Electric Cathode Press - ECP 890

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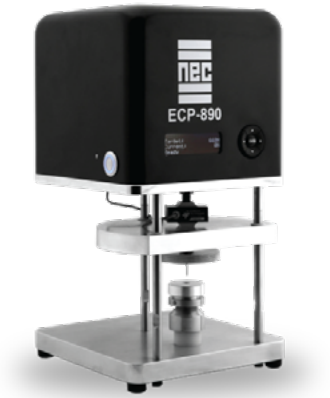


APPLICATIONS

The Electric Cathode Press (ECP-890) is designed to pack powdered elemental samples into cathodes (targets) suitable to generate negative ion beams. An electric press provides the user more control over the pressing process than a manual or pneumatic press, improving consistency among cathodes and providing an ergonomic process.

DESIGN

The ECP-890 uses a stepper motor and load cell to drive a small compression rod to pack the sample material into NEC MC-SNICS style cathodes.

Presets

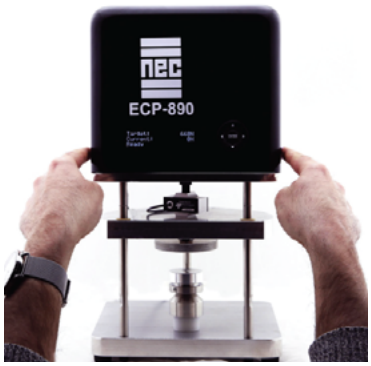
The easy to use interface allows the user to save and restore crucial pressing parameters, including the amount of force applied to the cathode material (Target Force) and the length of time it remains at that force (Dwell Time). This minimizes setup time and reduces the opportunity for user error, thus improving consistency in the pressing process.

Quick Release Rods

To prevent cross-contamination, items in the pressing process that contact the sample material must be cleaned or changed regularly. The ECP-890 was designed to make this procedure easy. The open column structure of the press allows the compression rod to be cleaned in place, or swiftly replaced with a clean compression rod. The drop-in anvil can be similarly cleaned or replaced during cathode changes. Compression rods and anvils can be ultrasonically cleaned and reused.

Centering Fixture

The cathode is placed into a centering fixture that is placed onto the self-aligning stage on the press. The stage is designed to automatically position the cathode to be centered with respect to the compression rod. This ensures the sample material is pressed evenly and uniformly with every press.

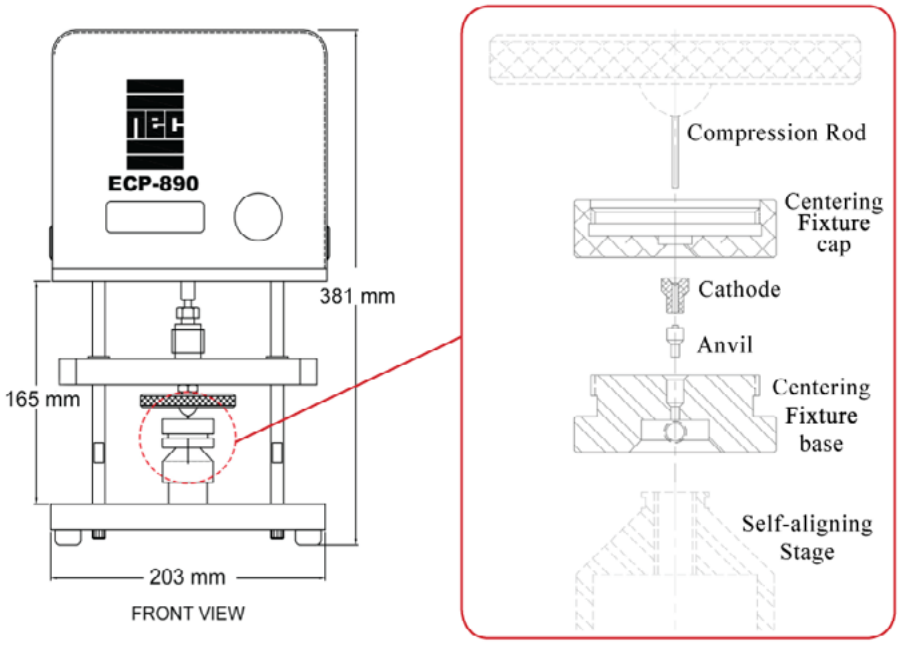


Two-Hand Activation

As a built in safety feature, the ECP-890 uses two-hand tie-down activation.

PRINCIPLES OF OPERATION

The pressing process can be learned quickly. The user begins by placing a clean anvil and cathode inside the base of the centering fixture. The cap of the fixture is then fastened, securing the cathode to the anvil. The sample material is then added. The centering fixture is placed on the self-aligning stage. After setting the pressing parameters, the user activates the press via the two-hand tie-down buttons.



SPECIFICATIONS

Target Force Range:	20 to 200 pound-force (89 to 890 Newtons)
Repeatability	+/- 5 pound-force (22 Newtons)
Dwell Time Range:	0 to 255 seconds
Unit Options:	Newtons, Kilograms, Pounds
Number of Savable Presets:	10
Compatible Cathodes (Targets):	NEC MC-SNICS (1mm)
Power Source:	CE rated external AC to DC supply (120-240 VAC)
Weight	7.3 kg; 16 lbs

ORDERING INFORMATION

Catalog No. 2JA070410 ECP-890 Cathode press assembly
Catalog No. 2JD033120 Compression rod
Catalog No. 2JD041250 Anvil

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