HEAT ENGINES

EMBRACING

THE THEORY, CONSTRUCTION, AND PERFORMANCE
OF STEAM BOILERS
RECIPIROCATING STEAM ENGINES
STEAM TURBINES
AND
INTERNAL COMBUSTION ENGINES

A TEXT-BOOK FOR ENGINEERING STUDENTS

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WITH 656 ILLUSTRATIONS AND 315 EXERCISES

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At a given load the ratio \( \frac{B.H.P.}{I.H.P.} \) is called the mechanical efficiency of the engine at that load. If the mechanical efficiency be calculated and plotted for various loads the curve M.E., Fig. 497, is obtained. At full load the mechanical efficiency of reciprocating steam engines is generally between 80 and 90 per cent. In high-speed engines with forced lubrication the mechanical efficiency at full load may be as high as 96 per cent.