

Masterthesis

Evaluation of a bending test and further development for cleated shoes

At adidas, we are passionate about pushing the boundaries of athletic footwear performance. We employ cutting-edge test methods to evaluate the flexibility of our footwear products, ensuring they deliver unmatched performance, comfort, and injury prevention. Our new test setup has yet to be evaluated, and we are currently unable to test football shoes on it, which we would like to change. Additionally, we aim to develop a Finite Element Method (FEM) model of the test setup with the football shoe.

The following work packages are planned:

- State-of-the-art literature research
- Evaluate the bending test setup for mechanical analysis of non-cleated footwear.
- Develop a method to test football boots with the new setup
- Validate the bending test setup for cleated shoes
- Compare the outcomes with those obtained from a standardized three-point bending test.
- Develop and validate a finite element model of a football boot using experimental data.



Begin: now

Location: adidas, Herzogenaurach

Posted on: 07.05.2025

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