

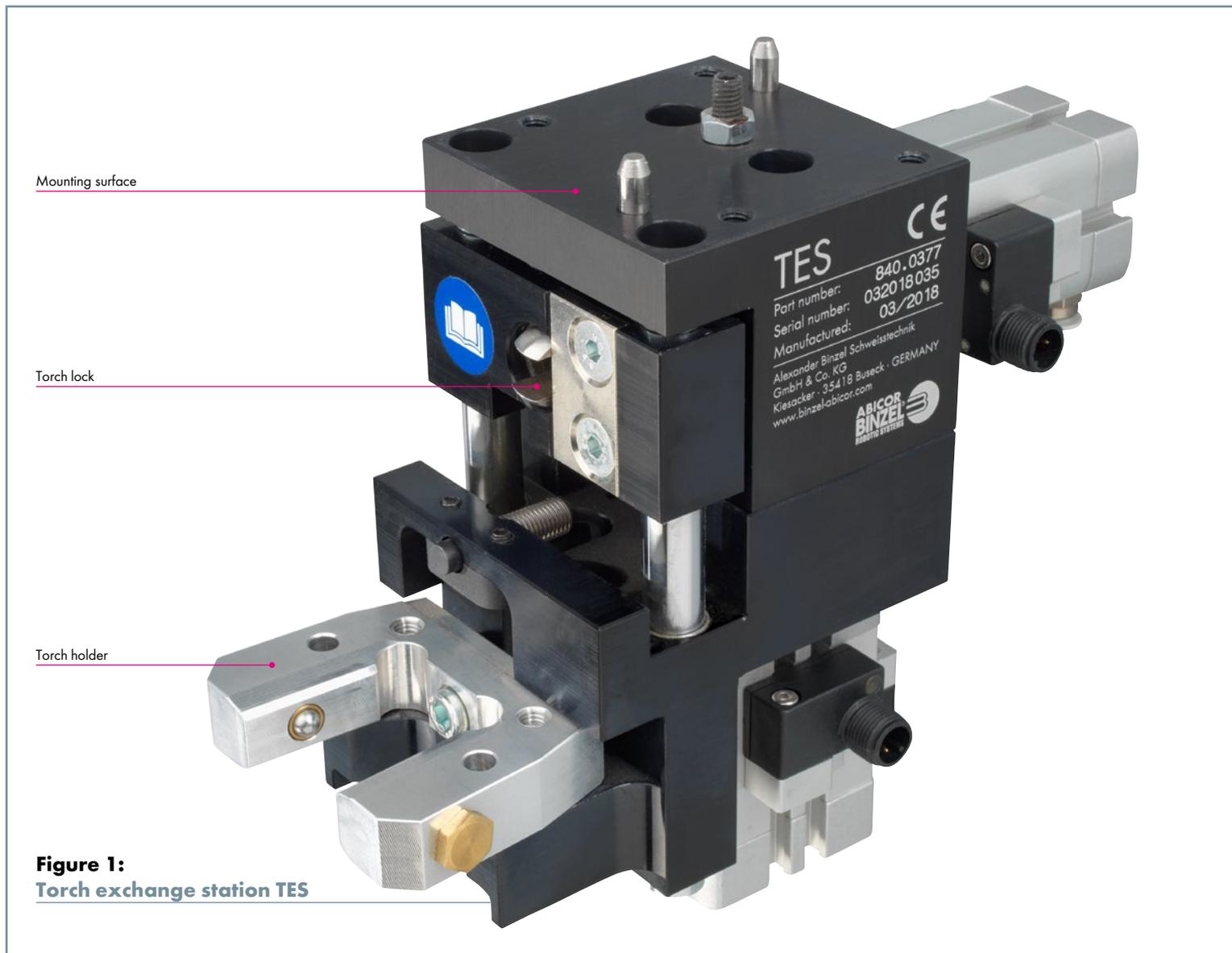
Torch exchange station TES

Increase productivity & flexibility



In detail

System overview & technical data



Torch exchange station TES. Increased productivity & flexibility

The torch exchange station TES can be used anywhere where welding torches need to be exchanged quickly and reliably. The strengths of the system include a change of torch geometry or even preventive torch changes for servicing wear parts of a TIG welding torch ABITIG® WH or MIG/MAG WH welding torch.

