单选题　1分

Compared to those made by casting and forging, sheet-metal parts offer the advantages of light weight and versatile shape.

A　Ture

B　False

提交

单选题 1分

Most sheet-metal forming processes are performed at elevated temperature.

A Ture

B False

提交

单选题　1分

In shearing operations, fracture usually starts with the formation of cracks in the center of the workpiece. These cracks eventually meet both the top and bottom edges of the sheet and separation occurs.

A　Ture

B　False

提交

单选题 1分

High sheared edge quality indicates the increased height of （ ）.

A rollover area

B burnished area

C fracture area

D burr

提交

单选题 1分

In shearing, the（ ）, which is the distance between the punch and the die, is a major factor in determining the shape and the quality of the sheared edge.

A allowance

B clearance

C gap

D space

提交

单选题 1分

The ratio of the burnished to the rough areas on the sheared edge increases with increasing ductility of the sheet metal, and decreases with increasing sheet thickness and clearance.

A Ture

B False

提交

单选题 1分

Burr height increases with decreasing clearance and ductility of the sheet metal.

A Ture

B False

提交

单选题 1分

In ( ), the sheared slug is the final part and the rest is scrap.

A blanking

B parting

C perforating

D punching

提交

单选题　1分

The amount of scrap produced in shearing operations, also called trim loss, can be a significant factor in manufacturing cost.

A　Ture

B　False

提交

单选题　1分

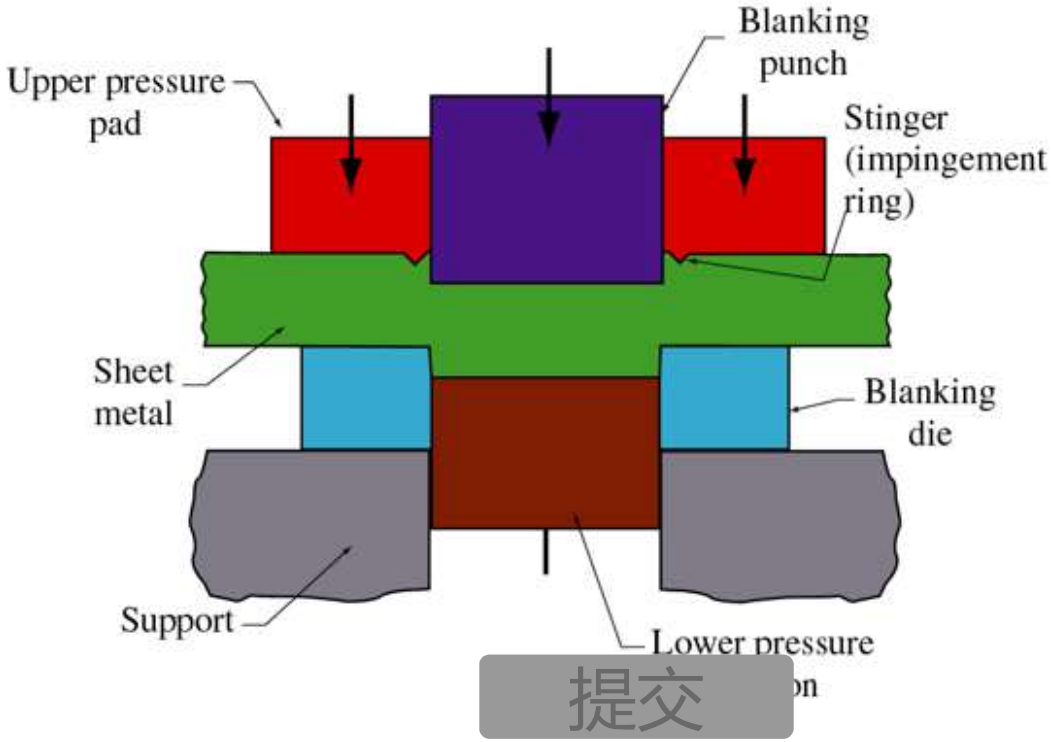
The figure shows the schematic illustration of die setup for fine blanking in a（　　）die.

