

Contents

Page 3

Editorial
Launch fever

Page 4

OBO Project and
Technical Systems



Page 5

OBO in Austria

Pages 6-7

OBO vitamins



Pages 8-9

Highlight
OBO Quick-Pipe



Pages 10-11

- Drill, push, done
- No drilling – aerated-concrete nails
- OBO Set-Clip



Pages 12-13

Highlight
OBO LightningController




Page 14

- LightningController design study
- Cable glands 

Page 15

- Everything metric 
- ATM data line protection

Page 16

- 130 Volts to hand 
- UL for V20C
- Plug terminals complete

Page 17

- Tested lightning protection components



Pages 18-19

Highlight
OBO GR Magic
mesh wire trays



Page 20

- Mesh wire trays connected in a flash 

Page 21

- New cable tray fittings
- GKS cable trays for extreme installations 

Pages 22-23

- New part references in KTS 
- Suspension supports with new perforations
- OBO-Fire Protection Guide

Pages 24-25

Record-breaking –
IBIS quickline 

Pages 26-27

- Coil aid and double sockets
- Underfloor floor box housings installation units for all floors now also for washable floors 
- New underfloor ducts
- Simply practical – ISO-A cover variants 

Pages 28-29

- Overview of OBO trade seminars 
- OBO in Finland

Pages 30-31

- www in orange 
- New corporate identity – the OBO brand



Launch fever

In every theatre, whether on Broadway or in the back of beyond in the provinces, poor and unsuccessful performances are slated by the critics while successful premieres receive applause and acclaim. As this cultural law is unlikely to be repealed in the new millennium, OBO Bettermann has applied an innovative method to guarantee and extend OBO stage success with the help of satisfied customers: "OBO is the Professional Brand".

So OBO Bettermann has a new corporate identity. In our reorganised corporate policy and new corporate identity, the spotlight is sharply focused on the OBO brand. The new livery for the OBO brand personality will assert itself strongly in this new millennium, turning problems into opportunities and implementing new trends in the industry.

The numerous exhibitions and fairs this year will provide the opportunities. Behind the OBO scenes are over 2000 employees



Ulrich L. Bettermann

who see themselves as playing a decisive role in shaping our future as partners to our customers in this country and abroad. The showpiece success is the result of back-stage organisation and preparation – often hidden from view. A team which can define objectives and exploit opportunities with commitment and dedication is vitally important.

For the general public attending these exhibitions, we will present the world premiere of the OBO Quick-Pipe, the OBO GR Magic mesh cable tray, the OBO LightningController, and, new derivatives of the OBO Systems:

- VBS Connection and Fastening Systems
- VBS Lightning and Overvoltage Protection
- KTS Cable Support Systems
- LFS Cable Trunking Systems

We have already received excellent reviews; we attract success from our public like magnets. We'll be going on tour with our entire product range over the coming weeks and months. We are preparing for global and international success via our local and

national presence and distribution. We have already decided the future for OBO through our OBO branches and dealers in this country and our OBO subsidiaries and agents worldwide.

Every success for our customers with OBO means success for OBO – faster, closer, better. Life is a process of continuous change – as is company development. The OBO game plan for this season has a title which represents the OBO range and means economic gain for our customers: "Guide power. Control energy. Prepare the way". Only OBO systems can achieve this, supported by all staff – in development with the innovation engine running at full speed, in production measuring progress with productivity, in logistics ensuring maximum delivery readiness and market availability, and in sales applying the optimum products in our systems and the renowned OBO quality in the service of our customers.

The new OBO corporate identity will not reduce this effort and performance, but the OBO profile in the market will become clearer and more unambiguous in scope and power. Let's meet the challenge together, and together experience the "Orange Wonder".

Ulrich L. Bettermann



**OBO
BETTERMANN –
now as complete
as our building
systems**

NEUWA

joins the OBO Family

Munich Airport, Boxberg Power Station, Commerzbank skyscraper in Frankfurt or the European Parliament in Strasbourg. Every one involved in the total success of such sophisticated and prestigious buildings lives and works with the constant duty to absorb outside experiences in order to influence their own performance, products and the complete building system technology. In Menden, with the usual reliability, this intelligent innovation work is in full swing; already many developments and refinements in installation technology have been successfully transferred to the working practices of electricians and system builders, and targeted installation optimisations perfected.

The company concerned is the former NEUWA Anlagentechnik GmbH. OBO Bettermann has just secured this jewel and as from 1st April 2000 gave NEUWA its new name of OBO BETTERMANN PROJEKT UND SYSTEMTECHNIK GmbH. And that's not the only change.

The global reach of the OBO brand and this OBO competence growth are evident and visible to any consumer as the new OBO



brand clothing is being tailored and adapted to this project management. Of course it's in orange, the colour of the professional. Outwardly the same, but different at heart as the company's previous independence will be retained under the umbrella of the common OBO brand, thus easing integration.

As a result, OBO Bettermann now presents worldwide in its catalogues a proven and certified "collection" which brings decisive competitive advantages from the drawing board to installation, thanks to its project-relevant quality features:

- planning reliability and electronic data processing network supported work in the preliminary stages
- engineering in detailed construction, applied project research and project-related consultation

- flexibility as regards technology and time
- complete rapid-response action from one point
- linking of all OBO systems into innovative building systems engineering
- production quality at world market level
- reliability in decentralized market support.

These principles for a unique future strategy mean double benefits for our customers in this country and abroad:

1. The former NEUWA Anlagentechnik profits from the proven OBO system range, and supplements the cable support and routing systems with innovative OBO safety systems such as fire protection, function maintenance or overvoltage protection in the installation sequence, ceiling – floor – wall; OBO underfloor and the new skirting duct systems included.
2. In its marketing via the classic three-stage trade route of manufacturer, wholesaler, user; OBO applies its innovative know-how and offers trade and commerce reliable, fully integrated OBO system modules, while continuing to research better system and product solutions.



With this acquisition, the ever-expanding OBO Bettermann family has taken a decisive step towards its ambition to be an unequalled success in the global market. For market partners, OBO Bettermann brings the visible combination of all OBO forces which individual businesses cannot match in this country or on the world market. OBO Bettermann constantly sets new standards in the international market.

While the Austrian Government struck a discordant note at the beginning of this year, for OBO Bettermann – far removed from everyday politics in the Alpine country – promising prospects and real opportunities for growth were opening up. Austria has traditionally assumed strategic and economic importance as the gateway to Eastern Europe. So, harmoniously and in complete agreement, two partners NEUBO Unitech and OBO Bettermann were taking the same route, and on 1st March 2000 signed a co-operation and coalition contract. From this date,

In Austria too, the new OBO image and associated marketing and publicity are causing excitement. The alliance of OBO Bettermann and NEUBO Unitech was legally sealed on 1st March 2000.



makes the present OBO marketing success a tremendous achievement. OBO Bettermann has therefore provisionally taken over co-ordination and responsibility for future market success, and with an instinct for potential success



OBO Bettermann in Austria

OBO took over 100% of the company shares.

The OBO victory campaign in Austria began on 1st April 1987. NEUBO Unitech, founded by experts Heinrich Haider and Peter Wimmer in Vienna and Graz, were then acting as distributors for OBO lightning and overvoltage protectors with their expert knowledge, consultancy skills and convincing sales skills. This magnificent success was followed by the entire OBO range, i.e. OBO connection and fastening systems and the OBO cable support and trunking systems, with commitment and reliability.

In these years of development and expansion, the sales motivation rules specified by OBO Bettermann and proven on all markets in the world were implemented in exemplary fashion. The motto was "Don't stop starting, don't start stopping". This released an incredibly dynamic enthusiasm to the benefit of customers and staff.

As part of the concentrated movement in trade and industry apparent in Austria, the acquisition of further manufacturing brands

has systematically reinforced the necessary distinction from all former marketing activities with the agreement of both founder members. This was another step forward in accordance with the well-structured OBO company philosophy: "Just when you think you've achieved a lot, it's time to take the next step." After analysis of all knowledge and subsequent evaluation, the solution was quickly and unanimously reached:

NEUBO Unitech, with Heinz Haider and his proven team, take over exclusive total responsibility for OBO sales in Austria. This concentration on essentials presents the OBO system benefits to the market in a targeted manner and secures OBO's claim. OBO is faster – closer – better. Global action needs local competence, the foundation which promotes the international OBO market strategy.

