

## ECO FITTING TECHNOLOGY EXPERTISE

LATCHING ON TO THINGS





### **ECO SCHULTE OFFERS**

### WIDE FITTING EXPERTISE

### PREMIUM BALL BEARING

ECO OKL Magis object ball bearing technology for the highest demands



..... from page 4

### **DESIGN HANDLES**

ECO Komé design sets, references, Bespoke Design & PVD Coating



..... from page 8

### HYGIENIC COATING

ECO Protect Hygienic coating is effective against 99% of all pathogens



..... from page 14

#### HANDS FREE HANDLES

ECO **Protect Hands free** hygienic door handles for protection against pathogens



..... from page 16

### **OVAL ROSE HANDLES**

ECO **OVR** Handles
Tangible diversity for profile doors



..... from page 18

### SPECIAL SECURITY HANDLES

ECO Combined security handles, security handles with panic or bullet-resistant function



..... from page 20

### ASSEMBLY-FRIENDLY

ECO **OGL Click & SGL Click** handles for easy assembly and disassembly



..... from page 26

### **HANDLE SHAPES**

ECO Schultes archetypes timeless shapes and classic handles



..... from page 28



#### **EVEN MORE**

### FITTING TECHNOLOGY EXPERTISE

### **FURTHER FITTINGS**

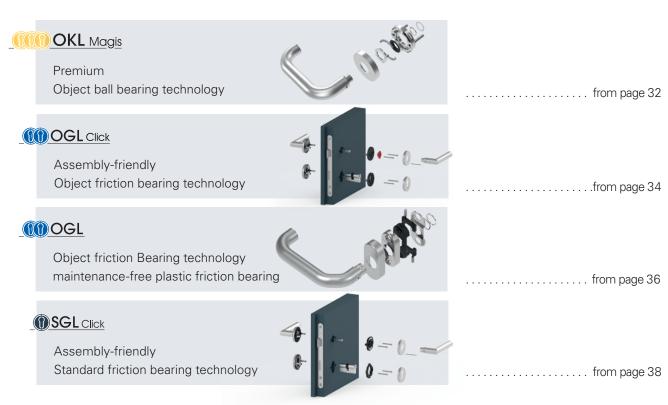
ECO Schulte solutions for all applications in the overview



from page 30

FOR EVERY SITUATION THE RIGHT

### **BEARING TECHNOLOGY** IN DETAIL



ALWAYS THERE FOR YOU

### WE OFFER MORE THAN JUST PRODUCTS

### **OUR CORE COMPETENCE**

System competence & support



..... from page 40





### **CONVINCING QUALITY**

## ECO OKL MAGIS PREMIUM BEARING TECHNOLOGY

Innovative ball bearing technology with integrated flex bearing. Technology & design at the highest level.

### PREMIUM PRODUCT OKL MAGIS

### **BEARING TECHNOLOGY**

The industrial ball bearing is characteristic for these high-quality object fittings. A precise and maintenance-free, fully encapsulated grooved ball bearing ensures the well-balanced, play-free mounting of the handle. The integrated flexible bearing compensates radial and axial clearance.

- Designed for vandalism-prone areas with large audiences in public buildings such as football stadiums and schools.
- Extremely high corrosion resistance for outdoor use.
- Supremely robust premium object fittings with high-precision, backlash-free deep groove ball bearing technology and return spring with 90° stop. The integrated flexible bearing compensates radial and axial clearance.
- Tested acc. to EN 1906 and MPAZert with 1 million test cycles.
- Available in stainless steel
- Available on request for fire and smoke protection doors
- Suitable for panic doors according to KEN179
   depending on the handle shape











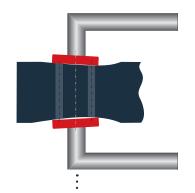
### STABLE YET FLEXIBLE

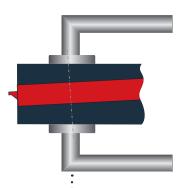
## MOBILITY ON THE DOOR

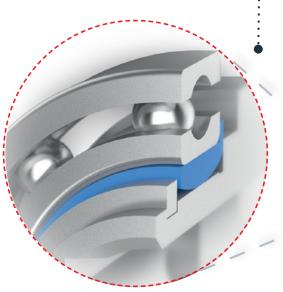
The new ECO flexible bearing easily solves all the common problems of handle installation:

 Screws done up too tight (deformation of door surface)

