SYSTEM AND METHOD FOR FLEXIBLE HIGH SPEED TRANSFER OF SEMICONDUCTOR COMPONENTS

Abstract

A system for transferring semiconductor components comprises a rotary turret structure, a first carrier, a second carrier and a gang pick and place mechanism. The turret comprises a central shaft and a number of pickup heads rotatable about the shaft. The pickup heads are rotatably displaced to transfer semiconductor components between processing modules to processes the components. The semiconductor components are transferred in series from the pickup heads to the first carrier and the second carrier. The gang pick and place mechanism transfers semiconductor components collectively from the first and second carriers onto packaging media. On-the fly up-down movement of the turret heads between processing stations, dual carriers which operate in cyclical motion with each other for transferring the components from the turret to a sorting position, and a gang pick and place mechanism to gang sort the components from the dual carriers into a output tray enhances system UPH.

FIG. 1