A　single

B　compound

C　progressive

D　transfer



提交

单选题　1分

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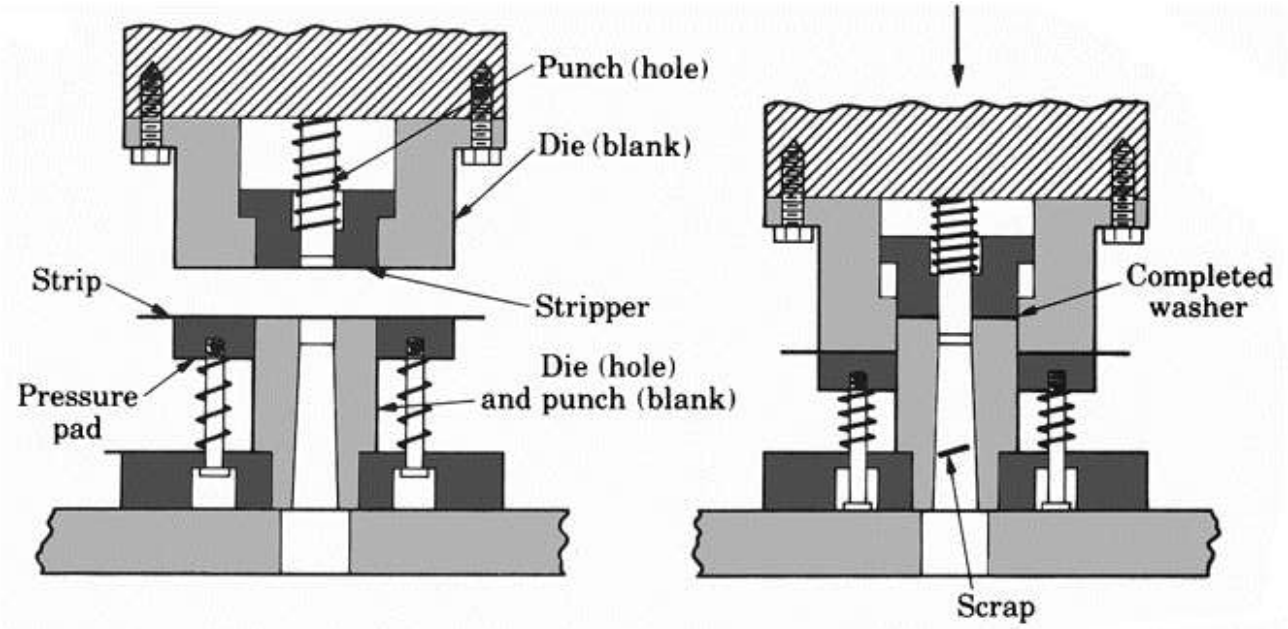