OBO Bettermann is confident of success. Naturally the new OBO image and the new marketing and publicity will also move into Austria and provide the external structure for the entire project. We provide our market partners with the certainty and guarantee

The top photo shows (left to right): Managing Director Markus Arens, Heinz Haider, Ulrich L. Bettermann and Rolf Barczewski. The lower picture shows the entire Austrian team.

of profiting directly from the market upturn and all product innovations, and invite them to join us on the road to success.

At this point we would like to thank Peter Wimmer and Heinz Haider once more for their preparatory work. Peter Wimmer will, as before, together with Rainer Breineßl continue his activities in Euro Unitech. We wish them both every success for the future.

All target groups in Austria have been informed in detail about these strategic changes and the new sales orientation, as the new NEUBO Unitech positioning, in conjunction with the customers, will lead to further OBO growth in coming years.





What your doctor or chemist
can't tell you, as only you have
the experience of our innovation
cure:

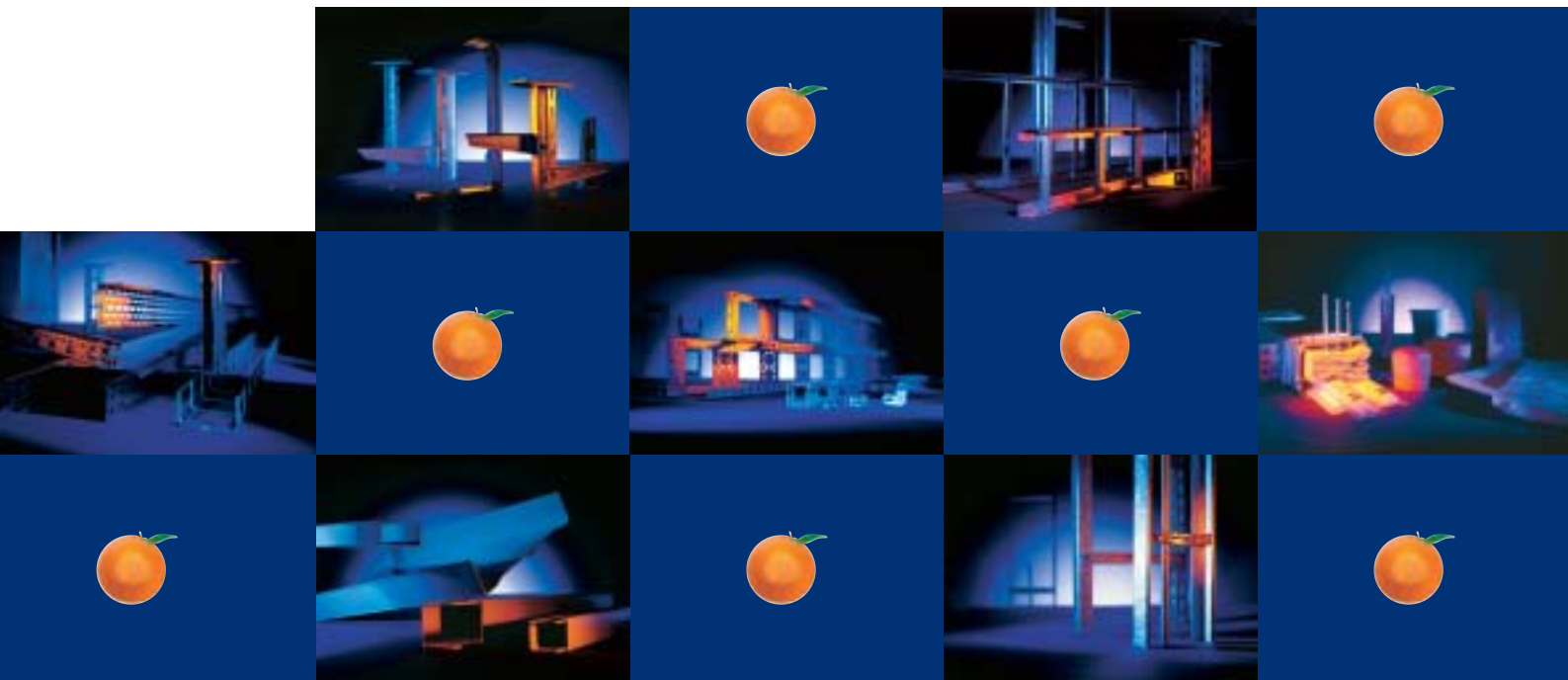
Available from OBO without
prescription, the highly effective
treatment for vitamin and innovation
deficiency at any time of year

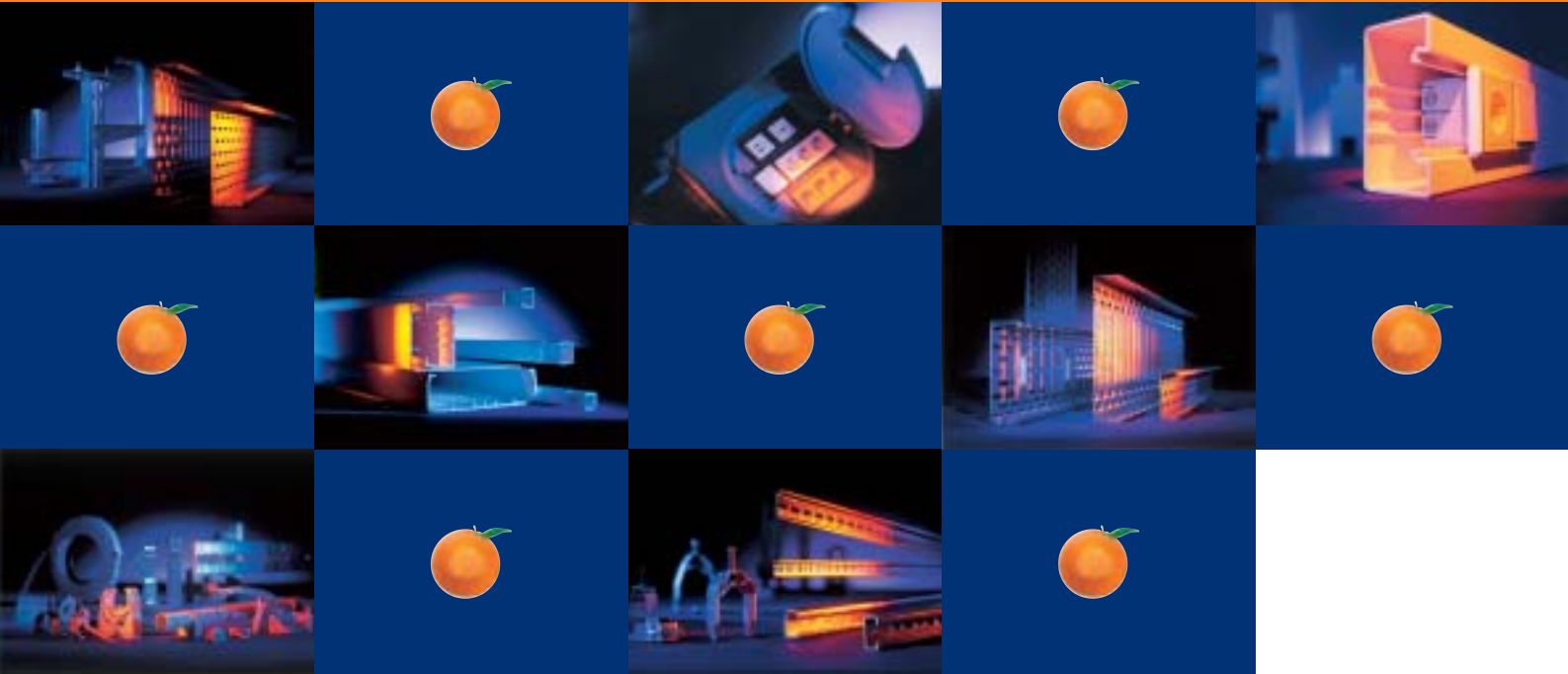
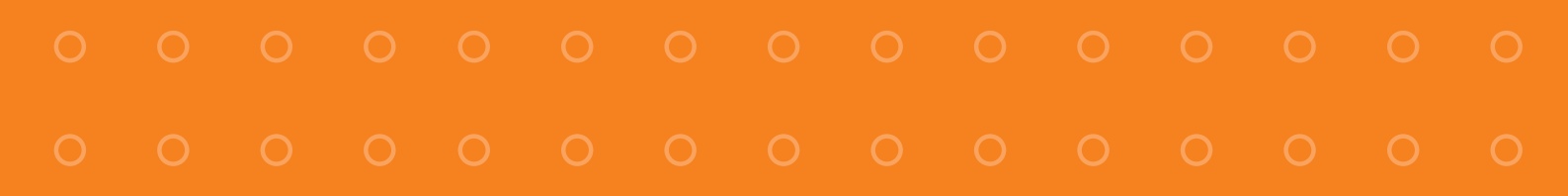
Safe and fast acting
for our profession-
als in craft, trade
and industry. These few lines are
aimed at you.