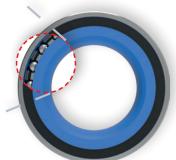
 Tolerance errors in lock installation (lock casing askew)

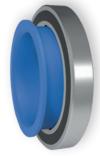






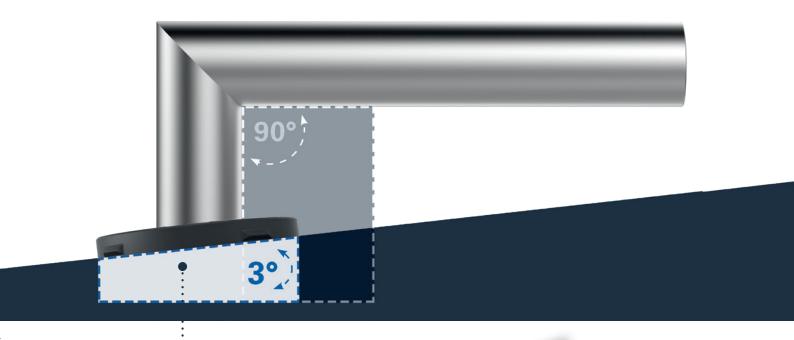
The flexible bearing sits neatly in the ball bearing unit and gives the latch the mobility to make the necessary adjustments.





The flexible bearing operates within the ball bearing unit and can compensate for uneven door surfaces of up to 3°.





### <sup>1</sup>DIN 18273 : 1997-12:

Construction hardware
- door handle fittings for
fire protection doors and
smoke protection doors
- Definitions, Sizes, Requirements and Tests, Annex A.



### **TECHNICAL INFORMATION**

**Radial and axial play:** This latch can compensate for uneven door surfaces of up to 3°, however **DIN Standard 18273** refers to possible play: "Due to the tolerance fields of door han-

dle pins (8.91 to 8.98 mm) and the inner square of the nut (9.0 to 9.1 mm) there can be a considerable amount of play between the door latch square and the locking nut. This play can lead to a maximum rotation of the installed latch of 5 mm, measured in a distance of 100 mm from the pivot point of the handle."1 In the case of two part panic pins in particular this play can be unavoidable.



This means that the door handle can waggle slightly up and down. The ECO OKL Magis door latch fitting prevents this from happening because it has a return spring setting with 90° fixed stop. The sense of play in the handle is thus significantly reduced and it far exceeds the requirements of standard **EN 1906**.





### CONSISTENTLY BEAUTIFUL ECO KOMÉ **DESIGN HANDLES**

The Randi Komé handle is part of the ECO security architecture and integrates seamlessly, both visually and functionally, into the ECO Schulte system.











Whether angled and closed, suitable for the window or as an oval rose for profiled doors. With the D-800 family from ECO Schulte, consistent design is guaranteed throughout the entire property.

- Available in premium quality ECO OKL Magis
- Suitable for profiled doors in OGL
- Suitable for fire protection as required
- Suitable for panic doors according to EN 179 depending on handle shape





ECO Komé D-810 OKL Magis ROS



ECO Komé D-830 OKL Magis ROS



ECO Komé D-810 OGL OVR



ECO Komé D-830 OGL OVR



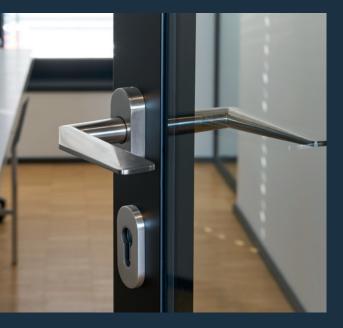
ECO Komé D-835 OGL OVR







# ECO REFERENCE PHOENIXWERK DORTMUND





The PhoenixWERK with its two main buildings was to fit naturally into the historic surroundings and at the same time create a prestigious working environment for its users - including the planning architectural firm SHA. Sustainable construction, state-of-the-art technology and high-quality materials were essential components of the concept.

ECO Schulte was involved in the planning at a very early stage and was able to provide successful support in the execution of the windows and doors. Visual accents were set by using the Komé design handles in stainless steel and partly in matt black. The door closers were colour-matched to the black façade design and thus inconspicuously integrated into the profile frame doors. The access control requirements were incorporated in close consultation with the architect, client and electrician. The access doors are now released or blocked via a chip, which can be independently programmed via a central administration point.



