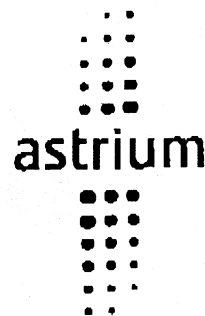


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Betreff/Subj.: Closure of Action Items from Harness Mtg., HP-2-ASED-MN-0112 (AI#5 and AI#10)

Dear John,

Please find below the response to the following Action Items.

AI#5, HP-2-ASED-MN-0112: Astrium to investigate daisy chaining of SS wire concerning single PSPs.

The schematic below shows a daisy-chain interconnection method of several multicore cable shields.

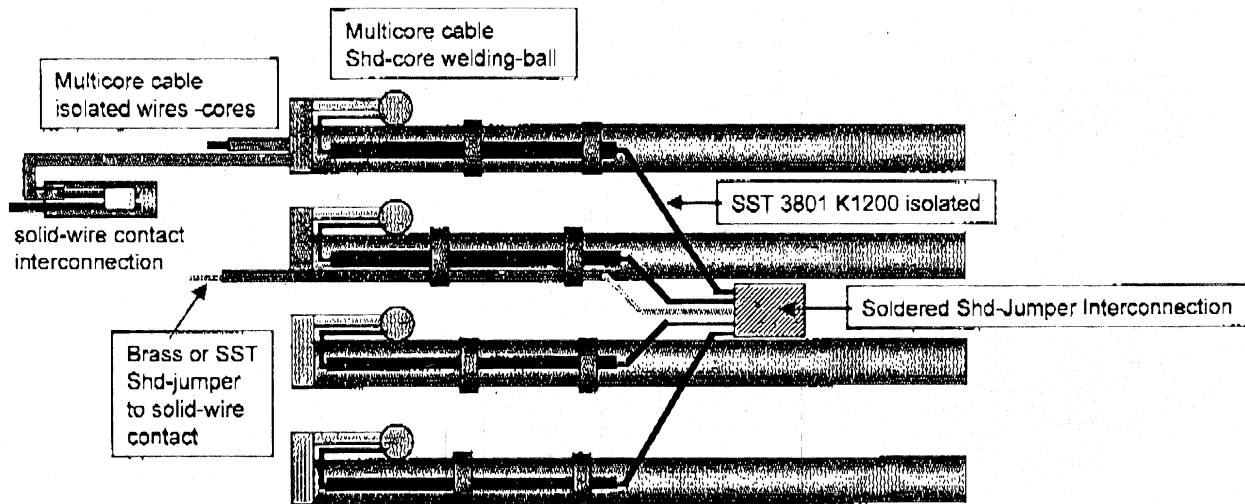
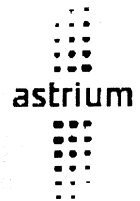
How many cable shields have to be interconnected, is pending on the shield groups, to be defined by the instrument.

Several shield groups can be interconnected in same way or soldered to the connector solid-wire contacts.

Isolated Brass-3801, Brass 3001 or SST-3801 K1200 wire core or SST 4401 K800 cores (to be isolated), can be selected as shield-jumper material to be connected to the connector solid-wire contact. For the multicore shield-core welding-ball interconnection, isolated SST 3801 should be used. In case where many shields have to be interconnected in limited connector rear-side areas, isolated SST 4401 could be used.

All single shield-jumper summary interconnections, shall be soldered in a way, that an opening is possible afterwards, for single multicore cable extraction & shield-jumper modification or repair. The welding method as summary shield-jumper interconnection shall be not selected.

Abs./Sender: Horst Faas
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Herschel Cryo-Harness
 SIH Multicore-cable shield „Daisy-chain“ Interconnection

01.10.02
 J.Lang

AI#010, HP-2-ASED-MN-0112: Investigate the feasibility of connecting the FPU Faraday shield link to the backshell of the cold unit

The Faraday shield is handled as overall/connector housing shield in the Astrium CAIE database and can be seen as an additional pin in the 37 way connector. Linking the shield to a pin in a CVV Feed Trough Connector follows the design of the SPIRE Harness Definition Document (RAL-PRJ-000608).

The isolated way down to DCU follows also the design in above referenced document.

An issue to be clarified is whether that shielding concept follows the requirements of EMC because in the CVV Feed through connector the Faraday shields are connected to overall shield and therefore building a "Starpoin" and then routed via long isolated lines to the end item (DCU).

Kind regards

Astrium GmbH

i. V. W. Ruhe

i. A. A. K. v. Ivady