production of industry's first waterproof light fitting made of fiberglass-reinforced polyester. Launching own production of "PREPREG" and in-house production of fiberglass-reinforced polyester housings.

### 1973

Start of production of legendary waterproof light fitting series 161/162, which, in sub-sequent years developed to **the** waterproof light fitting for severe industrial applications.

### 1975

Foamed polyurethane gasket is used for the first time instead of widespread conventional rubber seals.

### 1995

The range of waterproof light fittings extends by including special industry solutions for severe applications in the industry and at workshops.

### 2006

Production of a waterproof light fitting according to IFS standard designed for food and beverage industries.

### 2007

Industry's first waterproof light fitting for unprotected outdoor installation.

## LED-TECHNOLOGY

### 2007

Introduction of first waterproof LED light fittings (low power compact light fitting).

### 2011

First waterproof LED light fitting series as highly efficient substitute for conventional fluorescent tube versions up to 2x58W.

### 2014

With light fitting series 161 VARIO SCHUCH introduces industry's first waterproof light fitting with adjustable luminous flux of 2,300 lm to 6,900 lm. One light fitting can replace standard versions of 1x36W up to 2x58W.

### 2015/16

First LED light fitting series for a wide temperature range of -40°C to +65°C, which is designed to be used in climatic zones with extreme temperature fluctuations.



# *High Bay Light Fittings*

## *Perfect solutions for various requirements*

The company has produced light fittings for applications in workshops, industrial, processing and storage areas even in the beginning of its history. When high-pressure lamps appeared, this product line had become one of the main segments in the whole range. As in other manufacturing areas, SCHUCH design engineers covered more and more application fields with severe operating conditions. As a result, along with standard series, many new special versions have been developed over the time. Such special versions have turned into industry solutions due to which SCHUCH is known far beyond Germany by today.

Even in the most severe conditions, such as chlorine electrolysis plants, galvanizing plants or compost systems, SCHUCH light fittings demonstrate reliable operation and withstand the most aggressive environments.

New industrial LED light fittings feature, in particular, excellent temperature control, which is the basic condition of a long service life and one of the most important quality factors for a LED light fitting.



## STANDARD OR CUSTOMIZED SOLUTIONS? SCHUCH OFFERS BOTH

**1949**

Production of the first industrial reflector luminaire for high-pressure mercury lamps.

**1975**

Production of the first industrial high bay light fitting made of fiberglass-reinforced polyester. Series 3021 designed for application in very aggressive environment, such as in galvanizing plants, compost systems, steeping plants, etc.

**1998**

Application of inductive lamp systems with a minimum service life of 60,000 hours. This allowed using high bay light fittings in high-current and strong-magnetic-field applications, such as chlorine electrolysis plants.

**2001**

Introduction of the first high bay light fitting having a specific triangular shape, which is designed for dust-loaded and polluted environments with a high ambient temperature and high fire hazard.

**2003**

The range of high bay light fittings has been extended significantly by adding special versions for food industry, blast rooms, applications with high ambient temperatures up to +90°C and many others.

## LED-TECHNOLOGY

**2008**

Introduction of first LED reflector light fittings.

**2013**

Production of the first high bay light fitting DUEVO Series, which has been designed specially for LED technology and which operates at an ambient temperature of +60°C max.

**2015**

TRIANO Series for 1-point suspension mounting has been added into the range of high bay LED light fittings.

**2016**

Production of TRIANO XL high bay LED light fitting with luminous fluxes of up to 50,000lm. Launch of the Light-Management-System „LIMAS“. A unique remote control system for energy-saving and on-demand control of indoor- and street lighting.





# *Outdoor Light Fittings*

## *LED technology expands the scope*

A good outdoor light fitting shall meet various requirements. It shall provide visibility conditions according to the standards, be photometrically optimized, be easy to install and maintain, and have a long service life.

With its design, a light fitting shall harmonically fit in the environment or set deliberately individual accents.

Economic efficiency and environmental compatibility have achieved new heights due to LED technology. In this regard, modern LED light fittings set completely new standards.

