

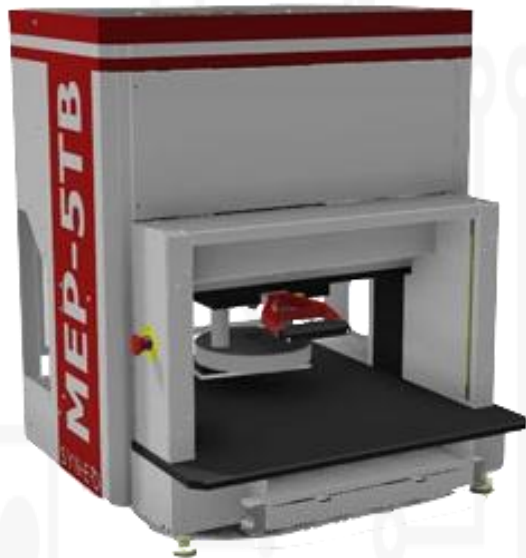
CONNECTOR PRESS-FIT MACHINE

MEP-5TB

SEMI-AUTOMATIC ELECTRIC PRESS



SYNEO'S EXPERT TEAM INNOVATES EVERYDAY TO ADDRESS YOUR PRESS CHALLENGES OF TOMORROW



- **INDUSTRY 4.0.** Ready
- Bench Top Press
- Ethernet Ready
- Automatic **Profile Generation**
- **Common Software** with 1 Click Recipe Transfer between Machines
- Easy Maintenance



WHAT MAKES SYNEO UNIQUE?

They are the ONLY machines on the market to combine these technologies



TRUE DISTANCE MEASUREMENT (OPTION): Dramatically improves the head position accuracy independently of the load being applied to the connector during pressing, thanks to a **0.001mm resolution linear encoder** mounted as close as possible to the anvil of the press head.



2 STAGE-FORCE MEASUREMENT (2SF) (OPTION): Improves the precision using four 16-bits A/D converters. Reading error is tremendously minimized thanks to the **two sets of loads cells combined**. Detects force even **under 20 Lbs.** and allows actual reading **accuracy below 0.1%** of full-scale.



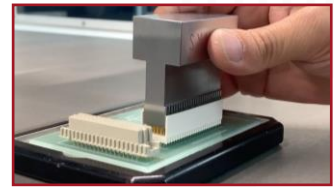
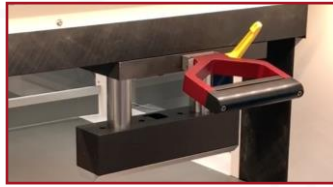
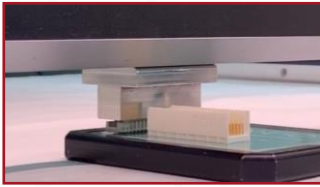
ZERO GAP HEAD: Improves the machine accuracy and its preciseness. No more loss of motion or force information thanks to the automatic head lift which grounds the structure prior to pressing.



INSTANTANEOUS FEEDBACK: Our **real-time press monitor** allows the operator to be **immediately made aware of a problem**, such as a bent pin, or an incorrectly positioned connector, during the press cycle.



INTUITIVE SOFTWARE SYSTEM: User-friendly system with an **easy setup** (no complex profiles required), a powerful importing tool, fine tuning and **troubleshooting assistance**, integrated online help, **multi-language**, touchscreen, keyboard, and mouse.



