



Holy-wood Academy, Kolhapur's

SANJEEVAN ENGINEERING AND TECHNOLOGY INSTITUTE

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Department of Mechanical Engineering

Date: 27/09/2018

To,

The Principal,

Sanjeevan Engineering and Technology Institute.

Panhala, Kolhapur.

Subject: Regarding Permission for Industrial Visit.

Respected Sir,

As per of our curriculum of Shivaji University Kolhapur T.E. Mechanical Engineering Students under the course of Theory of Machines II, having Industrial Visit to study Gear manufacturing processes. Thus we have arranged an Industrial Visit to **RND INDUSTRIES, MIDC Shirol** on Friday **28/09/2017**.

So, please permit us to carry out visit.

Thanking You,

Yours Sincerely,

Prof. A.T. Bhosale

Prof. V.H. Deokar
HOD Mech.

Ref. No.: SETI/MECH/IVL/2018-19/14
Date: 28/09/2017

To,
The Manager,
RND Industries
MIDC Shirol, , Tal:-hatkanangale,
Dist:-Kolhapur
Subject: Permission for Industrial visit.

Respected Sir,

As you may be aware Sanjeevan Engineering and Technology Institute, Panhala is one of the most reputed Engineering Institution and known for its excellent record in academics and co-curriculum activities. The state of art facilities and competent faculty provide an excellent climate for the all round development of students.

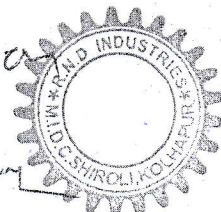
As per of our curriculum of Shivaji university, Kolhapur, for **Third Year Mechanical Engineering** students an industrial visit is required. This will help students to visualize the knowledge they have gained under the course of **Theory of Machines II**. It will be fruitful that the students with academic background have a glimpse of the factory in order to have a better appreciation of practical applications of theory.

In the above background, we would like to send a batch of **71 nos.** students of third year Mechanical Engineering Department accompanied by **2 staff** members to visit your esteemed plant on **28/09/2018**.

I request you to kindly accord the necessary permission for the above and arrange for guiding the students. We assume you that our students will observe the rules and regulations that are prescribed by your company for the visitors and will in no way disturb the functioning of the company.

Thanking you,

50
M/s RND Industries
Vilited is a
28/9/18
Anurag



Yours Faithfully

Jaodh
HOD
Mechanical Engineering



Holywood Academy's, Kolhapur
Sanjeevan Engineering and Technology Institute, Panhala
Roll Call List - TE Mech. Academic Year : 2018-19 (SEMESTER-I) 28/09/2018
Attendance Industrial Visit At Precitech Industries MIDC Shirol

