Seshadri Rao Knowledge Village, GUDLAVALLERU Department of Mechanical Engineering

Date: 18.08.2018.

#### **CIRCULAR**

All the faculty are here by informed that MEA is arranged aguest lecture on "Heat Treatment of Steels" by Sri K.V Ratnam, Superannuated Technical Officer (Gr.A, Gazetted), Indian Ordnance Factories on 24.08.2018 for third year mechanical students.

Venue: A/C Seminar Hall (N-216)

Time: 10:30 AM

H.M.E.





# IE (I) STUDENT CHAPTER



In association with

MECHANICAL ENGINEERING ASSOCIATION

Is Organising

Guest Lecture on Heat Treatment of Steels

on

24<sup>th</sup> August 2018, 10.30 AM



# Department of Mechanical Engineering Gudlavalleru Engineering College

(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)

Seshadri Rao Knowledge Village

GUDLAVALLERU - 521 356

Krishna Dist. A.P.

# Programme Schedule

- ⇒ Welcoming Guests
- ⇒ Introduction to Speaker
- ⇒ Lecture on Heat Treatment of Steels
- ⇒ Vote of Thanks

### Guest Speaker

Sri. K.V. Ratnam, Superannuated Technical Officer (Gr.A,Gazetted), Indian Ordnance Factories

#### Coordinators

Sri G. Karuna Kumar. Asst. Prof, Sri.B. Ramesh Nayak. Asst. Prof,

#### Venue

ME Seminar Hall (N – 216)

# CURRICULAMVITA

K.V. RATNAM 7-147 Main Road NIDAMANURU

VIJAYAWADA (Rural) Pin: 521 104.

Phone no: 0866 2841150, Mobile: 09441175150

Email iD: kondetiratnam@gmail.com

Aim

A superannuated technical officer (Gr.A, Gazetted) having put up 32 years of service in so called 4<sup>th</sup> Arm of Indian Armed forces "Indian Ordnance Factories Organization" Dept of defence production, min of Defence, Govt of India and 4 years in private sector involving tool making in tool room.

Through re- employment is not the need of the day in my case, normally what others do, but I would like to share my experience in the areas mentioned a head this CV, with the engineering students.

**Employment** 

1. Indian Ordnance Factories

a) Heavy Vehicles Factory , Avadi, Chennai 1999-June 2010

b) Ordnance Factory Medak, Yeddu Mailaram Hade 1984-1999

c) Gun Carriage Factory, Jabalpur 1978-1984

II. Private Sector 1974-1978

Fynerience

Area: a) Design and drawing office, in House R & D, PROJECT OFFICE T-90 (IN THE CAPACITY OF DIV. OFFICER Gr.'A' Gazetted)

5 years , involving transfer of technology (TOT) in manufacturing in T-90 Main battle tanks, Russian collaboration in the areas of design document, process technology documents, tooling, Non std eqpt (NSE) TEST Rigs, GOST & OST standards , technical specification, trade articles, operating an instruction manuals. Importation of CKD, SKD and product support for indigenized production , and associated in conducting annual meeting of Indo-Russian Inter Governmental Commission on land systems" chaired by Dy. Defence Minister from Russian side and the secretary defence production from Indian side at different cities in India for smooth indigenization of T-90 Tanks production in India.



- Conducting product indigenization meeting with different agencies like DGQA.
- Army, PSUS & MoD.
- Conducting Alteration Committee meeting for product development with the above agencies.
- Looking after process and tool design, in house R & D activities, product design and drawing office.
- Running the section having 30 staff to its strength.
- b) FINAL ASSYMBLY (In the capacity of head of section Gr.C)
  15 years, in final assembly of infantry combat vehicle BMP.II) and main battle
  tank T-72) involving Hull suspension assembly mounting of systems like power
  pack, running gear, control linkage, fuel, pneumatic and electrical on to the
  hull, static checks. Parallel assembly of Turret which involves mounting of
  cradle with barrel, Gun control system, vision devices and target designation
  system and gun stabilizer. Integration of hull with turret and mounting of
  track air tight checks of total vehicle and post static check and making vehicle
  road worthy for running trials. Running the shop having 30 staff and 250
  industrial employees to its strength fulfilling administrative, ISO, industrial
  safety and harmony obligations.
- c) 2 years in tool room, looking after right from framing of specifications and procurement of plant and machinery for tool room which handles manufacture of all types of gauges, templates, Jigs, fixture, press tools, thermo press tools from 10 T 4000 T. Running the shop having 35 staff and 150 industrial employees to its strength fulfilling administrative , ISO, industrial safety and harmony obligations.
- d) Tool Planning office (in the capacity of Head of Section Gr.'C')