Take a few minutes for a little
test. You know the situation –
with your mouth watering, you
peel a carefully selected, large
orange. Every mouthful is deli-
cious. Close your eyes and you
think of ... OBO. Automatically.
We'll tell you why in the next
20 seconds.

Let's start with a well-known, well-
established fact. In recent years,
OBO has often used colours and
many new symbols in the market
and for the entire industry. And
here's our latest.

OBO
BETTERMANN





OBO is orange. But there's more: orange is the colour of the professional. Now we can go one step further: OBO is the brand of the professional. Yesterday, today and tomorrow. A claim which brings obligations with it. Naturally OBO Bettermann wants to spread this symbol worldwide. The OBO signals range from "full of energy" to "vitamins and performance boost by innovation".

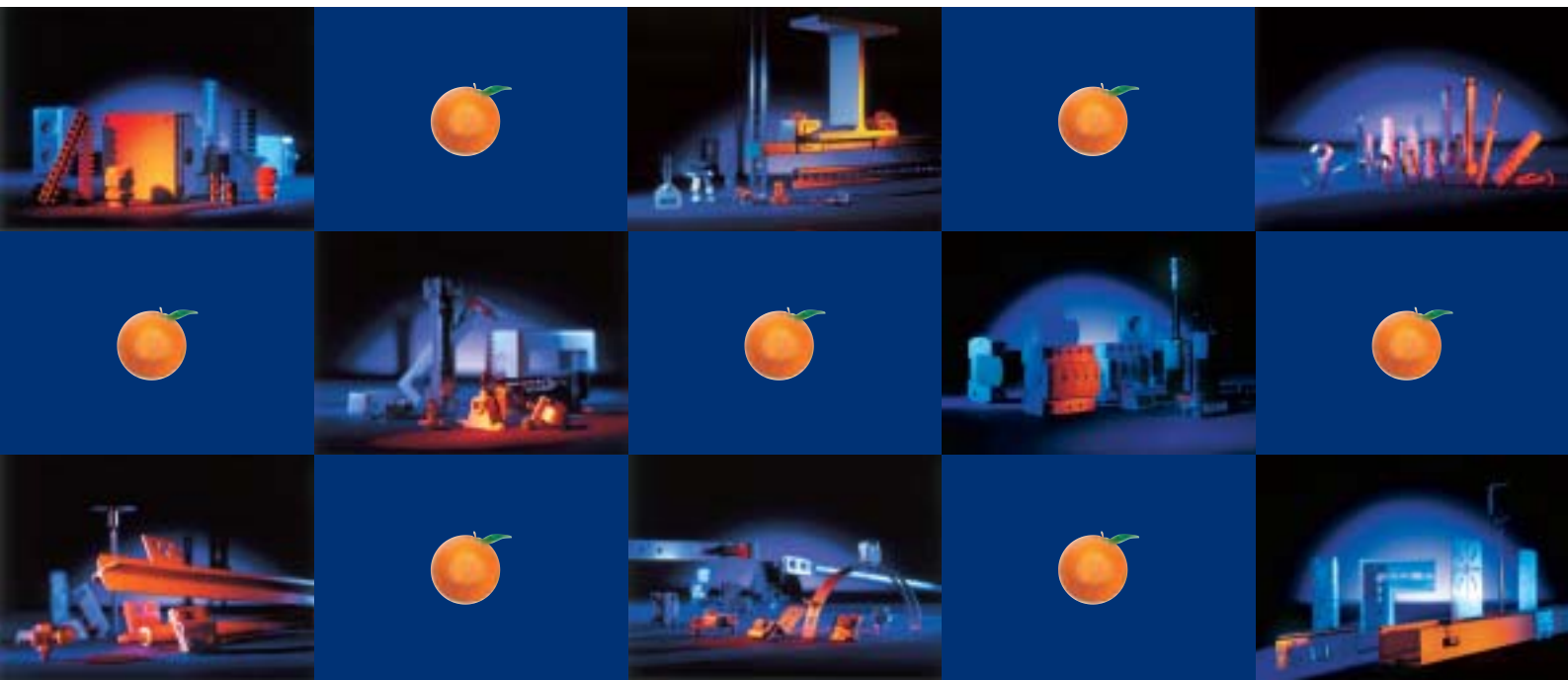
On the next few pages, we will tell you about the new OBO harvest for 2001. A special selection which has it all. Bit by bit, or



product by product, juicy and full of quality. For pure enjoyment and pleasure. Only with OBO can you experience the orange wonder. A wonderful recipe for reinforcing your defence mechanisms – just what you need for the months ahead. Stay healthy, fit and successful – with OBO Bettermann.

You'll need perseverance to reach all the product stations on this OBO innovations route. Dip into the OBO world of products and systems with us, and look at the five-strong integrated range, of which OBO systems engineering comprise:

The basket of OBO innovations 2000 and product improvements is before you. Pick it up. The pages which follow show, product by product, in a personal way, the orange wonder of OBO. Join in – it pays dividends for all of us in a functioning partnership. Which is another signal from the new OBO brand launch, and at the same time the solution to the puzzle.



OBO Quick-Pipe – the clever pipe system with a twist

A world first



The new closable OBO Quick-Pipe is the clever combination of conventional pipe installation and open cable laying. Ideal for walls and ceilings, and the perfect choice for a tidy and secure surface-mounted installation where the cables need protection from damage or even dust and dirt.

Quick-Pipes have a cover which automatically closes when the conduit is twisted. Quick-Pipe is used with the Junior Quick-Clips which have already proved successful millions of times.

Installation using the OBO Quick-Pipe is simple:

- Clip Quick-Pipe into the Junior Quick-Clip
- Introduce cables into the Quick-Pipe from the side
- Twist the OBO Quick-Pipe towards the back – done. The clever design automatically closes the cover on the Quick-Pipe.

Special fittings match the Quick-Pipe in design and function. Connectors, bend and T-pieces are a two part construction and can easily be fitted later. The channel can also be adjusted sideways. The 90° bend moulding can be used for both internal and external corners. The mouldings can be opened again easily after fitting, for example for later additions.

The patented Quick-Pipe system not only offers a neat appearance for surface-mounted installations and safe protection of the cables against dirt and contact, but also has a number of other benefits:

For example, Quick-Pipe is ideal for laying optical fibre cables, in particular in conjunction with fittings. These cables can be inserted into the channel from the side, minimising the risk of kinking.

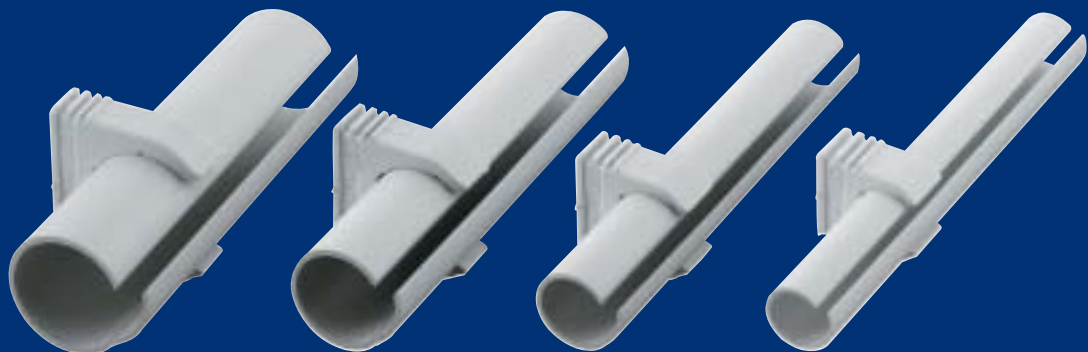
Even ready-assembled cable looms and plugs can easily be laid using Quick-Pipe, as the cables can be inserted from the side.

Further information will be found in the VBS catalogue

»Close Sesame« OBO Quick-Pipe



The OBO Quick-Pipe is available in metric dimensions M16, M20, M25 and M32 in standard lengths of 2000 mm.