| Roll No. | Name of Student | Sign | Roll No. | Name of Student | Sign |
|----------|-------------------------------|------|----------|---------------------------------|------|
| 1 | ASWALE BAJIRAO CHANDRAKANT | | 37 | KADAM AJINKYA ARUN | |
| 2 | BHOSALE VISHWAJEET PANDURANG | | 38 | KADAM OMRAJ DILIP | |
| 3 | BODAKE GOPINATH JAYSING | | 39 | CHUOGALE SURAJ ANANDA | |
| 4 | CHIKHALKAR RAHUL SUNIL | | 40 | DHUMAL KETAN KIRAN | |
| 5 | GHARGE SOURAV VIJAY | | 41 | DINDE RUSHIKESH ANKUSH | |
| 6 | KORAVI RAHUL SHASHIKANT | | 42 | KHOT RANJEET BHIKAJI | |
| 7 | NAGARAJAMAN NURMAHAMAD | | 43 | PATI VIJAY VASANT | |
| 8 | NAKADE KUNAL ADESH | | 44 | PATIL AKSHAY PRAKASH | |
| 9 | PALKAR JAYDEEP GANPATI | | 45 | PATIL ATISH SAMBHAJI | |
| 10 | PATIL NAMRATA RAVSO | | 46 | PATIL AVDHUT MADHUKAR | |
| 11 | POWAR RUSHIKESH RAJENDRA | | 47 | PATIL MAHESH AANANDA | |
| 12 | SOLANKURE SATISH DHANAJI | | 48 | PATIL NITESH NAMDEV | |
| 13 | TAVADE PRASHANT RAMCHANDRA | | 49 | PATIL OMKAR YASHWANT | |
| 14 | KASHID MAYURI | | 50 | PATIL SANTOSH BALU | |
| 15 | DHERE VAIBHAV RAGHUNATH | | 51 | PATIL TUSHAR JAYSING | |
| 16 | GAWADE ADINATH DATTATRAY | | 52 | PATIL VAIBHAV ANIL | |
| 17 | JHORE VAIBHAV DHONDIBA | | 53 | PATIL VAIBHAV MAHADEV | |
| 18 | KHADE SANDESH VITHAL | | 54 | PAWAR AASHISH JAGANNATH | |
| 19 | MANGAONKAR KARAN PRAKASH | | 55 | SALOKHE VINIT VILAS | |
| 20 | MARALKAR VAIBHAV SUBHASH | | 56 | SAWARDEKAE VIVEK KIRAN | |
| 21 | MEVEKARI SAURABH ANIL | | 57 | SHEDAGE SWAPNIL SANJAY | |
| 22 | PANARI OMKAR CHANDRAKANT | | 58 | SHINDE PRUTHVIRAJ VIJAYSINH | |
| 23 | PATIL AKASH HINDURAO | | 59 | SUTAR OMKAR RAJU | |
| 24 | PATIL JAYDEEP SHAMRAO | | 60 | TELI GURUPRASAD DEELIP | |
| 25 | PATIL OMKAR ADGONDA | | 61 | TEPUGADE PRASAD ANNASAHEB | |
| 26 | PATIL ROHIT YASHWANT | | 62 | KALE KAUSHAL SANJAY | |
| 27 | SHAIKH MUBIN GOUSMOHMMAD | | 63 | RAMANE VINAYAK DINKAR | |
| 28 | TAUFIK SHABBIR SUTAR | | 64 | PATIL VIDHYADHAR LAXMAN | |
| 29 | BELGAONKAR ROHAN RAJARAM | | 65 | SHINDE AVINASH SANJAY | |
| 30 | CHAVAN OMKAR SUNIL | | 66 | DHONUKSHE ASHITOSH ANANDA | |
| 31 | GANGADHARE KUNAL SHIVAJI | | 67 | KATKAR RUSHIKESH RAJENDRA | |
| 32 | JADHAV ANIKET RAJARAM | | 68 | KOLI VINAYAK | |
| 33 | JADHAV DHAIRYASHEEL JAKAR | | 69 | FADATARE HARSHVARDHAN DHANANJAY | |
| 34 | JADHAV HARSHVARDHAN DHANANJAY | | 70 | PATIL RAHUL LAXMAN | |
| 35 | JAISWAL RAJAT DILIP | | 71 | GUJAR ROHIT LAHU | |
| 36 | JITKAR KRUSHNARAJ SANTOSH | | | | |

CLASS COORDINATOR
T.E. Mech.

H.O.D.
Mechanical Engineering Department

Industrial visit Report
visit at

" R.N.D, Industry "
Shirali MIDC, Shirali "

Theory of machine IF
dated on,

Friday, 28th sept, 2018.

Shaping
m/c
1

Gear
Hobbing
1

Electrical Hoist

Shaping
m/c
1

Gear
hobbing
1

Shaping
m/c
1

Lathe
m/c
1

Company
Office

Lathe
m/c
1

loom gear making

Title :- Industrial visit Report.

Name of Industry :-

R.N.D. Industry, Shiroli MDC Shiroli.

Purpose & Introduction -

Under the guidance of Prof. A.T. Bhasle Sir for subject theory of machine II, we visited to R.N. Industry Shiroli MDC. The company mainly known for Gear manufacturing by gear machine process.

Our main purpose to visit is to know how gears are manu. by machine process like hobbing, shaping etc. method wherever we learned in class room.

