

Mechanical Engineering Department

Academic Year –2020-21	Class:TE
Semester–II	Date:05/6/2021
CO:CO1, CO2, CO3,CO4	PO:PO1, PO2,PO12

Innovative Teaching Methods

Title of Innovation method/activity:Digital Poster Making

1. Name of Faculty: Mrs. Ahire Vaishali V.

2. Subject: Manufacturing Process - II

3. Objective of Method:

- I. To make students familiar with manufacturing processes.
- II. To make students think and create their opinion about these processes.
- III. To provide platform to Present their opinion regarding these processes.

4. **Topic Covered through Activity:** Metal cutting, Machine tool and their application, Grinding and finishing operations, Advanced machining Processes.

5. **Description of method with Benefits (8 –10 lines):**

In this activity, students need to select the topics from the Syllabus mentioned. The students will be given sufficient time to gather information about the topic they selected. Students are informed to add the content out of syllabus if any as per the requirement of poster. They should develop digital poster from the information gathered using innovative ideas about selected topic. Subject teacher will analyze their performance on the criteria mentioned in rubrics.

Benefits of method:

- It will make students to think and study in depth about the selected topic .
- It will provide platform to express their ideas.
- Design ability of the students will improve

Roles and Responsibilities

- **Teacher**
 - Provide the task as per the basics studied by the student.
 - Assign topics to students as per their choice.
 - Explain the students how to involve in this activity.
 - Judge performance of individual student as per criteria mentioned below.

- **Student**

- Go through all the material provided on various Topics
- Provide choice of topics to subject teacher.
- Once topic assigned, understand and prepare a poster.
- Participate actively in digital poster making and try to cover all aspects of topic they have selected.
- Try to cover and implement all ideas in a poster.

6. Assessment tools with rubrics:

Assessment will be done by subject teacher on the basis of following rubrics

Sr. No.	Portfolio	Marks
1	Content of Digital Poster	4 Marks
2	Design Skill of the students	4 Marks
3	Innovativeness of the student	2 Marks

7. Evaluation sheet of attendee

Roll No	Name of Student	Content (4)	Design Skill (4)	Innovativeness (2)	Total (10)
2	ADOLE GIRISH PANDURANG	3	3	2	8
3	AHER PRERANA BHAUSAHEB	3	3	1	7
4	AHIRE SHUBHAM	3	2	1	6
5	AHIRRAO ABHISHEK MAHENDRA	2	2	1	5
6	AMBEKAR KRISHNA SANJAY	3	2	1	6
7	AMRUTKAR ATHARVA PRAMOD	3	3	2	8
9	AVHAD PRASAD SANTOSH	3	3	1	7
10	BADGE PARAG SUNIL	2	2	1	5
11	BAIRAGI PRIYA NARAYANDAS	2	2	1	5
12	BAVISKAR SIDDHI VIKAS	3	3	1	7
15	BHAMARE VIVEK ANIL	3	2	2	7
16	BHANGARE PRAMILA SUBHASH	3	2	1	6
18	BODKE PRAJWAL DIPAK	2	3	1	6
19	BODKE YASH SHIVAJI	3	3	2	8
22	BRAHMANKAR TEJAS SOMNATH	3	4	2	9
24	CHANDWADKAR ASHUTOSH SANTOSH	3	3	2	8
25	CHAUDHARI ABHISHEK SATISH	2	2	2	6
26	CHAUDHARI ANUJA NITIN	3	3	1	7
27	CHAUDHARI PRATIK KANHAIYALAL	3	4	2	9
28	CHAUDHARI UMESH SANJAY	3	4	2	9
29	CHAVAN RUTUJA VILAS	3	4	2	9
30	CHOPDA YASH RAJESH	3	2	2	7
31	DANGARE SAURABH BALASAHEB	3	3	2	8
32	DAWANGE SATISH TRAMBAK	3	4	2	9