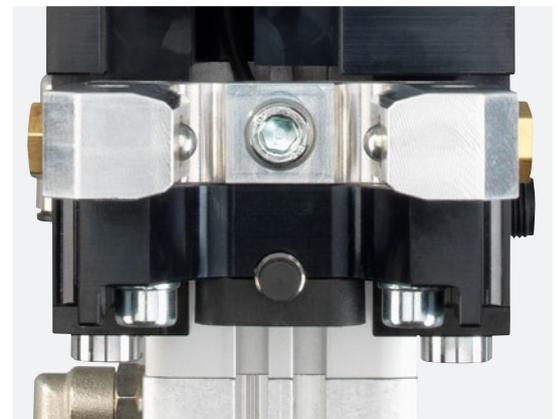
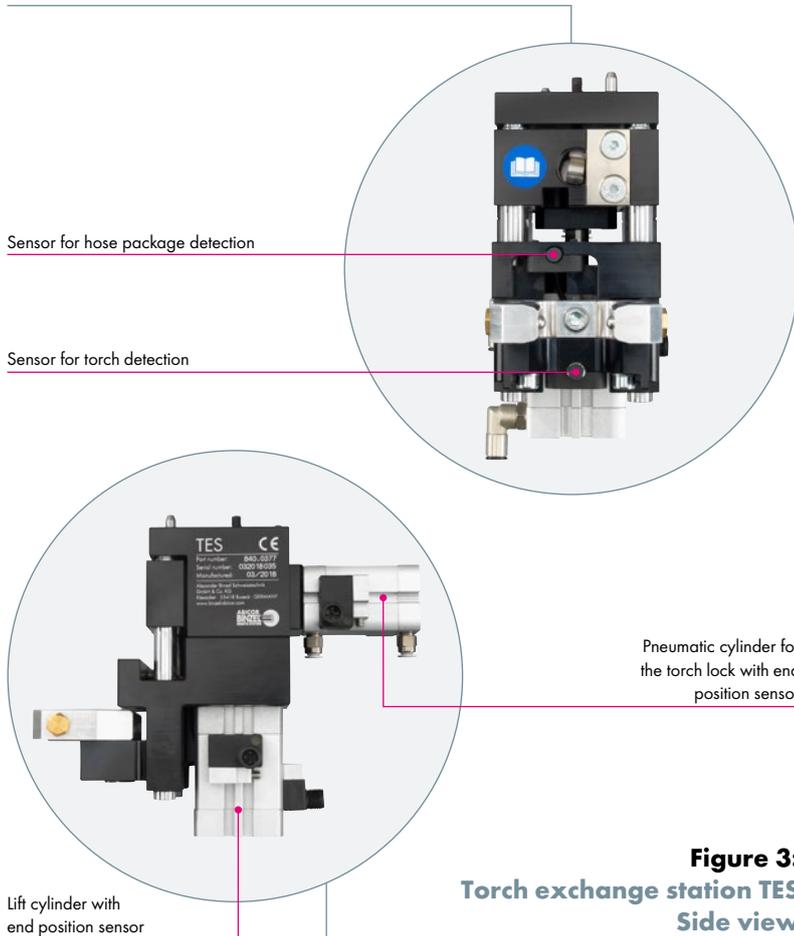
Due to the modular system concept, several TES can be combined with each other. The exchange stations are controlled by a PLC or by integrating the TES module into a field bus system. This guarantees full control of the units status at any time.

Integrated sensors help record the position of the changing movements and recognize the position of the welding torch for the exchanging process.

The torch exchanging movement is carried out by the welding robot. This allows freedom with respect to designing the welding cell and offers excellent flexibility in positioning the exchange stations in the welding cell – regardless of whether it is on a large gantry welding system in the heavy engineering plant or in compact welding cells in mass production facilities.