### **PRODUCTS**

- ECO Komé Round rose handles
- ECO Komé handles for profile doors
- ECO Komé window handles







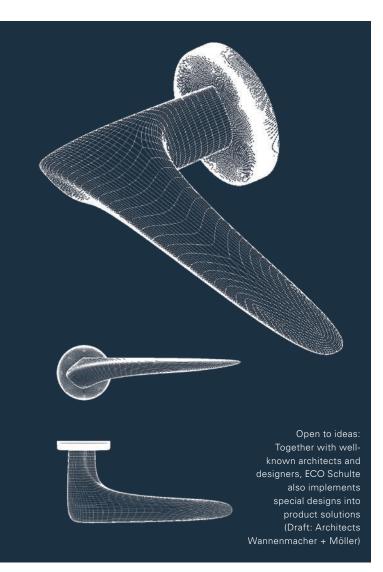






### **BESPOKE DESIGN**

# INDIVIDUAL DESIGNS FOR ARCHITECTURES



Designing a bespoke lever handle gives architects and designers enormous freedom: It allows them to influence the overall architectural coherence down to the last detail.

The Danish door handle specialist Randi – part of the ECO Schulte network – offers architects and the door industry the opportunity to develop **individual**, **bespoke solutions**. Randi has a long tradition in "authored" design; time and again, successful series products have been created from what began as a unique specimen.

The experts at Randi Manufacture examine the design while considering efficiency, the ergonomics of the door concept, and the relevant standards.

After a graphic visualisation of the design, **3D models** are produced to test the ergonomics and haptics. **The individual door handle** is not produced until all properties, materials and surfaces have been optimised and harmonised.



### SYSTEM-WIDE

## PVD SURFACE FINISHING

The PVD process (PVD = Physical Vapour Deposition) leads to high-quality finished surfaces with excellent properties, which we can offer you for our entire product system.

### Advantages:

- Brilliant colour quality
- Large colour spectrum
- Scratch resistance
- Cost efficiency in mass production
- Environmentally friendly process

#### **PVD** colours

- Black C60 Brushed / Polished
- Anthracite C6 Brushed / Polished
- Copper B2 Brushed / Polished
- Brass A1 Brushed / Polished





Randi-Line® Komé PVD black



Randi-Line® Wing PVD black



Randi-Line® Komé PVD anthracite



Randi-Line® Wing PVD anthracite



Randi-Line® Komé PVD copper



Randi-Line® Wing PVD copper



Randi-Line® Komé PVD brass



Randi-Line® Wing
PVD brass



### **PROTECT** Hygienic Coat

### TRANSPARENT

## HYGIENIC COATING

Hygienic surfaces are an important topic in the health sector. The Corona pandemic brought this issue further into focus.

### PROTECTING FACTS

- Transparent hygienic coating
- Effective against 99% of all pathogens
- Antiviral also against Corona and Influenza viruses
- Antibacterial also against multi-resistant bacteria
- Protection effect up to three years
- Extension of the protective effect through refresh-set
- Easy to clean effect
- Improved scratch resistance
- Laboratory tested and certified
- Approved by the "Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA)"

Protect

Protect

FCO

Landing page









HYGIENIC, HIGH-QUALITY, COMFORTABLE

## ECO HANDS FREE HANDLES

Comfortable operation and protection against pathogens.





### HIGH-QUALITY OGL CLICK

### **OBJECT HANDLE**

The stainless steel handles are suitable for standard doors as well as emergency exit and fire protection doors. Fixed rotatably mounted and available in OGL Click version.

### EASY AND CONVENIENT

### RETROFITTING

Every ECO OGL Click handle can be replaced with the hygiene handle by simple disassembly.