Now
complete

The lightning-fast OBO push-fit plug system Drill, push – done!

Just in time for the most important trade fair of the year, OBO presents the push-fit plug system in a fully "rounded" range. Various clips and clamps are available to the installer, for a wide range of applications.

All share the common feature of an integral push-fit plug, which considerably simplifies and speeds up installation. The motto is: drill, push – done!

With the push-fit plug products, the term "system" can justifiably be used, as the OBO range offers the facility of combining push-fit plugs and clips as required. The push-fit plugs can for example easily be combined with the Junior Quick-Clip or Quick-GL clips in all sizes to create a complete system units. Ready-assembled units are also available on request.

To guarantee the same high product quality throughout the entire push-fit plug range, all parts are made only from high quality polyamide. Evidence of the system quality is backed up by the proven retention forces of up to 500 N.

The following products have recently been added to the OBO push-fit plug range:

- Single push-fit clips for fixing cables and pipes on walls and ceilings, and for fixing flexible pipes on concrete and in cast floors. The single push-fit clips replace nail clips in concrete and aerated concrete.

Further
information will
be found in the
VBS catalogue

- Double push-fit clips for fixing cables and pipes on walls and ceilings, and for fixing flexible pipes on concrete and in cast floors. The double push-fit clips replace nail clips in concrete and aerated concrete.
- Push-fit plugs for holding cable ties up to 9 mm wide; for installation of cables and pipes of various diameters.



For rapid and secure fixing of cable channels to porous concrete walls:

The new 910/GN aerated-concrete nail

Specially designed for fixing thin-walled parts such as cable channels to walls of porous concrete, OBO now offers a practical aerated-concrete nail. The advantages for the user are: no more drilling or screwing! The nail is simply tapped in with a hammer, whereupon it expands and thus ensures stable anchoring – simple, fast and safe!

The 37 mm long aerated-concrete nail type 910/GN has a cross-

section of 4.2 x 7.5 mm and is therefore matched to the base holes in the BKS and WDK systems.

Further information will be found in the VBS catalogue



To ensure that order prevails in the building phase:

The fast OBO Set-Clip



With the new Set-Clip, OBO offers a practical fixing aid for fast and easy installation of cables and flexible pipes to concrete floors during the building phase. The clip is laid over the pipe or line, and the pre-assembled hardened drive plug is knocked into the floor – done.

The main advantage of the new fixing clip is the time saving: no time-consuming drilling, plugging or screwing is required. And the Set-Clip is secure when fixed.

Further information will be found in the VBS catalogue



VBS. Best connections

A world first

A small sensation: The new lightning protection system from OBO

»Simply great«
OBO LightningController



Simply the best

OBO »LightningController« – the first world-wide tested Lightning arrester



In the new LightningController, OBO presents innovative lightning protection systems with patented multicarbon technology. The first modular spark gap for perfect integration in distribution systems.

The great advantage of the new units is that they have a fully encapsulated spark gap. This means no more arcing! This eliminates the risk of burns in the distribution box due to sparking.

OBO LightningControllers have an extremely high sequential current extinction capacity of 25 kA. This means they can be fitted immediately after the domestic connection box without separate pre-protection. The spark gap itself consists of nine individual spark gaps each formed from ten high-load carbon discs. The precisely defined spacing of the spark gaps is ensured by the extremely heat-resistant Teflon plates. Diecast zinc blade contacts are screwed together and clamp the spark gaps precisely. Eight of the nine spark gaps are in contact with a board and thus ensure a precisely defined response surge voltage of ≤ 2 kV.

Further information will be found in the VBS catalogue

The new OBO LightningController is available in two different designs:

Type MC 50-B VDE is the first modular spark gap for use in distribution systems. The modular construction of this unit means that the upper part can be removed from the lower part without disconnecting the network power in order to check the insula-

tion resistance and hence function reliability of the spark gap. The MC 50-B VDE has two connection options for L and N/PE conductors. The sequential current extinction capacity is 25 kA, and the discharge capacity 50 kA (10/350 μ S).

Version MC 125-B/NPE is an NPE spark gap with an extremely high discharge capacity of 125 kA (10/350 μ S). This unit has two connection options for N or PE conductors.



1

Carbon Technology Advantages



- High performance technology
- Robust design. Case integrity guaranteed



2

MultiGap- & GapControl Technology Advantages

- Highest efficiency at minimum of space
- High availability of network power
- No insurance necessary
- Save money



World-wide exclusive

9

**Push In
Connection Top
Advantages**

- User friendly MMI
- Easy checking of electrical systems



8

**Lightning Controller
Push In
Connection Top**

- Correspond to requirements of VDEW guidelines



7

**Easy Installation
Advantages**

- Fast and skilled installation
- No phase rail required
- Easy terminal identification



6

**Tested Security
Advantages**

- All important properties have been inspected at BET IEC 61643-1
 - All features can be checked by BET test report
- EMC complaint-like co-ordination



3

**Lightning Controller
Encapsulated system
Advantages**

- Non-arcing



4

Existing designs: arcing



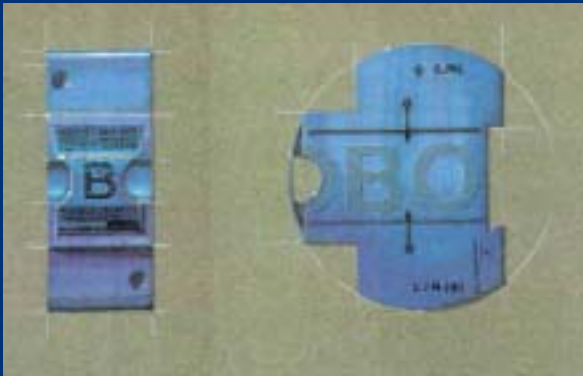
5

**Lightning Controller
Encapsulated system
Advantages**

- Non-arcing
- No special enclosures
- No installation restrictions
- More flexibility
- Lower costs



The new OBO LightningController



This is the concept behind the special OBO quality strategy. In light of the new OBO corporate image, the values and claims recently formulated by OBO have been specified for architects and designer:

OBO is the brand of the professional. OBO is an independent manufacturer of innovative products for the world market.

Such a broad claim on a world scale is naturally preceded by internal changes – efficient team organisation, a democratic management style, and unsurpassed quality awareness. Our joint forces for the market, customers and results come from the inside.

This is the decisive factor which certainly distinguishes us from a number of competitors.

Design is essential. In a time of transparent, global, contracting and equalising markets, which makes it difficult to differentiate products from those of competitors, industrial design makes a decisive contribution to individuality.

The new OBO spark gaps type MC 50-B VDE and MC 125-B/NPE are a classic example. See for yourself (photo). This product innovation for the "Light + building" show has adopted a perfectly tailored form, a true designer model. The electrical engineer knows from his everyday work that the aesthetic standard demanded for a complete installation has risen. The OBO spark gap reflects the awareness that engineering is a decisive factor in architecture, which has enabled us to raise the OBO quality to a new dimension.



At the time of the launch of OBO Bettermann's new corporate image, it's right that this unique and ergonomically perfect form should emerge from the studios of the industrial designers.

According to Arthur D. Little, former leading designer and one of the pioneers for whom industrial design equates to product design, "Industrial design concentrates on series-produced products and services". In other words, not only is product design dependent on aesthetic styling, but the form must also incorporate key features such as ease of installation and functionalism. Typical OBO.

Complete range:

OBO cable glands for use in explosive atmospheres



Further information will be found in the VBS catalogue

Very high requirements apply to the quality of cable glands for use in explosive atmospheres. OBO produces these components in all common designs and dimensions. Available in both plastic and metal, with various metric thread sizes. These cable glands are suitable for introduction of cables into housings with EExe' (increased safety) and EExi' (intrinsic safety) protection classes, in machine group II and categories 2 and 3.