Since the first outdoor light fitting was produced in 1906, this area of production has become an integral part of the SCHUCH manufacturing program.

With its 100-year experience, today SCHUCH offers a wide range of technical and decorative LED light fittings, which provide cost-effective lighting for streets, roads and squares, in compliance to the standards.



## FROM OUTDOOR LIGHT FITTINGS WITH INCANDESCENT LAMPS TO OUTDOOR LED LIGHT FITTINGS

### 1906

Production of first street light fittings for incandescent lamps.

### 1949

Street light fittings for high pressure mercury lamps were included in the manufacturing program.

### 1957

Production of the first street light fitting with a housing made of fiberglass-reinforced polyester using own "PREPEG".

### 1985

Production start of legendary street light fitting series 43 and 44.

## LED-TECHNOLOGY

### 2009

First LED street light fittings were manufactured at the plant in Worms

### 2011

Production of first street light fittings (series 47) specially designed for LED.

### 2012-14

The Company's LED product range extended tremendously by manufacturing suspended LED light fittings, LED floodlights and LED plane surface floodlights.

### 2015

Decorative outdoor light fittings series 544 have been added, SCHUCH has a complete range of technical outdoor LED light fittings.

### 2016

Launch of the Light-Management-System „LIMAS“. A unique remote control system for energy saving and on-demand control of public and industrial street lighting.



# *Emergency Light Fittings*

## *Reliability in severe environment*

Darkness means fear. Especially in buildings with a lot of people inside, panic will come up if the light fails.

For this reason and according to the relevant laws and standards, an emergency lighting system must be installed.

Due to special operating conditions, emergency light fitting design shall comply with particular requirements.



## A BROAD PRODUCT SPECTRUM, INCLUDING SPECIAL SOLUTIONS

SCHUCH offers optimal solutions for each specific application of an emergency lighting system, e.g. highly dangerous work places and escape routes.

A wide range of products is available: From light fittings with built-in batteries to group and central battery systems connected ones.

An emergency version is available for almost each light fitting out of the wide range of SCHUCH products.

Applications with harsh conditions, such as high ambient temperatures or extreme variations in temperature, consistently challenge us to develop new custom-built solutions. Ambient temperatures of +50°C are often observed at power plants, waste incineration plants, recycling plants, chemical factories, as well as commercial kitchens, bakeries, etc. In such cases, SCHUCH light fittings can also help safely illuminate and indicate any escape route.

## LED-TECHNOLOGY

LED light fittings are meanwhile a standard solution with regard to indication and illumination of escape routes. Pictogram illumination that complies with the standards can be done with a minimum supply power.

By applying relevant optics, escape route light fittings may be installed at longer distances between the light points. This allows reducing cost without compromising safety.

SCHUCH is a qualified partner having over 10 years of experience in emergency LED light fitting production.

### 2005

Introduction of first emergency light fittings with the new LED technology.

### 2011

Introduction of first explosion-protected LED light fittings equipped with a battery.

### 2013

New emergency LED light fitting Series 161... can replace standard fluorescent tube versions up to 2x58W.

### 2015

The product range is extended by adding emergency LED light fittings with batteries to be operated at an ambient temperature up to +50 °C and with wide temperature ranges of -40°C to +50°C.





## *Close to the Customer – Worldwide Presence*

SCHUCH products are used worldwide since more than a century.

**Technical consulting and support** during planning and realization of optimized lighting is provided by SCHUCH employees from the head quarter in Worms as well as field sales engineers and agencies all over the world.

We regularly conduct **product and application specific trainings** including the information about national and international standards.

Our Website **[www.schuch.de](http://www.schuch.de)** offers an up-to-date overview of all product lines with complete technical data. Our newsletter informs you about our latest released products. Related data sheets, product descriptions for tender requests, lighting calculations, certificates and our pricelist are available for download. RELUX software, available for download as well, can be used for your own lighting calculation.

In order to present our innovations and to stay in contact to our customers, we participate at the world's leading trade fair **LIGHT & BUILDING** every two years in **Frankfurt** as well as at several regional fairs.





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