

- Two ZIP files serve as the input. One ZIP file for training and another ZIP file for testing.
- The training ZIP file must have images classified into separate folders based on the respective defect types. The folders must be named accordingly. This training ZIP file must adhere to the following file structure

Sample.zip

|----defect\_type\_1

|----|----image1.png

|----defect\_type\_2

|----|----image1.png

|----...

|----defect\_type\_n

|----|----image1.png

- The testing ZIP file must have images that are not classified.
- From the training ZIP file, 20 percent of the data is automatically selected for validation. The best performing model is chosen based on 'validation loss' metric. The best model identified from the training ZIP file is saved for inferencing on the testing ZIP file.
- A good example of sample defect images for training and testing can be found [here](#). These images are illustrative of the defect types: pin-holes (i.e., tiny holes), holes, and prominent cracks.