

Newsletter



Master Tool

Innovators of Special Design & Build Tooling Systems

210 River Street, Grand River, Ohio 44045

Phone (440) 354-0600 FAX (440) 354-6372

Email: master@mtctools.com

HSS1 Hollow Mill - Form Cut - With Serrated Inserts



Navistar International in Indianapolis, Indiana asked Master Tool to review some of the trouble spots on their NGD diesel head transfer line and suggest some improvements.

One of the initial areas addressed was on their spring side (tower) operations. Their current tooling to perform this operation was a flange mounted hollow mill that provided approximately 2000 hits per insert index. Their main problem was the downtime related to changing of the inserts.

Master Tool first suggested quick change tooling (using the DIN standard HSK quick change system) to alleviate the downtime between tool changes.

Secondly, Master Tool suggested the use of serrated bottom inserts using a torx hold down screw to positively seat the insert into the tool holder pocket.

The biggest problem in designing a hollow mill style tool is the limited space available to hold the inserts. Master Tool's design with matching serrations on the bottom of the insert and in the holder pocket permits the inserts to be held in the pocket with extreme accuracy and solid positioning. Positive locking of an insert in a pocket can and will lead to better part quality and longer tool life.

The end result was a simple tool change with increased uptime. Their current tool life using the Master Tool system is over 48 hours of life - approximately 4000 hits per insert index.

If hollow milling is a problem for you, contact Master Tool Corporation for a solution.