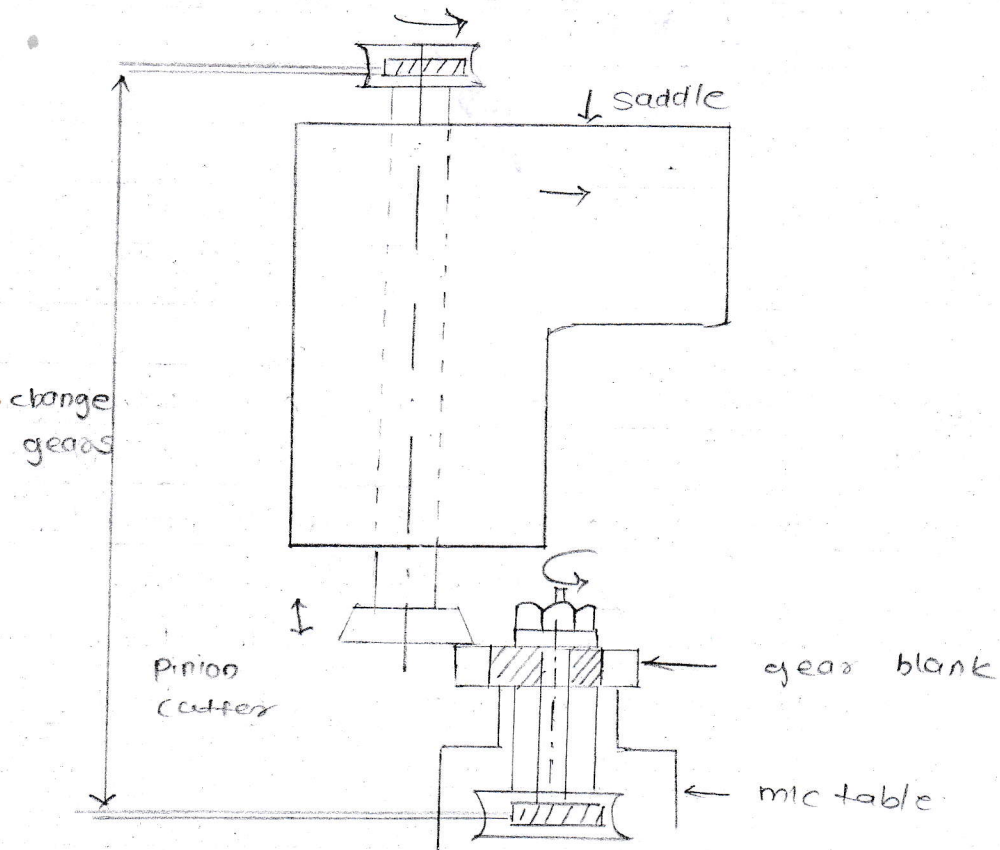
About Industry

Rack cutter, pinion, spur gear, helical gear, bevel gear, different gears, worm gears are manufactured in this industry. According to the required of component mainly parts are provided to sugar mill.

The layout given in fig at the entrance of industry office with control all the opr. In industry also it's provides these are diffn types placed with manufactured its industry blanks. & for spur gear

After this in order room there are two gear hobbing mc which are used to make helical gear. In this one is bigger provides with electrical hoist to carry blanks & one is smaller.

After that there is a lathe mc. provided to produce worm gears



is gear shaping opr.

Technical Information:

F) Gear shaping:

1) The tool & the gear blank are as they would on actual meshing.

2) There are two types of cutter used in shaping

1) Pinion type cutter

2) Rack type cutter

In this industry pinion type cutter is used.

3) The cutter is mounted on the spindle is provided a rot. motion on its own axis & gear blank rotate

4) As the cutter prod. each tooth space on the gears is generated a series of incremental cuts which collectively produce the tooth profile.

5) There is coolant flow (oil) continuously to remove

6) There is cutting takes place only during one stroke of the cutter. The process is slower than gear hobbing.

7) Special helical guides are req. for cutting helical gears.

II) Gear hobbing:

1) It is a most economical & fast method of producing accurate spur & helical gears.

2) The process is carried out on gear hobbing m

3) After the gear blank & the hob are set-up properly in the mc. Initially the gear blank moves towards the rotating hob unit proper depth is reached.

conclusion &

from this, visit, we get information & practical knowledge about gear manu. process. we also get idea about that how actually a tooth profiled is generated on gear blank. the visit help us to build basic concepts of gear manufacturing in us.

Interacting with industry also provide a chance to build network & communication skills overall visit help us clarify diffn concept about gears & ths manufacturing process.

Abhishek
10
13

The common normal of two SF which intercept line joining centre of rotation of two SF at fixed point

which divides centre distance \times ratio $\sin \phi$