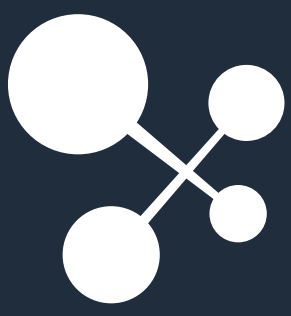


PLANNING
DESIGNING
NETWORKING
DEVELOPING

PLANNING DESIGNING NETWORKING DEVELOPING

Since the company was founded, ECO Schulte has consistently taken a holistic approach to the subject of "hardware on the door". A product system was developed early on that made the world of doors more secure and more functional. We call that — to quote Aristotle — "the whole is greater than the sum of its parts".

Today ECO Schulte offers much more than a product system. New areas of expertise have been added to a perfectly harmonised product range: the overarching design, the networking of products and the challenge of market- or order-based product development.

THE ECO SCHULTE STORY: WE ARE FAMILY

Much has already been philosophised about the charm of the family business in contrast to the corporate group. In our opinion, the main advantages are continuity, decisiveness and high flexibility. And a love of doing business.

A family business, an entrepreneurial family: siblings Tobias Schulte, Andrea Widmann, Heinz "Heiner" Schulte – and their father Ernst Schulte (from left).

A love of entrepreneurship is deeply rooted in the self-image of the Schulte family from Menden, Westphalia. The current generation of managing partners – **Andrea Widmann**, **Heinz and Tobias Schulte** – and their father, **Ernst Schulte,** can point to many successful industrialists in their immediate family as well as among more distant relatives. Ernst Schulte believes there is a kind of entrepreneurial gene that runs through the family: "We enjoy creating things, we enjoy building things!" The father has passed this down to the next generation and later wrote it in the family registry. And with the generational transition, the family has also broken new ground without leaving the path of growth.

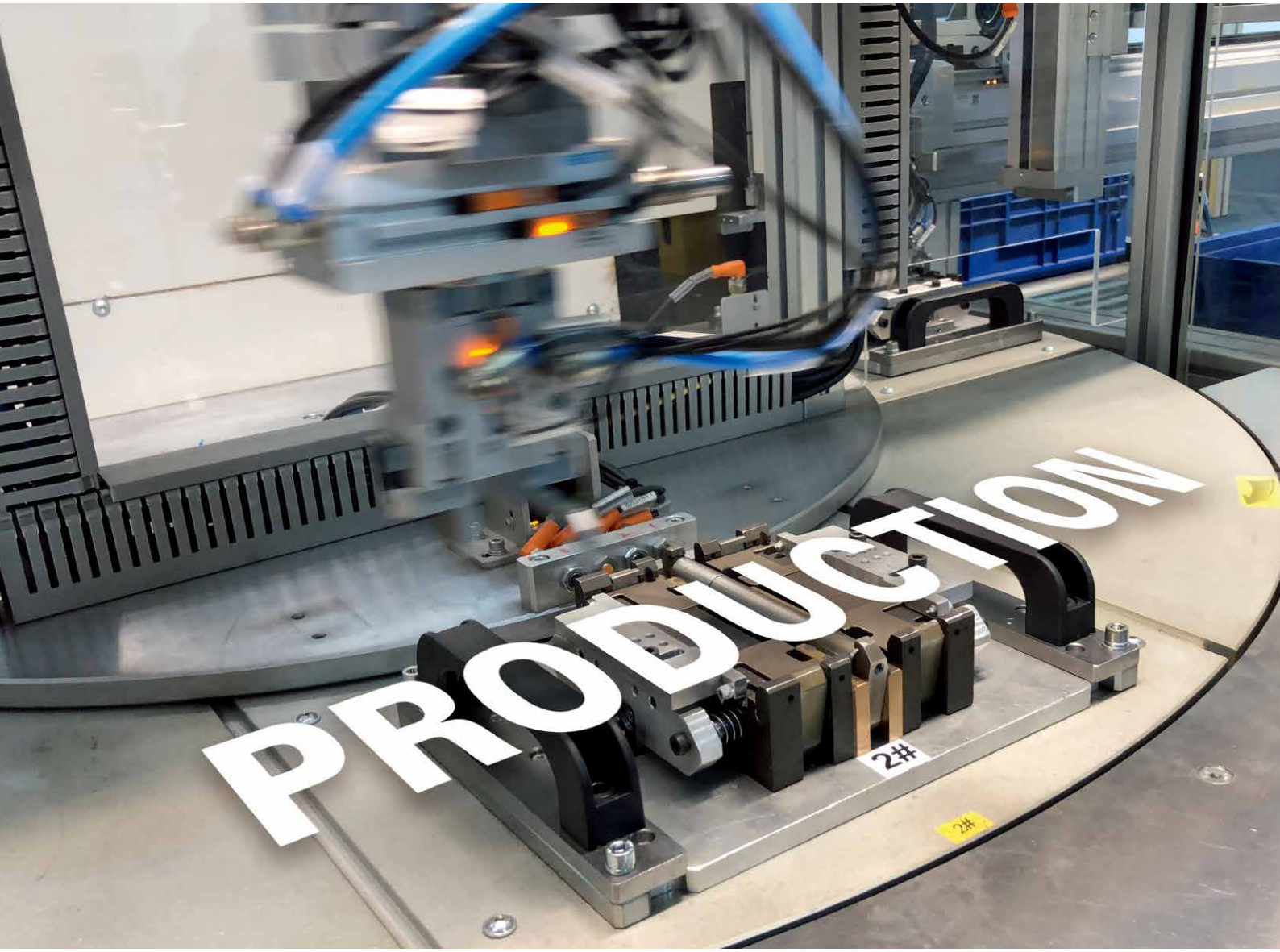
The entrepreneurial gene lives on

The international expansion in sales has been advanced – as has international production. ECO Schulte operates production and sales branches in Menden, Luckenwalde in Brandenburg, Hermagor in Austria, Warsaw in Poland and Zhuhai, China – as well as in Randers, Denmark. Tobias Schulte, who is responsible for international business, views this as an inescapable strategy: "We have to have the right production and distribution mix to remain competitive as a medium-sized company."

Heinz Schulte favours the home market and sees Germany as another important success factor: "We have the world's most sophisticated building services market and the most demanding system of standards – if you can succeed here, you can succeed anywhere in the world with German engineering."

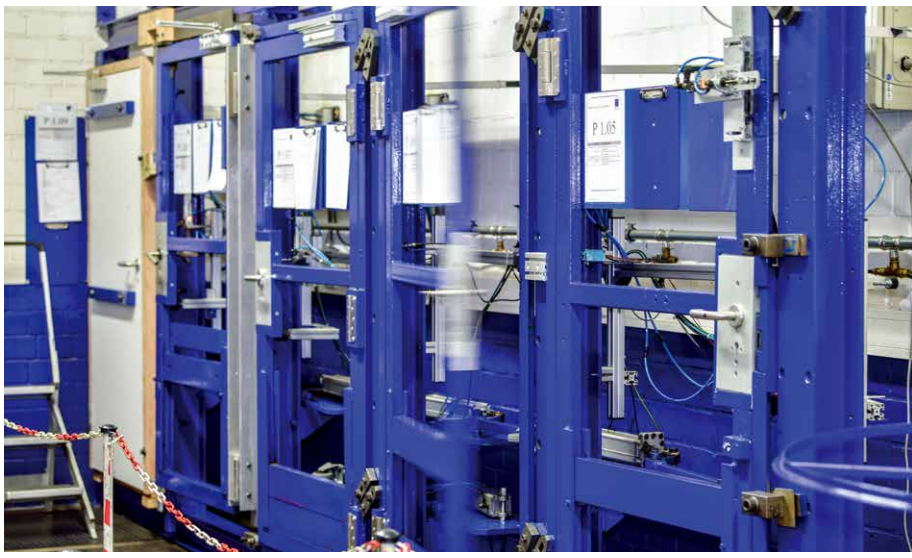
Andrea Widmann is responsible for business administration within the group of companies and juggles the numbers: "As a medium-sized company, we have to follow a growth course — but we have decided not to do this at any price. Quality takes precedence over quantity here as well."

Father Ernst Schulte thinks the company is on the right track and continues to support the team of managing partners with good advice. But he primarily devotes his time to the other passion of the entrepreneurial family: Europe, the European Youth Parliament and the idea behind European unification. This is no less than the democratic legacy of company founder Heinrich Schulte.


PRODUCTION
2#
2#

BECAUSE WE ALSO PRODUCE

If you enter a market as a system provider you must also have a command of the system. Arbitrarily purchased components are not our way of doing business. The concept of the company network includes fulfilling defined core competencies with our own production. ECO Schulte operates its own national and international production facilities.



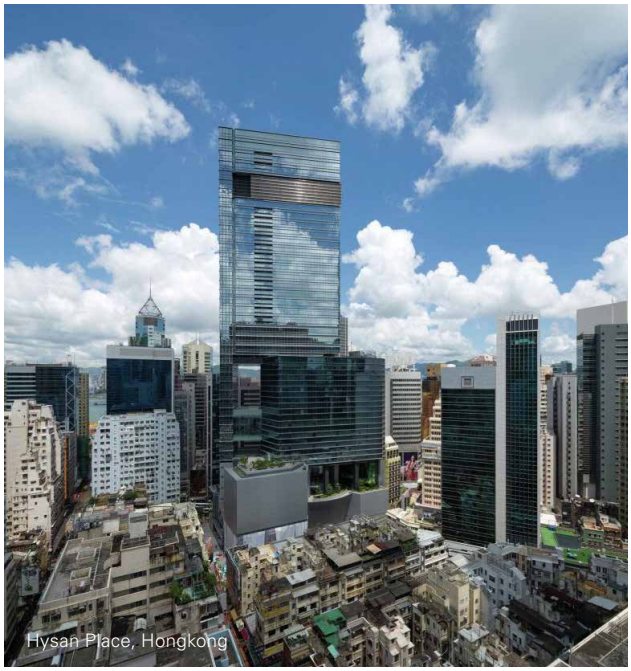
BECAUSE SERVICE MEANS „GOING GLOBAL“

ECO Schulte from Menden, Westphalia, is active worldwide with planning support, development expertise and product solutions. German quality, design and functionality have been decisive factors in our international success. From airports, hospitals and hotels to office buildings: we have the right system for our customers.


HK-Zhuhai-Macao Bridge, Zhuhai

BVLGARI hotel, Dubai


Sports Hub, Singapore



Hysan Place, Hongkong

PUMA Herarau headquarter,Germany

Daxing International Airport, Beijing

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.

