Fiber Name: po455

Tower Operator: of

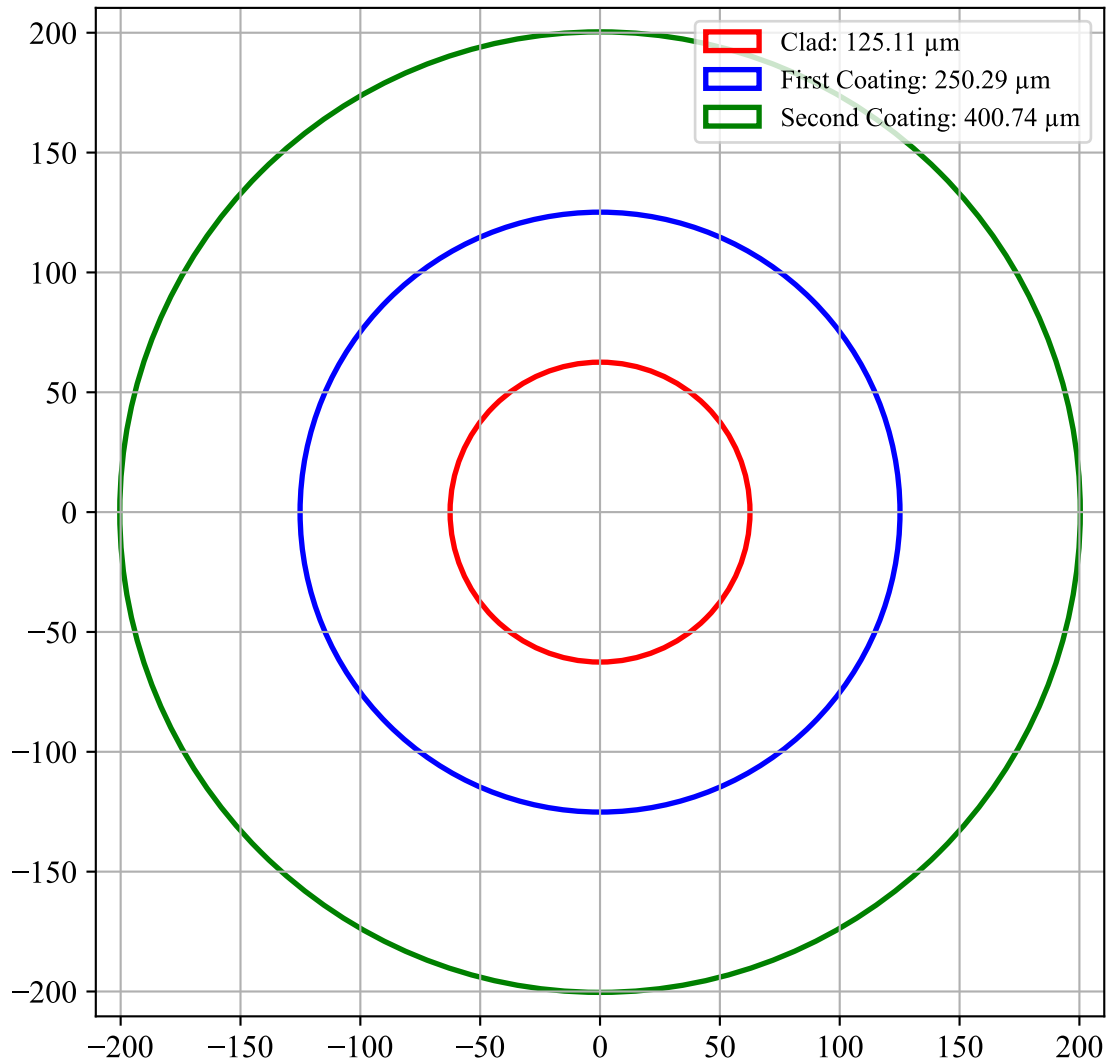
Drawing Date: 6

Section A - Fiber Good Zones for T&M


Good Fiber Zones with Dual X-Axis (Fiber Z & Preform Z)
Preform Z
27.15
24.07
21.07
18.09
15.08
12.16
9.19
6.14
3.11
0.10
Good Zone 1
Good Zone 2
Good Zone 3
1.0
0.8
0.6
0.4
0.2
0.0
3400
3600
3800
4000
4200
Fiber Z (Measured Data)

