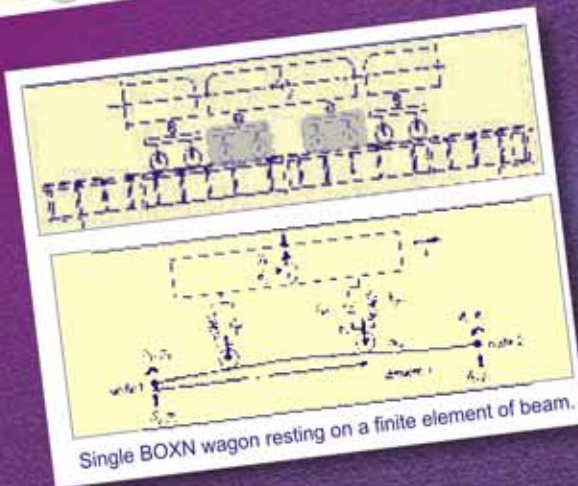
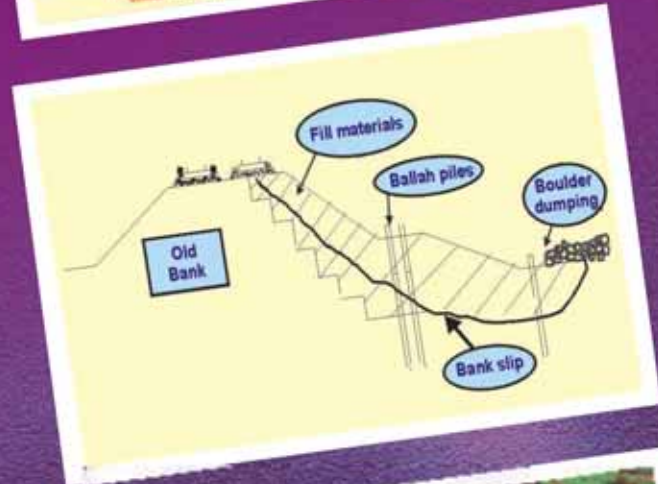
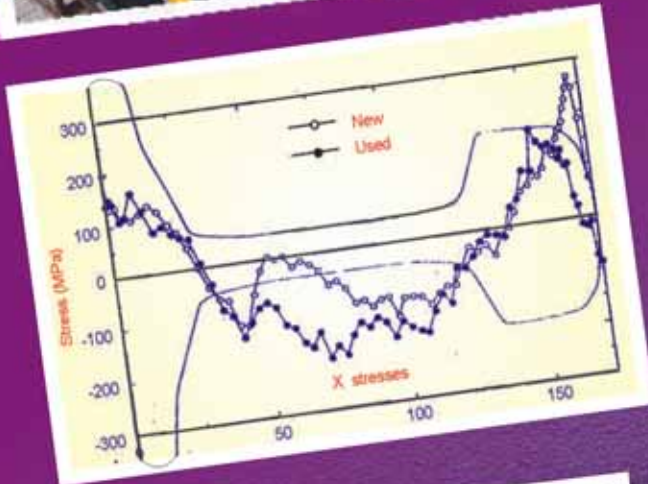
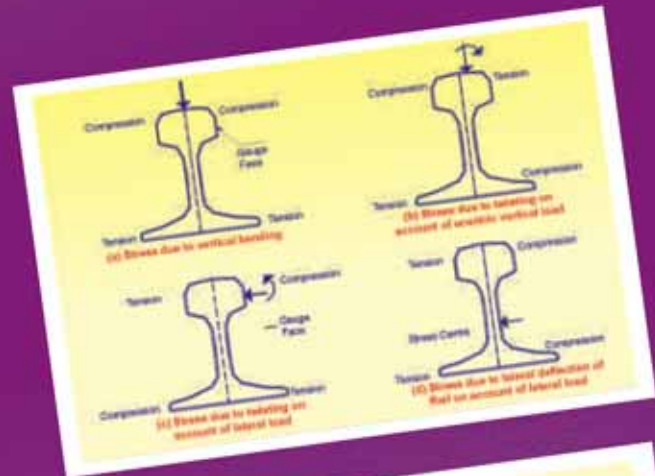


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Single BOXN wagon resting on a finite element of beam.



