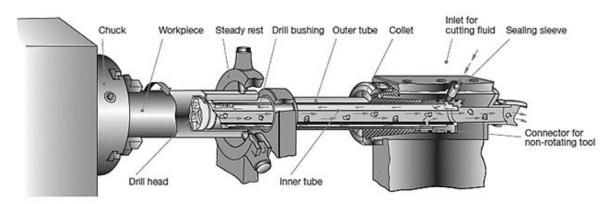


Double Tube System



The double tube system "DTS" or sometimes referred to as the "Ejector" system of drilling is where the coolant is supplied at the machine spindle through a special coolant inducer or connector. Also, as the name implies, this drilling system consists of an outer and inner tube that is connected to the coolant inducer at one end and to a drill head at the other end by means of a fast lead, four-start thread.

The principal of this system of drilling is where the pressurized coolant is introduced via the coolant connector to flow through the resulting annular space between the outer and the inner drill tubes towards the drill head. The majority of the coolant flow is forced through a series of holes in the drill head that provides lubrication and chip evacuation through the inner tube.

A small portion of the coolant flow is diverted through the rear end of the inner tube via a series of slots that are cut into the inner tube. In addition, this small flow of coolant creates a partial vacuum in the inner drill tube and sucks the coolant and the chips from the drill head through the inner tube, then to a chip exhaust port that is an interracial part of the coolant connector.



The Double Tube Drilling System Range

This system supports drill heads ranging from .787"-7.240" diameter. These tools and this system allow depth to diameter ratios of up to 100x's dia. The DTS system can be used on conventional machine tools such as lathes, horizontal boring mills and machining centers which have suitable feed mechanisms, rigidity, and our self-contained coolant system.

BTA Heller offers a full line of brazed and indexable drill heads and all applicable accessories for this system.