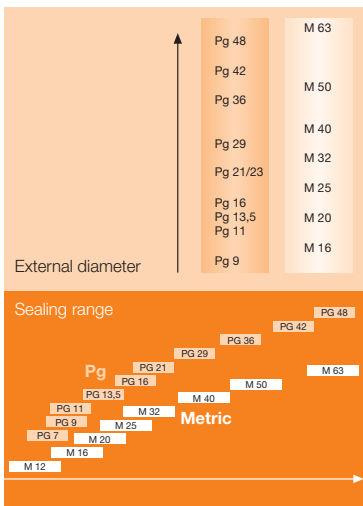
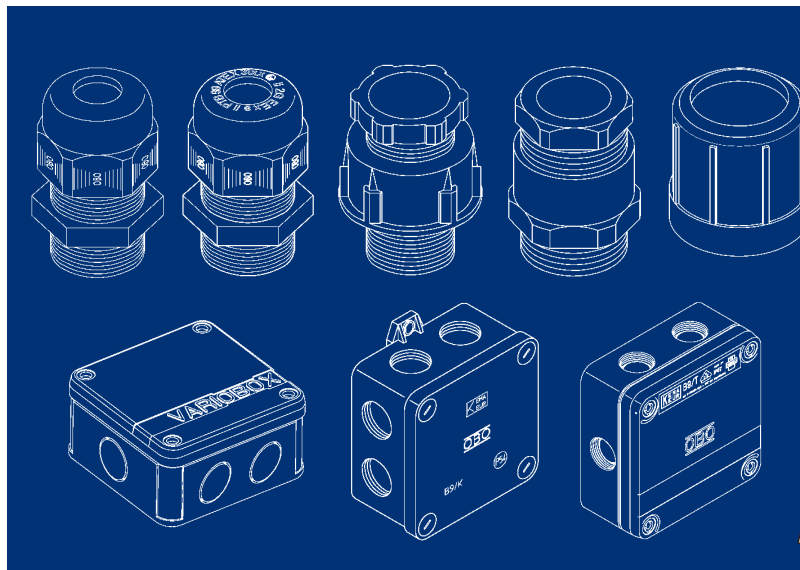
The OBO cable glands fulfil all the requirements of the Atex 100a regulation, comply with the relevant Ex protection standards and maintain the existing protection level.

PG is out, metric is in

A step forwards in size standards: the Pg system, common in Germany for decades, is being replaced by the metric system customarily used in other countries.

The changes affect the following product ranges:

- electrical installation conduits
- cable glands and connectors
- cable junction boxes
- installation boxes and distribution boxes



- consumer units and terminal boxes (e.g. for motors)
- switch cabinets, enclosed switch and control gear
- enclosures in general

Series Pg 7 to Pg 48 will be replaced by the metric series M 12 to M 63. Instead of the ten Pg sizes, in future there will just be 8 metric sizes.

The conversion of the cable glands, pipes and housings is based on the international metric measurement standard DIN EN 60423.

The table shown here gives an overview of the changes.

Data line protection units

Further information will be found in the VBS catalogue

Effective protection for ATM computer networks

The protection of data cables is becoming increasingly important as the computer networks and electronic data processing systems connected to these

cables are particularly sensitive to power surges. With data cable protection unit RJ45S-ATM/8-F, OBO now offers an effective fine and medium protection unit for ATM computer networks with a maximum data rate of 155 MHz.



The unit is based on STPRJ45 plug connectors (Cat. 5) and has universal application even in other network systems thanks to its complete protection of all eight cores.



Lightning and overvoltage protection units for Brazil

OBO can now offer a whole range of lightning protectors and overvoltage conductors for the Brazilian market. All products are TOV-tested to the future IEC standard 61643-2 and specially designed for 130 V networks.

The lightning conductor units are:

- V25-B/0-130
- V25-B/2+NPE-130
- V25-B/3+NPE-130
- V25-B/3+NPE-130-FS



All units share the advantage that the protection function is retained even in the event of a network failure.

Lightning conductor CLA 25-B offers the benefit of an encapsulated, non-arcing spark gap. Further features of this unit are the high discharge capacity of 25 kA (10/350 μ s) and the low response voltage of 1.5 kV. The conductor can be plugged into the V20-C base part.

Four class C surge arresters to E-DIN VDE 0675 Part 6/A1 are also designed for the Brazilian 130 V network. These units too; retain their protective function

even in the event of a network failure. The types are as follows:

- V20-C/0-130
- V20-C/2+NPE-130
- V20-C/3+NPE-130
- V20-C/3+NPE-130-FS

The surge voltage fine protector KNS-D was developed for use in socket and switch combinations. This unit, specially designed for the 130 V nominal voltage, fits under every commercial blank or unit cover with standard 22.5 mm opening and can therefore be integrated smoothly into an existing electrical installation.

The protective circuits of the protection unit are thermally monitored at all times. Any fault is signalled both visually and audibly.

Overvoltage protection approved for the US market

New markets are opening up for the OBO V20-C surge arrester. The unit has received UL approval, which is essential for sales on the American and New Zealand markets.



The UL certificate confirms that the OBO product can safely be used as a surge arrester. This certificate is issued on the basis of safety tests including fire testing.

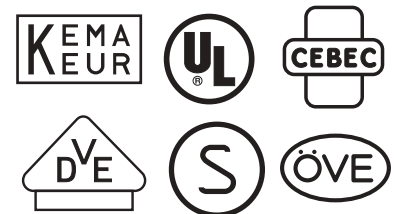
Screws? No thanks!

OBO completes the plug terminal range

With some new product introductions, OBO has completed its tried and tested range of plug terminals.



Further information will be found in the VBS catalogue



Newcomers to the range are plug terminals for two, three, five or eight single-cored conductors with a cross-section of 1-2.5 mm² or 0.75-1.5 mm².

The plug terminals are made of polyamide and are designed for nominal voltages up to 450 V.

KTS. Carrying power.

The new push fit

A world first

OBO mesh cable tray



Mesh cable trays have become increasingly popular recently for easier cable laying. Every installer knows the benefits of this system:

- high load-bearing capacity with low weight
- good cable ventilation
- fast – easy installation
- quicker cabling

With the new GR Magic mesh cable tray, OBO has gone one step further: in the new system, no connectors are required when installing in fixed lengths – the individual trays simply push together! When connecting bends

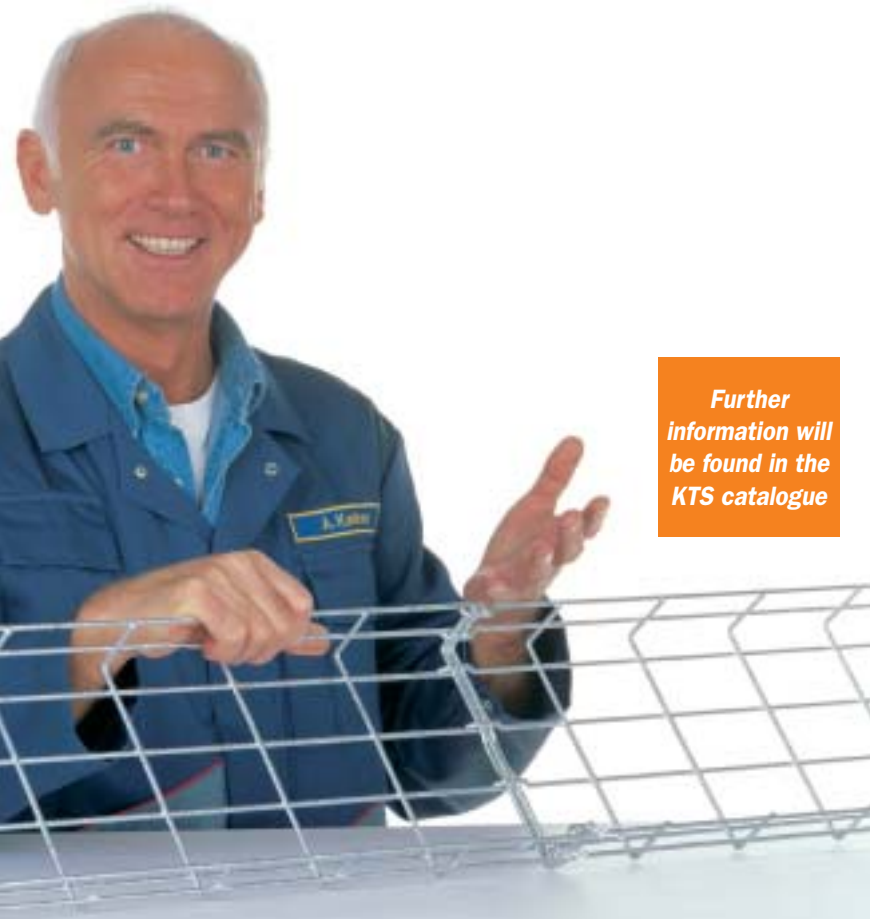
or shortened trays, GVS joint connectors are quickly fitted. And that's not all: no bolts or special tools are needed for fastening to wall brackets and ceiling supports. Bracket TP GA3 and support TPD G2 ensure fast and safe clamping of units.