TECHNICAL DATA

BOARD SIZE CAPACITY	580 x 710mm (23" x 28")
MAX CONNECTOR SIZE	279 x 38mm (11" x 1.5") WITH OPTIONAL ROTATE ANVIL – 203 x 38mm (8" x 1.5")
MACHINE FORCE	44kN (5 Tons)
MACHINE DIMENSIONS	870x850x1120mm (34"x33"x45")
OPENING BETWEEN COLUMNS	660mm (26")
LOAD CELL	2 - (4 with 2SF package)
ESTIMATED RECYCLE TIME	3-5 sec
PRESSING TRAVEL DISTANCE	89mm (3.5")
FORCE SYSTEM ACCURACY W/O 2SF	100 – 4500 N < 90N, 4.5kN-9kN < 5% of actual reading, 9-44kN < 220N
WITH 2SF	100 – 4500 N < 90N, 4.5kN-9kN < 5% of actual reading, 9-44kN < 220N
PRESSING HEAD MAX SPEED	10mm/s
PRESSING HEAD MIN SPEED	0.025mm/s
Z AXIS ACCURACY	+/- 0.025mm (+/- 0.010mm with TDM)
ELECTRICAL SUPPLY	110/240 VAC, 1ph, 15A, 50/60Hz
AIR SUPPLY	80psi (0.6Mpa) dry air
APPROX. CRATE WEIGHT	386 kgs (851Lbs)
APPROX. CRATE DIMS. (W x L x H)	914x1245x1219mm (36" x 49" x 48")

TOOLING

CONNECTOR TYPE	TEC / FLAT ROCK
FIXTURE TYPE	SUPPORT FIXTURE
THICKNESS MEASURING TOOL	YES

BASE MACHINE

FRAME STYLE	H
PCB XT POSITIONING	MANUAL
AIR TABLE WITH FOOT-SWITCH	YES
PCB LOADING	MANUAL
CONNECTOR LOADING	MANUAL
TOOL CHANGE	MANUAL
PRESS HEAD DRIVE	SERVO MOTOR
SPEED, HEIGHT & FORCE CONTROL	YES
HEAD GUIDE SHAFTS	2
FORCE MONITORING	YES
THICKNESS MEASURING	YES
BAR CODE SCANNER	OPTION
ACCESS FOR MAINTENANCE	EASY DOOR OPENING
SAFETY FEATURES	LIGHT CURTAIN – 2 HANDS SWITCH
TOOLING POSITIONING	LASER
LIGHT TOWER	OPTION



CONNECTOR PRESS-FIT MACHINE

MEP-8TL

SEMI-AUTOMATIC ELECTRIC PRESS



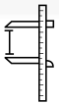
SYNECO'S EXPERT TEAM INNOVATES EVERYDAY TO ADDRESS YOUR PRESS CHALLENGES OF TOMORROW



- **INDUSTRY 4.0** Ready
- Ethernet Ready
- Automatic **Profile Generation**
- **Common Software** with 1 Click Recipe Transfer between Machines
- Easy Maintenance

WHAT MAKES SYNECO UNIQUE?

They are the ONLY machines on the market to combine these technologies



TRUE DISTANCE MEASUREMENT: Dramatically improves the head position accuracy independently of the load being applied to the connector during pressing, thanks to a **0.001 mm resolution linear encoder** mounted as close as possible to the anvil of the press head.



2 STAGE-FORCE MEASUREMENT (2SF) (OPTION): Improves the precision using four 16-bits A/D converters. Reading error is tremendously minimized thanks to the **two sets of loads cells combined**. Detects force even **under 20 Lbs.** and allows actual reading **accuracy below 0.1%** of full-scale.



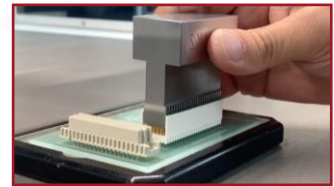
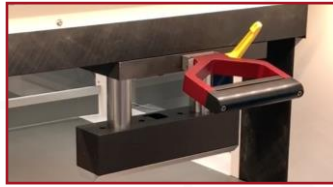
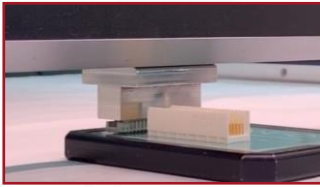
ZERO GAP HEAD: Improves machine accuracy and preciseness. No more loss of motion and force information thanks to the automatic head lift which grounds the structure prior to pressing.



