Propositions

accompanying the dissertation

On the arc wire-directed energy deposition of low thermal expansion Fe–Ni alloys

by

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1. Abnormal grain growth during AW-DED of Fe–Ni low thermal expansion alloys increases the susceptibility of these alloys to intergranular cracking (this thesis).
2. The time devoted to carefully selecting a crack-resistant alloy for AW-DED is a more efficient use of resources than the time spent mitigating cracking in a crack-susceptible alloy (this thesis).
3. A Twin-wire feeding approach during AW-DED can produce the entire low thermal expansion range within the Fe–Ni system (this thesis).
4. Possessing good weldability does not necessarily imply suitability for deposition during AW-DED (this thesis).
5. The quality of public infrastructure in The Netherlands makes it easier for expats to digest the culinary void in Dutch society.
6. Contrary to popular belief, the advent of railways in India by the British Empire should not be viewed as a benefaction to the country.
7. Artificial intelligence can evolve to develop a sense of humour that humans do not perceive as amusing.
8. In every successfully functioning experimental setup, tape or zip ties, instinct, and silent desperation are essential.
9. While riding a bike in the Netherlands is nice, driving is even nicer.
10. A PhD trajectory aims to cultivate independent researchers; however, this independence is sometimes compromised by stakeholder interests.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors dr. ir. M.J.M. Hermans, dr. V.A. Popovich and copromotor dr. ir. C. Goulas.