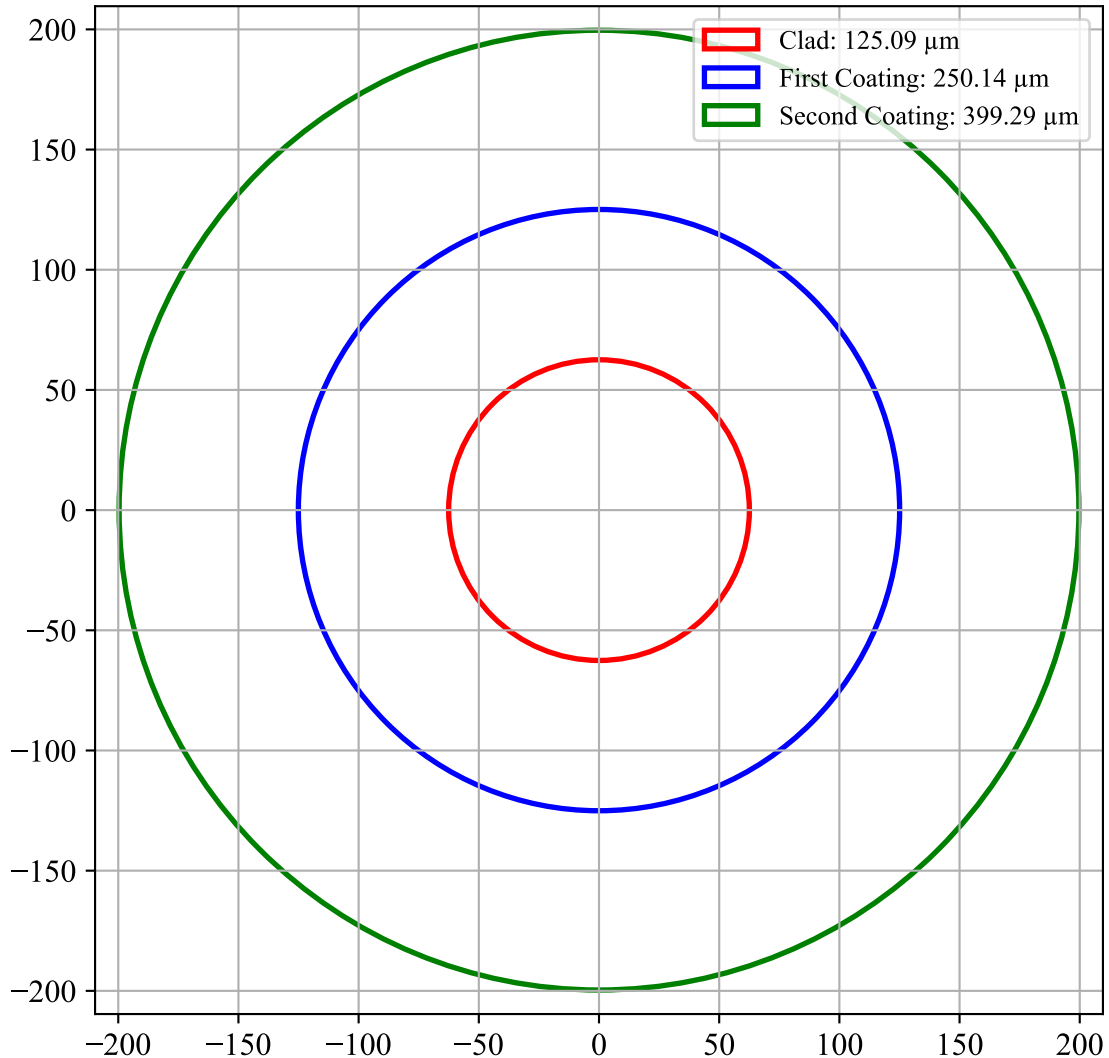
=== Good Fiber Zone 1 (Fiber Z: 4043.74 - 4341.09) ===
==========
Tension (N): 2.57 ± 0.15
Clad Diameter (µm): 125.11 ± 0.46
First Coating Diameter (µm): 250.29 ± 0.66
Second Coating Diameter (µm): 400.74 ± 2.23
Furnace Temperature (°C): 2101.80 ± 13.66
Cooling Rate (°C/s): 14.87 ± 0.69
UV Power (W): 78.92 ± 4.33

===T&M Section===
New fiber name=_____
Core Diameter(µm) = _____
Clad Diameter(µm) = _____
First coating Diameter(µm) = _____
Second coating Diameter(µm) = _____
Birefringence=_____



