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Title: Abstract Summarizing Bowtie Dataset

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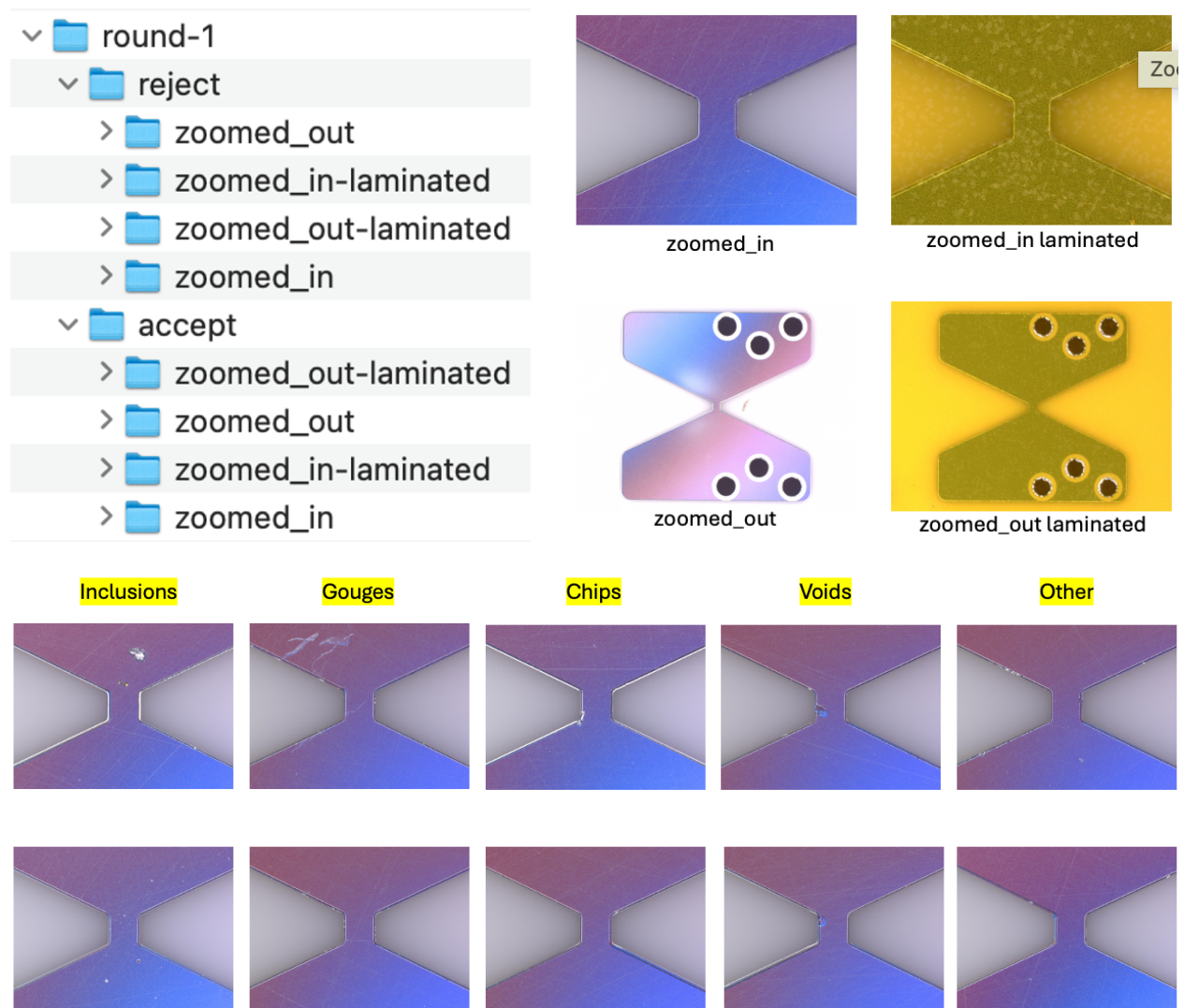
Abstract Summarizing Bowtie Dataset

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Summary of Bowtie Datasets Being Submitted

There are two folder structures, the first associated with “round 1” data, and a second associated with “round 2”.