NETWORKING

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

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.

PLANNING MEANS PLANNING WITHIN A SYSTEM

DRAWING FROM A WIDE RANGE OF OPTIONS WITH STANDARDS

4x Hinge
ECO Horizon OBX 18
EN 1935

When we talk about planning, ECO Schulte is referring to the process of selecting door components with the guarantee of absolute compliance with standards. This involves configuring the hardware on the door and ensuring everything fits together according to the relevant standards.

The world of electronics opens up wonderful possibilities: convenience, security, networked systems – it's all possible. The technology of absolutely certain functionality under almost all conditions; but that's how mechanical elements work. Unbothered by empty batteries or power failure, impervious to environmental influences: **where human lives are at stake, mechanics are the means of choice**.

The fascinating thing about mechanical devices is also the reliability of their function – just think of grandmother's heirloom pendulum clock, reliably ticking the time to the minute for more than 80 years. Pure mechanics, highly sophisticated, artfully designed and masterfully manufactured. Now transfer that to the door: even after a decade of waiting for the perfect moment, mechanics are able to access a program that saves lives – as a result, the door closer can secure the smoke compartment.


EN 1125
EN 1154
EN 1906
EN 12209
EN 1935
EN 1158
EN 12209
EN 1125
1x Closing sequence selector
SR-EFR-2
EN 1158
2x Door closer
ECO Newton TS-61
EN 1154
1x Panic lock keep
GBS 94
EN 12209
1x Touch bar
ECO Guardian EPN 2000 II
EN 1125
1x Push bar
ECO Guardian EPN 900 IV
EN 1125
1x Panic mortise lock
GBS 93
EN 12209
1x Fitting
ECO OKL Magis
EN 1906

HIGHLIGHT DESIGN

A SENSE FOR FRESH FORMS

We at ECO Schulte use the term “highlight design” for design products on the door that purposefully add accents to the architecture. An example of this is the Randi programme with its Scandinavian aesthetics.

The planner can use highlight design to add accents – on the door handle, for example, with Wing from Randi.

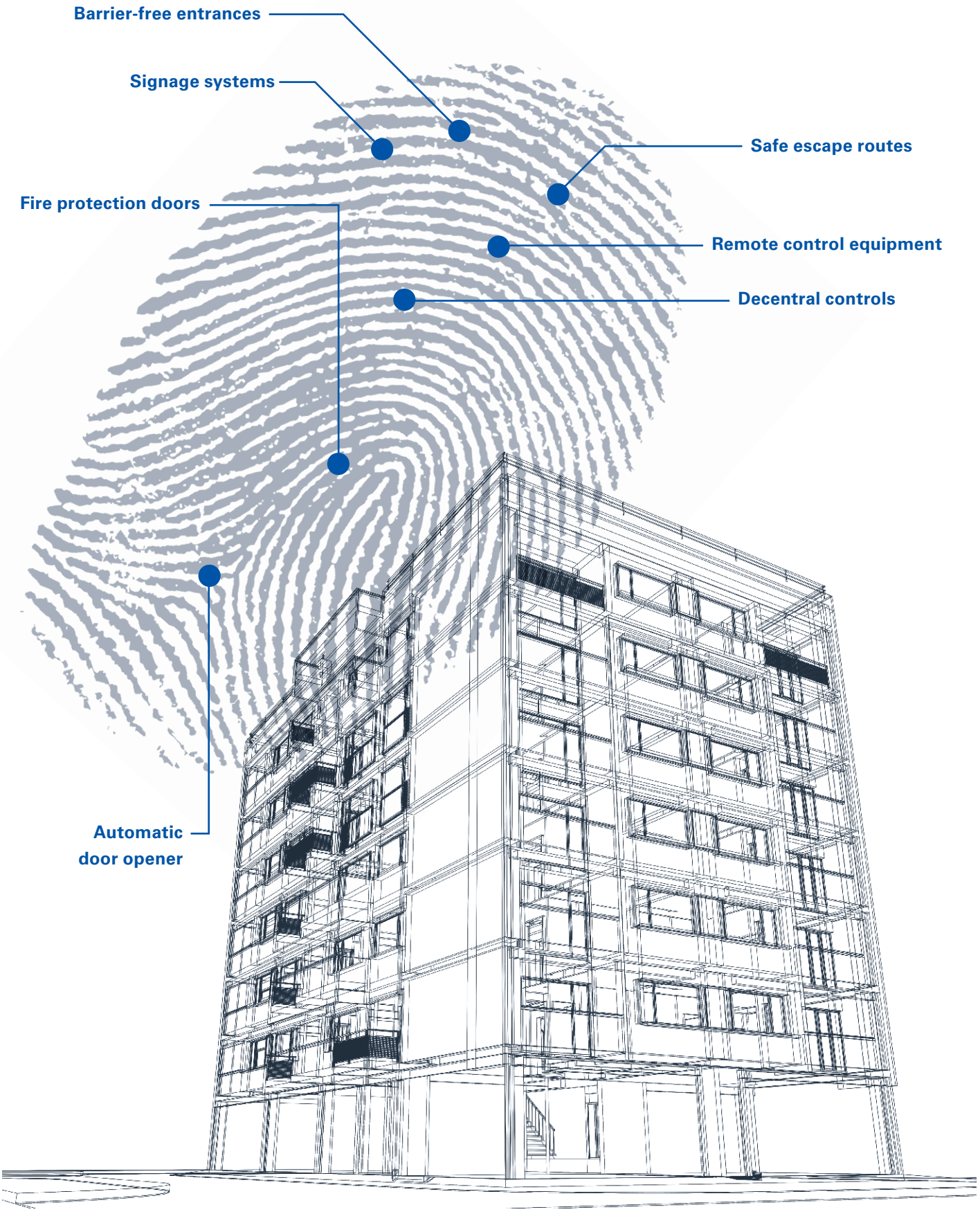
Door handles are a functional interface between people and architecture. Hardly any object is taken into the hand as frequently in everyday life or establishes such a direct relationship to the building. **Accordingly, we pay great attention to the design of these functional elements, which are in dialogue with highly sensitive palms and fingers**.

Their ergonomics and haptics are therefore decisive to how they are perceived and remembered. The Randi Wing lever handle, for example, which has won several design awards, is distinguished by a shape reminiscent of the profile of an aircraft wing. The gripping hand caresses the noble metal of the handle just as the airflow caresses a wing.

The surface texture is also important: whether it is satin stainless steel, smooth shiny brass or raw, unpolished materials whose appearance ages along with the building. The Randi product range even offers wood, birch bark or high-quality plastic as materials.

And ECO Schulte shines in the core product range of the brand with a wide range of individual surfaces in all product segments, made achievable through the technology of a robust PVD coating.

Highlight design from ECO **Schulte stands for fresh aesthetics**, diverse options for customisation, and – like the Danish design of Randi – often is in fact a fresh trade secret for insiders.


Barrier-free entrances
Signage systems
Safe escape routes
Fire protection doors
Remote control equipment
Decentral controls
Automatic
door opener

ITM – INTELLIGENT DOOR MANAGEMENT

ALL OPTIONS ARE OPEN

Doors control access into and within a building. What could be more logical than automating this access or even integrating it into the building management system? Visitor flows can be more effectively controlled and monitored this way – in all situations, in everyday operations as well as in emergencies.

Mechanics, mechatronics and IT are merging at our company under the name **ITM – Intelligent Door Management**, which is producing revolutionary complete packages with corresponding **engineering and service products**.

ITM – solving complex tasks

Each building is a highly individual project that reflects the use, needs and aesthetic values of its owners and users. By extension this means that behind every door there is an extensive catalogue of requirements made up of user needs and security architecture. **Only networked doors can articulate a response to increasingly complex demands**.

But this complexity requires specialists in every subsection. ECO Schulte is fully committed to upholding the **expertise of the specialist** and to concentrating on its core business. We cooperate closely with other medium-sized specialist enterprises to tackle the challenges of complexity.

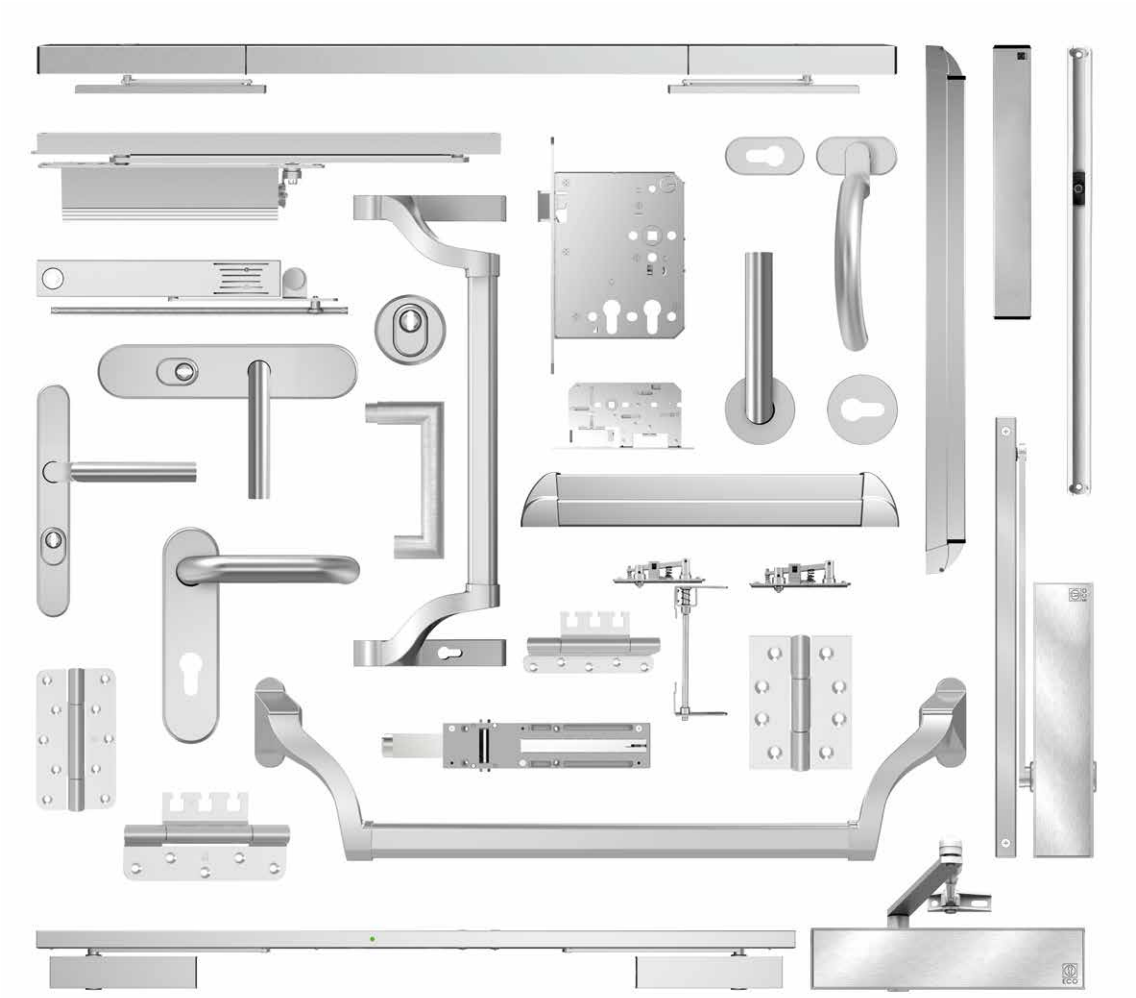
From multi-storey car parks to clinics and from offices to banks: the level of door networking must be developed individually for each building.