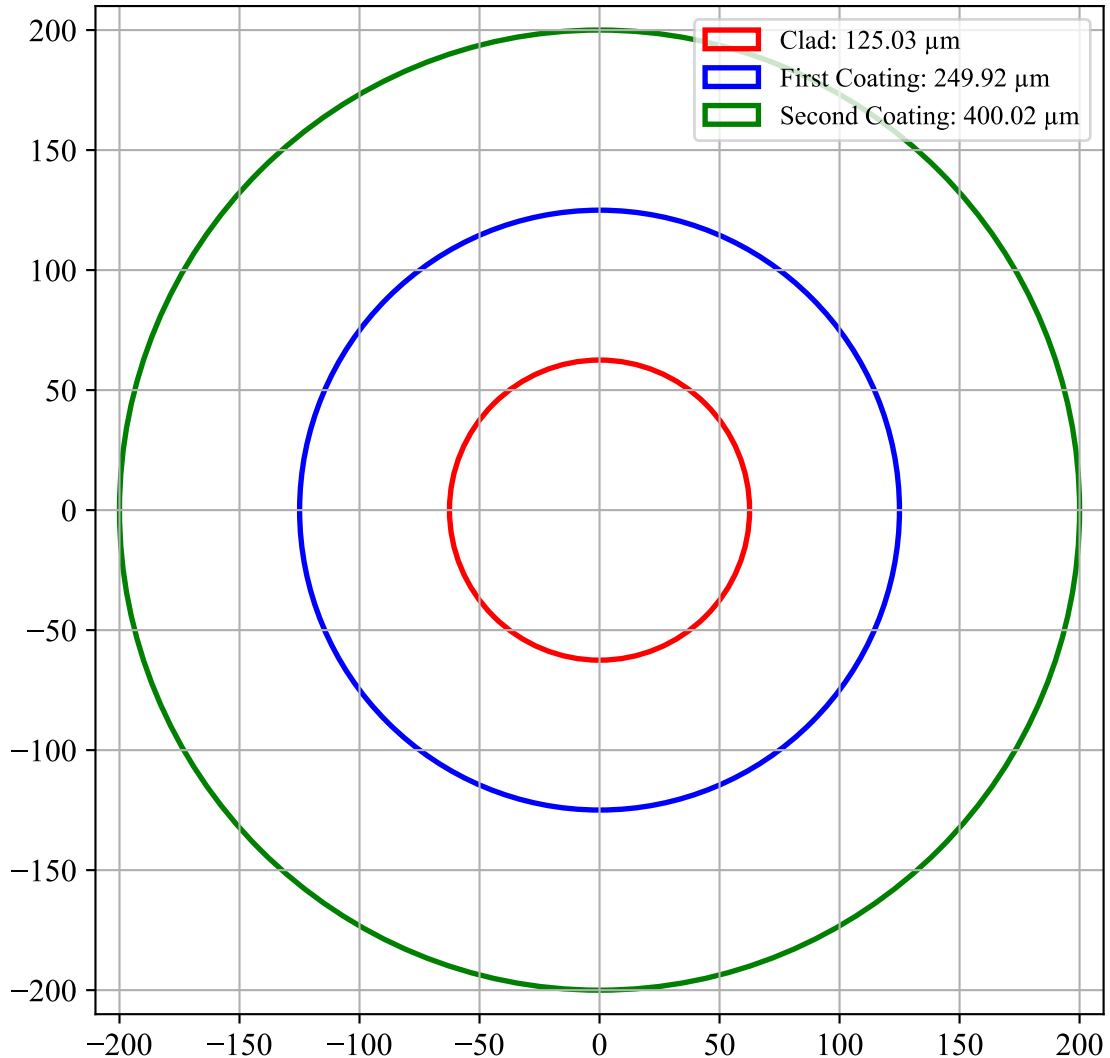
=== Good Fiber Zone 2 (Fiber Z: 3594.60 - 3894.59) ===
==========
Tension (N): 2.53 ± 0.21
Clad Diameter (µm): 125.09 ± 0.49
First Coating Diameter (µm): 250.14 ± 0.88
Second Coating Diameter (µm): 399.29 ± 2.36
Furnace Temperature (°C): 2101.52 ± 5.97
Cooling Rate (°C/s): 15.40 ± 1.07
UV Power (W): 78.65 ± 4.54

===T&M Section===
New fiber name=_____
Core Diameter(µm) = _____
Clad Diameter(µm) = _____
First coating Diameter(µm) = _____
Second coating Diameter(µm) = _____
Birefringence=_____



=== Good Fiber Zone 3 (Fiber Z: 3295.97 - 3444.29) ===
==========
Tension (N): 2.56 ± 0.18
Clad Diameter (µm): 125.03 ± 0.40
First Coating Diameter (µm): 249.92 ± 1.02
Second Coating Diameter (µm): 400.02 ± 2.01
Furnace Temperature (°C): 2097.92 ± 11.33
Cooling Rate (°C/s): 15.41 ± 0.72
UV Power (W): 81.38 ± 6.64

===T&M Section===
New fiber name=_____
Core Diameter(µm) = _____
Clad Diameter(µm) = _____
First coating Diameter(µm) = _____
Second coating Diameter(µm) = _____
Birefringence=_____



