

**VIDYAVARDHINI'S
NATIONAL CONFERENCE ON
TECHNICAL ADVANCEMENTS FOR
SOCIAL UPLIFTMENT
VNC - 2020 TASU
4TH APRIL, 2020**



Organized by:
**Vidyavardhini's College of
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About us:

Vidyavardhini means a Body committed to enhancement of Knowledge. Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering in six branches.

Objective of VNC 2020 TASU

Technology has always been potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment, sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, industrialist and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements.

Call for paper

We welcome submission in following area

1. Sustainable Computing
2. High Performance Computing
3. High Speed Networking and Information Security
4. Software Engineering and Emerging Technologies
5. Mathematical, Experimental, Computational and AI, IoT Techniques in Mechanical Engg.
6. Industrial Engg., ERP, MRP, SCM
7. Renewable Energy Technologies
8. Pollution Control and Waste Management
9. Advances in Structural engineering
10. Present geotechnical practices
11. Present practices in construction management
12. Recent developments in Instrumentation, control and automation
13. Embedded Systems, IoT and VLSI Design
14. Optical and Wireless Communication for NGN
15. Antenna and Microwave Devices
- Any other relevant topics

Important Dates:

Submission of full length paper

15th Feb 2020

Paper Acceptance Notification

22nd Feb 2020

Submission of Final Version of Paper

29th Feb 2020

Registration Deadline

5th March 2020

PPT Submission

20th March 2020

Conference

4th April 2020

Registration Fee Details:

Category of Delegates / Authors	Indian Authors & Delegates (in INR)
Full Time Students (UG)	1,500.00
Teachers/ Research Scholars/ PG students	2,500.00
Industry	3,500.00

Paper Submission:

Paper submission should be made strictly via Easy Chair the submission link for VNC 2020 "TASU": www.easychair.org/conferences/?conf=vnc2020

Download paper template from:

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***Best paper award
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Automatic Feeding Mechanism For Embossing of Welding Rods

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Abstract- Embossing is a conventional process used in the stamping and printing industry, where it is used to stamp the logo. Conventionally manual feeding of components is provided into machines due to the design complications and limitations, which reduces the output capacity. Automatic wire feeding mechanism for rod diameter 1.6 mm, 2.4 mm & 3.2 mm is designed and manufactured for embossing purpose.

Keywords—welding rod, Hopper, feeding mechanism, Key, Shaft, Bearings, Motor Speed reducing drive, electrical unit.

INTRODUCTION-

A suitable mechanism has been developed in the following research where multiple already present options were taken into consideration while deciding the final outcome and the cost for the same. The undesired outcomes and the issues following are explained in detail where the suitable mechanism is then finalized according to the industry requirement and budget.

The developed mechanism also favors the functioning and the space constraints of the industry where complex automated machinery is equipped with series of operations lined up.

This project is a successful attempt to fulfill the industry requirements within the space and budget constraints also providing a degree of flexibility to meet their production demands using automation.

SELECTION/DEVELOPMENT OF MECHANISM-

MECHANISM NO- 1

Feeding Mechanisms Feeding long U-shaped parts

When parts arrive in bulk, they often need to be oriented and fed to the next machine. On the left cylinders (rods in this case) in bulk are placed in a hopper. The vibrator serves to arrange the cylinders such that their long axes are parallel and help to prevent clogging. The cylinders then drop down a chute where they are fed into a slot in a wheel. The cylinders exit the machine with uniform orientation as long as their ends are the same. If the ends of the cylinders are different then it will be necessary to run them through an orientation mechanism. This is shown on the next slide on the right u-shaped pieces lie in a randomly oriented pile. The rotary center blades catch the parts and as the center blades are indexed, the parts slide off of the center blades and onto the blade feeder Feeding long cylinders Feeding U-shaped parts. The drum in the rotor is filled with rods as the parts flow through the neck of the hopper activated with a vibrator. This mechanism is not suitable as there is tangling of rods in the hopper neck and costs go high due to the requirement of precision.

REF: Mechanisms and Mechanical Devices Sourcebook, N. Chironis, N. Slater, McGraw-Hill Inc., New York, 1996

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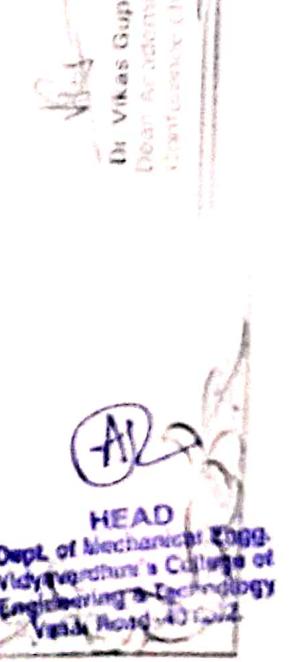
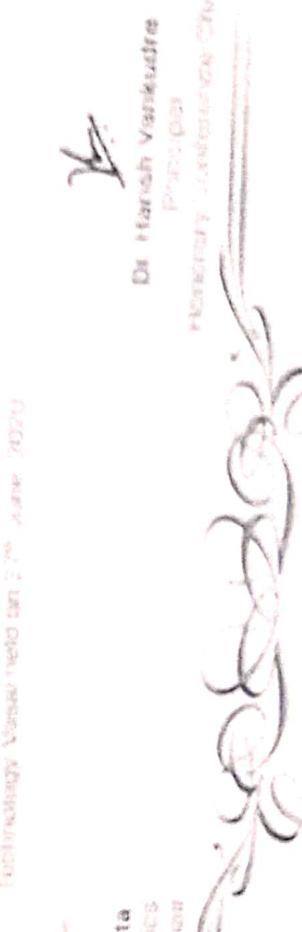
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Korean Autonomy

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Automatic Feeding Mechanism For Embossing of Welding Rods (NTASU1028)

at the VITVYEVATCIRUS National Conference on 2020 "Technical Advancements for Social Upliftments" organised by VITVYEVATCIRUS College of Engineering and



Dr. Harish Verma, M.A., Ph.D.,
Editor-in-Chief

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