CES Customer Profiles
A cooperative future

Customer Profiles for mechanical locking systems

www.ces.eu
Safety and quality made in Germany – this is what the locking systems produced by C.Ed. Schulte GmbH, known internationally as CES, stand for. The family-run business was founded in Velbert, near Düsseldorf, Germany, in 1840. Today, here at the heart of German locking and security technology manufacturing, CES product developers and engineers are continuously working to improve locking systems and the corresponding services in order to best meet customer needs.

The Federal Chancellery in Berlin, the Elbphilharmonie concert hall in Hamburg, the airport in Ankara and the Burj Khalifa in Dubai have all placed their trust in CES locking technology.

CES offers you patent-protected locking systems as exclusive customer profiles.

Whether it’s single locks with security cards, small or medium-sized master key systems, or highly complex master key systems for non-residential buildings: you appreciate the performance of the CES mechanical locking systems, and our 48-hour delivery programme sounds just as attractive.

With our service, quality and promptness, we want to win you over as a CES partner for our customer profiles.
CES Customer Profiles

Your advantages at a glance

Exclusive customer profile
You will receive a profile which is exclusively at your disposal. Depending on the type and extent of an order, you simply have to cut the keys, or you manufacture all customer keys and cylinders yourself. Alternatively, we can also produce the entire master key system with your customer profile for you.

Your embossed logo
You can now emboss keys with your own logo. This way your customers will always know where to reorder their keys – and you secure your follow-up business!

Our quality promise
Our customer profiles and factory profiles have exactly the same high quality standards. The profiles reserved for our CES partners are all derived from the profile trees of the factory profiles and thus include all the same quality features.
Individual security cards

For master key systems and single locks with security cards, you will receive security cards from us which have your system number printed on one side. The other side has space for your logo or ad.

Training programme

We are happy to assist you whenever you need our support. We will visit you or you can come to our dedicated training room in Velbert, which is equipped with Silca machinery and an ideal workshop.

Fast delivery programme

Master key systems and single lockings with security cards can be ordered as part of our fast delivery programme.
Key manufacturing

For reasons of dimensional accuracy, keys of master key systems should be manufactured on electronic cutting machines. The cards required for producing CES keys can be found in newer machines and in the software of all manufacturers. We have had particularly good experience with Silca key cutting machines. When you opt for a CES customer profile, technical support for operating the Silca machines is included.

CES Assisting Machine Project

If you have not yet acquired the necessary equipment, we recommend the full version of the electronic key cutting machine Silca Futura Pro. This key cutting machine allows you to cut keys for conventional and reversible key systems. The package also contains an engraving function and the required accessories. We offer the following attractive financing options:

Leasing

24-months duration, monthly leasing rates. Afterwards, you buy the machine for a previously agreed-upon final instalment, or you return it.

Refinancing

For a period of 24 months you commit to buying a certain amount of key blanks at an increased unit price every six months. At the latest after this 24-month period is complete, you purchase the key blanks at their normal unit price. You buy the machine for a previously agreed-upon final instalment, or you return it.
Our full-service package

Service tool case

CES has developed a practical pin set which contains all semi-finished parts to modify pre-assembled cylinders. Together with the assembly tools, the pin set comes in a handy, well organised tool case in a well-arranged manner. This gives you flexibility no matter where you work, be it at your workshop or on-site at the customer’s place. You receive the filled service tool case as part of the initial equipment at no additional cost.

Pin set

- 100 each of:
  - Key pins (all lengths)
  - Shims
  - Driver pins
  - Mushroom pins
  - Housing springs
  - Circlips

Assembly tools

- Two (2) pin clamps
- Circlip pliers
- Pin and spring tool
- Assembly aid for cam cylinder
- Assembly aid for padlock
If you are in a hurry, you can benefit from our fast delivery programme:

- **Within 48 hours***
  - up to 100 conventional cylinders
  - up to 20 cylinders of a reversible key system
  - all keys with embossed CES logo

- **Within 15 days**
  - up to 500 conventional cylinders
  - up to 400 cylinders of a reversible key system
  - keys with embossed customer or CES logo

*Valid for shipping within Germany. Orders of the lot sizes stated above which have been received by 12 am will be produced and shipped the following day. When delivering to other countries, shipping times may be longer depending on the transport routes.
If you have the master key systems produced at our factory, they are delivered in our special master key system packaging. It is a modular packaging system and consists of individual trays with a defined slot for each locking cylinder and each key. Locking cylinders and keys are assigned to the individual trays according to the locking plan sequence. The trays are made of lightweight and robust neopor, are easy to handle, can be stacked, and facilitate on-site assembly. The packaging material can also be ordered separately. Two different packaging systems are available for individual cylinders.

For all your customer profile orders you will receive the required manufacturing information:
- Production files, such as the locking plan, cylinder set-up and key codes, are sent in *.xlsx format.
- Prepared data for the import into the Silca key programme (*.dat for SI and *.csv for the code table)
- Upon request, CES offers the service of calculating master key systems as part of the customer profile programme.
Assembly
Quick and easy

Parts for locking cylinders
1. Housing
2. Plug
3. Extension piece
4. Plug pins
5. Driver pins
6. Housing springs
7. Coupling
8. Locking cam
9. Circlip
10. Plug extension
11. Key extension

Assembly tools
1. Loading bar for plug pins
2. Pin and spring tool
3. Spring tool
4. Pin clamps (2)
5. Assembly aid for padlock
6. Needle
7. Pre-assembled cylinder
8. Removing key
9. Assembly aid for cam cylinder
10. Circlip pliers

Optional assembly tool
1. Pliers to open circlip
2. Assembly tool for modular cylinders
In a few simple steps, CES cylinders are assembled quickly and easily.

