

CORBIN™

CHP-1 Hydro-Press

*The World's Most Powerful
Bullet Swaging Press...*



110-120v. 60 Hz
Optional:
220-240v. 50 Hz
220-240v. 60 Hz

0-6" stroke length
100-200,000 psi
0-2000 psig in lines
0-10sec. dwell time
.10 cal. to 20mm
16x22x62 inches
Enclosed cabinet

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Compact Power...

Hardly larger than a night-stand, the 22 by 16-inch footprint of the CHP-1 packs 1.5 HP inside its sturdy steel cabinet. Forced air cooled logic and control circuits give the Hydro-Press its intelligent stroke, position, and pressure sensing abilities. Capable of pressures exceeding 200,000 psi in certain dies, no other commercially available press offers such power a convenient package!

Sensitivity...

But power is only half the picture. The world-wide recognition accorded to the Hydro-press over the past decade is a direct result of its economical simulation of human "feel" – its remarkable ability to replicate the stroke, timing, pressure, and sensitivity of the most skillful bullet makers in the world, for anyone who presses the buttons!

Experience...

Corbin Hydro-presses are used by nearly every custom bullet making firm in the world, and are the choice for critical prototype applications by agencies of the U.S. Department of Defense, The Department of Energy, US Army Advanced Weapons Research at Picatinny Arsenal, and other defense labs around the world. In every job from making beautiful chrome-like lead wire, drawing precision jackets, swaging precision bullets or even reloading ammunition, the Hydro-press backs you with years of experience. (*Power Swaging*, published by Corbin, documents operation of the CHP-1 and other power systems.)

Economy...

Instead of depending on expensive die shoes, the CHP-1 provides alignment within its own bearing-supported head. This means you can quickly change simple screw-in dies and punches without expensive set-up. Tooling costs a fraction of what you'd spend for a punch press. Changing from one job or caliber to another is a matter of seconds, not days. Trial production is counted on one hand, not by the hundreds or thousands of parts. The cost of the CHP-1 itself is so reasonable that the largest industrial giants, such as Ray-Chem Corporation, feel it is preferable to purchase the units from Corbin rather than attempt to build their own.



JMK-2 Jacket Making Head

Versatility...

The largest selection of bullet-related tooling in the world is available for use in the CHP-1 Hydro-press, including the LED-1 Lead Extrusion Die (any size lead wire from .120 to .500-inch diameter), the JMK-H Jacket Making Kit (turns flat copper strip into target quality drawn jackets in any caliber from .14 to .50 BMG), the CTJM-1-H Copper Tubing Jacket



Maker (makes heavy copper or brass bullet jackets from tubing, including partitioned or full jackets with solid tips), and a wide range of bullet swage tools to make anything from an airgun pellet to a shotgun slug, a solid copper ultra-velocity projectile to a dense-core tank killer, or the finest civilian target, defense, and hunting bullets in the world. Nearly every high performance custom bullet offered today is made on a Corbin Hydro-press!

Precision...

Electronic pressure transducers monitor the pressure and control just how much ram force is applied to your bullet. Control logic circuits, which are easily programmed by flipping the appropriate switch on the top panel, establish the stroke length, dwell time, and amount of pressure to be applied, as well as the kind of stroke cycle desired. Either pressure alone, position alone, or pressure backed up by position, can determine the stopping point in any operation, with precision far greater than that possible by hand operation.

Control...

Stroke speed is adjustable from a rapid but safe two inches per second to a movement so slow the human eye cannot see it. Dual velocity ram movement delivers fast positioning with instant shift to a slow, powerful push at the end of the stroke. All this is measured and displayed on the direct-reading pressure gage on the control panel. The book *Power Swaging* provides charts of maximum safe pressure for various caliber dies. Low-cost computer software lets you translate the results of your own experiments into precise applications for other systems, or determine ram thrust, die pressure, and gage pressure charts.

Safety and Security

Designed for industrial duty, the Hydro-press features color coded oil-proof switches and a color coded control panel with matching indicator lights, heavy-duty key-lock safety switch and dual-hand control interlock. Safety guards and built-in 20-Amp motor circuit breaker, plus 5-Amp control circuit breaker, provide electrical security. From the built-in inspection lamp to the non-contact electronic position sensors (which set the stroke at zero to six inches with user-definable top, bottom, and loading positions), attention to user safety and details of operation have been thoroughly thought out. Virtually all owners have one first impression upon opening the crate: outstanding quality of design!

Your production will be increased by these four factors:

(1) Minimal physical effort, which eliminates fatigue. The last bullet of the day is just like the first one, resulting in higher quality and less rejects. Handicapped persons may operate the Hydro-press as well as anyone else. Our first Hydro-Press was a special version built for a quadraplegic who operated the machine with a probe held in his teeth!

(2) Full power from start to finish of stroke, instead of just at the end of the stroke (as with mechanical presses). Extrusion and drawing operations can be done in one operation, increasing production and reducing steps.

(3) Get more production per hour, since dwell timing, ejection, and correct pressure and position for punch insertion is automatic, with built-in transducers and logic circuits. You can use cycle time to inspect and package bullets instead of working the press. (Feeding is manual between press cycles).

(4) All the skill is in initial set-up, so you can use lower-cost labor to feed parts and press the buttons. Key-locked dual-hand operation makes an injury almost impossible. Full-auto stroke can be enabled only by the owner of the key. Ideal for use in under-developed nations, or job-training programs.

Security comes from the versatility for rapid change.

Whether you make bullets, stamp out coins, or punch 1/4-inch steel plate, you're not limited to one product, or even one field, with the CHP-1 Hydro-press! The growing demand for quality, special purpose bullets, bullet jackets, and extruded lead wire has provided a good income to hundreds of individuals, working from their homes. But it also makes fishing lures, automobile parts, and transmission line assemblies, to name just a few alternate uses for this versatile machine. The CHP-1 comes standard with 115-120 volt 60 Hz power, and can be ordered with 220-240 volt 50-60 Hz conversion (optional). Usually available from stock, or within 30 days if sold out.

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