In combination with the proven MIG/MAG WH welding torch necks, the integrated cutting of the wire electrodes ensures safe and secure torch exchanges, even if the wire electrode has melted to the contact tip of the welding torch due to poor arc starts, wire feed faults etc.

Figure 2:
Torch exchange station TES
Back side



Arguments that speak for themselves:

- Simple and inexpensive solution for automatic torch exchanges
- Several exchange stations can be combined
- Can be used for TIG* and MIG/MAG applications
- Simple and durable design
- Low operating and maintenance costs
- Increased uptime
- Use of different torch geometries for better part accessibility

* Currently only without cold wire feed

Technical data:
Torch exchange station TES

Operating pressure:
- max. 116 psi/min. 87 psi

Pneumatic connection:
- Connection Ø 6 mm

Electrical connection:
Cable connections M12

4 outputs
- Proximity switch 24 V DC/
max. 200 mA
- Switch output pnp No

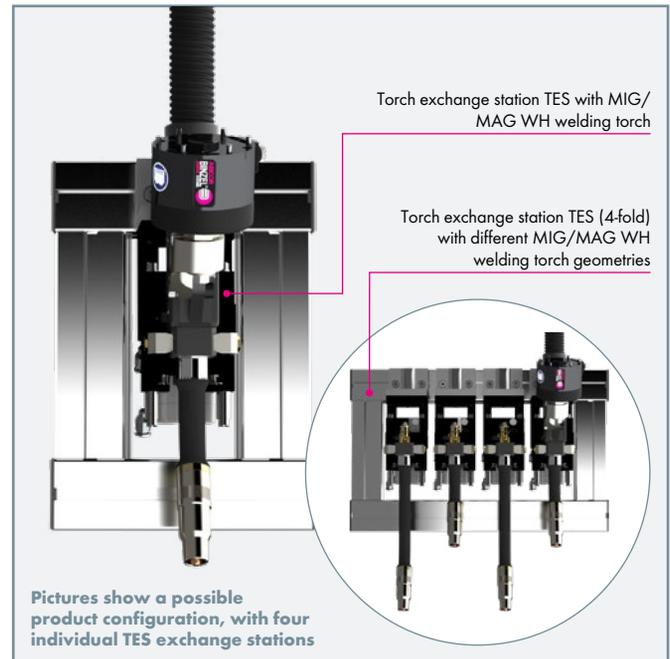
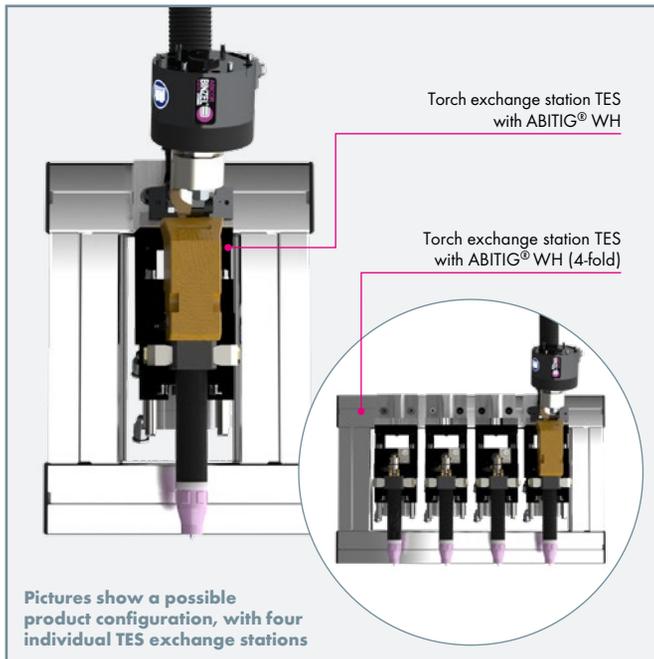
2 outputs
- Proximity switch 24 V DC/
max. 200 mA
- Switch output pnp No

2 inputs*
- 5/2 solenoid valves 24 V DC
- Power consumption 2.8 W

* Depending on the PN

Torch exchange station TES

Highest flexibility, extremely reduced downtimes



The condition of the tungsten electrode has an influence on the quality of the TIG weld. Due to the process-related wear of the electrode, it has to be changed regularly in order to ensure a consistent quality of the welds. By using the new torch exchange station TES from ABICOR BINZEL, the TIG welding torch ABITIG® WH can be exchanged reliably and quickly at the optimum time. This ensures the optimal quality of your components at all times and almost no downtime for your system.