**Important Recommendations of CPDE/CE (WORKS) Seminar held at
IRICEN, Pune on 04.02.2010 & 05.02.2010**

1. Railways should take proactive steps to develop standard drawing for various works of passenger amenities and other works of general use.
2. Duty list of drawing office staff should be issued by all zonal railways.
3. S.R. has developed a software based on ORACLE for "Better Contract Management". The same can be adopted by other Railways and customized to their requirements.
4. The earlier concept of issuing policy circulars / letters through Engineering Standing Orders may be revived.
5. Railways should plan more buildings following the Green Building principles for energy conservation and to save environment.
6. Western Railway should develop a draft manual for 'Maintenance and Structural repairs of Heritage Buildings in Railways'.



**IRICEN
Celebrates Foundation Day**

on 24th March 2010

Seminar on

**" Computerization of Civil Engineering
Department of Indian Railways"**

is organized by 1983 Batch IRSE officers on the occasion.

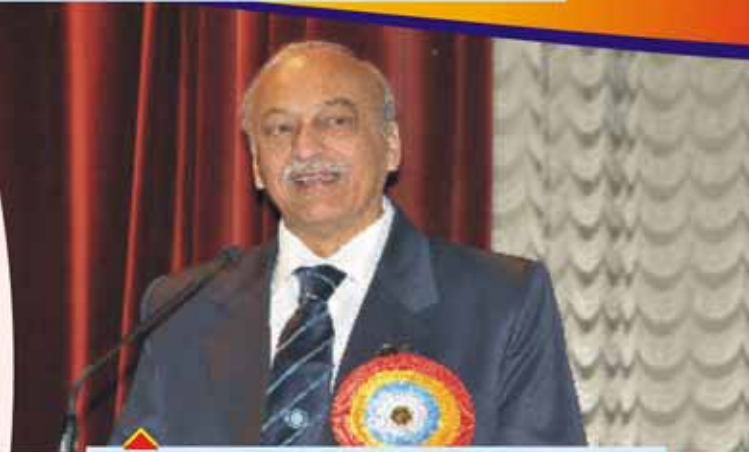
The seminar was organized by IRICEN at Dhanvantri Auditorium, AFMC, Pune on 21st and 22nd January 2010 under the aegis of Institute of Permanent Way Engineers(India). The seminar was a big success and was attended by more than 450 delegates from various Railways, PSUs, Production units and RDSO.



Inauguration of Souvenir by Member Engineering

Several eminent serving & retired railway officers graced the occasion by their presence. Prominent among them are

- Shri Rakesh Chopra, Member Engineering
- Shri Shiv Kumar, General Manager/ N.F.Railway
- Shri S .K. Malik, Addl. Member / Civil Engg.
- Shri Sudhir Kumar, CCRS
- Shri M. V. Basrur, Retired CRB
- Shri V. K. Agnihotri Retd. M.E.
- Shri S. P. S. Jain, Retd. M.E.
- Shri J.S. Mundrey, Retd. Advisor Railway Board
- Dr. M. Seshagiri Rao, Retd. MD/IRCON
- Shri V. K. J. Rane, Retd. MD/IRCON
- Shri Ankush Krishan, Retd. MD/IRCON
- Shri G. P. Garg, Retd. CCRS
- Shri Budh Prakash, Retd. General Manager NCR
- Shri S. K. Gupta, Retd. GM/Metro
- Shri Vinod Kumar, Retd GM/Metro
- Shri G. N. Phadke, Retd GM/C/NFR
- Shri G. K. Limaye, Retd GM/WR



Shri Rakesh Chopra Member Engineering addressing the gathering



Inspection of Track Maintenance Equipment (Tack Horse) By M.E.