#### Available in 2 variants:

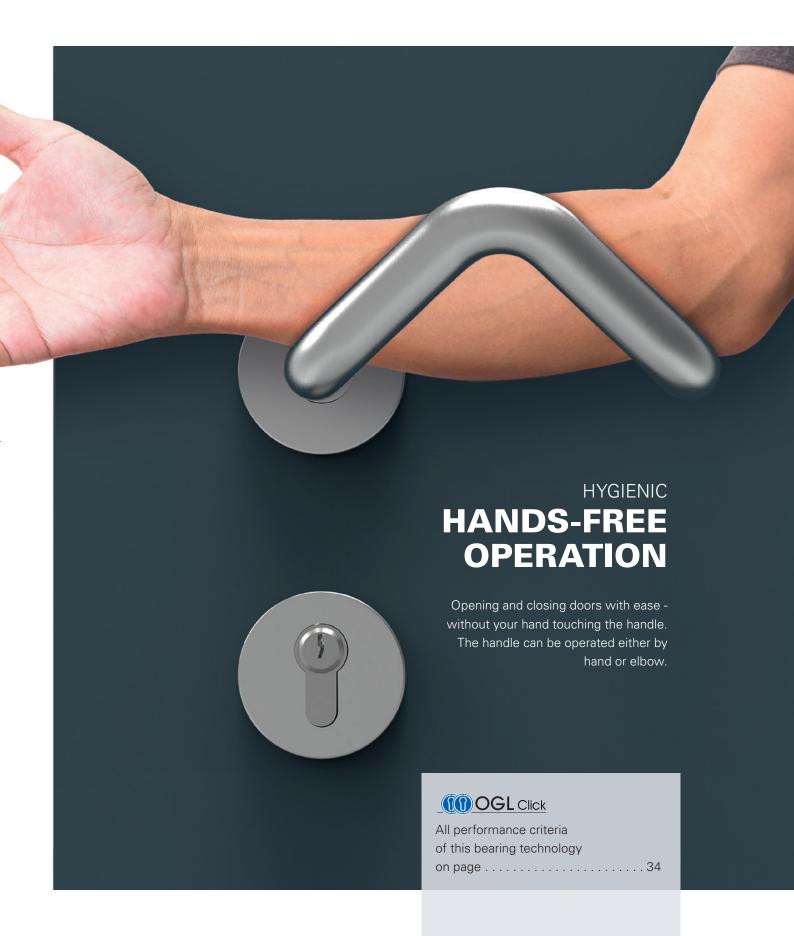






D- 990 (Curve)









### FOR PROFILE FRAME DOORS

### ECO OVR HANDLES

ECO oval rosette handles are designed for use on profile frame doors.

**OVR PRODUCT VARIANTS** 

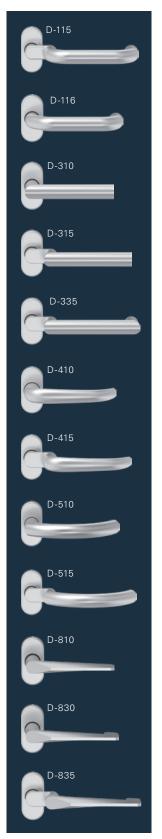
### TANGIBLE VARIETY

A wide range of knob and lever models is of course available for our OVR handles.

- Tested according to EN 1906 and MPAZert with 1 million test cycles
- Available in aluminium Al and stainless steel
- Available on request for fire and smoke protection doors
- Suitable for panic doors according to EN 179
  depending on lever handle shape
- Some lever handle models are also available as passive door leaf version with return spring



















### PROTECTION OUTSIDE, COSY INSIDE

## ECO COMBINED SECURITY HANDLES

High-grade combination of security fitting ES 1, ES 2 and easy-assembly rosette handle with ECO click system.





D-110 / K-130

Can be combined with long plate:

D-410 / K-130



ES 1 ZA / K-117



ES 1 ZA / K-130



ES 1 ZA / K-160



ES 1 ZA / K-165



ES 1 ZA / G-150



ES 1 ZA / G-160



ES 1 ZA / G-180









### **BURGLAR-RESISTANT**

## SECURITY HANDLE WITH PANIC FUNCTION

Combines two contradictory requirements: Building security through burglary protection, and personal security through panic function.

Burglary by forcibly knocking off the handle is specially secured corresponding to DIN EN 1627-1630. Patent-pending special solution Burglar-resistant security handle • Available as lever/knob handle **D-110/K-130** with panic function • ES 3 with OGL friction bearing technology Burglar resistance ES 3 according to DIN 18 257 and **EN 1906** class 4 Suitable for resistance class RC 4 Panic function acc. to K EN 179 Suitable for panic locks with panic function E (knob) and D, B, C (handle) Special protection fitting Outside: Burglary resistant K-130 long plate security fitting ES 3 Inside: Long plate handle with panic-alternating function





### BURGLAR-RESISTANT OUTSIDE

For the protection of persons and property in public buildings or private households.

### ANTI-PANIC FUNCTION INSIDE

In case of emergencies and panic, an easy, fast and safe escape is possible.