提交

单选题　1分

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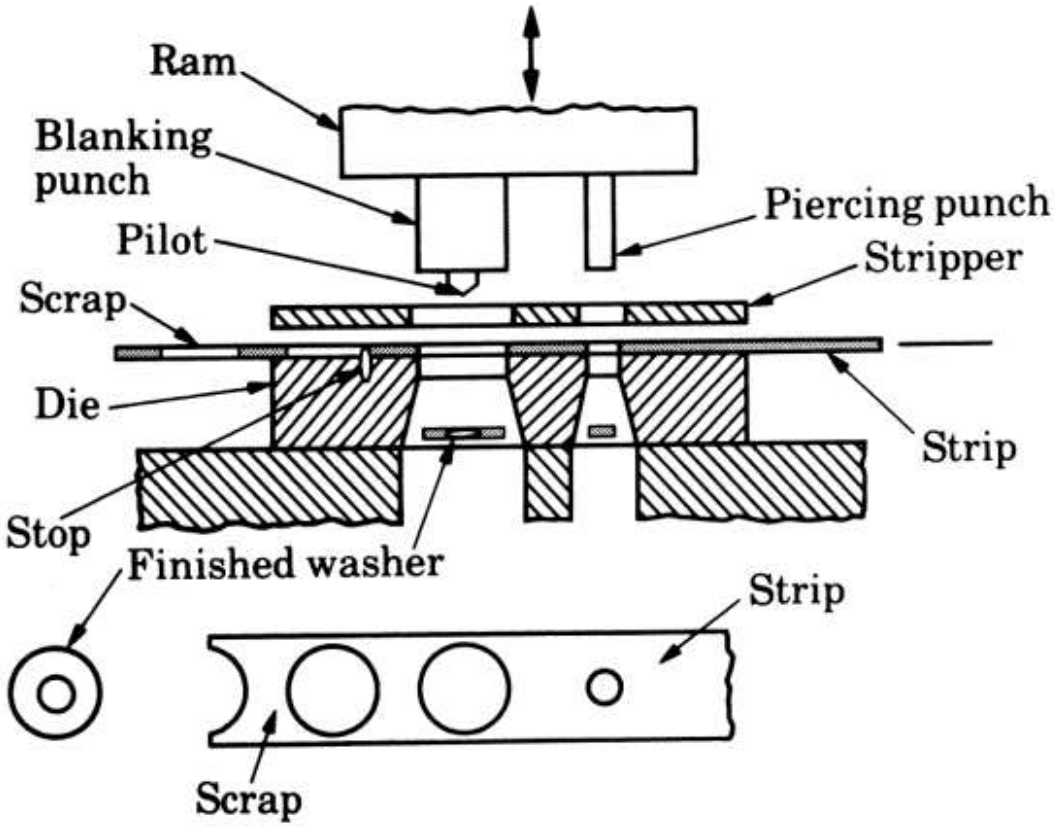


提交

单选题　1分

In a transfer die, the sheet metal undergoes different operations at different stations. After each step, the strip is transferred to the next station for further operations.

A　Ture

B　False

提交

单选题　1分

Formability means the ability of the sheet metal to undergo the desired shape change without such failure as necking or tearing.

A　Ture

B　False

提交

单选题　1分

In sheet-metal forming, both high uniform elongation and yield-point elongation are desirable for good formability.

A　Ture

B　False

提交

单选题　1分

The coarser the grain, the stronger is the metal and the rougher is the surface appearance.

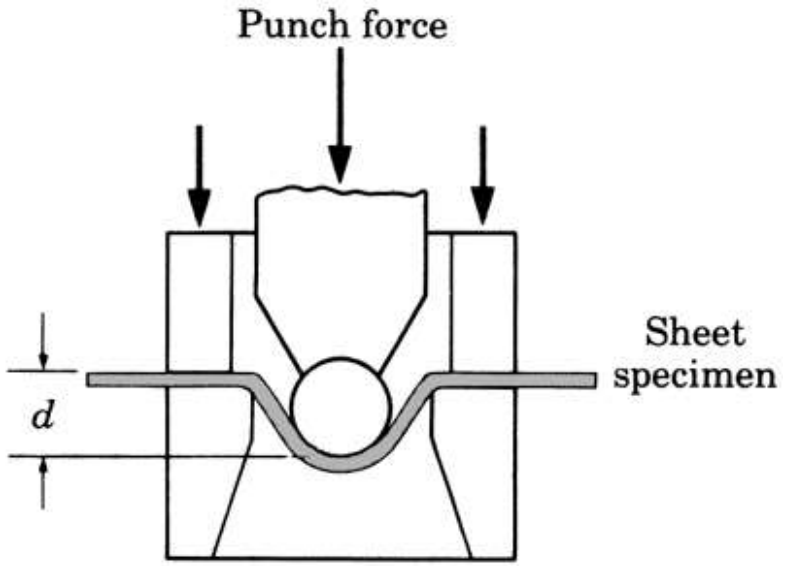
A　Ture

B　False

提交

单选题 1分

This figure shows the setup of ( ) test to predict formability of sheet metal.



