

2 OTTO CYCLE This is the cycle of many automobile engines and other four-stroke SI engines. In a real engine, the beginning of the stroke is affected by the intake valve not being fully closed until slightly after BDC. The intake stroke of the Otto cycle starts with the piston at TDC and is a constant-pressure process at an inlet pressure of one atmosphere (process 6-1 in Fig. This ideal cycle is called an Otto cycle, named after one of the early developers of this type of engine. The second stroke of the cycle is the compression stroke, which in the Otto cycle is an isentropic compression from BDC to TDC (process 1-2). to 35°C hotter than the surrounding air temperature. 1. 1).