

Highlights

This is a Title

B.T. Rawlins,Ryno Laubscher,Pieter Rousseau

- Computational Fluid Dynamics capture trend of boiler heat uptake at reduced loads.
- Computational Fluid Dynamics capture trend of boiler heat uptake at reduced loads.
- Computational Fluid Dynamics capture trend of boiler heat uptake at reduced loads.

This is a Title

B.T. Rawlins^{a,*}, Ryno Laubscher^b and Pieter Rousseau^a

^aDepartment of Mechanical Engineering, Applied Thermal-Fluid Process Modelling Research Unit, University of Cape Town, Library Road, Rondebosch, Cape Town, 7701, South Africa

^bDepartment of Mechanical Engineering, Stellenbosch University, Banghoek Road, Stellenbosch, 7600, South Africa

ARTICLE INFO

Keywords:

Mixture density model
Steady State

ABSTRACT

ss fhvosjv
sfjvnsfklnvjksfn
skfnvkpsfn
sjkvnsf skfnv
ksfvn;sfv,

1. Introduction

2. Mathematical Model

2.1. Artificial neural networks

2.2. Mixture density networks

3. Case study boiler configuration

4. Model development

4.1. Hyper parameter tuning


5. Results and discussion

6. Conclusion

CRedit authorship contribution statement

B.T. Rawlins: Methodology, Software, Validation, Formal analysis, Investigation, Writing original draft, Visualization.. **Ryno Laubscher:** Writing review & editing, Methodology, Resources, Conceptualization.. **Pieter Rousseau:** Writing review & editing, Resources, Conceptualization.

*Corresponding author

 rw1bra001@myuct.ac.za (B.T. Rawlins); r1aubscher@sun.ac.za (R. Laubscher); pieter.rousseau@uct.ac.za (P. Rousseau)
ORCID(s):