Section B - Coating Report

Coating Report

Main Coating

Main Coating Die Diameter (µm): 150.0

Main Entry Die Diameter (µm): 160.0

Main Density (g/cm³): 1.05

Main Coating: Coat A

Main Coating Temp (°C): 48.0

Main Viscosity (mPa·s): 1.066

Main Estimated Thickness (µm): 150.34

Secondary Coating

Secondary Coating Die Diameter (µm): 170.0

Secondary Entry Die Diameter (µm): 180.0

Secondary Density (g/cm³): 1.12

Secondary Coating: Coat B

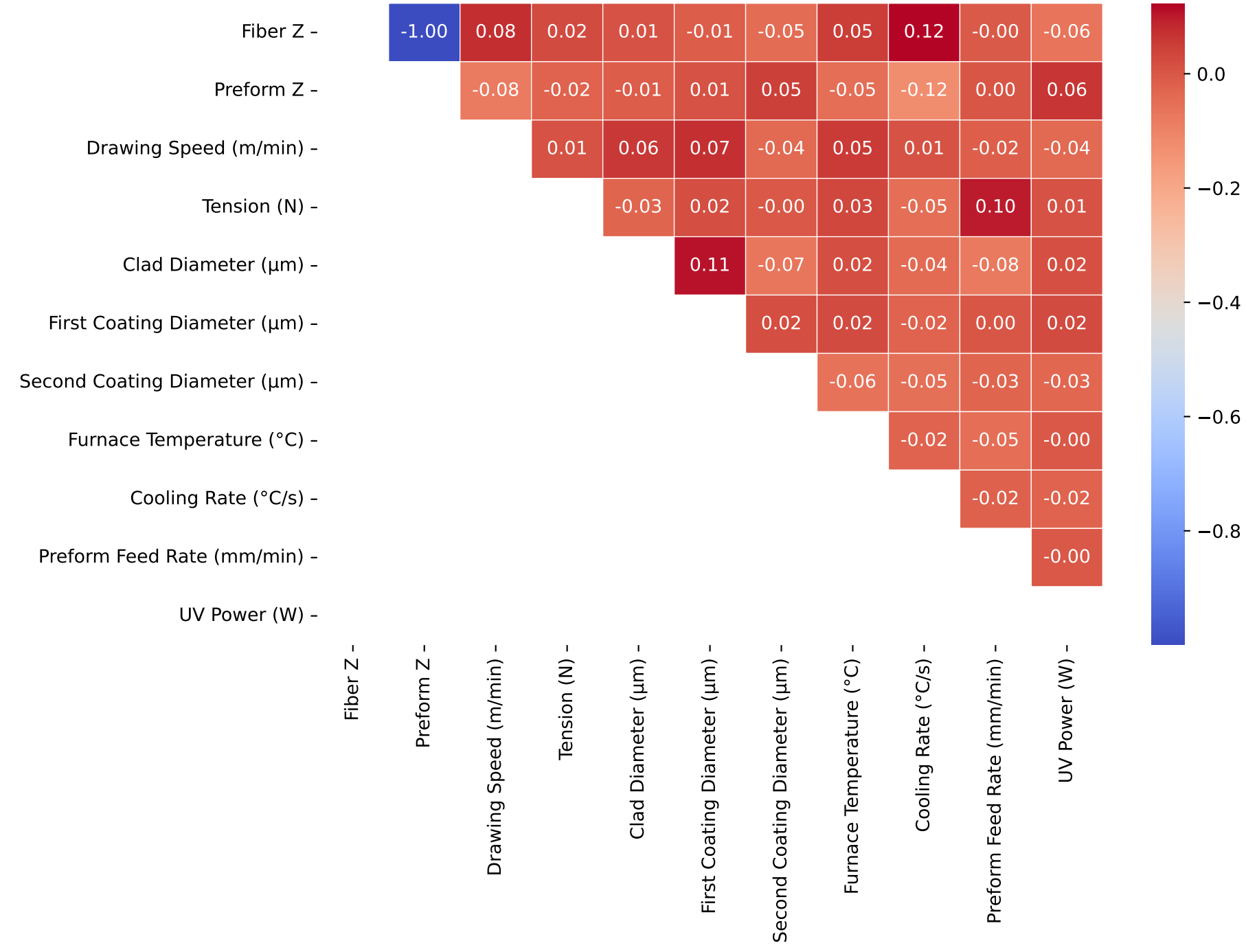
Secondary Coating Temp (°C): 44.0

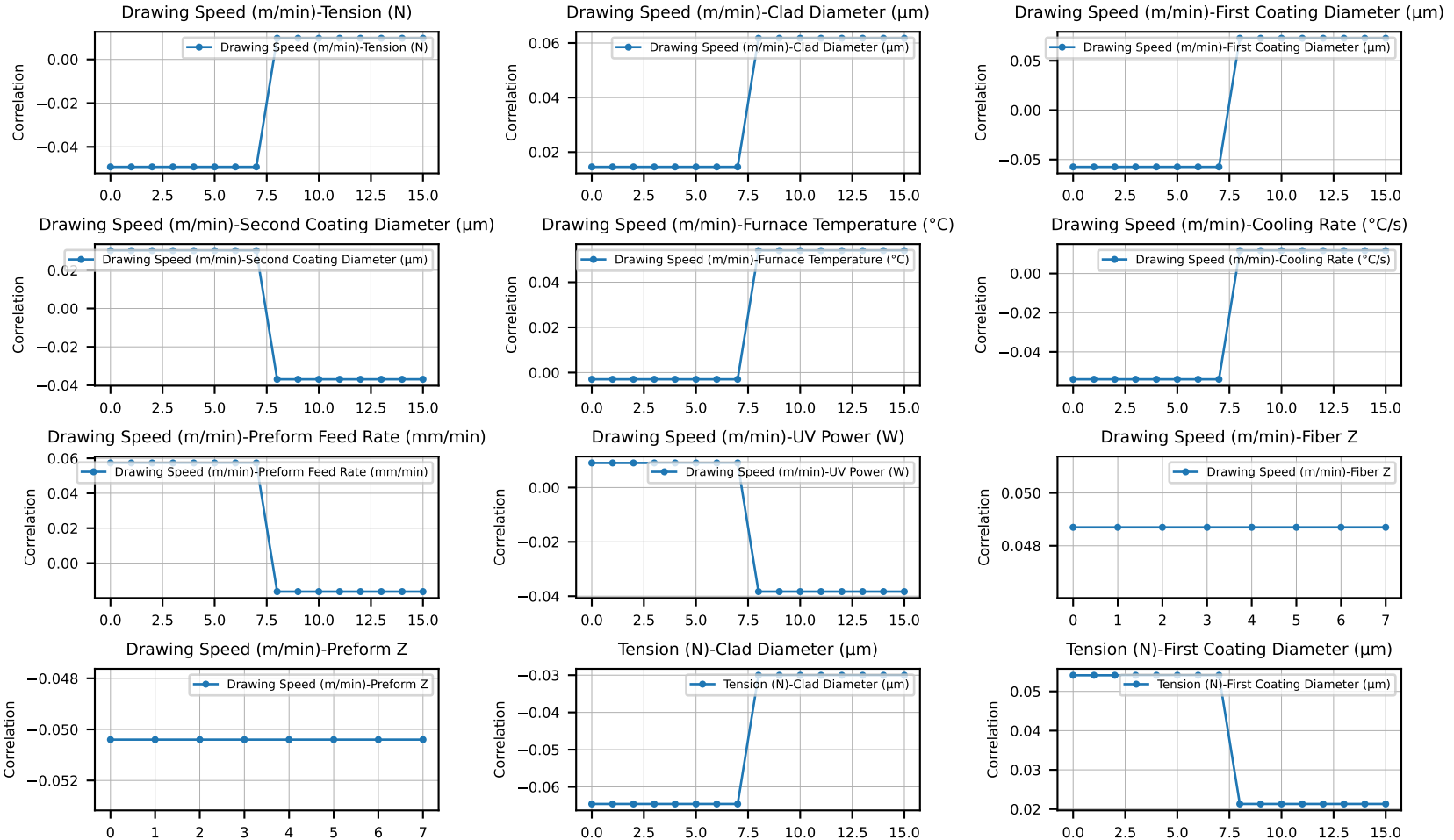
Secondary Viscosity (mPa·s): 1.398

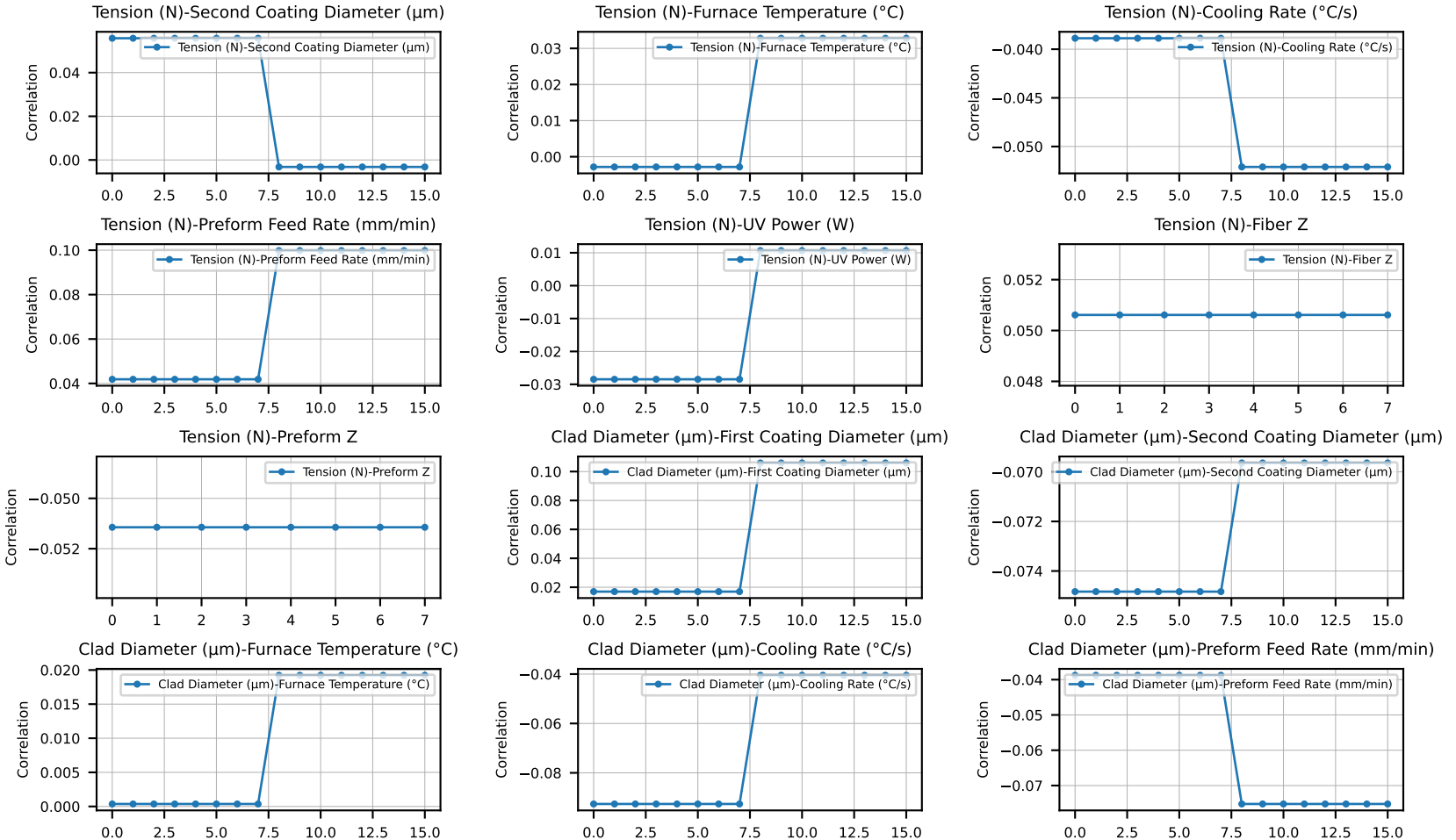
Secondary Estimated Thickness (µm): 175.75