SYNERGIES

WE LOVE DOORS

A fruitful network of experts: ECO Schulte has been working with the door industry – and developing hardware solutions for it – for more than 50 years.

Inspired products: All these products have been optimized to meet market requirements or customer requests, either as a whole or in essential details. The ideas for this came from the development department.



It began with steel doors in the cellar – and laid the foundation for **decades of solution-oriented research and development efforts**. One of the first plastic fire protection fittings comes from ECO Schulte. This version of the lever handle, with its obvious advantages, has established itself. The first chapter of an idea's success story has been written – and will be continued...

Since then, door manufacturers have been consulting with ECO Schulte due to the company's superior development and problem-solving capabilities: these collaborations have produced handles, hinges, locks, closers and fittings of all types. We know what we are talking about because the door is the focus of our expertise – and this is precisely what is prized by our partners in the door industry as well as those who are contractors. But our expertise reaches even further: As a **company with its own production**, ECO Schulte can guarantee development of solutions that are not only functional, secure and compliant with standards – but especially that products can also be produced economically. The manufacturing competence of ECO Schulte, with its own factories and the market proximity, guarantees **innovations** and results that can then also prevail in the market in tough competition.

■ SYSTEM TECHNOLOGY FOR THE DOOR


LD OF
CHULTE

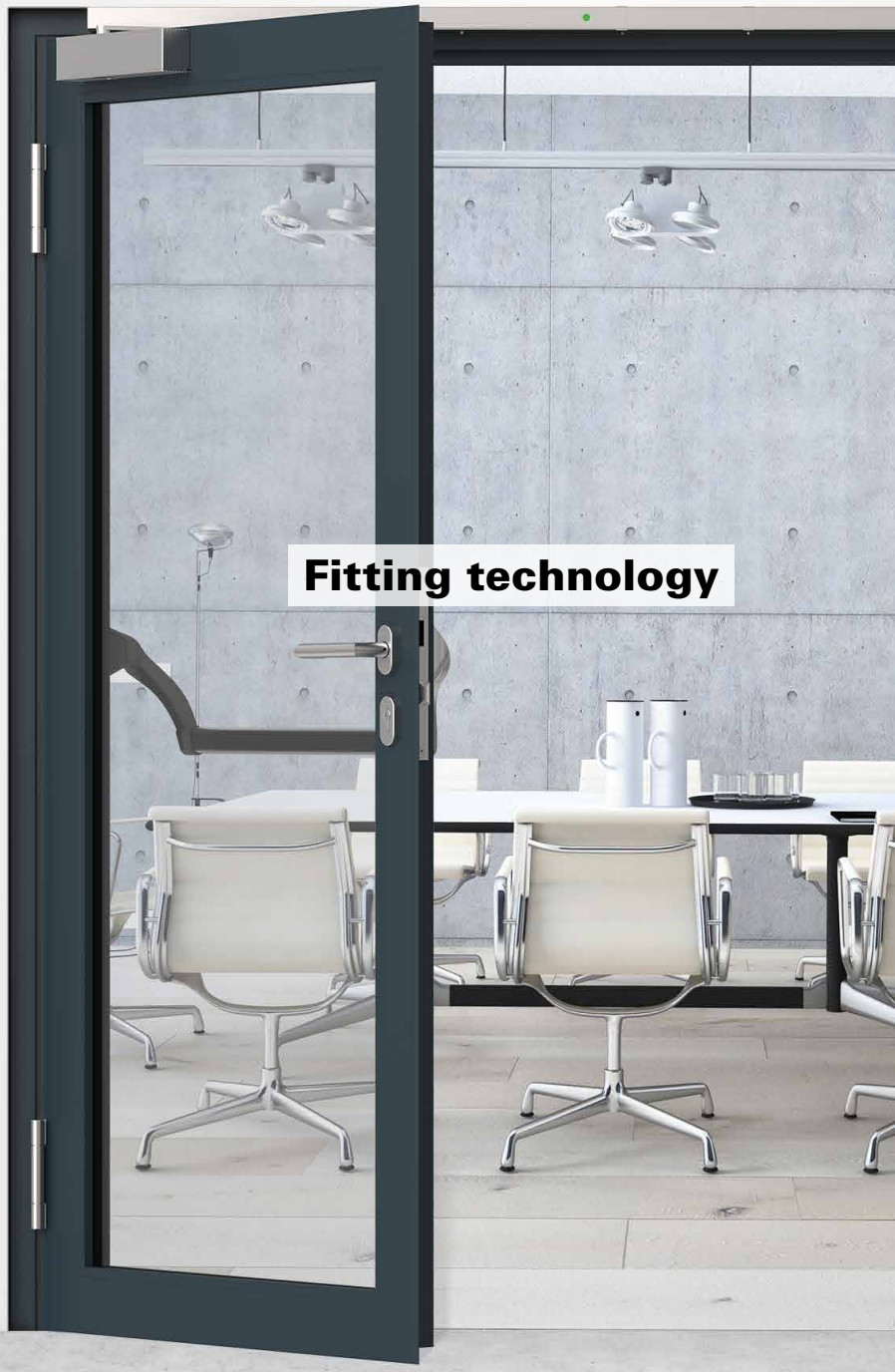
SAFETY IS INTEGRAL
THE ECO **SYSTEM**

Door closer technology

Hinge technology

Fitting technology

Intelligent door management



Panic & locking technology

The world of ECO Schulte is door technology. As one of only a very few system suppliers worldwide, the company takes a holistic approach. In close cooperation with door manufacturers and processors in the trade, the door-related technologies are developed and constantly honed round the clock. ECO never only focuses on the individual product, but rather on the interplay between all components in the door system. From the door closer to the hinge, from the lock to the fitting. The door is a complex safety structure: it protects life and limb – and values. All valuable – and deserving of best quality and maximum functional safety. **In all things door-related, the best is good enough –** ECO **Schulte.**

CREATIVITY AND IMAGINATION
ECO **AR WORLD**

OBN-14 Hinge
0° AR Display

YOUR ENGAGING

INTERACTIVE EXPERIENCE

OBN-14 Hinge
180° AR Display

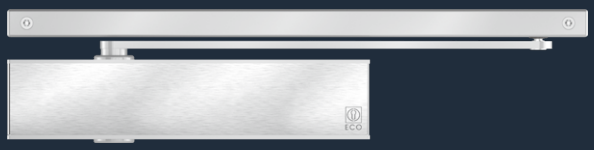

ECO
AESTHETIC
POWERHOUSES.
DOOR CLOS
TECHNOLG
■ SYSTEM TECHNOLOGY FOR THE DOOR


SER
Y
ECO

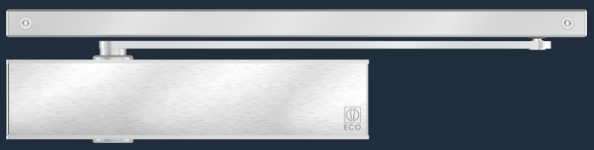
DOOR CLOSERS WITH SLIDE RAIL
ECO **NEWTON**

Tests / standards
F CE EN 1154

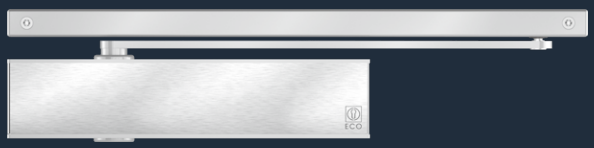
product design award 2012



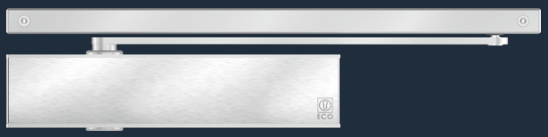
ECO **Newton** TS-62
(EN 2-5)



ECO **Newton** TS-61
(EN 2-5 / EN 5-6)



ECO **Newton** TS-51
(EN 1-4)



ECO **Newton** TS-41
(EN 1-4)

ECO **Newton** TS-31
(EN 1-3)

ECO **Newton** TS-33
(EN 3)

ER = Stainless steel, Al = Aluminium

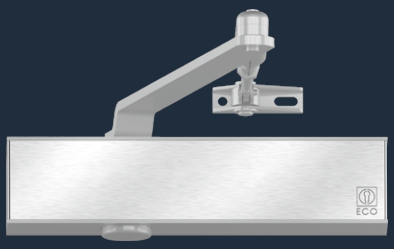
DOOR CLOSERS WITH STANDARD ARM

ECO **NEWTON**

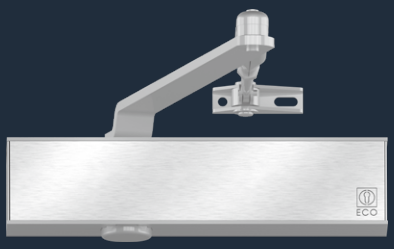
Tests / standards

F CE EN 1154

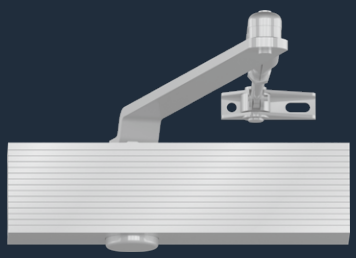
product design award 2012



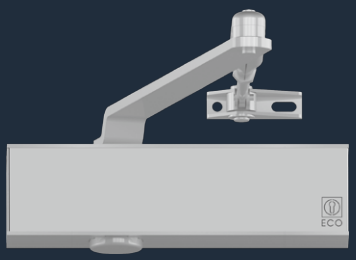
ECO **Newton** TS-50
(EN 2–6)