INSTANTANEOUS FEEDBACK: Our **real-time press monitor** allows the operator to be **immediately made aware of a problem**, such as a bent pin, or an incorrectly positioned connector, during the press cycle.



INTUITIVE SOFTWARE SYSTEM: User-friendly system with an **easy setup** (no complex profiles required), a powerful importing tool, fine tuning and **troubleshooting assistance**, integrated online help, **multi-language**, touchscreen, keyboard, and mouse.



TECHNICAL DATA

MAX PCB SIZE	830 x 1060mm (33" x 42")
MAX CONNECTOR SIZE	279 x 38mm (11" x 1.5")
MACHINE FORCE	71kN (8 Tons)
MACHINE DIMENSIONS	1140x1070x1860mm (45"x42"x73")
OPENING BETWEEN COLUMNS	910mm (36")
LOAD CELL	2 - (4 with 2SF package)
ESTIMATED RECYCLE TIME	3-5 sec
PRESSING TRAVEL DISTANCE	134,6mm (5.3")
FORCE SYSTEM ACCURACY W/O 2SF	100 – 4500 N < 90N, 4.5kN-45kN < 5% of actual reading, 45-71kN < 450N
WITH 2SF	10 – 4500 N < 40N, 4.5kN-45kN < 5% of actual reading, 45-71kN < 450N
PRESSING HEAD MAX SPEED	25mm/s
PRESSING HEAD MIN SPEED	0.025mm/s
Z AXIS ACCURACY	+/- 0.025mm (+/- 0.010mm with TDM)
ELECTRICAL SUPPLY	208/240 VAC, 1ph, 15A, 50/60Hz
AIR SUPPLY	80psi (0.6Mpa) dry air
APPROX. CRATE WEIGHT	907kgs (2000Lbs)
APPROX. CRATE DIMS. (W x L x H)	1143x1650x2260mm (45"x65"x89")

TOOLING

CONNECTOR TYPE	TEC  / FLAT ROCK 
FIXTURE TYPE	SUPPORT FIXTURE
THICKNESS MEASURING TOOL	YES

BASE MACHINE

FRAME STYLE	H
PCB XT POSITIONING	MANUAL
AIR TABLE WITH FOOT-SWITCH	YES
PCB LOADING	MANUAL
CONNECTOR LOADING	MANUAL
TOOL CHANGE	MANUAL
PRESS HEAD DRIVE	SERVO MOTOR
SPEED, HEIGHT & FORCE CONTROL	YES
HEAD GUIDE SHAFTS	2
FORCE MONITORING	YES
THICKNESS MEASURING	YES
BAR CODE SCANNER	OPTION
ACCESS FOR MAINTENANCE	EASY DOOR OPENING
SAFETY FEATURES	LIGHT CURTAIN – 2 HANDS SWITCH
TOOLING POSITIONING	LASER
LIGHT TOWER	OPTION



CONNECTOR PRESS-FIT MACHINE

MEP-8TM

SEMI-AUTOMATIC ELECTRIC PRESS

SYNECO'S EXPERT TEAM INNOVATES EVERYDAY TO ADDRESS YOUR PRESS CHALLENGES OF TOMORROW

- **INDUSTRY 4.0.** Ready
- Ethernet Ready
- Automatic **Profile Generation**
- **Common Software** with 1 Click Recipe Transfer between Machines
- Easy Maintenance

WHAT MAKES SYNECO UNIQUE?

They are the ONLY machines on the market to combine these technologies

TRUE DISTANCE MEASUREMENT: Dramatically improves the head position accuracy independently of the load being applied to the connector during pressing, thanks to a **0.001mm resolution linear encoder** mounted as close as possible to the anvil of the press head.



