



THE

TM

PERFORATING PRESS

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Quality Perforating, Inc.

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How a hole is made!

There are six steps to making/perforating a hole. Many consider this to be a simple two-step process of driving a punch through a piece of sheet metal and then stripping of the punch from the hole.

There are many technical, engineering and machining specifications that need to be followed. This newsletter is focused on the different steps that it takes to make one hole and the different shapes of holes we produce.

The six stages of “How a hole is made”.

Impact | Penetration | Break | Snap-Thru | Bottom | Withdrawal

Impact

Impact is where the punch first makes contact with the material.

Penetration

Penetration is the point of the punch that begins to penetrate the surface of the material.

Break

Break is when the material is deformed and stretched to its tensile limits.

Snap-Thru

Snap-Thru happens when the tensile limits of the material are exceeded, and the slug suddenly separates from the material.

Bottom

Bottom is at the end of the cycle when the ram of the press reaches the bottom of its stroke.

Withdrawal

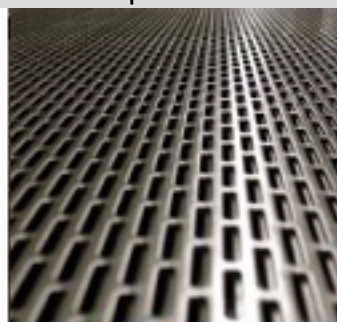
Withdrawal of the punch from the material resets the process for another impact cycle.

Above is the general rule as to how one hole is made. QPI makes many different size, shapes and number of holes. Our team works within each technical, engineering and machining requirement to provide the best outcome for our customer.

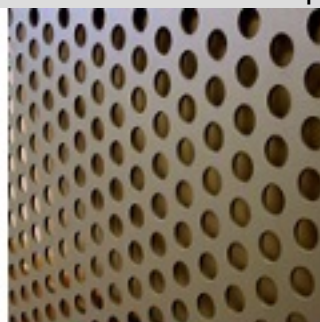
Below is a sample of some of the holes we have produced



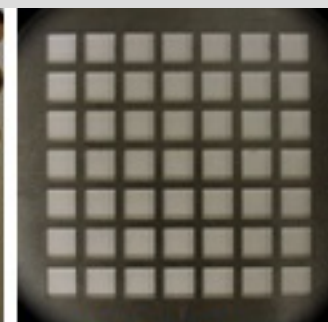
"hex"



"slot"



"round"



"square"

and two of the many "in-house" press capabilities available at QPI.



Producing holes for your whole project is our goal at QPI!

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