

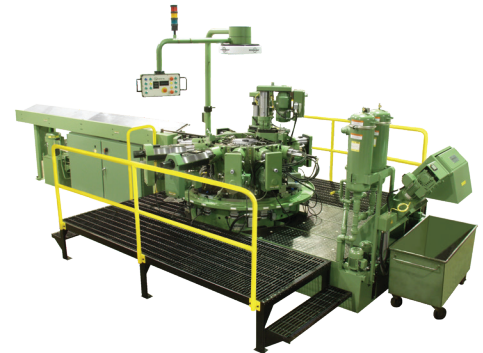


Flexibility & Quick Change-Over in the High Production World

Not Your Father's Hydromat Machine

The hydraulic Hydromat machine of 30 years ago would run day-in and day-out, three shifts, making millions of the same part year after year. A veritable workhorse known for producing precision **parts and profits**.

Today, there are still legacy Hydromat machines in production - some over 40 years old. Parts manufacturers are running dedicated parts, every day, on these older hydraulic Hydromat machines. As a result, the **perception still lingers** of Hydromat being the "a great machine, as long as it's a long-run, dedicated part your making."



CNC-Control Hydromat EPIC Platform

EPIC

The modern parts making industry has created different demands. For most of today's parts-manufacturers the mindset of "long-run, millions of the same part, year after year" is gone. It has been replaced with "speed, versatility, and adaptability."

Knowing this change was on the horizon Hydromat, in 2003, introduced the **CNC-controlled EPIC platform** family of rotary transfer machines. An evolution in productivity for parts manufacturers requiring **flexible machines capable of quick change-over**. The EPIC platform features a **plug-n-play control architecture**. This enabled **part-family production runs**, and **small to medium batch sizes**, to become the norm.

Challenge Your Perception

At Hydromat, we can't rest on past accomplishments. Part making and batch requirements have evolved and Hydromat has evolved to meet those requirements. The new **EPIC II** control and the new **EPIC HF FANUC** control option (pictured at right) are the latest in quick change-over, technologically advanced, Hydromat rotary transfer machines. These machines meet today's need for flexibility, just-in-time production, part families, and variable productivity requirements. **Flexibility means profit for parts manufacturers.**



Today's Hydromat - The Measure of Success

Speed and versatility are the hallmarks of today's parts manufacturers. With cycle-times in seconds, part-runs can now last hours instead of weeks. **Success is now measured by how efficiently you can change-over your machine**. A typical full part change-over can now be done in 1-3 hours on a Hydromat EPIC platform.

While applications within part families can result in a relatively quick change-over; others may take longer. The effort becomes two-fold, not only measuring & balancing cycle times for a single part - but making sure the machine change-over from part to part is as streamlined and efficient as possible.

Change-over time can be minimized if you are using the right technology. **Nothing is more flexible or adaptable than a Hydromat rotary transfer machine with the EPIC II or EPIC HF Fanuc platform.**



Flip for quick change-over comparison.

Comparative time-savings of EPIC platform vs. traditional hydraulic Hydromat set-up:

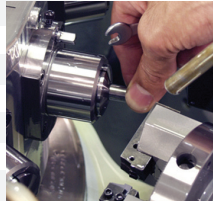
Workholding

Quick-Change collets have replaced threaded screw-in collets, gauge pins, and all the labor & time required with older change-over procedures. Chuck jaw inserts have replaced solid jaws resulting in quick change-over for similar part families. The savings in time is savings in cost.

Traditional:

Threaded Collet Change

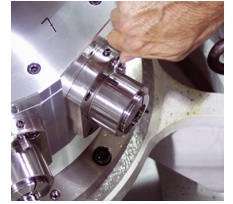
6:00 X (12 UNITS) = **72 MINUTES**



EPIC:

Quick-Change Collet Change

2:00 X (12 UNITS) = **24 MINUTES**



Tool Heads and Tool Offset

Quick-Change HSK or traditional VDI/PCM toolhead? If your goal is decreased run-out, increased rigidity, truer grip, better accuracy and a quicker change-over, then the answer is clear. Setting the tool length offset is another factor in tool head change-over:

Traditional:

Setting the Tool Length

12:00 X (12 UNITS) = **144 MINUTES**



EPIC:

Setting the Tool Length Offset

2:00 X (12 UNITS) = **24 MINUTES**



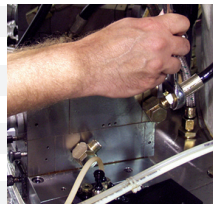
Manual vs. On-Screen Adjustments

Tweak settings, test, tweak settings, test, and on and on. The process is much faster when it's on-screen as opposed to time consuming manual adjustments and testing. Trouble shooting and preventative maintenance intervals also play a huge role.

Traditional:

Change Valves

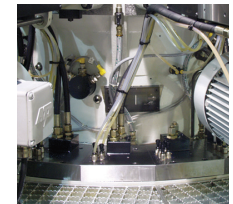
25:00 X (4 UNITS) = **100 MINUTES**



EPIC:

Change Valves

0 X (12 UNITS) = **0 MINUTES**



Skill Set

While the technology can boost efficiency and productivity it's the skill set, in the form of machine operators, that ultimately determines the final boost in performance. Long gone are the days of one man dedicated to one machine.

Our CNC based EPIC platform with time saving quick-change tooling, is perfectly suited for today's fast-paced CNC educated workforce.

Conclusion

Efficiency, in the form of flexibility and quick change-over ability, is a competitive edge. The Hydromat EPIC platform, with accurate, enhanced performance and faster production, together with streamlined change-overs will create that efficiency, leading to both increased revenue and profitability.

*If you are interested in learning more, or want to discuss a part or part family,
please give us a call: (314) 432-4644*



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