2 STAGE-FORCE MEASUREMENT (2SF) (OPTION): Improves the precision using four 16-bits A/D converters. Reading error is tremendously minimized thanks to the **two sets of loads cells combined**. Detects force even **under 20 Lbs.** and allows actual reading **accuracy below 0.1%** of full-scale.



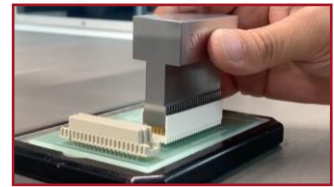
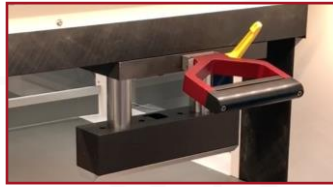
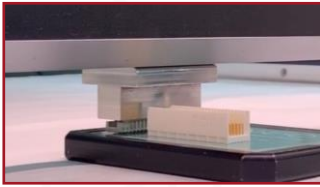
ZERO GAP HEAD: Improves machine accuracy and preciseness. No more loss of motion and force information thanks to the automatic head lift which grounds the structure prior to pressing.



INSTANTANEOUS FEEDBACK: Our **real-time press monitor** allows the operator to be **immediately made aware of a problem**, such as a bent pin, or an incorrectly positioned connector, during the press cycle.



INTUITIVE SOFTWARE SYSTEM: User-friendly system with an **easy setup** (no complex profiles required), a powerful importing tool, fine tuning and **troubleshooting assistance**, integrated online help, **multi-language**, touchscreen, keyboard, and mouse.



TECHNICAL DATA

MAX PCB SIZE	680 x 910mm (27" x 36")
MAX CONNECTOR SIZE	279 x 38mm (11" x 1.5")
MACHINE FORCE	71kN (8 Tons)
MACHINE DIMENSIONS	980x930x1870mm (39"x37"x74")
OPENING BETWEEN COLUMNS	760mm (30")
LOAD CELL	2 - (4 with 2SF package)
ESTIMATED RECYCLE TIME	3-5 sec
PRESSING TRAVEL DISTANCE	134,6mm (5.3")
FORCE SYSTEM ACCURACY W/O 2SF	100 – 4500 N < 90N, 4.5kN-45kN < 5% of actual reading, 45-71kN < 450N
WITH 2SF	10 – 4500 N < 40N, 4.5kN-45kN < 5% of actual reading, 45-71kN < 450N
PRESSING HEAD MAX SPEED	25mm/s
PRESSING HEAD MIN SPEED	0.025mm/s
Z AXIS ACCURACY	+/- 0.025mm (+/- 0.010mm with TDM)
ELECTRICAL SUPPLY	208/240 VAC, 1ph, 15A, 50/60Hz
AIR SUPPLY	80psi (0.6Mpa) dry air
APPROX. CRATE WEIGHT	850 kgs (1866Lbs)
APPROX. CRATE DIMS. (W x L x H)	1143x1473x2260mm (45"x58"x89")

TOOLING

CONNECTOR TYPE	TEC  / FLAT ROCK 
FIXTURE TYPE	SUPPORT FIXTURE
THICKNESS MEASURING TOOL	YES

BASE MACHINE

FRAME STYLE	H
PCB XT POSITIONING	MANUAL
AIR TABLE WITH FOOT-SWITCH	YES
PCB LOADING	MANUAL
CONNECTOR LOADING	MANUAL
TOOL CHANGE	MANUAL
PRESS HEAD DRIVE	SERVO MOTOR
SPEED, HEIGHT & FORCE CONTROL	YES
HEAD GUIDE SHAFTS	2
FORCE MONITORING	YES
THICKNESS MEASURING	YES
BAR CODE SCANNER	OPTION
ACCESS FOR MAINTENANCE	EASY DOOR OPENING
SAFETY FEATURES	LIGHT CURTAIN – 2 HANDS SWITCH
TOOLING POSITIONING	LASER
LIGHT TOWER	OPTION

