

“Optimization of an ejector refrigeration cycle”

ADDENDUM – ERRATA CORRIGE

In page 8, line 2, the phrase ‘... design techniques. The project has ...’ has to be changed to ‘...design techniques. Ejector refrigerators are three-thermal systems, among which absorption cooling is by far the established and increasingly competitive option. However, the market for three-thermal systems is wide and hopefully due to increase in the future, due to constantly increasing refrigeration demand for air conditioning, food conservation and other needs, so further options may be useful and deserve research and development effort. Among various alternatives, ejector refrigeration can play a significant role. The project has ...’.

In page 8, line 15, the phrase ‘... some innovative features. Starting from ...’ has to be changed to ‘... some innovative features. In particular, friction is included in 1D model of the ejector and specific model is proposed for the mixing chamber. The manufacture of carbon fibre diffuser also represents an innovative solution for the ejector. Starting from ...’.

In page 12, line 1, the word ‘ejection’ has to be changed to ‘ejector’.

In page 12, line 10, the phrase ‘... a part few works like [45] ...’ has to be changed to ‘apart from the research by Pollerberg *et al.* [45]’.

In page 15, line 24, the phrase ‘Starting from the fundamental work [11] ...’ has to be changed to ‘Starting from the fundamental work [11] by Dorantes and Lallemand ...’.

In page 20, line 3, the phrase ‘Normal boiling pressure close to ambient pressure, to avoid vacuum condenser’ has to be changed to ‘Vapour pressure in the evaporator should be greater than normal ambient pressure’.

In page 31, line 2, the phrase ‘... is computed by [37].’ has to be changed to ‘... is computed by Klein and Harvey [37].’.

In page 32, line 13, the phrase ‘... are obtained by [37] for temperature ...’ has to be changed to ‘... are obtained by Klein and Harvey [37] for temperature ...’.

In page 55, line 7, the phrase ‘A fourth order Runge-Kutta method [46] is used ...’ has to be changed to ‘A fourth order Runge-Kutta method (e.g. see Press *et al.* [46]) is used ...’.

In page 58, line 1, the phrase ‘...is achieved [10]’ has to be changed to ‘...is achieved by Dixon [10]’.

In page 58, caption of Figure 4.6 has to be replaced with ‘Static and stagnation pressure profiles along secondary nozzle up to the mixing chamber inlet’.

In page 70, line 1, the phrase Assuming Constant Rate of Momentum Change as in [12] ...’ has to be changed to ‘Assuming Constant Rate of Momentum Change proposed by Eames [12] ...’.

In page 89, line 26, the word ‘chocking’ has to be changed to ‘choking’.

In page 89, line 27, the word ‘chocked’ has to be changed to ‘choked’.

In page 89, line 30, the phrase ‘... a critical pressure value is found over which system COP ...’ has to be changed to ‘... a critical pressure value is found as the knee point on the graphs shown in Figures 5.8 and 5.9. This point represents the practical limit to the operation of an ejector for refrigerator purpose and over which system COP ...’.

In page 92, line 9, the phrase ‘... ejector A, as expected when considering that the first has a higher area ratio. On the other hand it presents...’ has to be changed to ‘... ejector A. Being primary nozzle geometry the same for both solutions, higher area ratio of ejector B involves a wider diffuser throat section which may accommodate a higher secondary mass flow rate. On the other hand ejector B presents ...’.

In page 97, line 14, the phrase ‘... tested in a prototype plant. An experimental ejector ...’ has to be changed to ‘... tested in a prototype plant. An innovative manufacture solution is adopted for one of the ejectors, being the diffuser a single piece made by carbon fibre. Moreover a design solution based on coupling CFD results for the mixing chamber and CRMC criterion with friction is also proposed and it represents a further innovative approach to ejector design. An experimental ejector ...’.

In page 100, the word ‘Bibliography’ has to be changed to ‘References’.