

Supplemental Material to ‘Estimation of Rolling Process Variation by Usage of a Monte-Carlo Method’

M. Weiner, C. Renzing, R. Pfeifer, M. Schmidtchen, and U. Prahll

2022-12-09

This repository contains all necessary data to reproduce the results of *Estimation of Rolling Process Variation by Usage of a Monte-Carlo Method* published at ESAFORM2023. The contents consist of data files as well as code for analysis and simulation.

To use this material you must have a copy of Python and a LaTeX distribution installed. A **Pipfile** is provided containing all necessary dependencies to recreate the results. You can create a virtual Python environment using **pipenv** by executing

```
pipenv install
```

if you have **pipenv** installed, otherwise install it with **pip**

```
pip install pipenv
```

To activate the virtual environment Usage

```
pipenv shell
```

From within the virtual environment shell you can run the whole procedure by executing

```
pytask
```

The task runner **pytask** will collect all Python code in the directory with the necessary format and run the tasks to generate data, run the simulations and typeset the article text.

The noticeable contents of this repository are:

- esaform2023/weiner/data** experimental raw data and analyzation procedures
- esaform2023/weiner/sim** simulation procedures
- esaform2023/weiner/img** images and plots
- esaform2023/weiner/tex** article text in LaTeX