The result: considerably faster installation, with no loss of rigidity



»It's magic...«
**OBO GR Magic mesh
cable tray**

GR-Magic

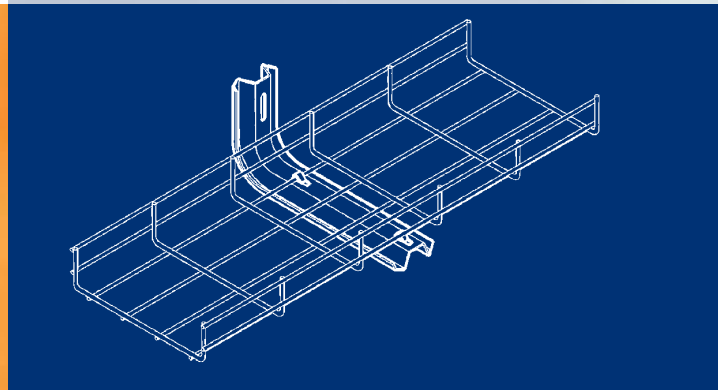


*Further
information will
be found in the
KTS catalogue*

and load-bearing capacity. Load tests have shown that GR Magic mesh cable tray connector systems are completely equivalent to conventional screw fastenings.

The electrical properties of the GR Magic are also superb in all respects. Measurements of the contact resistance have shown that the values required in VDE

guideline 0639 and the newly issued IEC 61537 are easily achieved.



New fast connectors for mesh cable trays

Working on the theory behind the saying that there's no product so good that it can't be improved, OBO "have" with the new GRS fast connector for mesh cable trays.

Fitted in a flash with no special tools: position the fast connectors and then bend the lugs inwards with a screwdriver – done! In this way, a stable and safe linear connection of two cable trays can be achieved in seconds.



GALFAN COATING GA
Institute tested

- dimensionally stable
- edge-protected
- constant quality
- high corrosion protection
- even layer thickness

For better galvanising!

The GRS Quick connectors are coated with galfan, the superior galvanised coating, and are suitable for all mesh cable trays type GR 55 FT, GR 55 G, GR 55 VA, GR 55 S, GR 105 and GR Magic.

Further information will be found in the KTS catalogue

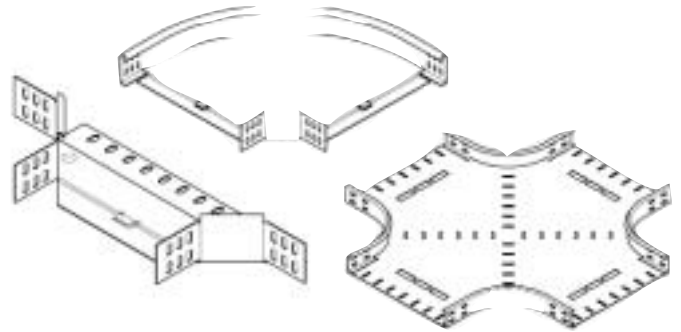
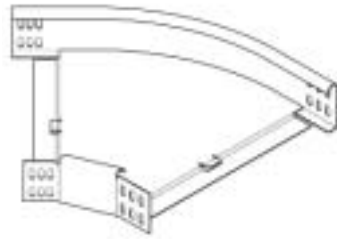
Nominal width	No. of connectors	Position of fast connectors
50	2	◀▶
100	2	◀▶▶
150	2	◀▶▶▶
200	2+1=3	◀▶▶▶▶
300	2+1=3	◀▶▶▶▶▶
400	2+2=4	◀▶▶▶▶▶▶
500	2+3=5	◀▶▶▶▶▶▶▶
600	2+3=5	◀▶▶▶▶▶▶▶▶



”Range reform” in cable tray fittings

The product range for cable tray fittings has been simplified. As part of our product rationalisation, the range has been reduced for better clarity and easier warehousing, without restricting the range of applications covered.

All tray widths now benefit from rounded fittings; the recently introduced 400 to 600 mm rounded units complete the range.



The change affects all cable tray fittings with side heights from 35 to 110 mm and in all available surface finishes.



GKS cable trays:

- torsionally rigid and flexible
- low weight
- anti-magnetic
- electrically insulating (no potential equalisation required)
- easy and quick to install

GKS cable trays from OBO are available in eight standard sizes. The standard length is 3 metres, but other lengths are available on request for larger projects.

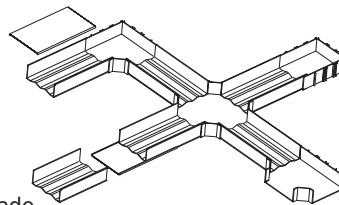
One particularly practical feature: the optional covers can also be used as linear connectors. And as the material is easy to cut, you can easily produce your own "tailor-made" fittings on site. A range of stainless steel fixings are available for fastening the GKS cable trays.

The universal talent for extreme installations

Wherever materials are exposed to extreme environmental conditions, the versatile GKS cable duct system from OBO comes to the rescue. In tunnel structures, in chemical and pharmaceutical industries, in shipyards, in agriculture and the energy industry – OBO installation systems with their proven strength are in demand everywhere.

OBO GKS cable ducts made of polyester for use out-door, or acrylic for use indoors, feature the following advantages:

- high mechanical strength
- high resistance to chemicals
- UV-resistant
- corrosion-resistant
- halogen-free and self-extinguishing in the event of fire
- temperature resistant from -50°C to +130°C



Further information will be found in the KTS catalogue

Successful slimming cure for the KTS range

The current OBO KTS range has undergone a thorough slimming exercise to emerge more attractive and clearer than ever before. As part of the extensive product rationalisation, the range has been reduced. Numerous practical requirements have given rise to product rationalisation which, in many areas of the range, has brought further improvements in terms of ease of installation. And naturally there are more interesting innovations.

All this and more is described in the new KTS catalogue which will be available in time for the "Light + Building" show. The striking change in this catalogue is the introduction of new type references. Here OBO is responding to the wishes expressed by many users for replacement of the confusing sequence of figures

by a more informative and clearer identification system.

The purpose of the change was to offer planners and users of OBO products new references which identify the key product features, such as for example the type series, design, form and main dimensions.

One example: the cable tray fitting "45° bend", previously known as 30851/60/100, now becomes type RB 45 610. The "R" means "tray" (Rinne in German), the "B" means "bend", the "45" means "45°" and the "610" means an side height of 60 mm and a useful width of 100 mm. Another example: the "vertical adjustable bend element" formerly known as 30751/60/400 is now RGBEV 640. Again the "R" means "tray", "G" means "adjustable" (Gelenk in German), "BE" means

"bend element", "V" means "vertical" and the "640" indicates a 60 mm side height and a width of 400 mm.

Tests prior to the introduction confirmed that this new reference system is relatively easy to understand, logically structured, and above all is considerably easier to remember than the old system. To help all users make the change in the transitional period, OBO offers an easy to use computer conversion programme free of charge: the OBO "KTS translator". This program can convert all old type references into new ones and vice versa. The "Translator" will shortly be available for download from our internet home page. The new KTS in English will be available during the first quarter of 2001.

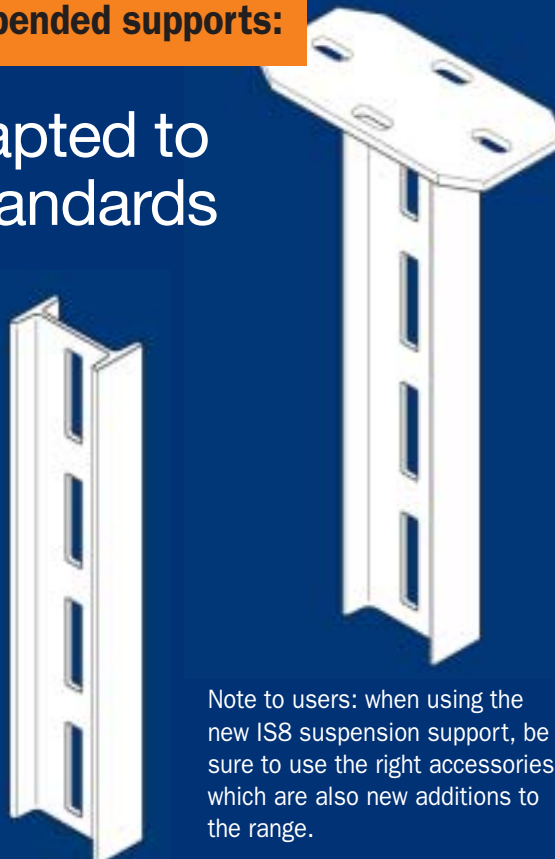
Some examples are shown in this table.

