

**THE PART LOAD PERFORMANCE (IPLV)STUDY OF
WATER-COOLED CHILLER AT CHINESE CLIMATE ZONE**

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ABSTRACT

In China the design and selection index of chiller units is COP yet, which is a performance only at full load. However, The part load value (IPLV) of chiller can reflect operation performance more actually. This paper will carry out a typical office building, and simulate by DOE2 program using meteorological data of Beijing and Shanghai, at a long operation period time. The paper analyzed the change of chiller's energy consumption annually. Furthermore, regress curves of PLF, and set up the IPLV's coefficients at 100%, 75%, 50%, 25% part load rating are also included. By referring to ASHRAE 90.1-1999, reasonable IPLV for Chinese climate conditions will be submitted. The results can be used as a reference index for design and operation of water-cooled chiller units in China.