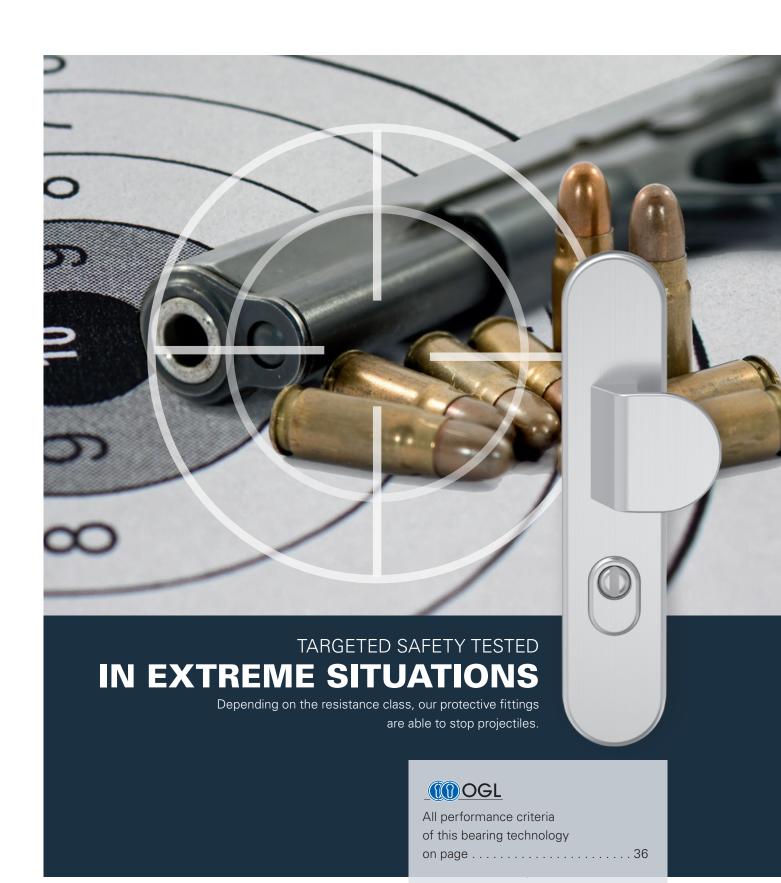
### TARGETED SAFETY TESTED

### BULLET-RESISTANT SECURITY HANDLE

In extreme situations, bullet-resistant protective fittings are used for personal protection and object security.









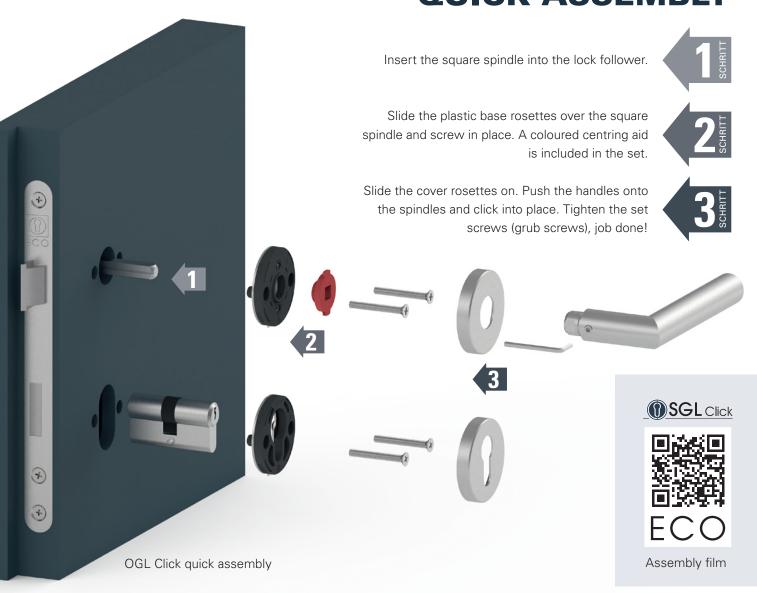




### ECO CLICK TECHNOLOGY

### **EASY TO ASSEMBLE**

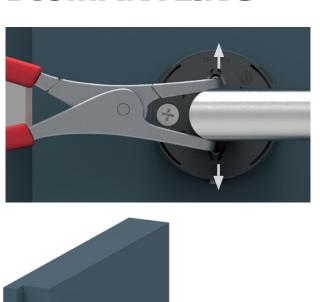
### CONVENIENT QUICK ASSEMBLY





Click on the handle without tools or simply disassemble it. Every ECO OGL Click or SGL Click fitting offers quick and yet secure fixing with the ECO Click system. It connects the handle and rose to form a fixed, rotatable unit, but can be released again without damage if necessary.

