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ACCEPTED MANUSCRIPT

- ¹ Optimisation of mixing performance of
- ² helical ribbon mixers for high throughput
- applications using computational fluid

dynamics

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12 Highlights

- 13 98 Helical mixer designs were screened using STAR-CCM+ and HEEDS package
- 14 Experimental validation was performed using ERT and torque measurements
 - Statistical analysis revealed key design features affecting mixer performance
- 16 Keywords

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17 CFD, Optimisation, Mixing, Helical ribbon mixers, Rapid prototyping

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