A bending

B cupping

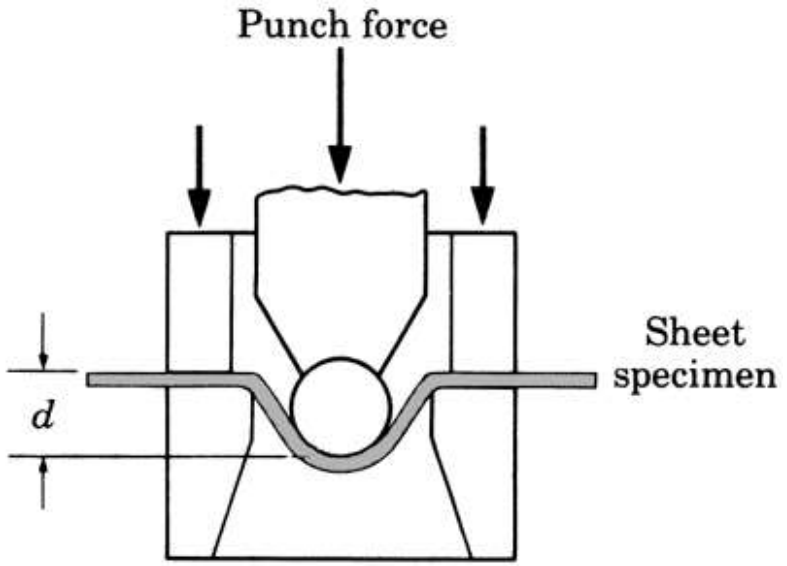
C punching

D stretching

提交

单选题　1分

In this formability test method, higher *d* indicates better formability.



A　Ture

B　False

提交

单选题 1分

This sheet-metal parts is formed by ( ) operations.

A bending

B deep drawing

C punching

D stretching

提交

单选题　1分

In bending of plates, the outer fibers are in tension, while the inner fibers are in compression.

A　Ture

B　False

提交

单选题 1分

The neutral axis in bending, called 中性轴，means the middle layer of the metal during the thickness of the sheet.

A Ture

B False

提交

单选题　1分

Which one of the following is used to determine the length of the blank for a part to be bent?

A　bend allowance

B　bend angle

C　bend length

D　bend radius

提交

单选题　1分

Which one of the following is used to describe the bendability of a material?

A　bend allowance

B　bend angle

C　bend length

D　bend radius

提交

单选题　1分

Bendability of a material can be expressed by the minimum bend radius, *R*. The smaller the *R* can reach, the better the bendability is.

A　Ture

B　False

提交

单选题 1分

To increase the bendability of metals, we may increase their tensile reduction of corss-section area, *r*, either by heating or by bending in a high-pressure environment.

A Ture

B False

提交

单选题　1分

Anisotropy of the sheet is another important factor in bendability.

A　Ture

B　False

提交

单选题　1分

In bending, because all materials have a finite modulus of elasticity, when the load is removed, plastic deformation is followed by some springback.

A　Ture

B　False

提交

单选题　1分

Springback is a main defect affecting the quality of bent part and increases with increasing elastic modulus, *E*, of the metal.

A　Ture

B　False

提交

单选题　1分

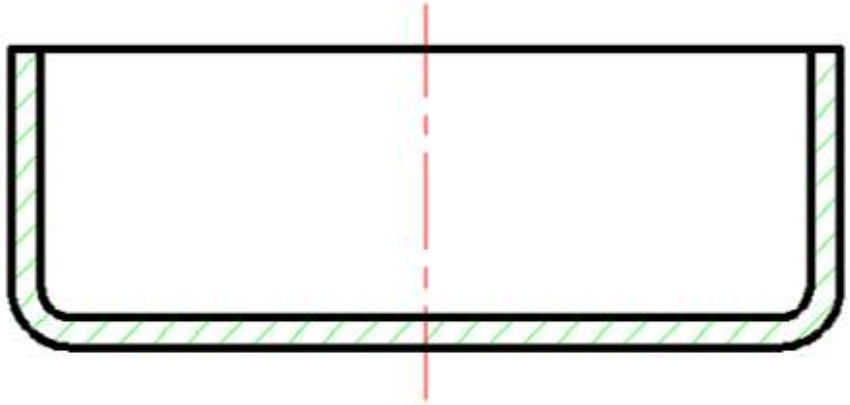
This sheet-metal parts is formed by (　　) operations.