Torch exchange station TES: With TIG welding torches ABITIG® WH

- Different torch geometries can be used
- System availability improved by automated torch exchange/electrode change
- Ensures quality welds

In the case of complex parts, various accessibility situations are normal for the robot welding torch. It often becomes necessary to use a welding torch neck of a different length, angle and output class to allow the welding process to continue.

The TES torch exchange station from ABICOR BINZEL offers the perfect solution. For changing the torch neck geometry or the power class, but also for preventive exchange as well as maintenance of the wear parts, the TES is the ideal system component for process-safe, effective and automated MIG/MAG welding with extremely reduced downtimes.

Torch exchange station TES: Applicable with different MIG/MAG-WH welding torch geometries

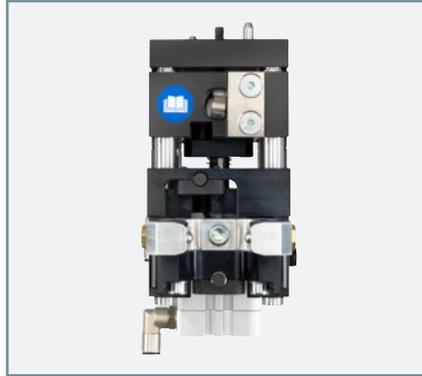
- Use of different torch geometries and torch power classes possible
- Improved system availability due to automated torch exchange
- Safe torch exchange due to integrated wire cutting device in the WH cable assembly

Watch on YouTube now!



Torch exchange station TES

Order overview & dimensions



Torch exchange station TES

Description

Torch exchange station TES without pneumatic connection set¹

Part-No.

840.0377.1²

Torch exchange station TES with pneumatic connection set¹

840.0393.1³

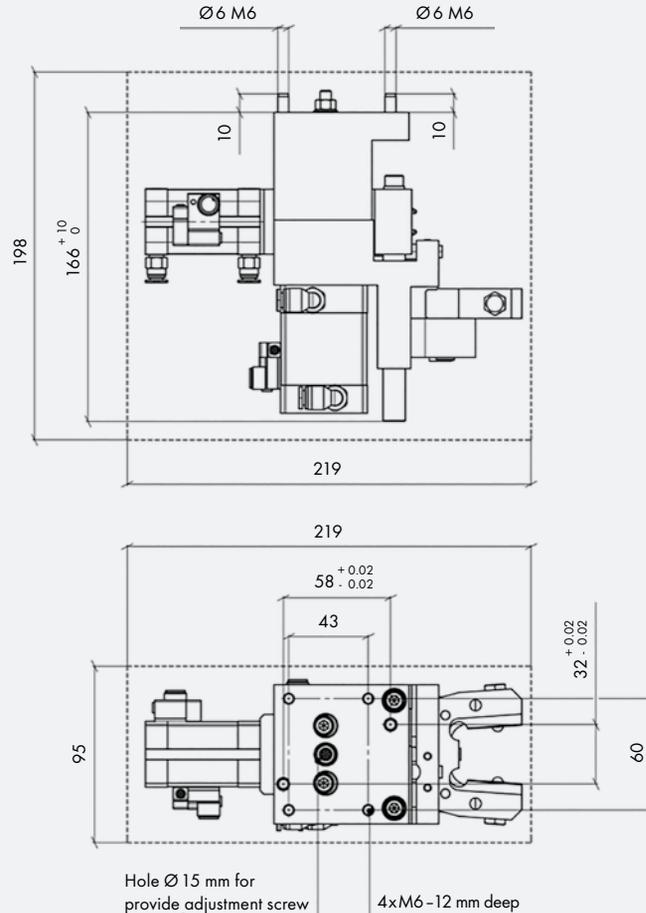
¹ The scope of delivery includes a torch exchange station including support bracket 840.0397.1.

