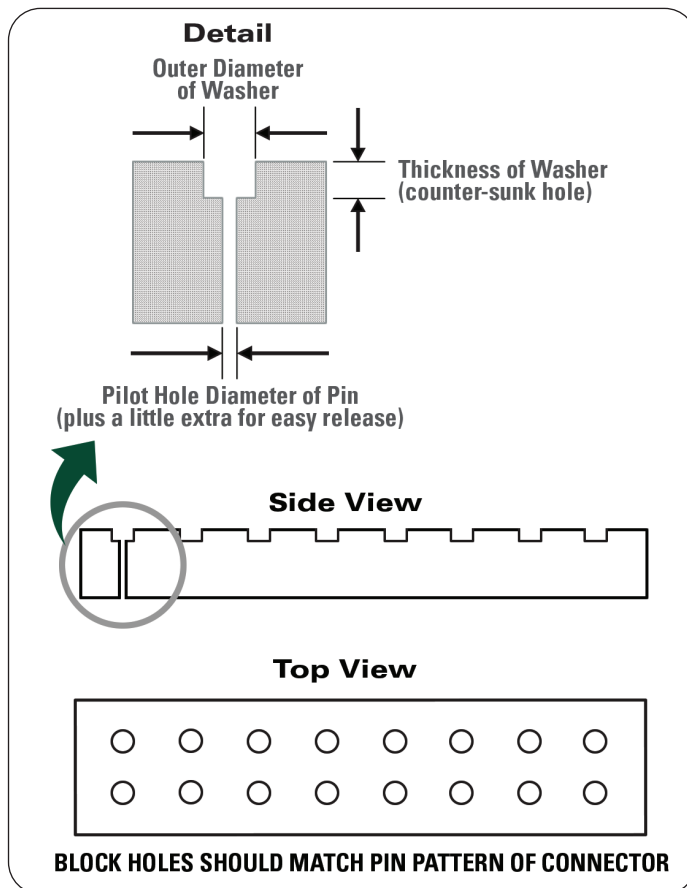# APPLICATION NOTE
Fixture Design
for Soldering Connector Pins with Washer Preforms

Objective

Design a fixture to facilitate placement of multiple solder washer preforms in one shot, thus minimizing process time.

Fixture Design

Design a fixture to facilitate placement of multiple solder washer preforms in one shot, thus minimizing process time.

Detail

Outer Diameter of Washer

Thickness of Washer (counter-sunk hole)

Pilot Hole Diameter of Pin (plus a little extra for easy release)

Side View

Top View

BLOCK HOLES SHOULD MATCH PIN PATTERN OF CONNECTOR

Ensure that the counter-sunk holes and the pilot holes in the fixture can accommodate the dimensional tolerances of the washer and connector pin, respectively.

Ensure that the fixture holes are machined to align with the connector pin array (X, Y, pitch).

Placement Procedure of Solder Washer Preforms

- Gently slide the solder washer preforms over the fixture surface to fill all the counter-sunk holes.

- Ensure that each solder washer is securely seated within its respective hole.

- Mate the fixture with the washer preforms to the connector, aligning the pins with the corresponding counter-sunk holes and pilot holes.

- Now, gently invert the fixture to transfer the washer preforms from the fixture to the connector pins.

- Release the fixture away from the connector pins, ensuring that all washers have been successfully released from the fixture.

- If the washers are flux-coated, periodically clean the block to prevent solder washers sticking to the counter-sunk holes.

Examples of multi-pin connector components.

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified.
Indium Corporation is an ISO 9001:2015 registered company.

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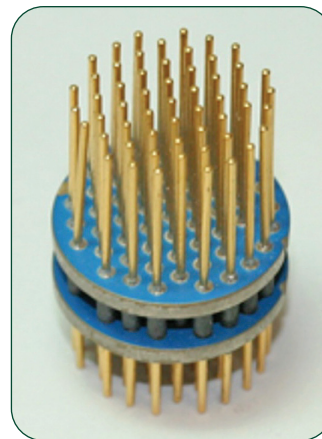Contact our engineers: **askus@indium.com**
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