33	DEORE CHIRAG MADHUKAR	3	3	2	8
34	DESHMUKH PRATHMESH RAVINDRA	3	4	2	9
35	DHANAIT SACHIN MADHAVRAO	3	3	2	8
36	DHANWATE ASHWINI BHAUSAHEB	3	4	2	9
38	GAIKWAD NINAD AVINASH	3	3	2	8
39	GAIKWAD SHRIKANT ANIL	3	3	2	8
40	GANGURDE KRUSHNA PRAMOD	2	3	1	6
41	GHOLVE SACHIN BABAN	3	4	2	9
42	HARAK SUSHANT ARUN	3	3	2	8
45	JADHAV ANIRUDDHA DILIP	3	4	2	9
47	JADHAV TRUPTI SANJAY	3	2	1	6
48	JANGLE RAHUL DNYANESHWAR	3	4	2	9
49	JOSHI DHRUV HEMANT	3	4	2	9
50	JOSHI SIDDHARTH NITIN	3	4	2	9
51	KADAM PRATHAMESH PARASHARAM	3	2	1	6
52	KADAM SANDESH SURESH	3	3	2	8
53	KALE SATISH GANPAT	3	3	2	8
54	KAPADNIS NIKITA YADAV	3	3	1	7
56	KOLHE MAYURESH VISHNU	3	3	2	8
58	LOHAKANE VEDANT ASHOKRAO	4	3	2	9
59	MAHALE HARDIK SUBHASH	3	4	2	9
60	MAHALE SHRUTI RAJESH	3	3	2	8
61	MAHATME OM KIRAN	3	2	1	6
63	METKAR SHANTANU HEMANT	3	4	2	9
64	MHASKE SHREYAS BHALCHANDRA	3	3	1	7
65	BADHE NIKHIL LALIT	3	3	1	7
66	BHADAGE RITIK PRASHANT	3	3	2	8
67	CHAUDHARI CHINMAY PRASHAT	3	4	2	9
68	DESALE AAYUSH DEEPAK	3	4	2	9
72	KATHE VINAMRA	3	3	2	8
73	NIKHIL SUBHASH CHAVAN	3	3	2	8

8. Impact analysis

SN	3-High/Excellent	2-Moderate /Average	1-Slight/Poor
1. Did you understand and cover the objective of the activity?	90.38%	9.62%	--
2. Do you find that methodology is helpful to cover the content beyond syllabus?	78.84 %	21.16 %	--
3. Does this helps you for building a good team?	73.07 %	26.92 %	--
4. Does the content covered are relevant and will be helpful as a Life-long learning?	73.07 %	26.92 %	--
5. Can you want to conduct such activity again?	75%	23.07 %	0.01 %

9. ActivityPicture

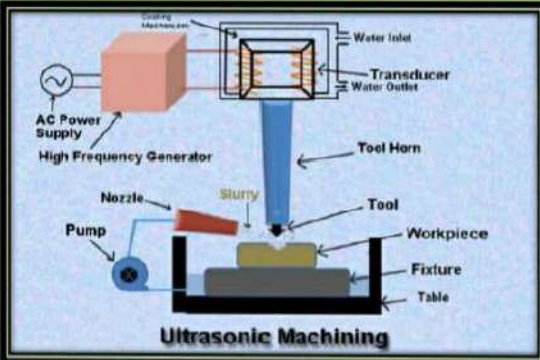
ULTRASONIC MACHINING

Prepared By: Dhruv Hemant Joshi
Class: TE (A) Roll No: 49

The term ultrasonic is used to describe a vibratory wave of a frequency above that of the upper limit of the human ear. A high frequency electric current is supplied by the ultrasonic oscillator to the ultrasonic transducer, which converts electric energy into mechanical vibrations. The shape of the cutting tool is mirror image as that of which is produced on the workpiece.

Advantages of USM:


- Extremely hard materials can be machined.
- Good surface finish and accurate profile can be obtained.
- Metal removal cost is low.
- The machined component is stress free.
- Physical properties of material remain same.




Ultrasonic Machining


DISADVANTAGES OF USM:


- Soft materials are difficult to machine.
- Initial equipment cost and tooling cost is high.
- Power consumption for machining is also high.
- After operation abrasive slurry should be replaced, to get next operation more efficient.




10. For review and critique contact: e-mail address of faculty and HOD ahire.vaishali@kbtcoe.org, hod.mech@kbtcoe.org


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