Here are some examples from Round 1



Here is the folder structure for Round 1:

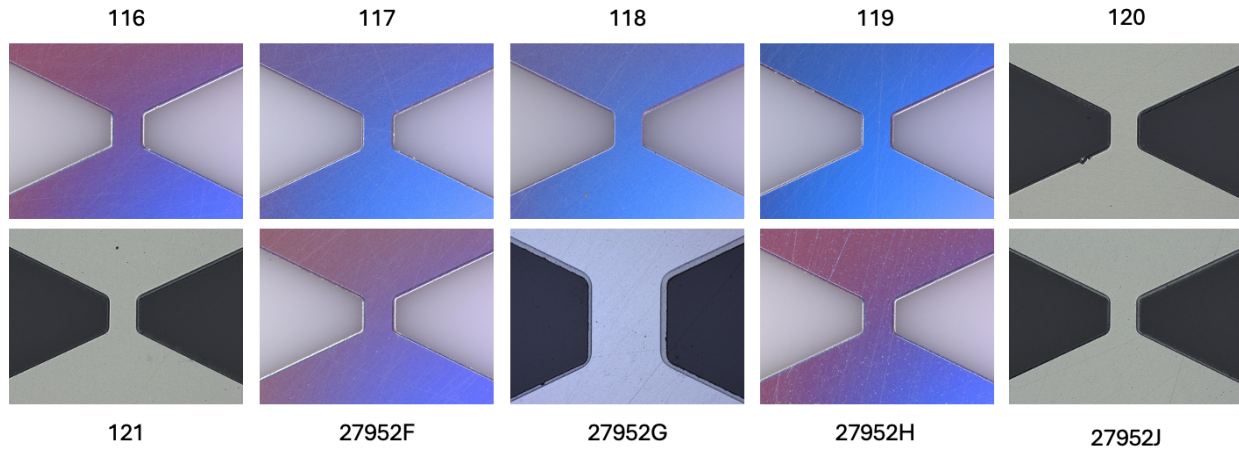
```
[(base) wjones@pn2502268 bowtie-rounds_1_and_2 % tree -d ./round-1
./round-1
├── accept
│   ├── zoomed_in
│   ├── zoomed_in-laminated
│   ├── zoomed_out
│   └── zoomed_out-laminated
└── reject
    ├── zoomed_in
    │   ├── chip
    │   ├── debris
    │   ├── gouge
    │   ├── inclusion
    │   └── void
    ├── zoomed_in-laminated
    │   ├── BUBBLE
    │   └── DEBRIS
    ├── zoomed_out
    │   ├── contamination
    │   ├── debris
    │   ├── gold
    │   ├── gouge
    │   ├── inclusion
    │   └── void
    └── zoomed_out-laminated
        ├── BUBBLE
        ├── DEBRIS
        ├── foreign
        └── inclusion
```

28 directories

The total number of files are:

```
[(base) wjones@pn2502268 bowtie-rounds_1_and_2 % count.sh ./round-1 1
Parent folder: ./round-1
Subdirectory  File Count
-----
accept                2107
reject                 258
-----
Total                 2365
(base) wjones@pn2502268 bowtie-rounds_1_and_2 %
```

Here are some examples from Round 2



Here is the folder structure for Round 2:

```
(base) wjones@pn2502268 bowtie-rounds_1_and_2 % tree -d round-2
round-2
├── 116_zoomed_in
├── 117_zoomed_in
├── 118_zoomed_in
├── 119_zoomed_in
├── 120_zoomed_in
├── 121_zoomed_in
├── 27952F_zoomed_in
├── 27952G_zoomed_in_more
├── 27952H_zoomed_in
└── 27952J_zoomed_in
```

11 directories

The total number of files are:

```
((base) wjones@pn2502268 bowtie-rounds_1_and_2 % count.sh ./round-2 1
Parent folder: ./round-2
Subdirectory      File Count
-----
116_zoomed_in      137
117_zoomed_in      137
118_zoomed_in      137
119_zoomed_in      137
120_zoomed_in      137
121_zoomed_in      137
27952F_zoomed_in    136
27952G_zoomed_in_more 137
27952H_zoomed_in    136
27952J_zoomed_in    136
-----
Total              1367
```

In addition to images, Round 2 data also contains 1 Excel document per tray that identifies ‘accept’ / ‘reject’ for each image – as well as the defect type.

```
[(base) wjones@pn2502268 round-2 % ls -1 *xlsx
116.xlsx
117.xlsx
118.xlsx
119.xlsx
120.xlsx
121.xlsx
27952F.xlsx
27952G.xlsx
27952H.xlsx
27952J.xlsx
(base) wjones@pn2502268 round-2 % █
```