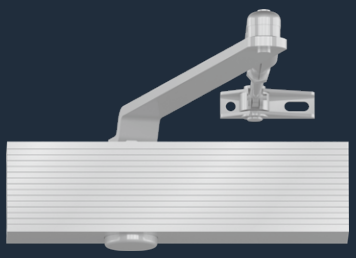
ECO **Newton** TS-20
(EN 2/3/5)



ECO **Newton** TS-15
(EN 2/3/4/5)



ECO **Newton** TS-14 EN
(EN 2/3/4)



ECO **Newton** TS-14
(EN 1/2/3/4)

ECO TS-10 D EN
(EN 2/3/4)

ECO TS-10
(EN 2/3/4)

CONCEALED DOOR CLOSER
ECO **ITS**

Tests / standards
F CE EN 1154

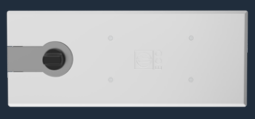
ITS Multi Genius
(EN 1-4 / EN 2-5)

ITS 630
(EN 3-6)

ITS 420
(EN 2-4)

ITS 380
(EN 3)

FLOOR SPRINGS
ECO **BTS**



BTS FH 650
(EN 3/4)

BTS FH 840
(EN 2/3/4)

DOOR COORDINATORS

ECO **SR**

Tests / standards

F CE EN 1158

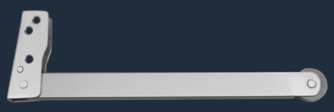
SR III door coordinator (B or BG)

SR-EF door coordinator with electro-magnetic hold open (B or BG)

SR-EFR door coordinator with electro-magnetic hold open and smoke detector (B or BG)

SR-Basis

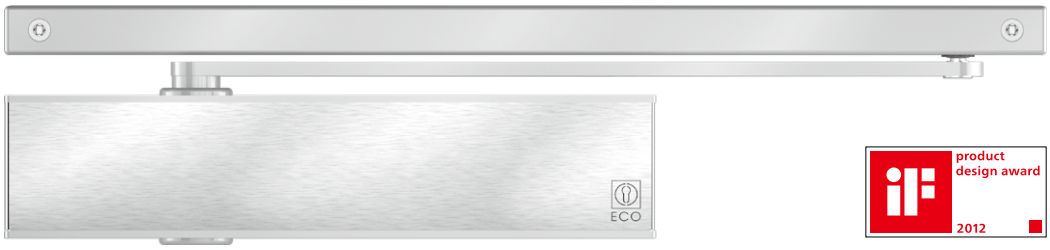
SR-1



SR-2

THE AESTHETE
ECO **NEWTON**

The door closer generation from ECO Schulte: a meticulously well-conceived design consisting of a **stainless steel cover** and aluminium body. **Concealed mounting plates**, setting elements protected against vandalism, colour-coordinated materials and the variable combination of all slide rail door closers with the closing sequence control systems characterise this generation of door closer models. In addition, the **new valve technology** ECO **VALVE** guarantees the simple and highly **precise adjustment** of all parameters of the closing process.



ECO **Newton** TS-61

THE SYSTEM OVERVIEW
ECO **NEWTON**

Door closer with slide rail		TS-62	TS-61	TS-51	TS-41	TS-31	TS-33
	Closing force size acc. to EN[2]	2-5	2-5 5-6	1-4	1-4	1-3	3
	Door width	≤ 1250 mm	≤ 1250 mm ≤ 1400 mm	≤ 1100 mm	≤ 1100 mm	≤ 950 mm	≤ 950 mm
	Latching speed[3]	■	■	■	■	■	■
	Closing speed	■	■	■	■	■	■
	Back-check[4]	■	■	■	◘	-	-
	Delayed action[5]	■	◘	-	-	-	-
■ Continuously adjustable ◘ Constant - Not available	Tested acc. to EN[1]	EN 1154 A	EN 1154 A	EN 1154 A	EN 1154 A	EN 1154 A	EN 1154 A

Door closer with standard arm		TS-50	TS-20	TS-15	TS-14 EN	TS-14	TS-10 D EN	TS-10
	Closing force size acc. to EN[2]	2-6	2/3/5	2/3/4/5	2/3/4	1/2/3/4	2/3/4	2/3/4
	Door width	≤ 1400 mm	≤ 1250 mm	≤ 1250 mm	≤ 1100 mm	≤ 1100 mm	≤ 1100 mm	≤ 1100 mm
	Latching speed[3]	■	■	■	■	■	■	■
	Closing speed	■	■	■	■	■	■	■
	Back-check[4]	■	■	-	-	-	◘	-
■ Continuously adjustable ◘ Constant - Not available	Tested acc. to EN[1]	EN 1154 A	EN 1154 A	-	EN 1154 A	-	EN 1154 A	-

1) EN 1154 – CE-mark and fire-protection tested **2)** Door closer sizes acc. to European Norm (EN) **3)** Increases the closing speed just before closing to ensure the door closes reliably **4)** Regulates the force necessary to open the door (check) from 70° opening angle **5)** Regulates the closing speed (delay) of the door up to 70° opening angle (e.g. for barrier-free passage)

THE HIGHLIGHTS
ECO **NEWTON**

Two bodies for the whole building.

The ECO **Newton** door closer portfolio covers all door dimensions with only two basic units. In addition, end-mounted valve technology permits the door closer to be installed on the pull and push side in normal or transom installation (TS-41/31).

Combination of elegant materials

Elegant materials are standard with ECO **Newton**: The stainless steel cover and aluminium body unit of the new door closer generation are perfectly matched with one another – in an architecturally compatible form language.

Intelligent stainless steel cover

ECO **CLIC** envelops the aluminium body unit with the power of spring steel. The cover conceals all of the adjusting elements and cannot be removed without tools, thus securing the closer against unauthorised access.

Well-conceived assembly system

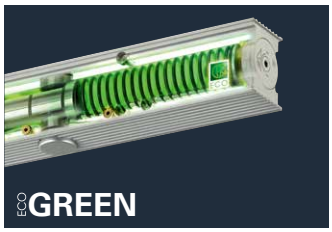
The special feature of the ECO **Newton** assembly system is that the mounting plate is completely concealed by the aluminium body of the closer, thus making it invisible. The mounting plate has standardised drill holes which guarantee time-saving, secure and straightforward attachment.

Innovative valve technology

The new ECO **VALVE** valve technology offers a wide and precisely adjustable setting range. This means the simple, high-precision and permanently secure adjustment of all parameters of the closing process using a conventional Allen key. As with all ECO **Newton** door closers, the closing speed and latching speed are regulated via the ECO **VALVE** as a standard feature. An additional valve stop prevents the valves being overtightened or screwed out.

Stainless steel full cover

The full cover is an optional stainless steel cover for the ECO **Newton** door closer and the respective slide rail. The overall appearance is perfected by a lever arm with a stainless steel finish. A cover on the closer body is available for standard arm closers.



Saves resources

ECO **Newton** door closers are up to 1,000 grams lighter than comparable solutions. Their intelligent construction and carefully planned use of materials make a considerable contribution to saving resources – without compromising functionality, safety, security or quality.

Uniform finishing edge and colour design

The mounted slide rail and door closer are flush when the door is closed. All materials are perfectly colour-matched – right through to the end caps on the slide rail. In this way, ECO **Newton** door closers can be integrated harmoniously into every design context.

Combination talent

The ECO **Newton VARIO** concept permits the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

Standardised quality

As with all ECO Schulte products, the door closers are manufactured in a quality management process certified in accordance with ISO 9001. This guarantees that top quality is produced and installed. Many door closer variants are suitable for use on fire and smoke protection doors – and tested in accordance with **EN 1154**. All products which are tested in accordance with valid European directives are identified by the CE mark.


ECO
■ SYSTEM TECHNOLOGY FOR THE DOOR


LATCHING
ON TO THINGS.
FITTING
TECHNOLOGY

ROSE HANDLES (ROS)
SHORT PLATE HANDLES (K)
LONG PLATE HANDLES (L)
OVAL ROSE HANDLES (OVR)

Bearing technologies

OKL Magis OGL SGL Click

Tests / standards

F EN 1906 DIN 18273

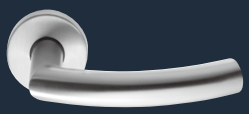

D-110


D-210


D-310


D-330


D-410


D-510


D-115


D-116


D-310


D-315


D-335


D-410


D-415


D-515

ROSE SET


Security rose set PZ


Rose set with PZ-hole


Rose set UG

WC-Set AV / SK

ROSE HANDLES (ROS)
OVAL ROSE HANDLES (OVR)

Basic friction bearing technology
BGL

Tests / standards
F EN 1906 DIN 18273


D-2110


D-2210


D-2310


D-2340


D-2410


D-2510


D-2610


D-2620


D-2630


D-2640


D-2650


D-2660


D-2670


D-2680


D-2690


D-2710


D-2720


D-2740


D-2750


D-2760


D-2770


D-2110


D-2210


D-2310

KNOBS

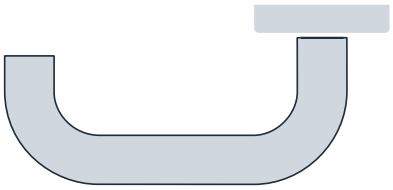

K-130


K-165


K-135

TIMELESS AND ELEGANT FORMS

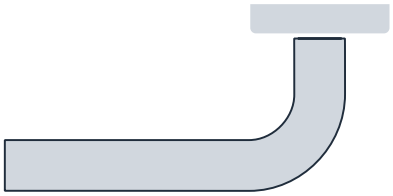
ECO D-100 archetype: U-shaped handle



ECO D-110

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



ECO D-210

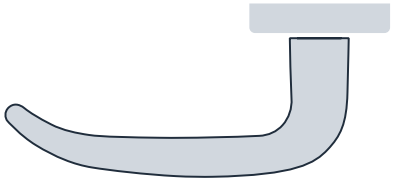
In their efforts to lower house construction prices and rents in the 1920s, many architects became involved in the standardisation of construction components. The ECO D-200 is a variation of the draft that once made a name for itself as the Frankfurt standard handle where a round rod was bent by 90 degrees 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 archetype: Frankfurt mitred handle

ECO D-310

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.

