The assembly system has been designed to accommodate two different versions. The distinguishing characteristics are the valve bucket and the spring. The cam-controlled assembly system produces the valves in a fully-automated process. The supply units deliver the individual components with the correct orientation. The spring-separation unit was provided and subsequently integrated within the process sequence. Once assembled, the parts are placed on pallets manually by the operating personnel.

Valve
Comprising the following individual components
- Valve retainer
- O-ring
- Valve bucket
- Valve disk / rubber seal
- Valve disk
- Spring

+ 1.5-second cycle time
+ 2 types
+ 20 stations
+ Integrated bending tool
+ Complex delivery unit
Station 9
Tab check
The 4 tabs are inspected by a vertically adjustable test unit. Sensors check to confirm that the positions are correct. Bends inward or outward.

Station 16
Deliver spring
The spring separator was provided on-site. A linear transfer unit featuring a double pneumatic gripper deposits the spring in the valve bucket. The contact-free “spring present” check is performed by a sensor on the discharge side of the spring separator.

Station 18
Close tabs
The bending tool folds over all 4 tabs while holding down the valve retainer.
With its own e-fleet, photovoltaic system, storage battery and charging station, sustainable e-mobility is in daily use at teamtechnik since 2013 and is part of the business model. Today, teamtechnik is leading in test benches for e-drive systems used in e-vehicles. Additionally, teamtechnik supplies assembly and test systems for batteries as well as PV stringers.