IBONG TIRIRIT (MDSP 5)

The hacksaw blade should be placed in the frame with:

A. the teeth pointing forward

B. the teeth pointing backward

C. one end looser than the other end

D. the teeth facing in any direction

answer: A

When cutting a long thin piece of metal:

A. turn the blade upside down the frame

B. turn the blade at right angles to the frame

C. use a blade with fewer teeth per inch

D. set the blade in the frame with the teeth facing you

answer: B

A hacksaw blade with 18 teeth per inch is best suited for cutting:

A. solid stock

B. cast iron

C. aluminum

D. any of the above

answer: D

A coclant is usually used when cutting material in a power hacksaw to

A. absorb the heat of friction

B. prevent the blade from overheating

C. prevent the blade from losing its temper

D. all of the above

answer: D

A hacksaw blade with 32 TPI is suited for cutting:

A. small tubing

B. conduct

C. sheet metal under 18 gage

D. any of the above

answer: D

For filing lead or Babbitt, use a:

A. vixen file

B. mill file

C. sheet metal under 18 gage

D. any of the above

answer: D

It moves on the lathe bed with cutting tool according to the rotation of lead screw or by hand traversing wheel

A. apron

B. compound rest

C. mandrel

D. saddle

answer: D

It acts the carriage or compound rest through the mechanism lifted inside the apron

A. apron

B. compound

C. mandrel

D. saddle

answer: A

It gives the cutting tool longitudinal feed, cross feed or

carriers

A. angular feed

B. apron

C. compound rest

D. saddle

answer: C

The center, which is fitted in head stock spindle, called

A. above center

B. below center

C. dead center

D. live center

answer: D

A center, which is fitted in tail stock spindle called

A. above center

B. below center

C. dead center

D. live center

answer: C

Which of the following gives shearing action?

A. front clearance

B. side clearance

C. slide rake

D. top rake

answer: D

Which of the ff. information is necessary when ordering a file?

A. size (length)

B. shape

C. type of teeth

D. all of the above

answer: D

Never use a file:

A. that is dirty

B. w/o a handle

C. w/o oiling

D. with a tang

answer: B

The best file to use when finishing sharp corners or slots and grooves is the:

A. mill file

- B. square
- C. knife file
- D. jewelers file

answer: C

On a lathe the dead center is used after:

- A. boring
- B. center-drilling
- C. drilling
- D. reaming

answer: B

Eleven - sixteenths of an inch expressed as a decimal is:

- A. .6785
- в. .7685
- C. .6875
- D. .6578

answer: C

The markings on a micrometer barrel are:

- A. .025" apart
- B. .250" apart C. .0025" apart
- D. 2.5" apart

answer: A

It measures the slope of the top surface of the tool to the side in a direction perpendicular to the longitudinal axis

- A. end relief angle
- B. side cutting edge angle
- C. side rake angle
- D. side relief edge angle

answer: C

It is used for holding straight shank drills in the spindle to the machine when drilling

- A. chuck key
- B. drill chuck
- C. floating holder
- D. magic chuck

answer: B

A reamer is used to correct the

- A. finish and depth of a drilled hole
- B. finish and position of a drilled hole
- C. size and position of a drilled hole
- D. size and roundness of a drilled hole

answer: D

Twist drills are usually considered suitable machining holes having a length less than

- A. two times their diameter
- B. five times their diameter
- C. ten times their diameter
- D. twenty times their diameter

answer: B

In quick return mechanism of shaping machine the ram stroke length is proportional to

- A. crank length
- B. ram length
- C. slotter arm length
- D. stroke

answer: A

Type and number of bearings to be used for spindles of machine tool depend on

- A. type of spindle
- B. type of machine tool
- C. load on spindle
- D. load on the bearing

answer: D

When the dial on the cross-feed is turned .010", you remove from diameter of the stock being cut:

- A. .010
- B. .020
- C. .005
- D. .015

answer: A

The flexible type hacksaw blade is best suited for work on:

- A. channel iron
- B. tubing
- C. aluminum
- D. any of the above

answer: D

- A flexible back hacksaw blade is one that has:
- A. only the teeth
- B. flexible ends
- C. a movable back
- D. any of the above

answer: D

A hacksaw blade with 24 TPI is best suitable for cutting:

- A. tubing
- B. sheet metal over 18 gage
- C. brass and copper
- D. any of the above

answer: D

An all hard hacksaw blade is one that:

- A. has a hard back and flexible teeth
- B. has a flexible back and hard teeth
- C. has the entire bade hardened
- D. will only fit a solid frame hacksaw

answer: C

- A hacksaw blade can be placed in a frame in:
- A. two positions
- B. four positions
- C. one position
- D. three positions

answer: B

what should be the top rake angle to cut brass?

A. 0

B. 15

C. 30

D. 45

answer: A

It is a long, tapered punch used for loosening straight pins, taper pins, rivets and other small parts being disassembled

A. center punch

B. drift punch

C. drive-pin punch

D. hand punch

answer: B

A tool used for turning nuts or bolts

A. c-clamps

B. long nose

C. plier

D. wrench

answer: D

Used to permit lever shift for vertical travel of rail

A. ball crank

B. clamp plates

C. plumb bob

D. plunger knob

answer: D

It is mounted on the top of the column and is guided in perfect alignment by the machined dovetailed surface

A. arbor

B. over arm

C. saddle

D. spindle

answer: B

Name of mechanism, which a welding operator holds during gas welding and at the end of which the gases are burred to perform the various gas welding operation.

A. hose

B. gage

C. switch

D. torch

answer: D

A scriber is made from:

A. carbon steel

B. cold-rolled steel

C. tool stee 1

D. hot-rolled steel

answer: C

Before applying layout blue on a piece of metal, it must be:

A. roughened

B. heated

C. cleaned

D. cold

answer: C

A drill bit has :

A. 4 flutes

B. 3 flutes

C. 2 flutes

D. no flutes

answer: C

The alignment of coupling faces can be checked by:

A. using an inside micrometer

B. inserting a thermocouple

C. inserting a feeler gage between the coupling faces at various points around the circumference

 $\ensuremath{\mathsf{D}}.$ rotating and measuring to nearest permanent fitting

answer: C

A piece of cast iron held against an emery wheel will give off:

A. dull yellow sparks

B. bright shiny sparks

C. red sparks

D. no sparks

answer: A

When cutting material in a lathe, the softer the material being cut, the tool bit should have:

A. more top rake

B. less top rake

C. double top rake

D. any of the above

answer: D

After grinding a tool bit, the cutting edge should be:

A. case-hardened

B. rubbed with emery cloth

C. stoned with an oilstone

D. rubbed with crocus cloth

answer: C

It is a hole revolving cutter or grinding wheel for mounting it on an arbor.

A. arbor hole

B. hole saw

C. star drill

D. star saw

answer: A

A machine in which materials are pulverized between the two toothed metal disk rotating in opposite directions.

A. attrition mill

B. ball mill

C. beater mill

D. tumbling mill

answer: A

A press in which mechanical feeding of the work is synchronized with the press action

A. automatic press

B. dial press

C. manual press

D. punch press

answer: A

A supporting member that carriers a wheel and either rotates with the wheel to transmit mechanical power to or from it, or allows the wheel to rotate freely on it called

A. axle

B. bushing

C. coupling

D. shaft

answer: A

A file whose edges are parallel is known as

A. blunt file

B. crochet file

C. cross cut file

D. equaling file

answer: A

Straight muriatic acid is often used as a flux on:

A. galvanized iron

B. cast sheet

C. sheet steel

D. any of the above

answer: D

Special solders used for aluminum usually require:

A. more heat

B. less heat

C. the same heat as copper wire

D. the same heat as sheet metal

answer: A

Copper is annealed by heating to a cherry red color and:

A. dousing in cold water

B. cooling slowly in air

C. dousing in oil

D. dousing in hot water

answer: B

A piece of mild steel held against an emery wheel will give off:

A. bright shiny sparks

B. light straw colored sparks

C. no sparks

D. green sparks

answer: B

A gear wheel making 156 rpm has 56 teeth. It drives another gear at 91 rpm. The number of teeth on the second gear is:

A. 65

в. 90

C. 50

D. 96

answer: D

Tool steel can be hardened by:

A. heating red hot and plunging into water

B. heating red hot and cooling in a blast of dry air

 ${\tt C.}$ heating red hot and plunging into linseed or cottonseed oil

D. any of the above, depending on type and use

answer: D

A scriber is made from:

A. carbon steel

B. cold-rolled steel

C. tool steel

D. hot-rolled steel

answer: C

After grinding a tool bit, the cutting edge should be

A. case hardened

B. rubbed with emery cloth

C. rubbed with crocus clothe

D. stoned with an oilstone

answer: D

When cutting material in a lathe, the softer the material being cut, the tool bit should have

A. any of these

B. double top rake

C. less top rake

D. more top rake

answer: C

A piece of cast iron held against an emery wheel will give off $% \left\{ 1\right\} =\left\{ 1\right\} =\left\{$

A. bright shiny sparks

B. dull yellow sparks

C. no sparks

D. red sparks

answer: B

Which of the following is not a common term relating to the classification of fits

A. bound

B. medium force fit

C. snug

D. tunking

answer: A

An oversize hole is produced by a drill if

A. cutting speed is too high

B. feed is too high

C. insufficient coolant is used

D. lips of drill are of unequal length

answer: D

The studs used as a coolant in general machine shop consist of

A. a chemical solution

B. an emulsion of oil and water

C. a solution of detergent and water

D. a straight mineral

answer: B

Sometimes used for soldering bright tin

A. rosin

B. sal ammoniac

C. tallow

D. tinning

answer: A

A very effective flux for soldering galvanized iron and zinc $\,$

A. cut acid

B. muriatic acid

C. soldering pastes

D. zinc chloride

answer: B

The process of checking the surface of a piece by rolling depressions into the surface

A. honing

B. knurling

C. reaming

D. snagging

answer: B

The process of cutting internal threads by means of a cutting tool.

A. chamfering

B. honing

C. reaming

D. tapping

answer: D

The surface below the cutting edge

A. face

B. flank

C. nose

D. side relief

answer: B

Which one is the hardest material?

A. brass

B. bronze

C. diamond

D. steel

answer: C

The movement of belt upon the face of rim or outer of the driver and driven pulleys within the area of arc of contact is called

A. creep

B. crowning

C. dressing

D. slip

answer: A

It is a device, which hold the job family

A. clamp

B. fixture

C. grip

D. jig

answer: B

It is the outer surface of face or rim of the pulley is made in convex form to keep the belt in center when it is in motion

A. creep

B. crowning

C. dressing

D. slip

answer: B

It is used to transmit motion at high speed without producing noise.

A. bevel gear

B. helical gears

C. hypoid gears

D. worm gears

answer: B

It is used to transmit motion at high speed with heavy load without producing noise

A. bevel gear

B. herring bone gear

C. spur gear

D. worm gear

answer: B

It connect the shafts with soft materials such

as rubber, leather and canvass

A. flexible coupling

B. Oldham coupling

C. rigid coupling

D. universal coupling

answer: A

One of the most important factors that is often overlooked when soldering is the fact that:

- A. the surface to be soldered must be clean
- B. the two metals to be soldered must not be the same $\ensuremath{\text{\text{must}}}$
- ${\tt C.}$ the two metals to be soldered must be the same
- D. all surfaces should be dipped in acid first

answer: A

A surface should be prepared for soldering by

- A. filing the surfaces
- B. scraping the surfaces
- C. acid-cleaning the surfaces
- D. any of the above

answer: D

The hand tool used for cutting threads on round stock is the:

- A. stock and die
- B. die wrench
- C. stock
- D. stock cutter

answer: A

A hand tool used for cutting threads on round stock is the:

- A. stock and die
- B. die wrench
- C. stock
- D. stock cutter

answer: A

A tapered piece of stock is 2" long, 1-1/8" diameter at one end and ½ diameter at the other end. The taper per foot is:

- A. 2"
- B. 2-1/2"
- C. 2-1/4"
- D. 2-1/16"

answer: C

Sweating is the process of:

- A. soldering two different kinds of metal together
- $\ensuremath{\mathsf{B}}.$ separating two pieces of metal that have been soldered together
- C. tinning two surfaces, applying, flux between them, holding the two together and heating
- D. none of the above

answer: C

If muriatic acid is used as a flux, the soldered area must be cleaned thoroughly afterwards to prevent:

- A. anyone touching it from getting burned
- B. remaining acid from eating the metal
- C. the acid from evaporating the solder disintegrating
- D. none of the above

answer: B

It cannot be forged because it will break if heated and beaten by hammer.

- A. Carbon steel
- B. Cast iron
- C. High speed stee 1
- D. Tool steel

answer: B

Shaper tools are made of what type of material?

- A. Babbitt
- B. Brass
- C. Bronze
- D. High speed steel

answer: D

It is the operation of beveling the mouth of a hole.

- A. Counter boring
- B. Counter broaching
- C. Counter sinking
- D. Spot facing

Answer: C

The size of abrasive grains produced by crushing process is called

- A. B.
- C. Grit
- D.

Answer: C

It is the combination of iron, carbon and other alloying elements.

- A. Alloy steel
- B. Brass
- C. Carbon steel
- D. Cast iron

Answer: A

It is the process to divide the periphery of the job in degrees.

- A. Angular indexing
- B. Differential indexing
- C. Direct indexing
- D. Plain indexing

Answer: A

It consists of surface irregularities, which result from the various manufacturing process.

- A. Flaws
- B. Lay
- C. Roughness
- D. Waiveness

Answer: C

A piece of tool steel held against an emery wheel will give off:

- A. White sparks with stars on the ends
- B. Yellow sparks
- C. No sparks
- D. Green sparks

Answer: A

Grinding wheels have a range of soft to hard abrasive materials depending on the use. Most manufacturers latter their wheels from A to Z. The hardest is marked:

- A. E
- B. A
- C. Z
- D. El

Answer: C

The main difference between a planer and shaper is that:

- A. The planer has an offset table and the shaper has a horizontal table.
- B. The shaper has a rotting table and the planer has a horizontal table.
- C. The table of planer has a reciprocating motion past the tool head white the table of the shaper is stationary and the tool head has a reciprocating motion.
- D. Ones is larger than the other

Answer: C

One of the factors involved in the choice of a grinding wheel is:

- A. The kind of material to be ground
- B. The amount of stock to be removed
- C. The kind of finish required
- D. All of the above

Answer: D

The "tang" of a file is the past that:

- A. Does the cutting
- B. Fits into the handle
- C. has no teeth
- D. is opposite the handle

Answer: B

The best method of avoiding accident is by observing _____ related to job, machine and work piece.

- A. Cleanliness
- B. Emery
- C. Opponent
- D. Safety precautions

Answer: D

The size of try square is measured from the inner edge of stock to the end of its

- A. Base
- B. Blade
- C. Body
- D. Edge

Answer: B

Angle of center punch is

- A. 30°
- B. 45°
- C. 60°
- D. 90°

Answer: D

Staggering of hacksaw blade teeth on both sides alternatively is called

- A. Arrangement of teeth
- B. Positioning to teeth
- C. Setting of teeth
- D. None of the above

Answer: C

It is the distance measured parallel to the axis from a point on a screw thread to the corresponding point on the next thread.