A　bending

B　deep drawing

C　punching

D　stretching



提交

单选题 1分

The cup-shaped or box-shaped sheet-metal parts are produced by ( ) operations.

A bending

B drawing

C drawing out

D deep drawing

提交

单选题 1分

During deep drawing, compressive circumferential (hoop) stresses in the flange tend to cause sheet metal to ( ) .

A earing

B springback

C tearing

D wrinkle

提交

单选题 1分

In deep drawing, wrinkling can be reduced or eliminated by（ ）.

A large punch force

B large corner radius of punch and die

C small clearance

D suitable blankholder force

提交

单选题　1分

During deep drawing, the cup wall is subjected principally to a longitudinal tensile stress. Elongation causes the cup wall to thin; if excessive, it causes（　　）.

A　earing

B　springback

C　tearing

D　wrinkle

提交

单选题　1分

In deep drawing, the sheet meatal must be capable of undergoing a reduction in width due to a reduction in diameter and must also resist thinning under the longitudinal tensile stresses in the cup wall.

A　Ture

B　False

提交

单选题　1分

Deep drawability is generally expressed by the limiting drawing ratio, LDR. Smaller LDR indicates the better deep drawability.

A　Ture

B　False

提交

单选题 1分

In deep drawing, LDR (limiting drawing ratio) is determined by the ( ) of the sheet metal.

A elongation

B yield-point elongation

C normal anisotropy

D planar anisotropy

提交

单选题 1分

Deep drawability increases with increasing LDR and with increasing normal anisotropy.

A Ture

B False

提交

单选题 1分

A high R_{avg} value (average normal anisotropy) of sheet metals is desirable for good deep drawability.

A Ture

B False

提交

单选题 1分

Which one of the followings is NOT the main defect of deep-drawing parts?

A earing

B springback

C tearing

D wrinkle

提交

单选题 1分

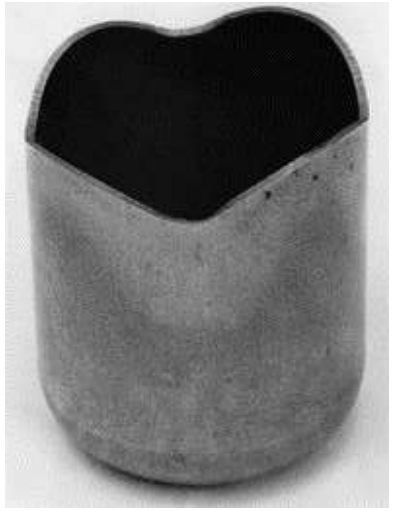
This picture shows the defect of （ ） in deep-drawing.

A earing

B springback

C tearing

D wrinkle



提交

单选题 1分

In deep drawing, earing is caused by the ( ) of the sheet.

A normal anisotropy

B planar anisotropy

C plastic anisotropy

D coarse grain size

提交

单选题　1分

A low ΔR value (planar anisotropy) of sheet metals is desirable for good deep drawability.

A　Ture

B　False

提交

单选题　1分

Draw beads often are necessary to control the flow of the blank into the die cavity and also are useful in drawing box-shaped and nonsymmetric parts.

A　Ture

B　False

提交

单选题 1分

In deep drawing, tearing can NOT be avoided or minimized by （ ）.

A effective lubrication

B large blankholder pressure

C large radius of punch and die

D proper design and location of draw beads

提交

单选题 1分

For most sheet-metal forming operations, the generally used equipment is various presses.

A Ture

B False

提交