

Erratum: “Secondary Flows, Endwall Effects, and Stall Detection in Axial Compressor Design” [ASME J. Turbomach. 2015, 137(5), p. 051004; DOI: 10.1115/1.4028648]

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In the published paper, the expressions listed under (51) were miswritten. The correct version is

$$\begin{array}{l|l}
 \text{–for a rotor:} & \text{–for a stator:} \\
 (w_2/w_1)_T < C_{tc}(W_{R\min})_T/1.3 & (w_2/w_1)_T < (W_{R\min})_T/1.3 \\
 (w_2/w_1)_A < (W_{R\min})_A & (w_2/w_1)_A < (W_{R\min})_A \\
 (w_2/w_1)_H < (W_{R\min})_H/1.3 & (w_2/w_1)_H < C_{tc}(W_{R\min})_H/1.3
 \end{array} \tag{51}$$

And the following sentence should be: “Hub and tip minimum velocity ratios are divided by a factor of 1.3 due to the ability of the blade row to operate stably in spite of the presence of corner stall.”

In Eq. (56), member $(W_{R\min})_M$ is wrongly labeled, and it should be replaced with $(W_{R\min})_A$. The correct version of the equation is

$$C_{tc} = \frac{1}{(W_{R,\min})_A} \sqrt{1 - K_{tc} (1 - (W_{R,\min})_A^2)} \tag{56}$$