

The diagram illustrates a normal shock wave. A vertical dashed line represents the shock front. To the left of the shock is the region labeled 'CEA AIR'. To the right is the region labeled '5-SPECIES AIR'. The shock wave is represented by a vertical dashed line. The flow properties are listed on either side of the shock. On the left (CEA AIR), the properties are p_1 , T_1 , $u_1 = a_1$, e_1 , and h_1 . On the right (5-SPECIES AIR), the properties are $p_2 = p_1$, T_2 , $u_2 = a_1$, e_2 , and h_2 . The shock wave is shown as a vertical dashed line separating the two regions. The flow is from left to right, as indicated by the velocity u and the speed of sound a .

CEA
AIR

$$p_1$$

$$T_1$$

$$u_1 = a_1$$

$$e_1$$

$$h_1$$

$$p_2 = p_1$$

$$T_2$$

$$u_2 = a_1$$

$$e_2$$

$$h_2$$

5-SPECIES
AIR