

## Scroll Tip Seals

### Avalon® 57 Delivers Industry-Leading Performance for Dry Scroll Pumps

#### Customer

Industrial Vacuum Equipment Supplier

#### Application

Dry Scroll Pumps (Life Sciences)

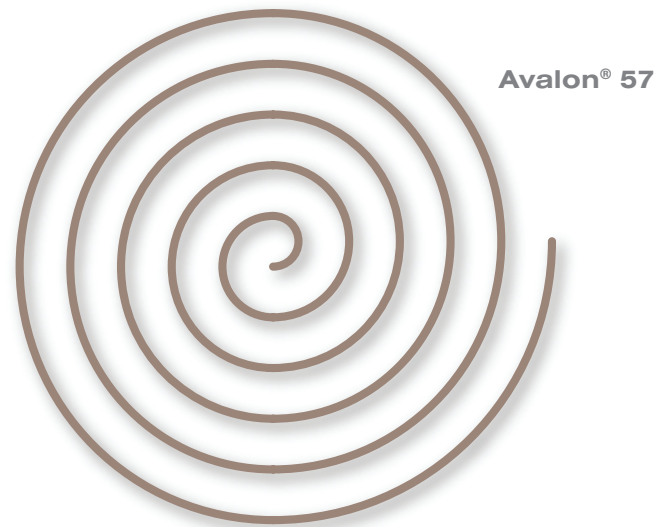
#### Product

Greene Tweed Avalon® 57 Scroll Tip Seals

#### Problem

Our client first came to Greene Tweed with a sealing quality issue in their Scroll Vacuum Pump; customers complained that the original seals didn't last long enough and created large amounts of dust when in use, risking contamination and making it difficult to clean when fitting a new tip seal. In some cases, the life of the seal failed to meet its warranty target – an expensive and time-consuming problem for both the client and their customers.

Greene Tweed developed a sealing solution that would meet and exceed the demands of dry scroll pump applications. Read on to see how a patented Greene Tweed sealing solution helped the client become the market leader in leader for Dry Scroll Pumps in scientific, laboratory, and pharmaceutical manufacturing markets.



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## Solution

Greene Tweed proposed Avalon<sup>®</sup> 57, a fluoropolymer thermoplastic with exceptional friction and wear properties, as an alternative material for the client's scroll tip seals. A combination of PTFE and polyimide, Avalon<sup>®</sup> 57 did not shed the carbon/graphite dust that the original material did. After extensive testing, the client adopted Avalon<sup>®</sup> 57 as the standard material for its tip seals.

## Results

The following test results shows how Greene Tweed Avalon<sup>®</sup> 57 Scroll Tip Seals outperformed the original sealing solution as well as those of competing brands:

- **Greene Tweed tip seals bed-in and seal in 1/3 the time of the previous design**
- **Time in operation greater than one year**
- **Return to production time reduced**
- **No heavy cleaning required on change out**
- **No hang-up or sticking in groove**
- **Generated ultimate vacuum levels never seen with the previous design**

As a result, Greene Tweed Avalon<sup>®</sup> 57 Scroll Tip Seals remain the standard sealing solution for the client's Dry Scroll Pumps.

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## Greene Tweed

1684 South Broad Street, PO Box 1307 | Lansdale PA 19446 USA | Phone: (+1) (215) 256-9521 | [gtweed.com](https://www.gtweed.com)