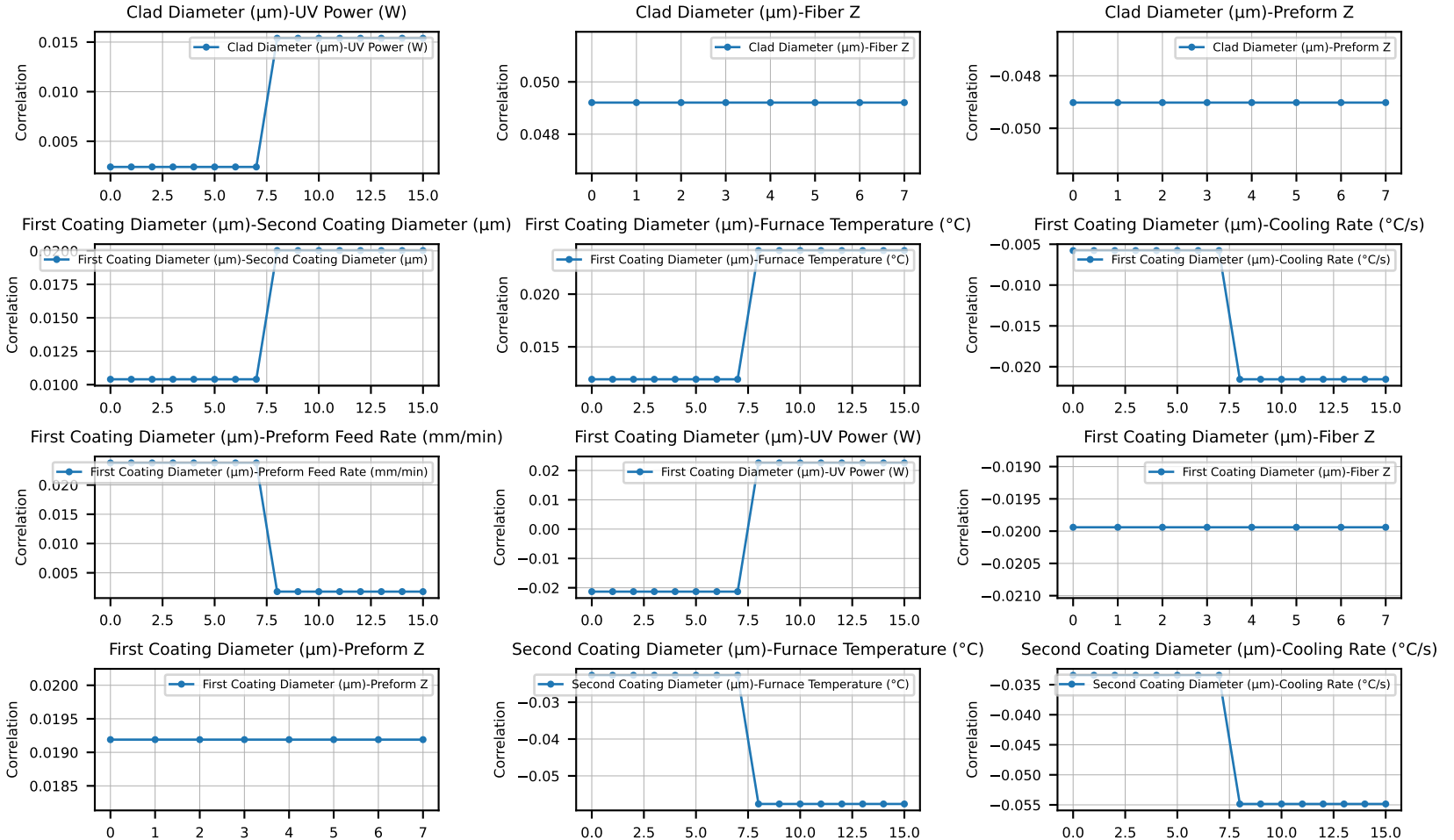
Section C - Tower Performance Analysis