### EASY DISMANTLING



For OGL Click, simple disassembly is carried out with circlip pliers. SGL Click fittings are dismantled in the usual way.

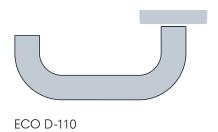






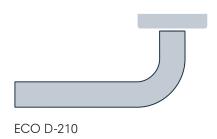
## TIMELESS SHAPES AND CLASSICS

### ECO D-100 archetype: U-shaped handle



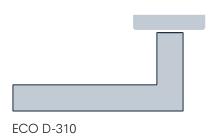
Classic handle with added value: the advantage of the U-shaped handle lies in its second 90 degree bend. It was used traditionally to prevent people or material from getting "threaded on". The rear bend of the handle helps to prevent shopping bags or coat sleeves from getting caught on the handle. In addition, the U-shaped handle has comfort qualities, because the rear turn supports the ball of the hand when the door is opened. ECO Schulte has the U-shaped handle in its product range as factory design draft D-110.

### ECO D-200 archetype: Frankfurt standard L-shaped handle



In their efforts to lower house construction prices and rents in the 1920s, many architects became involved in the standardisation of construction components. The ECO D-200 is a variation of the draft that once made a name for itself as the Frankfurt standard handle where a round rod was bent by 90 degrees and positioned on a simple rose. All of the Frankfurt versions are based on the idea of the right angle. ECO Schulte has included the Frankfurt standard handle in its product range in a high-quality modern interpretation as factory design draft D-210.

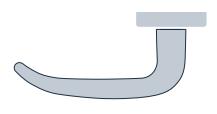
### ECO D-300 Archetypus: Frankfurter Gehrungsdrücker



The ECO D-300 is a variation of a geometric handle draft design from the 1920s and stands out through the legible simplicity of the construction: a circular tube is separated with a mitred cut. The two halves are then joined together again at right angles. This handle was given the attribute "Frankfurt" not only through its close geometric relationship with the Frankfurt standard handle but also because it was used when the Frankfurt Architecture Museum was built. ECO Schulte has included its interpretation of the Frankfurt mitred handle in its product range as factory design draft D-310.



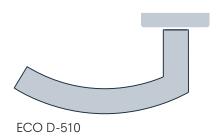
### ECO D-400 archetype: Ulm handle



Made for getting to grips with! The archetype of this U-shaped handle was named after the Ulm School of Design where it was first used in the 1950s. The draft was based at the time on the door handles of trains run by the Swiss railway. ECO Schulte reworked the Ulm handle with its own factory design draft D-410.

ECO D-410

### ECO D-500 archetype: Hand-shape handle



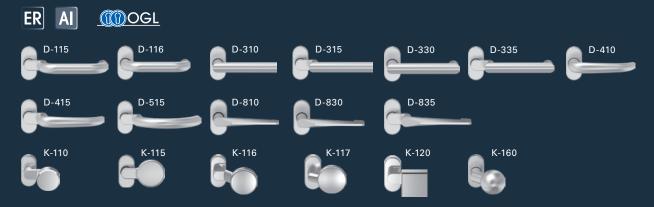
As far as the typology is concerned, this handle constitutes an ergonomic connection between the Frankfurt mitred handle and the Ulm handle. The design of this factory design draft D-510 is discreet, easy to grip and oriented towards the direction of movement.



