Aircraft seating comfort: the influence of seat pitch on passengers’ well-being

Abstract:

One of the most important factors influencing aircraft seating comfort in economy class, is legroom. In an airline interior mock up, with the ability to adjust the seat pitch in a range of 28 inches to 43 inches, a study to investigate the influence of seat pitch on passengers’ well-being was conducted. In a pre-study, aspects of subjective postural sensations and spatial perception were identified, and a questionnaire was developed. In the main study, 30 subjects rated at different seat pitch settings the spatial perception and the ability of adopting and changing sitting postures. As a result a functional relationship between overall well-being, the subjects’ anthropometry and seat pitch was developed. Furthermore it was identified, that there is a maximum overall well-being at a seat pitch of 34 inches to 40 inches, depending on the passengers’ anthropometry. A further enlargement of seat pitch, led to a reduction of well-being.
Occurences:
- Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Produktionstechnik > Lehrstuhl für Ergonomie (Prof. Bengler) > 2012

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