**Step 1 – Removal**

- Insert the removing key
- Turn by 180°
- Insert the pin clamp
- Remove the plug

**Step 2 – Assembly**

- Take out the pins
- Insert the required pins according to the list provided

**Step 3 – Assembly**

- Carefully insert the plug until it snaps into place. If necessary, slightly move the locking cam to the right or left
- Remove the pin clamp
- Hold the plug, and turn the housing by 180° until the driver pins in the plug snap into place

**Step 4 – Assembly**

- Use the circlip pliers to press the circlip firmly together on both sides
Systems

DIN 18252/EN 1303-compliant

Master key systems

**System**

- **RHM system**
  - System with 5 or 6 pins
  - Patent-protected until 2031
  - Paracentric profile with double undercut
  - An additional element scans the undercut
  - Hardware profile
  - Two (2) profile pins create profile variants
  - Locking bar
  - Lateral drill holes
  - Basic length: 27.5/27.5 mm (5-pin)
  - Basic length: 31.5/31.5 mm (6-pin)

- **UDM system**
  - System with 5 or 6 pins
  - Patent-protected until 2031
  - Paracentric profile with double undercut
  - Scan of the undercut
  - Control Plus pins
  - Basic length: 27.5/27.5 mm (5-pin)
  - Basic length: 31.5/31.5 mm (6-pin)

<table>
<thead>
<tr>
<th>Feature</th>
<th>RHM</th>
<th>UDM</th>
<th>RBMS</th>
<th>UDM5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Master key systems</td>
<td>Single locks</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5-pin system</strong></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>6-pin system</strong></td>
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<tr>
<td><strong>Conventional locking system</strong></td>
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<td><strong>Reversible key system</strong></td>
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<tr>
<td><strong>Key thickness</strong></td>
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<td>3.5 mm</td>
<td>3.5 mm</td>
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<tr>
<td><strong>Patent-protected until</strong></td>
<td>2031</td>
<td>2031</td>
<td>2031</td>
<td>2031</td>
</tr>
<tr>
<td><strong>Free wheel mode (F) for panic function (FZG)</strong></td>
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<tr>
<td><strong>Technical duplication protection</strong></td>
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<td><strong>Modular system available</strong></td>
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<tr>
<td><strong>Exclusive customer profile</strong></td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td><strong>Key blanks with customer logo</strong></td>
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<td>✓</td>
</tr>
<tr>
<td><strong>Security cards with customer logo</strong></td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Pictures show complete equipment
Single lockings

RBMS system
- 5-pin system
- Patent-protected until 2031
- Paracentric profile with double undercut
- Two (2) profile pins create profile variants
- Hardware profile
- Basic length: 27.5/27.5 mm (5-pin)
- Individual cylinder packaging (standard) or premium packaging (optional)

UDMS system
- 5-pin system
- Patent-protected until 2031
- Paracentric profile with double undercut
- Scan of the undercut
- Control Plus pins
- Basic length: 27.5/27.5 mm (5-pin)
- Individual cylinder packaging (standard) or premium packaging (optional)

Options
- Anti-drilling and anti-pulling protection (BS3, BS4, BZ1, BZ2)
- Impact protection design (HT)
- Seawater-resistant design
- Wear-resistant design (VF)
- Various colours
- Compatible with all electronic CES locking systems

Solid nickel-silver key
The solid nickel-silver keys have an impressive high-quality look and pleasant feel. The large key head allows for the transmission of higher torques. Therefore, the locking systems are particularly suited for use in modern doors with high thermal insulation. The large key head allows people with limited hand mobility to comfortably turn the key. The key shank, which is at least 14 mm long, matches commercial handle sets with cylinder covering.
Types

Modular design

You decide whether you want to order modular cylinders, and how many. We recommend ordering the most common lengths in the non-modular design and using our modular system for less common dimensions.

This lets you reduce your stock, while still allowing you to offer your customers nearly any cylinder length.

Available lengths
27.5/27.5 mm (31.5/31.5 mm) up to a total length of maximum 110.5/110.5 mm.

Assembly tool case
For cylinder lengths from 27.5 mm to 65.5 mm (31.5 mm to 70.5 mm)

Connecting studs and pieces are made of chrome-nickel steel. Housing extensions are made of brass.
Available cylinder variants

Profile double cylinder no. 810
Brass matt nickel-plated

Profile double cylinder no. 8710
With emergency function
Brass matt nickel-plated
Can be locked on either side

Profile double cylinder with free wheel mode
No. 8710F
For gear-box driven
Multipoint locking with panic function
Brass matt nickel-plated

Profile half cylinder no. 851½
Brass matt nickel-plated
Locking cam, adjustable to 12 positions

Profile knob cylinder no. 815
Brass matt nickel-plated
Locking function on one side, aluminium knob on the other side, NF; available in various knob forms (shown: H form)

Cam cylinder no. 5558/30
Polished brass, nickel-plated
Locking movement 90°
Locking direction as desired
Fitting dimension 25 mm

Padlock no. 215 N/58
Lock body made of brass velours chrome-plated
Shackle stainless steel
Housing width 58 mm, height 50 mm
Key removable without locking
Shackle clearance 35 mm (standard)

Double knob cylinder
Swiss profile no. 610
Only with a reversible key system
Brass matt nickel-plated
With 5 pins: 31.5 mm/31.5 mm
With 6 pins: 35.5 mm/35.5 mm

Profile insert no. 802/5
Brass matt nickel-plated
Locking function on one side, other side without function

Basic lengths for profile cylinders:

<table>
<thead>
<tr>
<th>With 5 pins</th>
<th>With 6 pins</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5/27.5 mm</td>
<td>31.5/31.5 mm</td>
</tr>
</tbody>
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More article variants available.
Also available as British and Scandinavian profile, as well as ANSI cylinder.