Further information will be found in the KTS catalogue

Product rationalisation in suspended supports:

Perforation adapted to international standards

The classic OBO IS8 suspended supports now look different: as part of the product rationalisation, the perforations have been changed from the former square shape to rectangular. In this way OBO has adapted the supports to the general international standard and at the same time provided greater adjustability in the holes. The advantage for the user: for the same range of applications fewer different types of suspension support are now required – a clear benefit for warehousing.



Note to users: when using the new IS8 suspension support, be sure to use the right accessories which are also new additions to the range.

With two new components for the US5 universal flexible installation system, OBO has rounded off the extensive range of cable support systems.

The new KUS5 head plate, in conjunction with the US5 U profile, creates wall or suspended supports which can then be attached to the ceiling. The VUS5 U-support connector can be used to connect or extend suspended supports.

The new components make the US5 KTS system even more versatile, as users can now construct "tailor-made" suspension parts quickly and easily on site without having to carry a large number of different profiles and system parts.

**New in the KTS catalogue:
New type references – example**

OLD

NEW

CABLE TRAYS	Type	Order-No.	Finish	Type	Order-No.	Finish
	50950 L 60/ 100	6085 016	FS	DKS 610	6085 016	FS
	50950 L 60/ 200	6085 032	FS	DKS 620	6085 032	FS
	50950 L 60/ 300	6085 059	FS	DKS 630	6085 059	FS
	50950 S 60/ 400	6085 202	FS	DKS 640	6085 202	FS
	50950 S 60/ 500	6085 229	FS	DKS 650	6085 229	FS
	50950 S 60/ 600	6085 245	FS	DKS 660	6085 245	FS
	50950 L 60/ 100	6085 326	FT	DKS 610	6085 326	FT
	50950 L 60/ 200	6085 342	FT	DKS 620	6085 342	FT
	50950 L 60/ 300	6085 369	FT	DKS 630	6085 369	FT
	50950 S 60/ 400	6085 512	FT	DKS 640	6085 512	FT
	50950 S 60/ 500	6085 539	FT	DKS 650	6085 539	FT
50950 S 60/ 600	6085 555	FT	DKS 660	6085 555	FT	

FITTINGS	45° bend					
	30851/ 60/ 100	7000 324	FS	RB 45 610	6043 763	FS
	30851/ 60/ 400	7000 383	FS	RB 45 640	7000 383	FS
	30851/ 60/ 100	7066 104	FT	RB 45 610	7066 112	FT
	30851/ 60/ 400	7066 406	FT	RB 45 640	7066 406	FT

FITTINGS	90° bend					
	30850 R 60/ 100	7001 223	FS	RB 90 610	6043 216	FS
	30850 R 60/ 400	7001 290	FS	RB 90 640	7001 290	FS
	30850 R 60/ 100	7125 097	FT	RB 90 610	7125 100	FT
	30850 R 60/ 400	7125 410	FT	RB 90 640	7125 410	FT

FITTINGS	Add-on-Tees					
	30854 A 60/ 100	7002 327	FS	RAA 610	6040 403	FS
	30854 A 60/ 400	7002 394	FS	RAA 640	7002 394	FS
	30854 A 60/ 100	7121 105	FT	RAA 610	7121 109	FT
	30854 A 60/ 400	7121 407	FT	RAA 640	7121 407	FT

FITTINGS	Tees					
	30854/60/ 100	7003 323	FS	RT 610	6043 410	FS
	30854/60/ 400	7003 390	FS	RT 640	7003 390	FS
	30854/60/ 100	7117 108	FT	RT 610	7117 116	FT
	30854/60/ 400	7117 396	FT	RT 640	7117 396	FT

FITTINGS	Crossover					
	30858/60/ 100	7004 338	FS	RK 610	6043 615	FS
	30858/60/ 400	7004 397	FS	RK 640	7004 397	FS
	30858/60/ 100	7113 102	FT	RK 610	7113 110	FT
	30858/60/ 400	7113 404	FT	RK 640	7113 404	FT

FITTINGS	90° vertical adjustable bend					
	30750/60/ 100	7006 322	FS	RGBV 610	7006 322	FS
	30750/60/ 400	7006 381	FS	RGBV 640	7006 381	FS
	30750/60/ 100	7079 109	FT	RGBV 610	7079 109	FT
	30750/60/ 400	7079 400	FT	RGBV 640	7079 400	FT

FITTINGS	Vertical adjustable bend elements					
	30751/60/ 100	7005 326	FS	RGBEV 610	7005 326	FS
	30751/60/ 400	7005 385	FS	RGBEV 640	7005 385	FS
	30751/60/ 100	7075 103	FT	RGBEV 610	7075 103	FT
	30751/60/ 400	7075 405	FT	RGBEV 640	7075 405	FT

OBO Fire Protection Guide:

**Decades of
experience in
compact form**



"Fire protection in electrical installations" is a topic which has occupied OBO Bettermann for almost 25 years. The first patent application for BAK cable screening – still included in the OBO range – was submitted in 1976. Since then this product range has expanded continuously.

In 1987, OBO Bettermann for the first time confronted the problem of maintaining the function of electrical cable systems in the event of fire. And it quickly became clear that this subject, thanks to steadily increasing safety-consciousness, would, in the future, assume an important role in electrical installations.

OBO employee Hans-Theo Fabry, an experienced specialist in this field, has, since 1990, played a decisive role in the Standards Committee in the production of a test standard for function maintenance, DIN 4102 Part 12.

Hans-Theo Fabry has now summarised his expert knowledge from 13 years' activity and commitment in the fire protection and function maintenance sector in the "OBO Fire Protection Guide". This work contains valuable information on the regulations, test standards, laying systems and other important details in a fire-safe electrical installation.

The "OBO Fire Protection Guide" is available free of charge on request.

LFS. Guides power.

Fast, faster,

The record-breaking skirting duct system from OBO is here



A neat solution – in every respect. IBIS quickline is the skirting duct system from OBO which not only looks great but also saves time.

And time is money. Especially when it comes to installation. The secret of the IBIS quickline system is the patented profiling of the rear of the duct, which allows simple "one man installation". Simply hang the duct from the support bracket or – for direct wall mounting – the fixing bracket, secure at intervals with self tapping screws, press in the connectors – done.

Further information will be found in the IBIS quickline catalogue

With IBIS quickline, OBO presents a complete skirting duct system which is not only easy to install but also extremely versatile. 15 different sheet steel and 13 aluminium profiles are available. Coatings in all RAL card colours, and special lengths (steel up to 3 m, aluminium up to 6 m) available.

Further plus points of the system are the following features and accessories:

- plug in socket with economic and fast strain relief via cable ties
- quick to install push-fit blade holders
- automatic earthing at end pieces and duct joints
- connecting brackets for butt joints (one console can be omitted)
- special sockets for the installation of data sockets in copper and fibre-optic technology

- wall end caps of PVC or high quality aluminium in all RAL colours

Even difficult locations – below window seats, in radiator niches or between columns and pillars – present no challenge to IBIS quickline with the unique broad span fixing included in the range.

Thanks to the subdivision with separating webs made of plastic or sheet steel, high and low current lines, telecommunications and data lines can be laid in one duct. Because of the special installation position, there is enough space for lines even under the sockets.

Not only for new buildings; in particular for renovation of existing structures, IBIS quickline brings great benefits for electrical installations with skirting trunking.



quickline:



New for skirting duct systems:

Coil aid for fibre-optic cables and double sockets

The new coil aid for fibre-optic cables is an ideal complement to the OBO type BS and BK skirting duct systems. With this new development, which makes even existing skirting ducts suitable for fibre-optic cables, OBO is anticipating the increasing importance of fibre-optic technology in many areas of electrical installation.

As well as the proven single socket for plastic and sheet steel skirting duct systems, OBO now offers a double socket.



Further information will be found in the LFS catalogue

In addition to data and telecommunications connections, two single machines, a double combination or a triple socket combination (two installation points) can be fitted in this new socket. Various

pre-punched inlets are available for the introduction of data lines.

The new double socket is attached to the upper section holder of the skirting duct using two fixing points.



