

ABSTRACT

Heat straightening of steel beams on bridges struck by over height trucks has become common practice in the recent years in Iowa. A study of the effects of this heat straightening on the steel beams thus straightened is needed.

Appropriate samples for mechanical and metallurgical tests were cut from the same rolled beam from the end which was heated and the end which was not heated and the test results were compared. The test results showed beyond doubt that the steel was being heated beyond the permitted temperature and that the impact properties are being drastically reduced by the current method of heat straightening.