Round rose handles (ROS), handles (D), knobs (K)

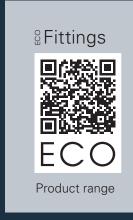


Round rose handles (OVR), handles (D), knobs (K)



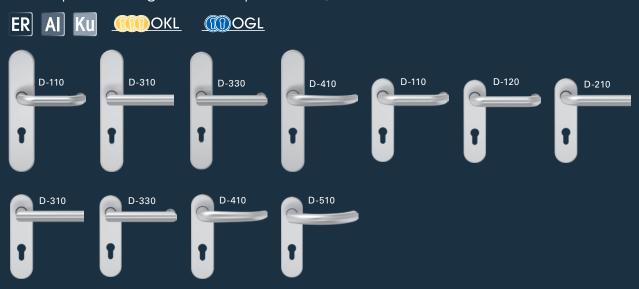
Object window handles (FO), Lockable (A), Tilt before Turn (TBT)







Cover plates Long and short plates (LS, KS)



Security handles Long and short plates (LS, KS); Combined security handles





### MORE THAN JUST A DOOR HANDLE

### ECO OKL MAGIS OKL Magis



OKL Magis – premium object fitting with ball bearing technology

#### OKL bearing technology

The industrial ball bearing is characteristic for these high-quality object fittings. A precise and maintenance-free, fully encapsulated grooved ball bearing ensures the well-balanced, play-free mounting of the handle. The integrated flexible bearing compensates radial and axial clearance.

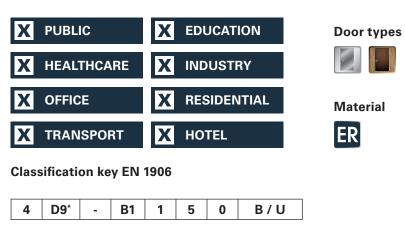
#### Performance criteria ECO OKL Magis

- EN 1906, user class 4
- 1 million test cycles, tested to MPAZert
- EN 1906, corrosion class 5
- **DIN 18273** approved for fire and smoke protection doors
- EN 179, depending on handle shape <a>ろ</a>
- DIN-L/DIN-R usable

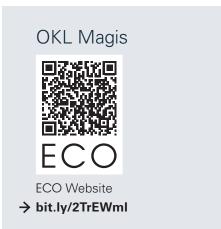
- Restoring spring with 90° stop
- Fixed sleeve nuts + support cams
- High-precision ball-bearing technology with flexible compensating bearing
- High-strength pin connection
- Rose dimensions Ø 55 x 9 mm
- Standard door thickness 38 45 mm and 44 - 66 mm
- 8 mm / 9 mm fire protection







Stainless steel version



<sup>\* 1</sup> million test cycles, tested according to **MPAZert** 



## QUICK ASSEMBLY WITH ECO OGL CLICK





OGL Click – object fitting with friction bearing technology



The high-quality and durable object rosette handle with ECO Click system is characterised by its maintenance-free friction bearing technology. With user class 4, it is suitable for use in public buildings with a lot of public traffic, but is still very easy to assemble and disassemble.

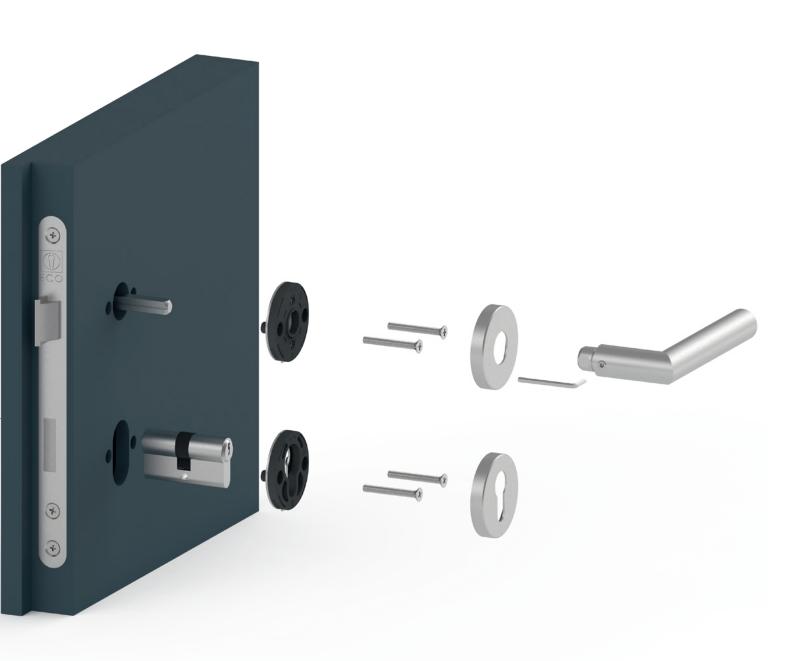
#### Performance criteria ECO OGL Click

- ECO **Click** quick assembly
- Damage-free removal
- EN 1906, user class 4
- 200.000 test cycles
- EN 1906, corrosion class 4
- DIN 18273 approved for fire and smoke protection doors
- EN 179, depending on handle shape 🗹
- DIN-L/DIN-R usable