INSTITUTION OF PROFESSIONAL ENGINEERS AND
NATIONAL TECHNICAL SEMINAR
ON
**"IMPACT AND EXPERIENCE OF HEAVY AXLE LOADS ON I.R.
& MAINTENANCE STRATEGIES"**
&
**"INNOVATION IN DESIGN & CONSTRUCTION OF ROB/RUBs
ON THE I.R."**
PUNE 21 - 22 JANUARY 2010

Inaugral Session of IPWE Seminar

There were two topics for the IPWE National Technical Seminar this year namely - (i) "Impact and experience of heavier axle loads on Indian Railways and resultant maintenance strategies" and (ii) "Innovation in Design and construction of road over bridges and road under bridges on the Indian Railways".

The topics of the seminar were very appropriate and timely in today's scenario. Indian Railways has taken few steps for entering into an era of heavier axle loads and the authors shared their experiences of running the heavy axle loads for last 4 years on Indian Railways and suggested the short term and long term measures to be taken. Similarly, the system improvements required for facilitating the fast construction of ROB's and RUB's so as to enhance safety were also brought out. In all 41 papers were presented by the national and international authors during the seminar. The papers were thought provoking and provided useful guidelines for adoption on Indian Railways.

Apart from the seminar papers, one special session for the trade was also kept for the first time in the seminar wherein trade representatives not only presented the technical innovations in track technology but also expressed their frank opinion to enhance the co-operation between industry and Indian Railways to achieve a win-win situation.

An exhibition containing 26 stalls was also organized at the seminar venue on this occasion in which many national and international track fittings and track maintenance equipment manufacturers showcased their latest products. The exhibition was also the center of attraction for the delegates and invited lot of enthusiasm and queries from the participants. The exhibition was having the stalls from IPWE, IRICEN and South Western Railway also. The recommendations of the seminar on the seminar topics are as below:

Shri Joseph W. Palace from Zeta Tech.
Presenting his Paper



A View of Exhibition at Seminar Venue



A) TOPIC 1: Impact and Experience of Heavier Axle Loads on Indian Railways and resultant maintenance strategies:

- Indian Railways needs to go for structural improvements in the track structure as well as adopt the right maintenance strategies for reducing the adverse effects of running higher axle loads.
- Use of Head Hardened Rails is necessary on sharp curves since rail life has reduced drastically with heavy loads on such locations.
- Design of rubber pads needs to be modified suitably for plain track as well as for turn-outs.
- Rail Grinding is inevitable for running heavy axle loads to have proper rail-wheel interaction. Training of staff involved and a systematic co-ordinated approach is required to reap the benefits of rail grinding.
- Proper Rail Defect Management system needs to be developed to rationalise ultrasonic testing of rails. Vehicle based testing using state of the art machines is called for on HAL routes.
- Rail lubrication on curves will go a long way in reducing the side wear of rails on curves. Wheel Actuated Rail Lubricators of latest designs need to be adopted.
- Greater use of technology such as WILD need to be adopted to find the high impact generating rolling stock and follow up action on the same is a must to reduce the ill effects on track.
- The population of AT welds failing is very high and their population needs to be controlled by making use of longer rails and on site flash butt welds. The quality of AT welds in the field has to be ensured.
- Due to faster deterioration of track, the need for proper maintenance blocks for track maintenance has to be impressed upon.

Technical Session of Seminar



B) TOPIC 2: Innovations in design and construction of Road Over Bridges and Road Under Bridges on Indian Railways:

- Technological innovations are required in design and execution of ROB and RUB for expediting the construction and overcoming the site specific constraints.
- The processing time including approval of GAD etc. needs to be reduced.
- The multiplicity of agencies for execution should be avoided. Government may float a separate dedicated company for the job since the volume of construction and the cost involved is high.
- Proper selection of bridge form needs to be done before deciding the scheme. This will include the type of the bridge, scheme of launching etc. to suit the site conditions. So a careful technical planning in initial stages of the project is necessary.
- During the box pushing, innovative methods to be evolved to minimise the disturbance to track so that the work can be done without block under speed restriction.

* * *

Felicitation of Shri M.V.Basur as the Senior most IPWE member attending the seminar