- A. Chord
- B. Lead
- C. Linear
- D. Pitch

Answer: D

Solder is an alloy of

- A. Lead and antimony
- B. Lead and tin
- C. Lead and tungsten
- D. Lead and zinc

Answer: B

It's a square key with the bottom two corners are beveled.

- A. Saddle key
- B. Barth key
- C. Woodruff key
- D. Gib head key

Answer: B

Change in metal structure by which the surface structure recover from its unstable condition

- A. annealing
- B. normalizing
- C. aging
- D. tempering

Answer: C

A tapered square key is known as

- A. Gib head
- B. Woodruff
- C. Kennedy
- D. Barth

Answer: C

The process of welding two dissimilar metals is known as

- A. Friction welding
- B. Flash welding
- C. Oxyacetylene welding
- D. Cold welding

Answer: D

A nonmetal considered as undesirable impurity in steel is

- A. lead
- B. sulfur
- C. phosphorous
- D. cyanide

Answer: B

An alloying element which improves the tensile strength of steel and make it harder

- A. vanadium
- B. carbon
- C. cobalt
- D. chromium

Answer: D

An alloying element which reduces deformation of configuration and sulfuric brittleness.

- A. molybdenum
- B. manganese
- C. nickel
- D. chromium

Answer: B

What is the lip clearance angle of twist drill for generated work?

- A. 3 6°
- $B.8 10^{\circ}$
- C. 12 15°
- D. 18 22°

Answer: C

It is a milling method in which parts are placed in a row parallel to the axis of the cutting tool end are milled simultaneously.

- A. Abreast milling
- B. Angular milling

- C. Helical milling
- D. Straddle milling

Answer: A

A core drill with hardened steel shot pellets that revolve under the rim of the rotating tube, employed in rotary drilling in very hard ground.

- A. Adamantive drill
- B. Automatic drill
- C. Double core barrel drill
- D. Flat drill

Answer: A

A grinding mill of large diameter with either lumps of ore pebbles or steel balls as crushing bodies the dry lead is air swept remove mesh material.

- A. Aerial speed
- B. Aero fall mill
- C. Aero motor
- D. Ball mill

Answer: B

A tool - steel cutter used fro - finishing surfaces of angles greater than or less than 90* with its axis of rotation called:

- A. Angle cutter
- B. Asphalt cutter
- C. Circular cutter
- D. Helical cutter

Answer: A

When installing a new grinding wheel, always use:

- A. Blotting paper gaskets on each side of the wheel
- B. Copper gasket on each side of the wheel
- $\ensuremath{\text{C.}}$ Only the steel washers provided with the machine
- D. None of the above

Answer: A

The operation of "truing" a grinding wheel is known as:

- A. centering
- B. dressing
- C. sizing
- D. rounding

Answer: B

The tool used to check external pipe threads is called a:

- A. plug gage
- B. thread gage
- C. pitch gage
- D. ring gage

Answer: D

The tool used to check internal pipe threads is called a:

- A. plug gage
- B. thread gage
- C. pitch angle
- D. ring gage

Answer: A

The tool used to cut gears is called a:

- A. gear cutter
- B. gear hob
- C. gear center
- D. gear threader

Answer: B

If use a dry grinding wheel for sharpening tool bits, dip the end of the bit in water frequently to prevent-

- A. burning your fingers
- B. annealing the cutting edge of the bit
- C. hardening of the tip
- D. the tip from crysallizing

Answer: B

CNC in machine shop means

- A. Communication Network Control
- B. Computer Network Center
- C. Computer Number Control
- D. Computer Numerical Control

Answer: D

It is the time lost due to breakdowns, waiting for tools, minor accidents etc.

- A. Down time
- B. Handling time
- C. Machining time
- D. Set up time

Answer: A

Refers to the process of separating or removing the burning or combustible material from the neighborhood of the fire.