  10 years, in tool planning section looking after the entire factory tool requirement which involves design, manufactures, procurement and control of all kinds of metal cutting tools, Gauge and measuring instruments, jigs ,fixtures, press tools, machines accessories and work holding devices and indirect consumables having 20 staff in its strength.
- e) Tool room (in the capacity of supervisor 4 years in manufacture of injection, compression, transfer and blow moulds for different components. Running the shop having 20 workers to its strength attending tool try outs and trouble shooting in production.

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**Education:** 

Academic:

passed SSLC in first class

1968

Technical:

passed in first class

1971

Diploma in mechanical Engineering

Additional:

Successfully completed 2 years course (later converted to post diploma) in plastics mould making from "Central Institute of Plastics Engg. and tools, a Govt. India undertaking, guindy, CHENNAI. A project under ILO and UNDP.

Personal:

Age

66 years

D.o.B

01-07-1950

**Nationality** 

Indian

Married

2 sons

1<sup>st</sup> son aged about 41 years with M.Sc (chemistry) Working as principal of Junior Corporate College for the past 5 years in Hyderabad. Married having 2 sons.

2<sup>nd</sup> son aged about 40 years with B.Sc & GNIIT working as project manager in M/S ford Technology India Itd., Chennai Married

having 2 sons.

Having good health condition.

HOBBIES:

Enjoying mutual trust, sincerity and honesty of an organization or institution. Disciplined and hard working and also having the same track record. Participating in Technical Discussions in the areas like production technology, production planning and control, work shop practice (metal cutting), classification of steels, heat treatment.

#### Lanuages known:

- English( speak, read and write fluently )
- Telugu(mother tongue),(speak, read and write fluently)
- Hindi (speak, read and write fluently)
- Tamil (speak and understand only)

#### PREAMBLE

This Faculty is having 40 years of experience in both Mechanical and Automobile Engineering. After retirement, worked for Navta Group of Industries as Principal of their ITI and Driving School. During this period, approximately 250 students from various Universities and Colleges have been interviewed for recruiting them as technical personnel including campus interviews also

It is understood from the above interviews that there is a lot of gap between institution and the industry. To bridge this gap, it is determined to share the experience of this faculty with the engineering students. To be more precise, this faculty shall work in conjunction with placement departments in the colleges. In other words, placement departments shall not only search for the placement of the students shall also prepare the students for interviews in the domain. This faculty will deal with the following topics in the real terms of the industry being followed so that if an engineering student appears for an interview in the manufacturing sector, he can articulate something on the subject.

The topics are:

- Production Technology
- Production planning and control
- Workshop technology (machining)
- Metrology and Gauging
- Heat Treatment of steels
- Classification of Tools steels
- Limits, fits and tolerances
- Material management and stores
- Hand tools and tools used on the machines
- Cutting tools
- Jigs, Fixtures, Press Tools and Dies
- CNC basics
- Automobile engineering basics

Seshadri Rao Knowledge Village, GUDLAVALLERU (Autonomous 2016-2017 Batch)

### MECHANICAL ENGINEERING DEPARTMENT

Students Attendance Sheet For Guest Lecture on Heat Treatment of Steels

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SNo.	H.T.NO.	Sign. of the candidate
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13	16481A0370	K.malieth	
14	16481A0371	E. Arri Kumon	
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37	16481A0395	M. Najaraya:	

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SNo.	H.T.NO.	Sign. of the candidate
38	16481A0396	M. Kasi Vignesh
39	16481A0397	M. Raja Kuman
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41	16481A0399	M. Subta Rom
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#### PROGRAM REPORT

Name of the Program

: Guest Lecture on "Heat Treatment of Steels"

Dates

: 24.08.2018

**Details of the Resource Person** 

Sri. K.V. Ratnam, Superannuated Technical Officer

(Gr. A, Gazetted), Indian Ordinance Factories

Objective of the Program

: To bring awareness on the heat treatment of steels

Outcome of the Program

Students are able to understand the need of heat

treatment of steels.

No. of Participants

: 208

**Concluding Remarks** 

Speaker has explained the various heat treatments for

: steels in order to achieve the desired properties based

on the application it is used for.

Coordinator