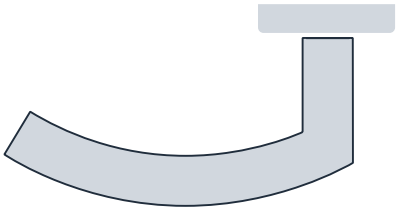
ECO D-400 archetype: Ulm handle



ECO D-410

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-500 archetype: Hand-shape handle



ECO D-510

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.

GOOD, BETTER, BEST: QUALITY BEARINGS WITH A SYSTEM

OKL - Premium handles with ball-bearing technology

OKL
Magis

OKL-bearing

These high-end project handles are characterized by an industrial ball bearing. The precise and maintenance free ball bearing technology ensures a well-balanced system. Additionally the flex-bearing, lying inside the ball bearing unit, balances uneven door surfaces for up to 3 degree. This premium and innovative solution will meet all standards for private or public doors.

- EN 1906, class 4
- With spring and 90 degree carrier
- Patented flex-bearing unit
- 1 million cycle tested

OGL - Handles with friction bearing technology

OGL

OGL-bearing

The main characteristic of this handle is a maintenance free nylon bearing that is floating on the steel base rose and balancing radial and axial free-play. This class 4 handle bearing can be used on doors with high frequency and a potential for violent usage such as in schools or football stadiums.

- EN 1906, class 4
- Unsprung
- 200,000 cycle tested

SGL - Handles with standard friction bearing technology

SGL-bearing
The bearing made of glass fiber reinforced nylon is guiding the handle axial as well as radial. A wave spring is compensating angular tolerances. A perfect and certified price/performance ratio for frequently used handles in all kind of buildings.

- EN 1906, class 3
- With spring
- 200,000 cycle tested

BGL - Handles with basic friction bearing technology

BGL-bearing
The steel base rose and return spring ensure a proper and stable fixing on the door. The economic bearing is perfect for interior doors in public buildings or private houses.

- EN 1906, class 2[1]
- With spring
- 100,000 cycle tested

1) applies only to D-2110, D-2210, D-2310, D-2340, D-2510

ECO

ALWAYS ON THE SAFE SIDE!
PANIC & LOCKIN
TECHNOLOGY

■ SYSTEM TECHNOLOGY FOR THE DOOR

PANIC BAR SYSTEMS
ECO **GUARDIAN**

reddot design award winner 2010

Designpreis Deutschland 2011 NOMINIERT

Panic bar systems ■ Touchbar

Tests / standards

F CE EN 1125

Guardian **EPN** 2000 III

Guardian EPN 2000 II

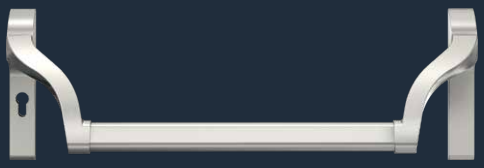
Guardian EPN 3000 EN

PANIC BAR SYSTEMS
ECO **GUARDIAN**

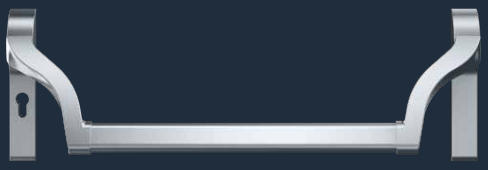
Panic bar systems ■ Pushbar

Tests / standards

F CE EN 1125

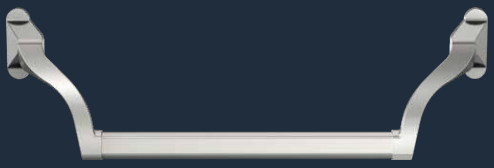


Guardian EPN 900 IV (Stainless steel)



Guardian EPN 900 IV (Aluminium F1)

Guardian EPN 900 IV (Black / red)



Guardian EPN 950

PANIC LOCKS
FOR SINGLE LEAF DOORS

Tests / standards

F CE EN 12 209 DIN 18 250 EN 179 EN 1125


GBS 90


GBS 92


GBS 96


GBS 96 AVP


GBS 130

FOR DOUBLE LEAF DOORS


GBS 93


GBS 94


GBS 94 RSK


GBS 97

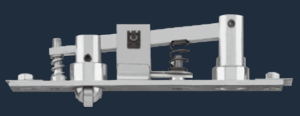

GBS 97 AVP


GBS 98


GBS 140


GBS 152 ETÖ

DUAL LOCKING DEVICE



STANDARD LOCKS
FOR SINGLE LEAF DOORS

Tests / standards

F CE EN 12 209 DIN 18 250

GBS 31 F SH
Sash lock

GBS 31 F NR
Noise reduction lock

GBS 31 F RL
Roller latch lock

GBS 31 F UR
Latch lock

GBS 31 F DB
Dead lock

GBS 31 F NL
Nightlatch lock

GBS 31 F WC
Bathroom lock

GBS 31 F SUR
Single latch lock

GBS 31 F SDB
Single dead lock

GBS 31 F SWC
Bathroom deadbolt

GBS 31 F
Tube well lock

GBS 31 F
Profile sash lock

GBS 31 F
Profile roller latch lock

GBS 31 F
Narrow dead lock

GBS 81

GBS 94F

GBS 187

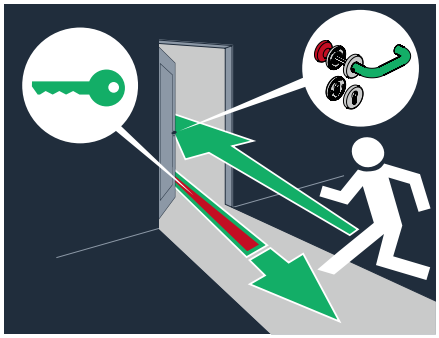
GBS 190

GBS 198

GBS 199

PANIC LOCK
FUNCTIONS

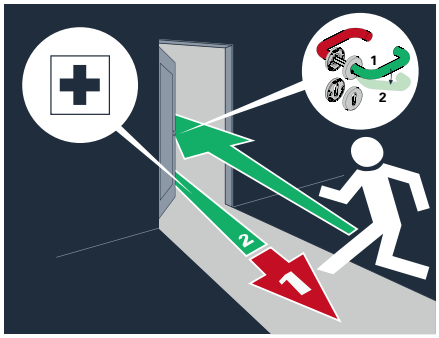
A panic lock works according to a defined principle: If the lever handle or panic bar on the inside is operated, the lock must open promptly under a defined application of force. In this case, not only the latch is drawn back, but also the locked bolt if necessary. This basic function can be refined and varied using ECO technology.



Knob-lever function

Panic function E

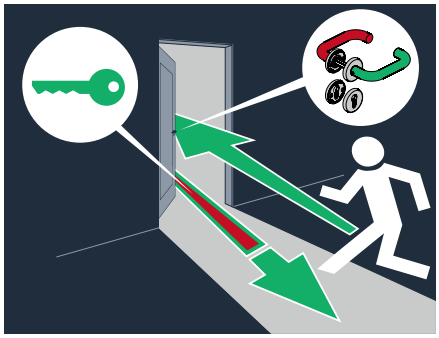
Panic function E is designed for buildings with access for a defined group of people. There is a blind plate or knob fitted on the outside, the door can only be opened by key. Classic panic function via the lever handle on the inside.



Fire brigade function

Panic function D

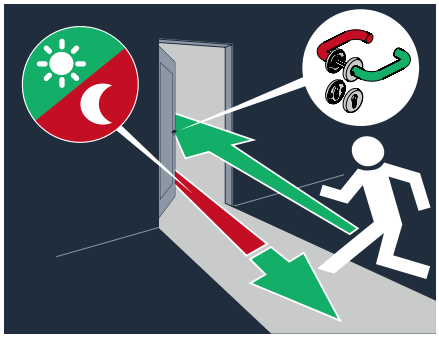
Panic function D is designed for pure escape doors which are not otherwise used: Following a classic panic operation from the inside the door is not only opened, the outer lever handle is engaged as well. In this setting, the door is no longer an obstacle for entry to nor escape from the building. The original function can be restored by a key. Engagement takes place mechanically through a two-part follower.



Forced closure function

Panic function C

Panic function C with a lever handle on both sides is designed for buildings accessible to the general public: Whereas the lever handle on the inside has a classic panic function, the lever handle on the outside is usually disengaged (idle function) and can only be disengaged and engaged through a key position (opening position) (forced closing). However, the key can only be removed when the idle function has been restored.



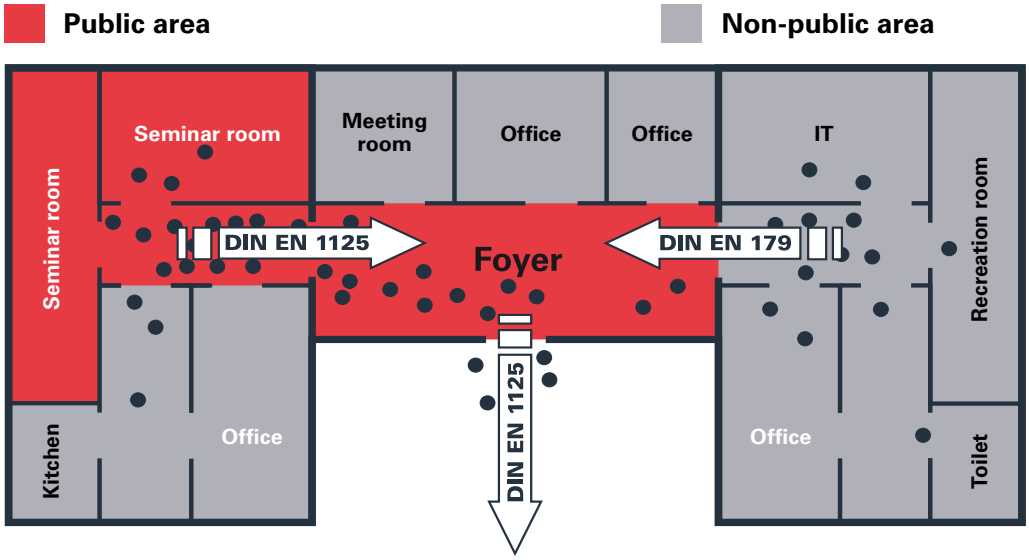
Switchover function

Panic function B

Panic function B with a lever handle on both sides is designed for buildings accessible to the general public: Whereas the lever handle on the inside has a classic panic function, the lever handle on the outside can be disengaged or engaged mechanically as required. Engagement of the two lever handles takes place mechanically through a two-part follower.