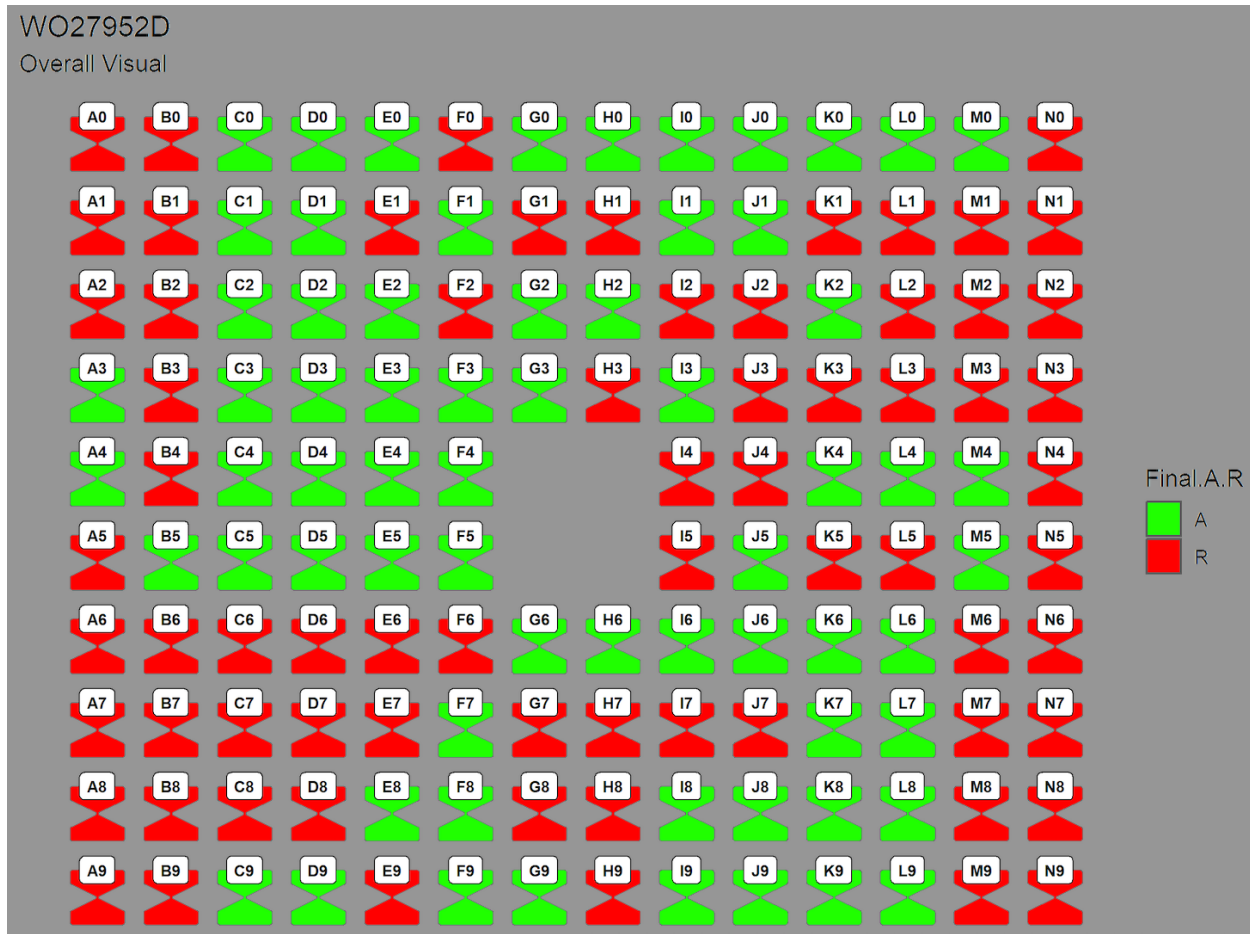
Here is an example from the first Excel file “116.xlsx”

	A	B	C	D	E	F	G
1			Tray	116	Inspector	1	
2	img	Pos	zoomed_in/Note	comments	zoomed_out/Note	comments	Visual 9.9M
3	3	A0	A		A		A
4	4	B0	A		A		A
5	5	C0	A		A		A
6	6	D0	A		A		A
7	7	E0	R	CHIP	A		A
8	8	F0	A		A		A
9	9	G0	A		A		A
10	10	H0	A		A		A
11	11	I0	A		R	GOUGE	A
12	12	J0	A		A		A
13	13	K0	A		R	INCLUSION	A
14	14	L0	A		A		A
15	15	M0	A		R	GOUGE	A
16	16	N0	A		A		A
17	17	A1	A		A		A
18	18	B1	A		R	GOUGE	A
19	19	C1	A		A		A
20	20	D1	A		A		A
21	21	E1	R	CHIP	A		A
22	22	F1	A		A		A
23	23	G1	A		A		A

As you can see – the only “PII” information here would be the inspector ID which was a Znumber, but those have been removed and replaced with anonymous ID numbers:

```
1, 2, 3, 4, ... ,num_unique_inspectors
```

Finally – Round 2 data also include a layout of where in the tray each bowtie comes from



Which can be mapped back to the “POS” column in the Excel files.