² Please note scope of delivery: device number 840.0377.1 is supplied without control valves and connection cable.

³ Included in delivery: pre-assembled compressed air valve unit including 830.0395.1 - consisting of: valve connection cable L=0.6 m, open on one side; sensor cable M12, L=1.5 m; compressed air hose D6, 4 m, including support bracket 840.0397.1

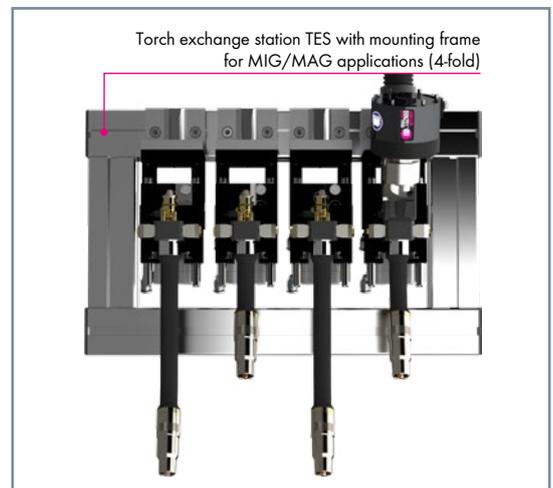
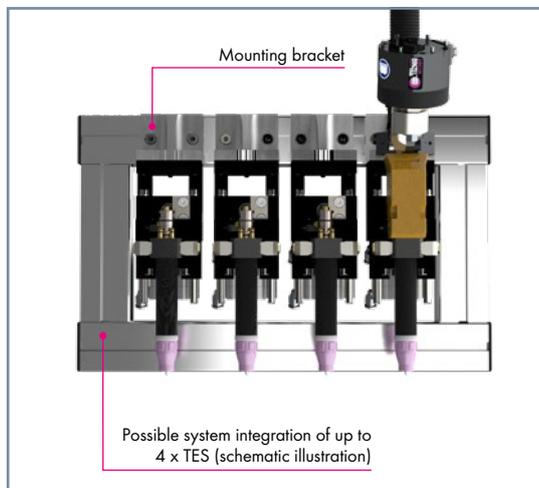
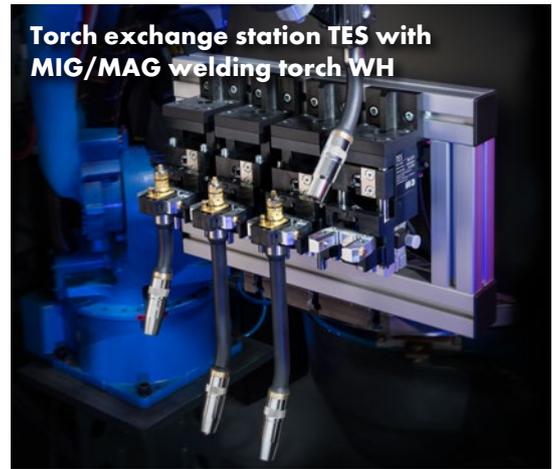
Dimensions:

Torch exchange station TES

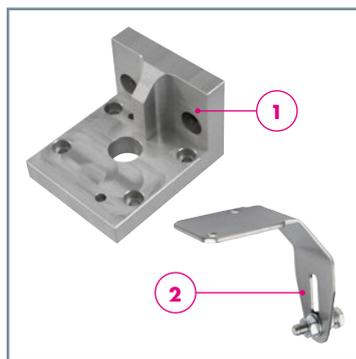


Example System integration TES

4-position changing station



Accessories



Pos.	Description	Part-No.
1	Support bracket for torch exchange station TES	840.0396.1
2	Support bracket for long torches	840.0397.1