NORMS DEPENDING ON BUILDING USE

The type of room and utilization of the building are decisive when choosing the right panic door combination. European standards **DIN EN 1125** and **DIN EN 179** define the fittings of panic doors and emergency exits. Emergency exit locks in compliance with **DIN EN 179** are not normally subjected to use by the general public. It is assumed here that the users of the building are acquainted with the escape routes, so conventional panic lock technology with a handle or impact plate are sufficient here. Panic locks with a horizontal activation bar in accordance with **DIN EN 1125**, on the other hand, are intended for use in buildings frequented by the general public. Our panic systems in conformance with **DIN EN 1125** ensure that persons who have panicked and are not acquainted with the functions of the door can always get out of the building safely.



Panic locks with a horizontal activation bar

EN 1125

Panic locks in accordance with **DIN EN 1125** are used in public buildings in which the users are not acquainted with the functioning of the escape door but must nevertheless be able to operate them without instruction.

Panic locks activated mechanically by means of a horizontal handle or push-bar.

Areas of application:
- Hospitals and clinics
- Escape routes in schools and training centres
- Public administration buildings
- Stadia, arenas and events buildings
- Shopping centres

Users have no advance knowledge of how to open the escape door.

Emergency exit locks with door handle

EN 179

Emergency exit locks in accordance with **DIN EN 179** for buildings or building sections not open to the general public and all areas where access by the general public can be excluded. Side entrances or doors in these buildings or building sections are only used by authorized persons.

Emergency exit locks operated mechanically by means of a handle or impact plate.

Areas of application:
- Private residential complexes
- School classrooms
- Non-public administration buildings or industrial companies
- Non-public areas of administrative buildings
- Non-public areas of airports, banks, shopping centres

Users have advance knowledge of how to open the escape door.


ECO
SUPPORTIN
ROLLERS.
HINGE
TECHN
■ SYSTEM TECHNOLOGY FOR THE DOOR


G
OLOGY

OBJECT HINGES ECO **HORIZON** OBX-20, OBX-18 AND OBX-14

Tests / standards
F CE EN 1935

OBX-20-1531/160
3D Hinge

OBX-20-2541/160
3D Hinge

OBX-20-2542/160
3D Hinge

OBX-18-1531/160
3D Hinge

OBX-18-1531/120
3D Hinge

OBX-18-1534/160
3D Hinge

OBX-18-2541/160
3D Hinge

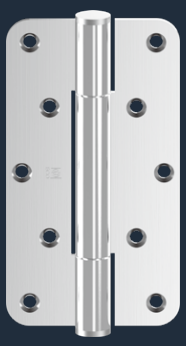
OBX-18-2541/120
3D Hinge

OBX-14-4526
3D Hinge

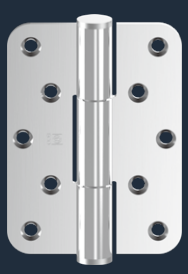
OBJECT HINGES ECO **HORIZON** OBN-20, OBN-18 AND OBN-14

Tests / standards
F CE EN 1935

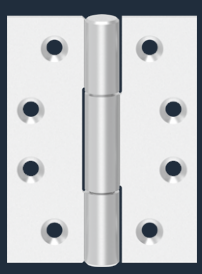
OBX-20-4141/160
Butt Hinge



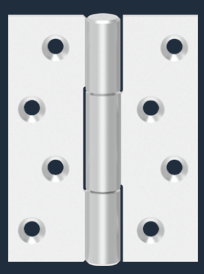
OBN-18-4141/160
Butt Hinge



OBN-18-4141/120
Butt Hinge

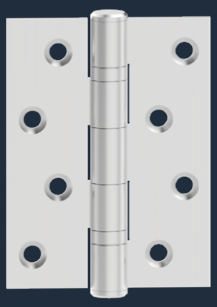


OBN-14
C-hole Butt Hinge

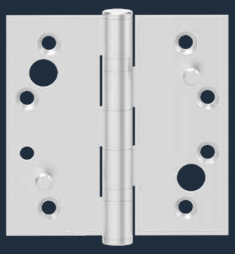


OBN-14
Z-hole Butt Hinge

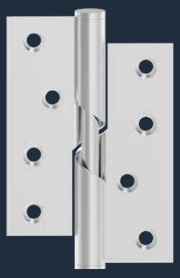
OBJECT HINGES OBN-13 SERIES



OBN-13
Butt Hinge



OBN-13 C
Security Hinge



OBN-13-433H/102
Rising Hinge

OBN-13-4325ZM/102
Flag Hinge

CONCEALED OBJECT HINGES OBC SERIES

OBC-25-1440/150Z-3D

OBC-28-1640/177Z-3D

OBC-34-1845/246Z-3D

ADJUSTABLE FRAME BOXES, COVER PLATES AND LIFTING LUG

OBX Adjustable Frame
Boxes For OBX-hinges

OBX Cover Plates For
Adjustable Frame Boxes

OBX Lifting Lug
For OBX-hinges

PERFORMANCE WEIGHTS AND LOADS

Door hinges are highly stressed construction elements: they not only have to bear the weight of the door itself, but much higher loads as well, depending on where they are used. Frequent door opening, slamming and unusual treatment of doors as in barracks or schools can make conventional hinges reach their load limit if they are simply designed to cope with the door weight.

ECO **Horizon** hinges have a closed hinge roller which prevents the roller bending open. No compromises have been made with the material thickness of the hinges either: the hinge plates of the ECO **Horizon** hinges can bear loads of up to 300 kg per hinge.

Maximum door weight of ECO Horizon object hinges

Stop	Max. door weight: 300 kg	Max. door weight: 200 kg	Max. door weight: 160 kg	Max. door weight: 120 kg
rebated notch	OBX-20-1531/160 OBX-20-1532/160 FD	OBX-20-1531/120 OBX-20-1532/120 OBX-20-1951/160 OBX-18-1531/160	OBX-20-1951/120 OBX-18-1532/160	OBX-18-1531/120
unrebated notch	OBX-20-2541/160 OBX-20-2542/160 OBN-20-4141/160	OBX-20-2541/120 OBX-20-2542/120 OBX-18-2541/160 OBN-18-4141/160	OBN-14-E-C OBN-14-E-Z OBN-14-R-C OBN-14-R-Z	OBX-18-2541/120

The values given were established under 100 % testing laboratory conditions on 2 m high and 1 m wide doors as per EN 1935. Please remember this when selecting the object hinge or contact us for further details.

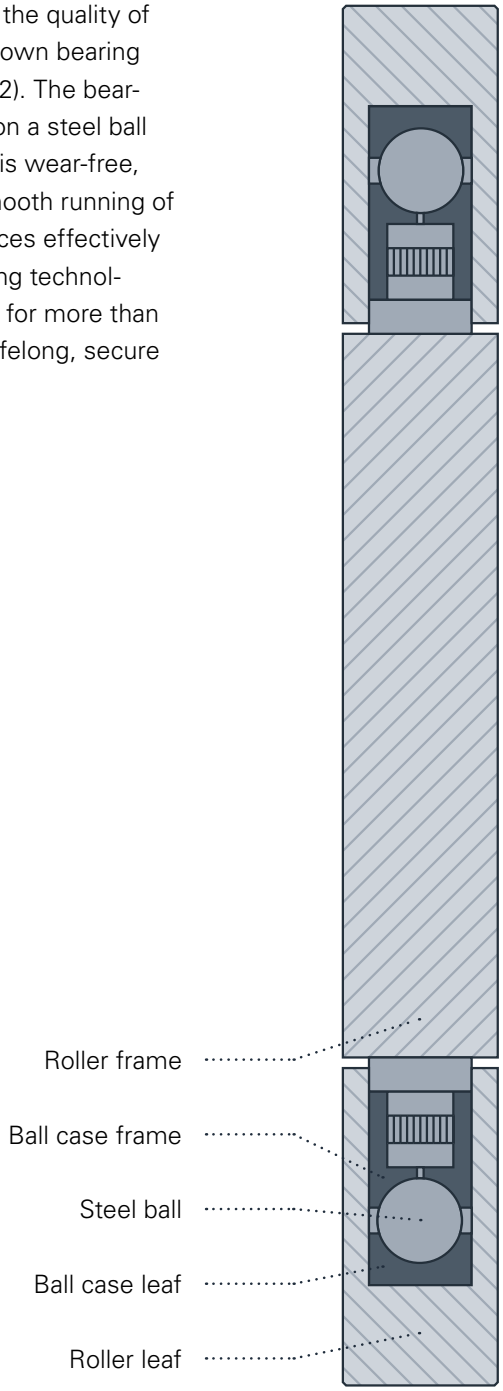
Assuming proper installation of the door, the material strength of the construction element to be attached and a frictional connection with the masonry: ECO **Horizon** hinges should be selected and used according to the above table with sufficient load and safety reserves for special areas of use as well. When ECO Schulte systems are used, a third hinge is only required under really difficult conditions. A third hinge that is attached in the top third of the door frame can increase the load-bearing capacity of the hinges by around one third.The data in the table refer to a door leaf size of 2 x 1m, the use of two hinges and professional installation.

The numerous individual selection criteria such as areas of use, frequency of door passage etc. cannot be taken into account when determining the values. For this reason we recommend including safety reserves in the calculation and the selection of corresponding hinges to protect individuals.

We will be happy to help if you have any queries.

PREMIUM BALL BEARINGS

The quality of a hinge is determined to a great extent by the quality of the bearing. That is why ECO Schulte has developed its own bearing technology for its object hinges (patent: DE 103 61 548.2). The bearing is characteristic: the roller is guided top and bottom on a steel ball in two high-strength plastic cases. This specific bearing is wear-free, maintenance-free and clearance-free and guarantees smooth running of the door. The double bearing controls axial and radial forces effectively and permanently. In a series of practical tests, this bearing technology was successfully tested by an independent institute for more than one million closing actions. That more than guarantees lifelong, secure fastening.



