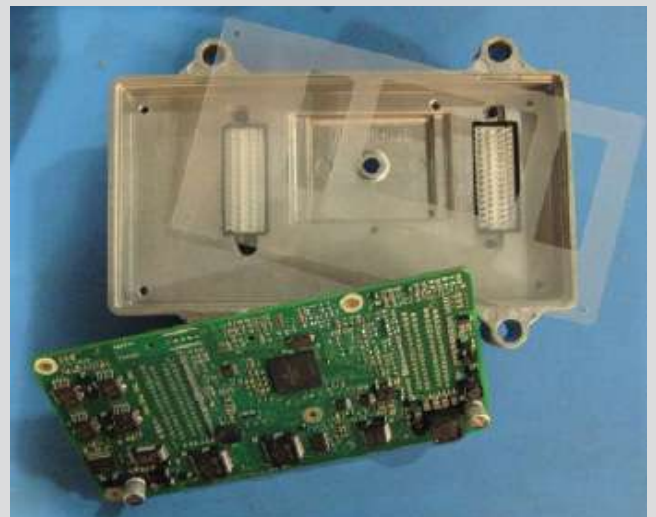


# COMPLIANT PIN ASSEMBLY, INSPECTION AND PRESS FIT NR. 420 SERVOPRESS



# SCHMIDT® Nr. 420 ServoPress

## Application, Requirements

- Press PCB onto connector pins. PCB must bottom out in housing without inducing stress to the PCB. Two connectors, each with 64 pins, 128 pins total.
- Complete pin height inspection, absence/presence, bent pin, pre- and post-press operation
- Manual loading/unloading
- Inspect for Mylar foil presence
- Sequence verification of bar code placement on housing
- Quality assurance of press operation via Force & Distance monitoring



## Concept Description

This station consists of a self-contained work cell. The operator loads and unloads the work piece of a fixture located directly in the front. The fixture is transferred from the operator to the inspection via servo linear slide. If the inspection is OK, part advances to the press station. If press cycle is OK, part is transferred to return slide for post-press inspection, then back to the operator. If part is not OK, cycle is aborted and part is returned to operator. While a part is being processed, the operator places Mylar & PCB on the housing in an auxiliary station attached to the main station. Poka yoke in this station will ensure proper assembly sequence. The SCHMIDT control PRC4000 handles all sequencing, positioning, and controlling of this system.

## Operation

### Assembly Processing

Load house with Mylar & PCB	2.0
Close gravity gate, initiate cycle	1.0
Shuttle to inspection station	1.0
Inspection	14.0
Shuttle to press station	1.0
Press assembly	5.0
Shuttle to inspection station	1.0
Inspection	14.0
Shuttle to load station & open gate	2.0
Unload finished assembly	2.0
<b>Part to part cycle time total</b>	<b>43.0</b>

### Pre-pressed assembly station, operator responsibility

Scan PCD bar code	2.0
Print duplicate bar code label	3.0
Install label on housing	3.0
Place housing on holder	2.0
Install Mylar foil	4.0
Initiate cycle, two hand	1.0
Inspect presence of Mylar foil & scan label on housing	3.0
Place PCB on housing	3.0

**Assembly preparation time total** 21.0

Customer controls system to provide the SCHMIDT Control with a permissive to process the assembly.

### Equipment performance

No. 420 ServoPress Station, consist of:

- Press Nr 420
- Custom workstation, welded steel construction
- Transfer shuttle, servo controlled
- Return slide, pneumatic operated
- Main base plate made from Aluminium
- All around Guarding Pkg., ESD type Lexan panel
- Single hand cycle initiation via light touch button
- SCHMIDT® Press 4000 Complete
- Pneumatic Package, complete
- Two Pin Inspection Station, with fixture locating device
- Custom tooling, consisting of:
  1. Complete upper pressure tool
  2. Lower nesting fixture, floating for accurate positioning
- ESD Protection Pre-press assembly area

## NIXMA TECHNOLOGY GROUP

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