- A. Blanketing
- B. Combustion
- C. Cooling
- D. Starvation

Answer: D

What is the necessity of giving tolerance?

- A. It saves the labor charges
- B. Its saves the material from wastage
- C. It saves the time
- D. All of the above

Answer: D

It is done then and there by adjusting or repairing the faults come in notice during work.

- A. Corrective maintenance
- B. Predictive maintenance
- C. Preventive maintenance
- D. Routine maintenance

Answer: D

Which statement does NOT belong to the function of bearings?

- A. To give free rotation to the shaft
- B. To guide the shaft
- C. To support the shaft
- D. To transmit power

Answer: D

- A "pillar" file has:
- A. One safe edge
- B. Three safe edges
- C. Two safe edges
- D. A or C

Answer: D

In general, files are divided into two classes called:

- A. Single cut and double cut
- B. Fine and coarse
- C. Rough and smooth
- D. Heel and sizes

Answer: A

The length of a file is measured from:

- A. End to end
- B. Point to heel
- C. Point to end
- D. Heel to end

Answer: B

- A "pillar" file is used for:
- A. Filling slots
- B. Filling keyways
- C. Filling against a shoulder
- D. Any of the above

Answer: D

- A flexible hacksaw blade has a tendency to:
- A. Snap easily
- B. Buckle or run out of line when too much pressure is applied
- C. Cut too fast
- D. Cut on a slant

Answer: B

Soldering is the process of:

- A. Holding two metals together by heating
- B. Joining two metals by third soft metal that
- is applied in a molten state
- C. Holding two different kinds of metals together by heating

D. Joining two metals together by heating

Answer: B

When soldering, flux is used to;

- A. Keep the solder from running off the metal
- B. Keep the metal from getting too hot
- C. Keep the tip of the soldering iron clean
- D. Remove and prevent oxidation of the metals

Answer: D

What is used to connect the shaft whose axes are intersecting?

- A. Flexible coupling
- B. Oldham coupling
- C. Rigid coupling
- D. Universal coupling

Answer: D

It is generally used on high speed with light load because it has point contact.

- A. Ball bearing
- B. Metal bearing
- C. Roller bearing
- D. Wood bearing

Answer: A

It is generally used on high speed with heavy load because it has line contact.

- A. Ball bearing
- B. Metal bearing
- C. Plastic bearing
- D. Roller bearing

Answer: D

It is a process of enlarging and smoothening the punched hole by means of tapered drifts of various sizes and shape.

- A. Drawing out
- B. Drifting
- C. Jumping
- D. Upsetting

Answer: B

It is a set of gears fitted in different position on a plate which are controlled by a lever.

- A. Differential gear
- B. Gear train
- C. Stud gear
- D. Tumbler gear

Answer: D

An instrument for determining the relative hardness of material by a drop and rebound method.

- A. Brinell hardness tester
- B. Rockwell hardness tester
- C. Scleroscope

D. Universal testing machine

Answer: C

An instrument for measuring the degree of surface roughness in micro inches.

- A. Caliper
- B. Micrometer
- C. Profilometer
- D. Sclerescope

Answer: C

These spindle of the grinding machine on which the wheel is mounted.

- A. Arbor
- B. Bearing
- C. Bushing
- D. Fluting

Answer: A

A device for holding grinding wheels of special shape or the working piece - being grounded.

- A. Chuck
- B. Fixtures
- C. Head stock
- D. Jigs

Answer: A

Grinding the grooves of a twist drill or tap.