ADVANTAGES
ECO HORIZON

Performance criteria

- **Hinge class:** 14
- **Use class:** 4, very heavy
- **Long-term operability:** 200,000 cycles

USPs

- Clearance-free, patented and maintenance-free premium ball bearing
- Automated, innovative production technology with minimum tolerances and gap dimensions
- No lubricants used
- Easy to clean thanks to closed hinge roller - especially suitable for hygiene-critical areas
- Opening resistance significantly under the test norm required
- Guarantee: Entire service life

Burglar resistance

- No pin securing necessary, since there is no full floating axle
- Not possible to lever out the closed hinge roller (made of solid material)

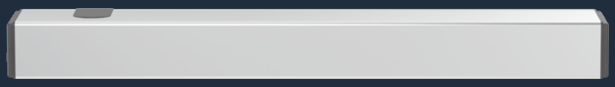
Design

- Seamless hinge design without cover head top/bottom thanks to closed hinge roller
- Attractive finish pattern thanks to longitudinal polishing
- Automated, innovative production technology with minimum tolerances thanks to laser welding technology

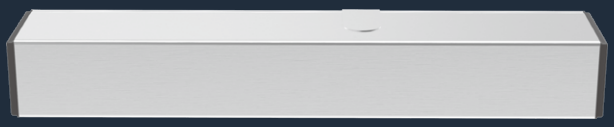
■ SYSTEM TECHNOLOGY FOR THE DOOR


T
AGEMENT

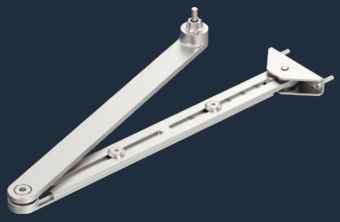
ETS OPERATOR



ETS 42 Swing door operator
(EN 2 – 4)



ETS 73 Swing door operator
(EN 3 – 7)



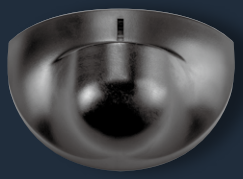
SGS-ETS standard arm

NG-ETS slide arm

ORS 142 W - Smoke detector

D-BEDIX control device for ETS

Clamping pieces



Radar Eagle One

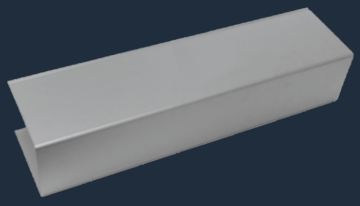
Flatscan

Remote control

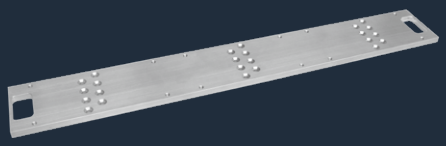
ETS OPERATOR

Sensor strip set IV

Sensor strip set **III**



Cladding for double leaf doors



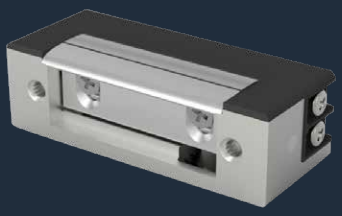
Mounting plate for ETS-73 (MPL)

FTA ECO Vent

FTA ECO-Vent
TS-62
FTA 600 R

ELECTRIC STRIKES

ES 480 Series

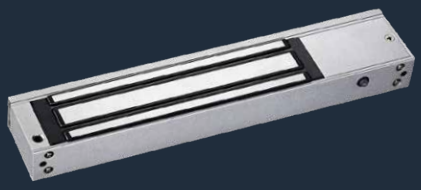


ES 350 Series

L01

S01

EM-LOCKS

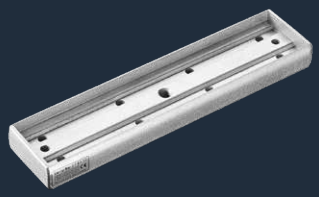


EM 280 Electromagnetic lock

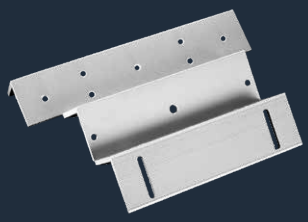
EM 280 D Electromagnetic lock

DL 300SLD Electric drop bolt

BRACKETS

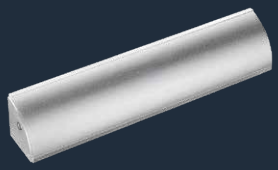


280I

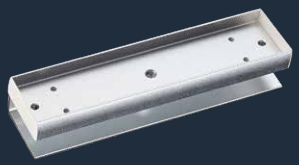


280ZL

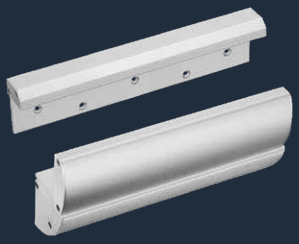
280L



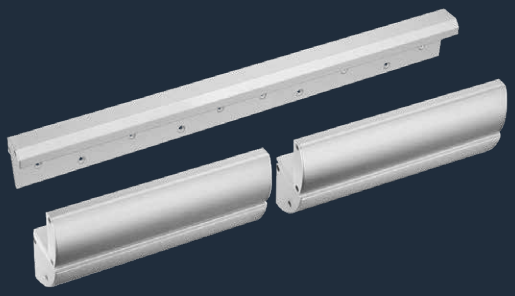
280C



280G



280ZLC



280DZLC

CONTROL ELEMENTS

OPB 05 Standard exit button

OPB 06 Piezoelectric exit button

OPB 07 Infrared sensor exit button

FL11-02 / FL93-02 Finger print reader

Contactless motion detector (magic switch)

CR 03 Card reader

CR 04 Card reader with touch keypad

CW 02 Card issuer

IC Key Fob

TERMINAL SOLUTIONS

FT3 Basic Emergency exit terminal

FTI Emergency exit terminal

ITM ACCESSORIES

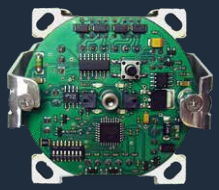
DH602S Extended Wall-Mounted Door Holder (with monitoring)

DH604S Standard Wall-Mounted Door Holder (with monitoring)

DH605S Standard Floor-Mounted Door Holder (with monitoring)