New installation units:

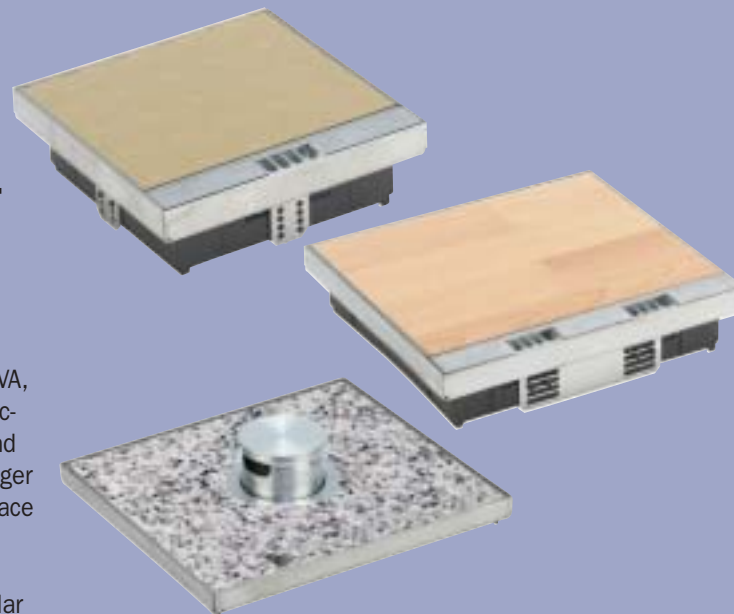
Even more possibilities for underfloor installation

OBO has now extended the possibilities of flush floor electrical installations in wooden, tiled or stone floors with a series of new products.

For electrical installations in dry-maintained wooden floors, new installation units made of stainless steel are now available for the tried and tested UA 340 and UA 240 device installation units. The new products have a hinged cover with cable outlets and are available in two designs for floor covering depths of up to 19 or up to 39 mm.

The smaller version, GEE 4/6 VA, holds up to six machine connections such as sockets, data and telephone sockets, and the larger model, GEE 9/12 VA, offers space for up to twelve connections.

For washable floors, in particular tiled and stone floors, OBO now offers four different machine installation units for underfloor installation. The units comply with VDE standard 0634 and have a round aluminium tube in the centre. This tube, which is quickly and easily withdrawn from the unit and which can be fully retracted when



OBO underfloor ducts:

Even faster installation thanks to integral pre-punched fixings

The new generation of OBO underfloor ducts offers convincing installation benefits: the built in flange has pre-punched 6 mm clearance holes for rapid fixing of the duct directly to the concrete with no additional fixings.

Another new feature is the duct connector, which now has two bolts for fast, simple leveling.

OBO underfloor system ducts are available in twelve different sizes.



not required, provides secure routing for connection cables.

The cassette frame is made of stainless steel and is resistant to all conventional cleaning agents. If space for a maximum of six connections is required, type GEE-T 4/6 VA is available. For up to twelve connections, model GEE-T 9/12 VA is suitable. Both versions are available for floor thickness of 19 to 39 mm.

Further information will be found in the LFS catalogue

Snap-fit:

Practical cover variant for ISO-A systems



OB0 has developed a second cover variant for ISO-A underfloor systems which requires no screw fitting and locks onto the lower duct part with just a single snap-fit action.

This new cover simplifies and accelerates installation. In particular, this cover means that cables and machines can quickly and easily be added later.





SCHULUNGS- UND
SEMINARZENTRUM



Overview of trade seminars (external)

Topic
Over voltage protection
OBO fire protection / function maintenance and cable screening
Cable routing systems
Overvoltage protection
Overvoltage protection
Dataline surge protection
OBO fire protection / function maintenance and cable screening
Overvoltage protection
Dataline sure protection
OBO fire protection / function maintenance and cable screening
External lightning protection
Cable routing systems
External lightning protection
External lightning protection
OBO fire protection / function maintenance and cable screening
Cable support systems
Cable support systems

Up-to-date information on our trade seminars can be found at www.obo.de or obtained from our local branches and agents, for staff of installation companies, architects and engineers offices, planning offices.

Seminar topics: ask for the programme covering the topic concerned.

Seminar venue: OBO BETTERMANN GmbH & Co., Training Centre, 58708 Menden, Böspeder Bahnhofstr. 92

Seminar venue: BET Lightning Protection & Technology Centre, Fischkuhle 39, 58710 Menden

Applications: Mrs Hoppe, tel. 0 23 73 / 89 14 51, fax 0 23 73 / 89 14 66, e-mail: hoppe.td@obo.de

Accommodation: At present overnight accommodation is available free of charge in our own guesthouse. If you wish to make use of this facility, please state this in your written application.



Something's
happening
1860 km away

"Hyvää päivää"

(or "Good Morning" in English!)

OBO Bettermann's campaign for success in Finland began with a relatively small range of OBO fasteners and connectors over 20 years ago, and on 1st March 2000 culminated on a broad front with the foundation of another European subsidiary, OBO Bettermann Finland OY. The answer to our European claim to leadership in global competition.

Neither the 1860 km separating Menden and Helsinki, nor the difficulties with the Finnish infrastructure, were able to halt the almost total distribution coverage and hence success in recent years. This has laid the foundations for today.

"Sydämellisesti tervetuloa" means "welcome" to OBO. Customers are already familiar with the voice and this friendly greeting. Managing Director Ari Lindholm and his sales manager Torsti Kosonen hold the reins in the Finnish capital, and are responsible for the market, customers and management of the entire team.

Both managers are experienced in marketing and have spent many years in the electrical and fastenings industry. Naturally, they are initially focusing upon the domestic Finnish market; later on, neighbouring areas of Russia will be targeted.

The team's sales strategy is clear: consistent customer orientation will strengthen OBO's leading position in the regional market and for the first time the entire OBO range will be positioned in the market with excellent logistics.

The foundation of the youngest of the OBO subsidiaries with its dedicated team confirms that the OBO consultation and market preparation services are continuing at international level.

All OBO sales offices in Europe, Asia or America focus on the customer and our service promise. The word at the heart of the Finnish market now is: OBO – faster, closer, better. The new OBO power in the service of our customers. OBO investment in marketing success is evident: 1300 m² of warehousing and immediate access to all OBO systems in electrical installation and building systems engineering,

and a well-equipped sales and information centre covering a further 300 m².

OBO's management and the export sales division in Menden wish the new team a good start on the way to our shared future success.

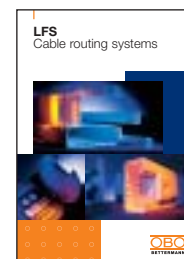
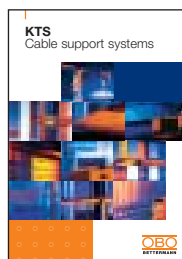


OBO has a new CI (corporate identity)

The OBO brand – the identity of a strong brand

OBO puts the brand in the spotlight so that the company personality can be clearly recognised. The entire OBO family has embraced a new direction with passion and commitment. The message is

"OBO is fit for the future". The first signs appear in the new catalogues, brochures and the new media image. There is much new content as well as a new look. Surprise yourself and enjoy the orange wonder of OBO.



OBO
BETTERMANN

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Editorial team

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OBO is the brand of professionals

OBO is orange

Orange is the colour of professionals

OBO – for professionals

VBS
Connection and fastening systems

KTS
Cable support systems

LFS
Cable routing systems

KTS
Brandschutz-Systeme für elektrische Kabel und Leitungen

Brandschutz-Fibel
Funktionssehricht von elektrischen Kabelanlagen im Brandfall gemäß DIN 4102, Teil 12
Hans-Theo Fabry



VBS. Best connections

The VBS catalogue:

- Connection systems
- Fastening systems
- Beam clamp systems
- Rail systems
- Screw and drive systems
- Earthing systems
- Equipotential systems
- Lightning protection systems
- Overvoltage protection systems

KTS. Carrying power

The KTS SKS catalogue:

- RKS/MKS cable support systems
- Installation systems
- Cable tray systems
- GKS Cable tray systems
- Cable ladder systems
- Luminaire support duct systems
- Construction kit systems
- Vertical ladder systems
- Stainless steel components
- Fire protection systems

LFS. Guides power

The LFS catalogue:

- Installation duct systems
- Skirting trunking
- Underfloor systems

... with safety

The fire protection brochure:

- Cable screening
- Installation methods for function maintenance

... for safety

The fire protection guide

- Principles of function maintenance
- Regulations
- Test processes
- Installation methods
- Pins