

MANJEET JANGRA YOUTUBE - IC UKLANA

Module 5 Drilling (Week 1)

Learning Outcome Week 1

Day 1 : Trade Theory - 1.5.61 Drills	✓
Day 1 : Trade Practicals - 1.5.61 Mark off and drill through holes	✓
Day 2 : Trade Theory - 1.5.62 Drill Angles	✓
Day 2 : Trade Practicals - 1.5.62 Drill on M.S Flat	✓
Day 3 : Trade Theory - 1.5.63-65 Cutting speed, feed and r.p.m , drill holding devices	✓
Day 3 : Trade Practicals - 1.5.67 Drill through hole and blind holes	✓
Day 3 : Supporting Video	✓
Day 4 : Trade Theory - 1.5.72 & 73 Drill troubles - Causes and remedy, drill kinds	✓
Day 4 : Trade Practicals - 1.5.77 - Correction of drill location by binding previously drilled hole	✓
Day 4 : Supporting Video	✓
Day 5 : Trade Theory - 1.5.74 & 76 Standard marking system for grinding wheels	✓
Day 5 : Trade Practicals - 1.5.64 - Sharpening of drills	✓
Day 5 : Supporting Video	✓
Week 1 - Test your Learning (MCQ)	

Module 5 Drilling (Week 2) MANJEET JANGRA YOUTUBE - IC UKLANA

This section is a prerequisite. You must complete this section in order to unlock additional content.

Quiz Week 1

Quiz Week 1

15/15 points (ungraded)

Which type of taper is provided in the drill shank?

☐ Pin taper

☐ Metric taper☒ Morse taper **MANJEET JANGRA YOUTUBE IC UKLANA**☐ Jarno taper

Which is used to remove drills and sockets from the machine spindle?

☒ Drift **MANJEET JANGRA YOUTUBE IC UKLANA**☐ Sleeve☐ Punch☐ Hammer

What is the purpose of dressing the grinding wheel?

☒ Restore the correct cutting action of the wheel **MANJEET JANGRA YOUTUBE IC UKLANA**☐ Make it run concentric with the air☐ Align the wheel in the spindle☐ Remove cracks from the wheel

What is the name of the process of finishing the drilled hole?

**Reaming**

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Spot facing

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Counter boring



Counter sinking



Why hand reamers have uneven spacing of teeth?

**Reduce chattering**

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Remove more metals



Increase the efficiency



Increase the life of the tool



What is the drill size for $\varnothing 15$ mm reaming hole?

**14.75 mm**

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14.50 mm



15.25 mm



14.65 mm



How the drill chucks are held on the machine spindle?



By arbor

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By sockets



By sleeves



By special clamp



What is the purpose of clearance angle in twist drill?



Prevent rough holes



Prevent over size holes



Prevent unequal angle of cutting edges



Prevent friction of drill behind the cutting edges

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Which angle is determined by the helix angle in drill bit?



Point angle



Rake angle

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Chisel angle



Clearance angle



What is the purpose of type "N" twist drills?



Used for hard material



Used for brittle material



Used for soft and tough material Used for normal



low carbon steel

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Which decides the point angle of drill?



Drill material



Job material

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Cutting speed



Size of the drill



What is the result of the drill feed rate is too high?



High finish hole



Unequal flow of chips



Oversized hole



Overheated drill

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What is the other name of number drill series?

☐ Letter drill series

☐ Template gauge series

☒ Wire gauge series

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☐ Hole gauge series



Which letter specifies the largest diameter of the letter drill?

☐ A

☐ M

☒ Z

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☐ O



Which indicates the strength of bond in grinding wheel?

☐ Grid

☒ Grade

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☐ Structure

☐ Grain size



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✓ Correct (15/15 points) TypeMANJEET JANGRA YOUTUBE - IC UKLANA text here

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Module 5 Drilling (Week 1)

Module 5 Drilling (Week 2)

Learning Outcome Week 2

- Day 6 : Trade Theory - 1.5.66 Counter Sinking ✓
- Day 6 : Trade Theory - 1.5.67 Reamers ✓
- Day 6 : Trade Theory - 1.5.77 & 78 Gauges and types of gauges ✓
- Day 6 : Trade Practicals - 1.5.66 - Counter sink, counter bore and ream split fit (three piece fitting) ✓
- Day 6 : Supporting Video ✓
- Day 7 : Trade Theory - 1.5.68-69 Screw Thread and Elements ✓
- Day 7 : Trade Practicals - 1.5.70 - Form external threads with dies to standard size ✓
- Day 7 : Supporting Video ✓
- Day 8 : Trade Theory - 1.5.68-69 Screw Thread and Elements ✓
- Day 8 : Trade Practicals - 1.5.68 - Form internal threads with taps to standard size (through holes and blind holes) ✓
- Day 8 : Supporting Video ✓
- Day 9 : Trade Theory - 1.5.68-69 Screw Thread and Elements ✓
- Day 9 : Trade Practicals - 1.5.69 - Prepare studs and bolt ✓
- Day 10 : Trade Theory - 1.5.68-69 Screw Thread and Elements ✓
- Day 10 : Trade Practicals - 1.5.71 - Prepare nuts and match with bolts ✓
- Day 10 : Supporting Video ✓

Week 2 - Test your Learning (MCQ)

Quiz Week 2

Quiz Week 2 (MCQ)

9/9 points (ungraded)

What is the minor diameter of thread?

☐ Minor dia = Major dia – (2 x pitch)

☐ Minor dia = Major dia + (2 x pitch)

☐ Minor dia = Major dia + (2 x depth) **BRAGYOUTUBE UKLANA here**

☒ Minor dia = Major dia – (2 x depth) **MANJEET JANGRA YOUTUBE IC UKLANA**



What is the name of drilling machine?

☒ Pillar drilling machine **MANJEET JANGRA YOUTUBE IC UKLANA**

☐ Gang drilling machine

☐ Bench drilling machine

☐ Radial drilling machine



What is the name of the operation producing flat seat on drilled hole?

☐ Drilling

☒ Spot facing **MANJEET JANGRA YOUTUBE IC UKLANA**

☐ Countersinking

☐ Counterboring



What is the formula to calculate the blank size of external thread (where p=pitch and d=depth)?



$$D = d - p/10$$

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$$D = d + p/10 \setminus$$



$$D = d \times p/10$$



$$D = d \div p/10$$



What is the angle of counter sinking for riveting?



75°

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80°



90°



120°



What is the name of the operation to enlarge the hole for given depth?



Reaming



Spot facing



Counter boring

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Counter sinking



Which method is suitable to remove the broken stud very near to the surface?

☐ Ezy out method

☐ Making drill hole

☒ Prick punch method MANJEET JANGRA YOUTUBE IC UKLANA

☐ Using square taper punch



What is the advantage of centre screw in die stock?

☐ To tighten the die

☒ To adjust the depth of cut MANJEET JANGRA YOUTUBE IC UKLANA

☐ To adjust the dia of internal thread

☐ To adjust the dia of external thread



What is the method of removing broken stud?

☒ Ezy-out MANJEET JANGRA YOUTUBE IC UKLANA

☐ Prick punch

☐ Making drill hole

☐ Using square taper punch



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✓ Correct (9/9 points)

**THANKS BY
MANJEET JANGRA**