CL 290I Cable loop

Door magnetic contact



FL-RP22-DIN Control for fingerprint

ITM ACCESSORIES

AC 12 Controller and power supply

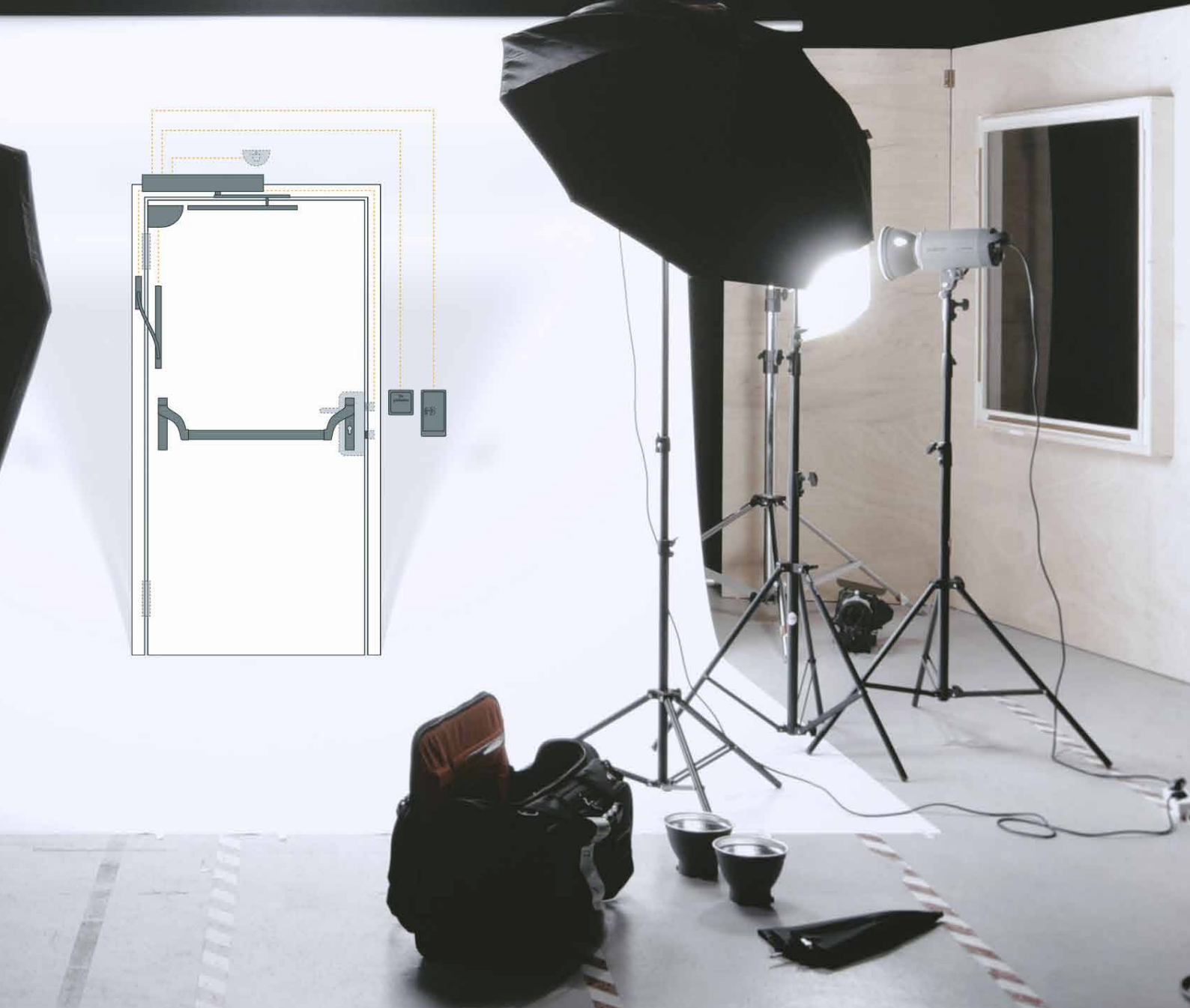
AC 22 Controller and power supply

AC 41 Controller and power supply

PS 2212 Power supply


ECO
27
26
26
THE SYSTEM IN FOCUS
ECO ITM
■ SYSTEM TECHNOLOGY FOR THE DOOR


10
11
24
23
22
21



ENDLESS SPACES.
GLASS DOOR TECHNOLOGY

PATCH FITTINGS

GF-0100

GF-0200

GF-0300

GF-0400

GF-0500

GLASS DOOR PULL HANDLES

S-110

S-310

S-330

S-420

GLASS DOOR HANDLES AND LOCKS

Studio PZ

Studio UV

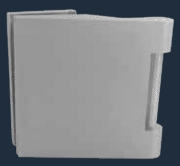
Studio SF

Studio D-2110

Studio D-2310

ACCESSORIES FOR GLASS DOORS

Glass clamping device



Studio hinge

Frame

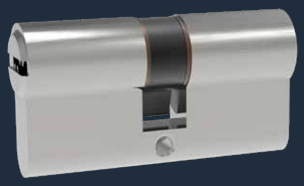
SF lock

MANAGING ACCESS. **CYLINDER TECHNOLOGY**

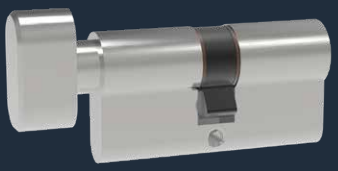
EUROPROFILE CYLINDERS

Tests / standards

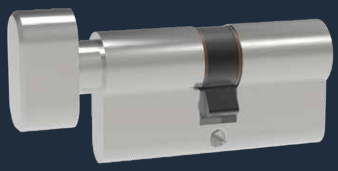
F CE EN 1303



CY Double Cylinder



TCY Thumb Turn Cylinder

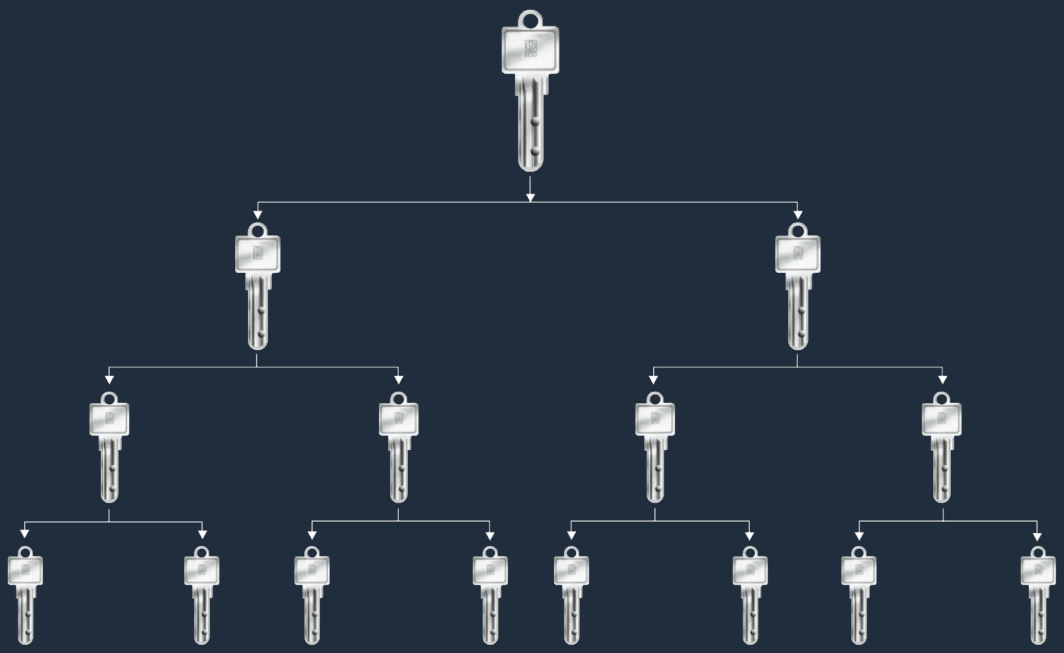


BCY Bathroom Cylinder

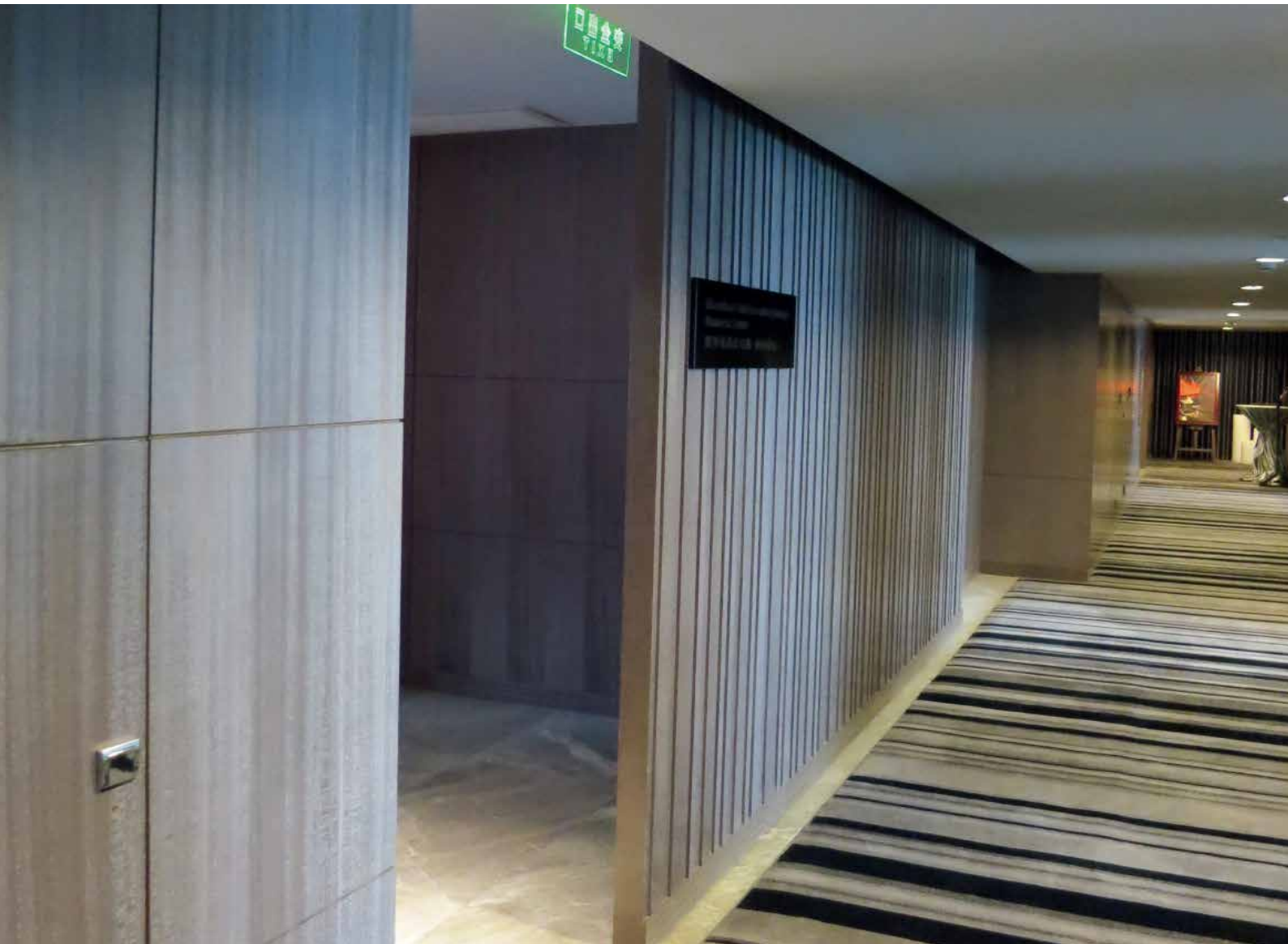
HCY Half Cylinder

MASTERKEY SYSTEM

- One present key needed to open any door in the building
- Up to 5 levels
- Available with patented keyway
- Suitable for all kinds of locks



HOLISTIC SOLUTIONS. **SLIDING DOOR TECHNOLOGY**

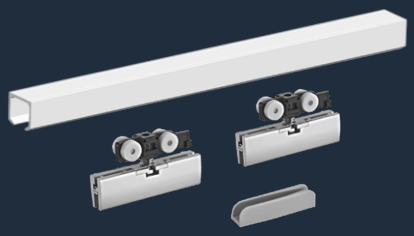


SLIDING SYSTEM FOR TIMBER DOORS

Product characteristics	
Product	Max. Door Weight
HR SL60-W	60 kg
HR SL100-W	100 kg
HR SL160-W	160 kg
HR SL250-W	250 kg

SLIDING SYSTEM FOR GLASS DOORS

Product characteristics	
Product	Max. Door Weight
HR SL80-G	80 kg
HR SL120-G	120 kg



SLIDING DOOR ACCESSORIES

Hook Lock

WC Lock

WC Rosette
Escutcheon Sets

PZ Rosette
Escutcheon Sets

WC Oval Plate
Escutcheon Sets

PZ Oval Plate
Escutcheon Sets

THE SCANDINAVIAN HAND. **HANDLES DESIGNED BY ARCHITECTS**

For decades the name Randi has been synonymous with high quality products in stainless steel and brass. Since the beginning, Randi's design philosophy has been: simplicity and flexibility. To create the best possible function in the most suitable material using the simplest design expression. Randi A/S has developed two unique, first-class series of door handles- the Randi Line and the Classic Line- designed in collaboration with leading Danish architects.

GERMAN DESIGN AWARD SPECIAL 2017

ICONIC AWARDS 2016 product winner

RANDI-LINE® DESIGN

AART designers

1074

1074

C.F. Møller Architects

1073

1073

1073 RAW

1060

Friis & Moltke Design

1075

1077 Black

1077 Oak

1077 Stainless Steel

Architect Jørn Schütze

1040

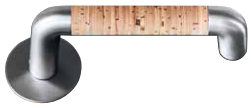
1061

Architects Benedicte & Poul Erik Find

3010

3020

Design Studio Lars Vejen



1078

1068

Architect Christoffer Harlang

1072

CEBRA Architecture

1070

RANDI-LINE®

1010

1011

1015

1050

1090

1091

LINE 18®

7020

7021

7024

7060

7065

7080

Further product lines and models can be found on www.randi.com

HEADQUARTER

ECO Schulte GmbH & Co. KG
Iserlohner Landstraße 89, D-58706 Menden
Phone +49 2373 9276 - 0
Fax +49 2373 9276-40
info@eco-schulte.de www.eco-schulte.com

AUSTRIA SALES OFFICE

ECO Schulte Austria GmbH
Podlanig 9, A-9620 Hermagor

ASIA SALES OFFICE

ECO Schulte Doorsystems Zhuhai Co. Ltd.
No.31 Zhuhai Free Trade Zone, CN-Zhuhai, Guangdong

FRANCE SALES OFFICE

ECO Schulte France SA
27, rue du Champ de Mars, 57200 Sarreguemines

POLAND SALES OFFICE

ECO Schulte Sp. zo. o.
Ul. Wspólna 26, PL-05-090 Janki / Raszyn

MEMBER OF ECO GROUP

Randi A/S
Mirabellevej 3 DK-8930 Randers NØ

■ SYSTEM TECHNOLOGY FOR THE DOOR