Switchguard®
ITS 700 with CKJ
Pointing for any rail profile
(UIC as well as AREMA)
Switchguard ITS 700, the innovative point operating system from Siemens, provides your passengers with greater travelling comfort, your trains with more stability and your points with a longer service life. Besides the well-established CKA locking units a new generation of locking devices has been developed in the last few years, using the same proven concepts as the CKA units.

**ITS 700 with new locking unit**
The Siemens Switchguard CKJ locking unit is used to operate and secure points of every type and gauge. It has also been designed to be installed also in heavy turnouts covering axle loads up to 40 tons.

It is compatible with different rail profiles, particularly all common profiles including UIC, BS and AREMA.

The CKJ locking device is located in a hollow sleeper and thus well protected against environmental conditions.

**Easy adjustability**
The locking device is adjustable for different running edges and positions in large turnouts. Convenient handling is guaranteed by easy accessibility of adjustable components.

**Minimized installation time**
The complete point operating system is preassembled in the factory. This makes on-site installation easy, with little training required. The same applies to all maintenance activities as well as to all visual inspections.

**Promising low life cycle costs**
This advantageous combination offers favorable overall life cycle costs. Additionally, turnouts equipped with the new CKJ locking unit allow continuous machine operated tamping, which increases the overall lifetime of all installed systems.

**Other features**
- Suitable for all rail profiles
- High level of reliability
- Compact design
- Proven locking concept using pawls
- Preassembled in the factory
- Easy on-site installation
- Drilling of stock rail not needed
- Works with any point machine
- Existing boreholes in point blades can be used
The point machine is available in numerous variants:
- Trailable and non-trailable
- With and without point detection
- Operating voltage: 110 V AC/DC, 220 V AC, 3 x 400/230 V AC
- Throwing stroke: 120 to 220 mm
- Throwing force: 4.5 to 6.5 kN
- Throwing time: 2.8 to 7.5 s
- Other options available on request

The hollow sleeper, which replaces a conventional steel, wooden or concrete sleeper, houses the point machine, the adjustable locking unit (CKJ) as well as the drive and detector rods. This means that all moveable parts are protected against both mechanical damage and environmental effects. Depending on the component layout, the hollow sleeper can be used either as a point-tip lock or as a mid-blade lock. The number of spare parts to be stocked can be reduced to a minimum as spare parts are interchangeable between all variants.

Furthermore, the hollow sleeper can optionally be heated electrically, thus further improving the winter-proofness of the entire point operating system.

**Major benefits at a glance**

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<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
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<tr>
<td>Adjustable locking unit – available for any rail profile and a wide range of turnout types</td>
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<td>Optimized access to all major components including locking elements</td>
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<td>Reduced amount of spare parts on stock, as same locking units cover many different turnout types</td>
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<td>Use of low-maintenance locking and point machine components</td>
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<td>Low life cycle costs in combination with high availability</td>
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<td>Enhancement of the track geometry quality as machine tamping is also possible in the area around the locking</td>
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<td>Shorter track closure and on-site installation times thanks to the option of preassembly at the turnout factory</td>
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<td>Interface compatibility of the control system with the existing point controller in the interlocking</td>
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