

# Process for Updated PIPE MATERIALS Data

---

"Section IV - Pipe Materials.xlsx"

Note: All python commands are run from the edb root directory

## Prep the Data

1. Download the new Pipe Materials spreadsheet to your Downloads folder.
2. Rename the new file to "Section IV - Pipe Materials.xlsx".
3. Save the "Pipe Data" tab from the spreadsheet as a separate CSV file (UTF8-encoded) as: "Section IV - Pipe-Tube Data.csv"
4. Replace the existing files in the `edl/kb/friction-loss` folder with these 2 files.
5. Open the `edl/kb/friction-loss/Section IV - Pipe-Tube Data.csv` file.
  - Add a new row under the header row (which is/should be at row 4)
  - On that new row, put the word "include" in every column that you want displayed on the tables in **Section IV** on the EDL website.
  - Make sure to always "include" the **Group Name, Sub-Division and Sub-Division Name**.

## Build the tables and json file for the Friction Calculator

1. Run the friction-loss build file:
  - `python kb/friction-loss/build-full.py`
  - This will generate the data tables in `source/04_piping-materials-IV/table-data`
    - The file names are auto-created based on the **Group Name** and then the **Sub-Division Name**:  
`<Group Name Initials>_<First 4 letters of each of the words in the Sub-Division Name followed by '-'>.csv`
    - Ex: **Group:** Steel Pipe  
**Sub-Division Name:** Welded and Seamless Wrought Steel Pipe  
Filename generated: `sp_weld-and-seam-wrou-stee-pipe.csv`
  - These tables are referenced in the \*.md files in `source/04_piping-materials-IV`
  - This build will also generate the `friction-loss-materials-full.json` file in the `generate/static` folder.
    - This file is used by the friction calculator implemented in the `source/javascript/calculators.js` file.

# Process for Updated FLANGE Data

---

"Section IV - Flange Data.xlsx"

## Prep the Data

1. Download the new Flange Data spreadsheet to your Downloads folder.
2. Rename the new file to "Section IV - Flange Data.xlsx".
3. Replace the existing file in the `source/04_piping-materials-IV/table-data` folder.

#### 4. For each tab in the spreadsheet:

- There exists a CSV file for each tab in the spreadsheet in this same folder.
- Copy JUST the data (US or Metric) and replace the data in the existing CSV file.
- There is a row under the *header* row called *tags*. This row is for tagging the columns you want to who on the table.
  - If you leave a column blank or tag it 'All', it WILL be included.
  - If you tag the column 'None', it will NOT be included
  - For the files with multiple types of flanges, the appropriate "*Section IV - Flange Data.xlsx*" tab/sheet will have a row of *tags* that can be copy/pasted into the appropriate CSV file in the *tags* row.
- Save the file.

## Build the tables

1. The tables will automatically be built in the `output.py` file in the `table_data()` function when you build the system:
  - `python serve.py`

## Using TAGS for tables

---

1. Here is an example of using *tags* to select specific columns from a table

```
=|=
title: Threaded Steel Pipe Flanges per ASME B16.5 (Class 150, 300)
data-us: flange-16.5-150-300-us.csv
data-metric: flange-16.5-150-300-metric.csv
column_tags: Th
=|
```

In this example, the columns that will be included will be the ones tagged with 'Th' on the *tags* row in the CSV files. The CSV file(s) can be used for multiple flanges.