- A. Flaring
- B. Fluting
- C. Honing
- D. Lapping

Answer: B

The dulling of the cutting particles of a grinding wheel resulting in a decreased rate of cutting is called

- A. fluting
- B. glazing
- C. grinding
- D. lapping

Answer: B

The process of lengthening a piece of stock while the cross-sectional area is being reduced

- A. Drawing
- B. Honing
- C. Tapping
- D. Upsetting

Answer: A

The major factors, which determined the rpm on milling cutter, are the material being cut and A. depth of the cutter

- B. diameter of cutter
- C. number of teeth in cutter
- D. time allowed to complete the job

Answer: D

Electron beam machining process is quite suitable for a material having

- A. high melting point and high thermal conductivity
- B. high melting point and low thermal conductivity
- C. low melting point and low thermal conductivity
- D. low melting point and high thermal conductivity

Answer: B

Grinding is what type of operation?

- A. Metal finishing operation
- B. Metal fusing operation
- C. Metal powdering operation
- D. metal surfacing operation

Answer: A

Grinding is done wherever

- A. a large amount of material is to be removed
- B. a small amount of material is to be removed
- C. high accuracy is required
- $\ensuremath{\mathsf{D}}.$ other machining operations can not be carried out

Answer: C

Laser beam machining process is used to machine

- A. heavier materials
- B. lighter materials
- C. thicker materials
- D. thinner materials

Answer: D

- A hard grade-grinding wheel is suitable for grinding
- A. both hard and soft materials
- B. hard materials
- C. smooth materials
- D. soft materials

Answer: D

The usual ratio of forward and return stroke, in quick mechanism of shaping machine is

- A. 3:1
- B. 3:2
- C. 5:2
- D. 6:8

Answer: B

Solder will not unite with metal surface that has:

- A. grease on it
- B. dirt on it

- C. oxidation on it
- D. any of the above

Answer: D

Prepared soldered paste flux is most popular but if you did not have any, you should use:

- A. hydrochloric acid
- B. sulphuric acid
- C. nitric acid
- D. any of the above

Answer: A

Another name for hydrochloric acid is:

- A. sulphuric acid
- B. muriatic acid
- C. nitric acid
- D. acetic acid

Answer: B

Hard solder is made of:

- ${\tt A.}$ copper and zinc
- B. tin and zinc
- C. tin and copper
- D. tin and lead

Answer: A

Soft solder is made of:

- A. copper and zinc
- B. tin and lead
- C. tin and copper
- D. tin and zinc

Answer: B

Soft solder melts at approximately:

- A. 250 deg.
- B. 350 deg.
- C. 450 deg.
- D. 550 deg.

Answer: B

The flux usually used for hard solder is:

- A. rosin
- B. borax
- C. barium
- D. alum

Answer: B

Which of the following is a boring machine tool used particularly for large work place, types are horizontal and vertical?

- A. Boring mill
- B. Burrstone mill
- C. Cage mill
- D. Chile mill

Answer: A

A tap with a chamfer 1 - 1 ½ threads in length

- A. Bottom tap
- B. Center tap

- C. Plug tap
- D. Taper tap

Answer: A

A small portable hand drill customarily used by hand setters to drill the holes in breast called

- A. spiral drill
- B. diamond drill
- C. churn drill
- D. breast drill

Answer: D

A job, which is fixed away from the table, can be machined by

- A. running head
- B. moving head
- C. static head
- D. traveling head

Answer: D

Shaper tools are made of

- A. cast iron
- B. high speed steel
- C. mild steel
- D. wrought iron

Answer: B

Refers to the unit can be moved longitudinally along the swivel table and is clamped in position by two bolts one on either side of the base

- A. Cross stock
- B. Foot stock
- C. Head stock
- D. Tail Stock

Answer: C

When a lathe is put into back gear, it will go:

- ${\tt A.}$ at the same speed backwards
- B. slower
- C. faster
- D. at a slower speed backwards

Answer: B

When using a drill press, the work should be held with

- A. the hand
- B. a pair of pliers
- C. a vise or clamp
- D. gloves on

Answers: C

When drilling a hole in a piece of work held in a lathe chuck, and would use the:

- A. compound rest
- B. cross-feed
- C. tailstock and drill chuck
- D. headstock

Answer: C

Copper is annealed by heating to a cherry red color and:

- A. dousing in cold water
- B. cooling slowly in air
- C. dousing with oil
- D. dousing in hot water

Answer: B

The purpose of "annealing" is to make a metal:

- A. harder
- B. medium hard
- C. softer
- D. shiny

Answer: C

The purpose of "tempering" is to make a metal:

- A. harder
- B. softer
- C. less brittle
- D. more brittle

Answer: C

The minimum diameter of a piece of round stock necessary to make a square key $\frac{3}{4}$ " on a side is:

- A. 1.5"
- B. 1.06"
- C. 1.0"
- D. .75"

Answer: B

A fine grained, salty silica rock used for sharpening edge tools

- A. Oilstone
- B. Peeblestone
- C. Surface grinder
- D. Rocky oil

Answer: A

A hand tool used to measure tension on bolts

- A. Hammer
- B. Plier
- C. Screw driver
- D. Torque range

Answer: D

A hand tool used to measure engine crank web deflection

- A. compound gage
- B. dial gage
- C. distortion gage
- D. feeler gage

Answer: C

A kind of chuck, which has reversible jaws, which could be adjusted separately

- A. Combination chuck
- B. Independent chuck
- C. Magnetic chuck
- D. Universal chuck

Answer: B

A method whereby a gear is run with another gear that has abrasive surface material

- A. hobbing
- B. honing
- C. lapping
- D. milling

Answer: C

Is the process of cold works where a limited amount of material, resulted to a higher strength and it leaves a surface under compressive stress

- A. surface finishing
- B. smoothing
- C. surfacing
- D. surface rolling

Answer: D

Is largely used for low strength application such as elevator ropes not used for hoisting and for stationary guy ropes

- A. steel rope
- B. cast steel rope
- C. nylon rope
- D. iron wire rope

Answer: D

Nitriding process of surface treatment for steel tools is used for tools taking

- A. heavy cuts
- B. light cuts
- C. medium cuts
- D. straight cuts

Answer: B

At a very low cutting speeds the tool wear is due to

- A. hardness
- B. material
- C. plowing action
- D. transfer

Answer: C

They are mixtures of lard, cottonseed or rapeseed oils and mineral oils are called

- A. Cooling oils
- B. Cutting oils

- C. Heating oils
- D. Emulsions

Answer: B

How is the height of a bench vice adjusted?

- A. By using a wooden plate form $\[$
- B. By using a wooden packing piece under the vice base
- C. By using a vice adjusting fixture
- D. All of the above

Answer: D

Why hacksaw blade teeth get dullness?

- A. Coarse pitched blade is used on hard metal
- B. Pressure is not released in return stroke
- C. To much speed and pressure
- D. Any of the above

Answer: D

Files are classified according to

- A. grade and cut
- B. shape
- C. size and length
- D. all of the above

Answer: D

How are rivets made?

- A. Cold pressing
- B. Drawing
- C. Hot rolling
- D. Rolling

Answer: A

What support the top rake?

- A. Front clearance
- B. Side clearance
- C. Side rake
- D. Top rake

Answer: A

Which of the following reduces the rubbing action?

- A. Front clearance
- B. Side Clearance
- C. Side rake
- D. Top rake

Answer: A

Which of the following is used for all general purposes?

- A. Forging
- B. Production slotter
- C. Puncher slotter
- D. Tool room slotter

Answer: C

It is an operation of milling the complex surfaces with the help of a group of cutters mounted on the same arbor

- A. Climb milling
- B. Down milling
- C. Gang milling
- D. Straddle milling

Answer: D

It is an operation to divide the periphery of the job into number of equal parts

- A. Dividing head
- B. Indexing
- C. Protractor
- D. Slotting

Answer: B

The angle formed between the face of a tool and the work surface or the tangent to the work piece at the point of contact with the tool called

- A. clearance angle
- B. cutting angle
- C. rake angle
- D. wedge angle

Answer: B