

[9 and 12 inch shell production]

OPERATIONS AND TIME REQUIRED TO DO THE ABOVE WORK
on 9.2 HIGH EXPLOSIVE SHELLS, by the system used by
the VICKERS CO. England.

They take the rough forging, trim off the open end, and face
the base. The shell is then centered on the solid end, and
the outside diameter is rough turned. These operations would
require approximately 4 hours, and under the Vickers system,
they make these entirely distinct from the machining of the
shells.

OPER. 1 Rough and finish the bore of shell
This rough and finish cut extends only to where the curve
begins toward the bottom of the inside of shell.
Time 2 hours and 35 mins.

OPER. 2 Rough and finish the profile, and face to length
This is finishing the bottom of the inside, boring and
facing open end of shell.
Time 2 hours.

OPER. 3 Core for heading and facing the base
This we understand to be the shape of the outside diameter
in the open end of shell, which has been determined as being
the correct size and shape, so that when the shell is headed
and placed under Hydraulic Press, the shell nose will form
to the correct shape. This operation we also understand means
the open end of shell. At this time the base is also
faced.
Time 35 mins.

OPER. 4 Grinding the inside
This is done for the purpose of removing any marks left by
the boring tools, so that there will be a perfectly smooth
surface.
Time 25 mins.

OPER. 5 Heading shell nose to shape
Shell will be heated in suitable furnace, and formed to
shape under Hydraulic Press. Two men are required for
this operation.
Time 30 mins. apiece.

OPER. 6 Bore and face the nose, after it has been headed to shape
Time 20 mins.

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