

EVALUATION OF SOME PHYSICAL ENVIRONMENTAL CONDITIONS IN  
AN IRON FOUNDRY AND A STEEL FOUNDRY

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Environmental measurements were carried out for thermal factors, light and sound.

The wet bulb-globe temperature (WBGT) profiles in the steel foundry significantly exceeded the threshold limits set by the Occupational Safety and Health Administration - 1974.

The noise in the foundries was intermittent and fluctuating. The noise levels were below 90 dB(A), the British standard in many operations, except around the arc furnace and pattern shop in the steel foundry, fettling/grinding operations in both foundries.

The average illuminance measured for different operations were below the values recommended by the Illuminating Engineering Society - 1977. Natural lighting was better in the iron foundry than in the steel foundry as the former was small and more open.

(This study was funded by the World Health Organization)

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