

PHQ361R Drill Speeds

Summary of Results

Bit Description

T38 Retrac Button Bit

T38 Regular Button Bit

T38 Retrac Button Bit - bad regrind

T45 Retrac Button Bit

T45 Retrac Button Bit (new)

Bit Diameter	Bit Diameter	Steel Diameter	Steel Diameter	Number Rods Drilled	Drill Rod Length	Penetration Av Meters per Minute	Penetration Av Inches per Minute
64 mm	2.5 inch	1.50 inch	38 mm	53	1.22 m	0.59	23.2
64mm	2.5 inch	1.50 inch	38 mm	44	1.22 m	0.62	24.5
64 mm	2.5 inch	1.50 inch	38 mm	24	1.22 m	0.47	18.5
76 mm	3.0 inch	1.75 inch	45 mm	111	1.22 m	0.65	25.8
89 mm	3.5 inch	1.75 inch	45 mm	24	1.22 m	0.31	12.3

NOTE:

Drilling speed tests were conducted by [Taurus Drilling](#) using a [PHQ361R Independent Rotation Drill](#) mounted on a [MKV Four Foot Feed Assembly](#) with a [PHQ15001H Heavy Duty Centralizer](#) with inline [F61 Lubricator](#) and operated by a [PHQ21001 Remote Control Panel](#). The [Long Hole Drill Assembly](#) was mounted on a Taurus Drill Carrier drilling underground in medium to hard rock conditions. Each drill rod was timed as it was added into the drill string in the process of drilling 30 to 100 foot holes and the total of the drilling times for all the rods was added up and averaged by the number of rods used. It will be noted that a larger diameter drill rod (45mm as opposed to 38mm) will provide much better penetration rates even for a larger diameter bit. This is a result of better transmission of blow energy through a larger cross section of drill rod, from the drill piston hitting on the shank down through the many joints in the drill string to the face of the bit in the hole.