BATTERY INDVATION CENTER

Bilder: Lunghammer – TU Graz

"Battery cells are the mechanical elements of the future," says TU Graz researcher Franz Haas, meaning that batteries will be as widespread in industrial applications and mobility of the future as for example screws are today. Accordingly, the construction of large quantities of battery modules and different cell types must be efficient and automatic. And this is exactly what TU Graz is researching together with the AVL company at the Battery Innovation Center. The large test factory is located on the AVL site, but there is also a collaborative production line on a smaller scale at TU Graz. Here, batteries of different types are tested and arranged into stacks – in the future, the researchers will also test the processing of fuel cells in a recently built dedicated clean room integrated into the robotic cell.





- The first step in the production line is to select the appropriate gripper for the battery type. All common battery types can be picked up by means of vacuum. The robot picks up the battery cell ...
- 2 ... and transports it independently to the test stand.
- 3 At the test stand, the battery cell is first checked visually and then electronically for functionality and faults.
- 4 The robotic arm then places the battery on a ramp which transports it to the next production step stacking.
- 5 Finally, the individual battery cells are integrated into a module housing and are now ready for final contacting and installation in battery packs.