



Press Release

Superior contact solutions for battery cell formation and test up to 600 A



Feinmetall provides contact solutions for Li-ion cell formation and cell testing for cylindrical, prismatic as well as pouch cells. As the requirements on contact quality and current are increasing rapidly, Feinmetall developed new sophisticated contact principles which are introduced in their new high current families. As an example, the new high current block HC01, suitable for contacting prismatic and pouch cells, allows continuous currents up to 600 A. It inclines 41 individually spring loaded contact probes to guarantee multiple contact points and therefore maximize the overall current carrying capacity as well as a high redundancy.

The core principle of this contact block is the so called scratch principle which was developed and protected by Feinmetall. The scratch principle penetrates surface layers (e.g. oxides pollution) to secure a constantly low contact resistance. In particular, the occurrence of a wetting current effect can



thus be avoided. This contact solution has been tested and verified by an independent institute at the University of Aachen in Germany that ranks among the most renowned technical universities in Europe. Such a scratch contact is especially suitable for contacting Li-ion battery cells, as the typical aluminum current collector on the cathode side can be contacted safely. As aluminum tends to build oxide layers at the surface, this solves a major challenge in contacting those battery cells.

The contact block can be equipped with a spring loaded sense pin for the voltage path of a four pole measurement. An integrated spring-loaded temperature sensor allows monitoring of the heating directly at the current collector. Additionally, a dedicated drill hole in the block can be used for cooling the contact area by compressed air.

This ideal combination of various innovative approaches to optimize the contact of battery cells is outstanding on the market.

The HC01 contact solution is only one out of a variety of Feinmetall's new high current contacts for battery cell test and production. Many years of experience in the field of battery testing make Feinmetall a competent partner for all battery cell contacting needs.

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About Feinmetall:

Feinmetall offers comprehensive contacting solutions for the electronics, automotive and semiconductor industries and makes a significant contribution to reliability in testing technology and quality assurance. The two product groups are contact probes for contacting PCBs, wire harnesses and other electronic devices as well as wafer probe cards. This combination of contact solutions leads to an outstanding competence in terms of precision at the limits of feasibility. Since more than 50 years FEINMETALL is a reliable partner of the worldwide high-tech and automotive industry. The company is set up globally with headquarters in Herrenberg, Germany, and subsidiaries in the US, in the Czech Republic, in Mexico, Tunisia, Singapore, Taiwan and China.