

CUTTING TOOL ASSEMBLY HAVING AN EXCHANGEABLE ADAPTOR

ABSTRACT

A cutting tool assembly comprises a tool shank having a shank holding
5 portion and an exchangeable adaptor. The adaptor has an adaptor mounting
portion to be secured to the shank holding portion with clamping means, and
an insert retaining portion for retaining a replaceable cutting insert, the insert
retaining portion projecting outwardly from the adaptor mounting portion.
The adaptor mounting portion has a side wall formed with a protrusion
10 which has a protrusion abutting surface substantially parallel to the side
wall. The shank holding portion has a face surface generally parallel to the
side wall of the adaptor mounting portion and formed with a recess mating
with and capable of receiving the protrusion of the adaptor mounting
portion. The clamping means comprises an adaptor through bore formed
15 adjacent a rear end of the adaptor and passing through the protrusion, a
threaded bore formed in the shank holding portion and aligned with the
adaptor through bore, and a clamping screw. The rear end of the adaptor
is formed with a transverse slit merging with the adaptor through bore, and
at least a portion of the through bore, which is disposed in the protrusion,
20 tapers in the direction towards the protrusion abutting surface of the adaptor
mounting portion, the screw head portion being capable of bearing against
the tapered portion of the through bore.

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FIG. 1