- Type A restoring spring
- Fixed sleeve nuts + support cams
- Maintenance-free handle bearing
- High-strength pin connection
- Rose dimensions Ø 55 x 9 mm
- Standard door thickness 38 45 mm and 44 - 66 mm
- 8 mm / 9 mm fire protection









Material
ER AI

**Door types** 



## OVAL ROSE HANDLE ECO OGL (OVR)





### OGL bearing technology

These object fittings have a maintenance-free plastic friction bearing, which floats in the galvanized steel base rose and thus compensates the radial and axial play.

#### Performance criteria ECO OGL

- **EN 1906**, user class 4
- 1 million test cycles, tested to MPAZert
- EN 1906, corrosion class 4
- DIN 18273 approved for fire and smoke protection doors
- EN 179, depending on handle shape 🔀
- DIN-L/DIN-R usable

- Type A restoring spring
- Available with and without support cams
- Maintenance-free handle bearing
- High-strength pin connection
- Oval rose dimension 70 x 33 mm
- 8mm / 9mm fire protection







Classification key EN 1906 - OGL

4	D9*	-	B1	1	4	0	Α
---	-----	---	----	---	---	---	---

Stainless steel version

**Door types** 



Material







 $<sup>^{\</sup>star}$  1 million test cycles, tested according to  $\mathbf{MPAZert}$ 



### **ROSE HANDLE** WITH QUICK ASSEMBLY

### ECO SGL CLICK







#### SGL Click bearing technology

The lever handle is guided radially and axially in the base rose made of glass fibre reinforced plastic. Angle tolerances are compensated by a wave spring washer.



- ECO Click quick assembly
- EN 1906, user class 3
- 200.000 test cycles
- **EN 1906**, corrosion class 4
- DIN-L/DIN-R usable

- Type A restoring spring
- Fixed sleeve nuts + support cams
- Maintenance-free handle bearing
- High-strength pin connection
- Rose dimensions Ø 55 x 9 mm
- Standard door thickness 38 45 mm
- 8mm











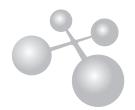
### **OUR CORE COMPETENCE**

### SYSTEM COMPETENCE FROM A SINGLE SOURCE

The door is a system made up of a wide variety of components, which in total - perfectly coordinated with each other - must function just as perfectly.

Since the company was founded, ECO Schulte has always taken a holistic view of the topic of "hardware at the door". Early on, a product system was developed that made the world of doors safer and more functional. The results are coordinated designs, matching materials and surfaces, coherent functionality - and **perfect conformity to standards** for all components.





#### Today ECO Schulte offers much more than a product system.

New fields of competence joined a perfectly standardised product range: The overarching design, the networking of products and

### **PLANNING**

Plan your project with fully coordinated, **standards-compliant product combinations** – from the ECO Schulte system **product range**.

#### **DESIGNING**

All design options: From **highlight design** for creative accents to **integrative design**. From timeless classics to bespoke design.

### **CONNECTING**

Needs-based use of technology: intelligent door management from stand-alone to fully connected.

#### **DEVELOPING**

Never say "can't": **Development** and problem-solving expertise for the door industry and buildings when it comes to hardware that complies with standards on the door.

the challenge of marketor order-related product development.

















### ALWAYS THERE FOR YOU

### MORE INFO + CONTACT

### ECO Imagebook

Our ECO Imagebook will guide you into the world of ECO Schulte.





### ECO standards guide

Our ECO standards guide gives you an overview of all relevant EN standards around the door.





### ECO ITM teaser

The ECO ITM teaser gives you an introduction to the intelligent door management at ECO Schulte.





### **ECO** Protect online

Our topic page with all the information about ECO Protect.









Friendly support: service and support are part of our corporate culture.

### **ECO Contact**

Your contact for everything to do with ECO fittings. Always there for you.



+49 2373 9276-6092



@ objekt@eco-schulte.de

### ECO Schulte GmbH & Co. KG

Iserlohner Landstraße 89 D-58706 Menden

Telephone +49 2373 9276 - 0 Telefax +49 2373 9276 - 40

info@eco-schulte.de www.eco-schulte.de

Your company imprint

### ■ SYSTEM TECHNOLOGY FOR THE DOOR