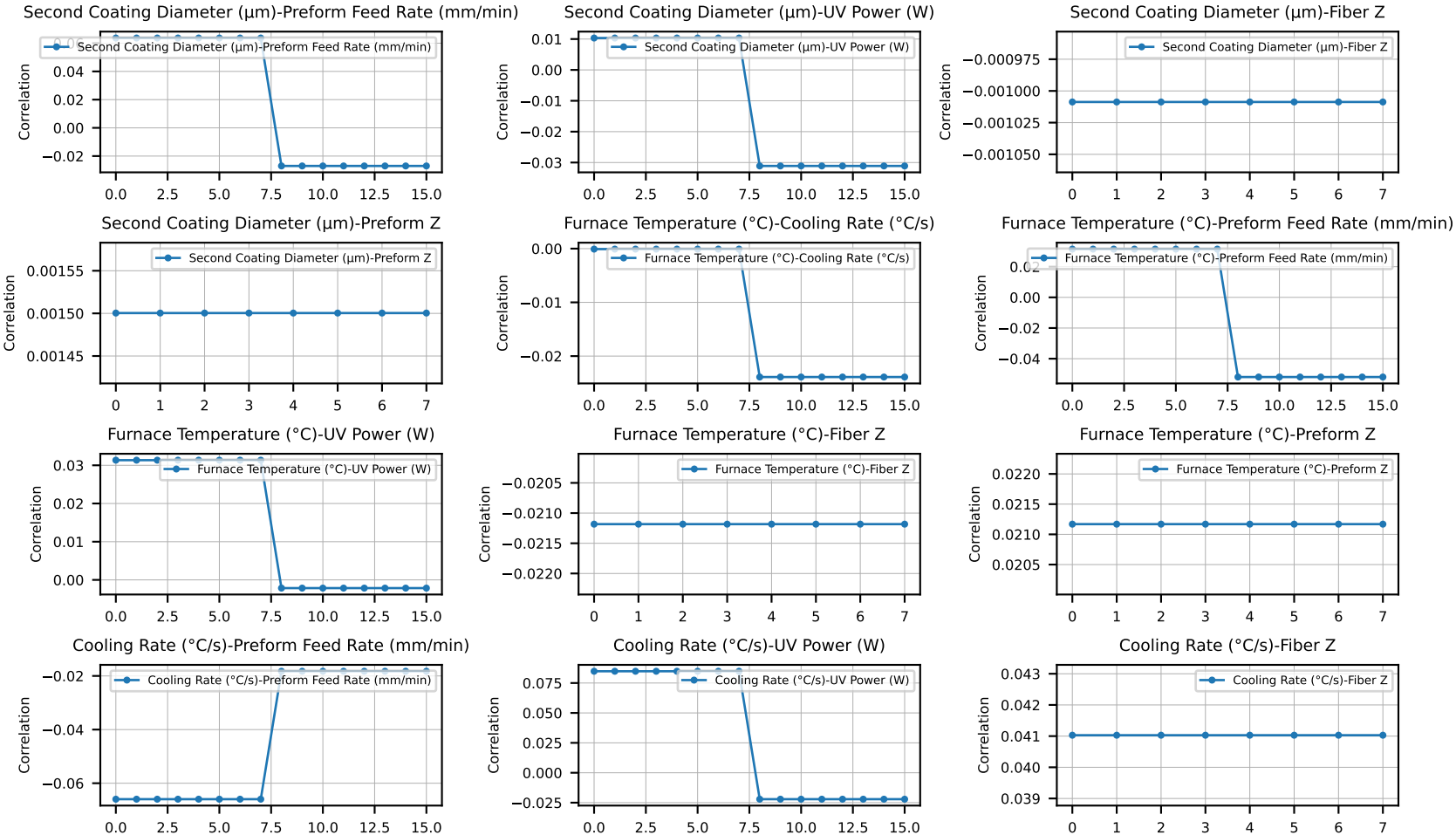
Correlation Tower Data

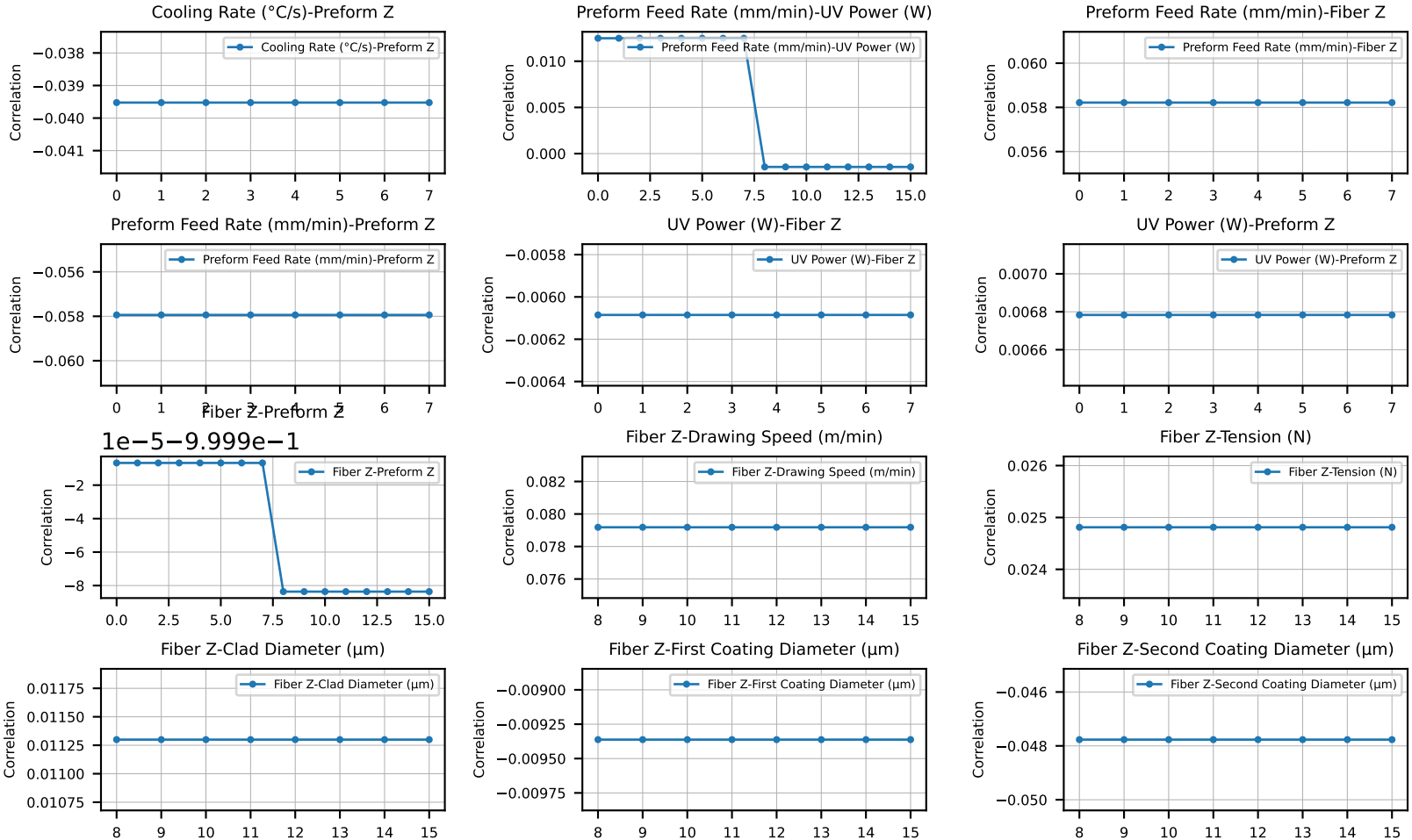


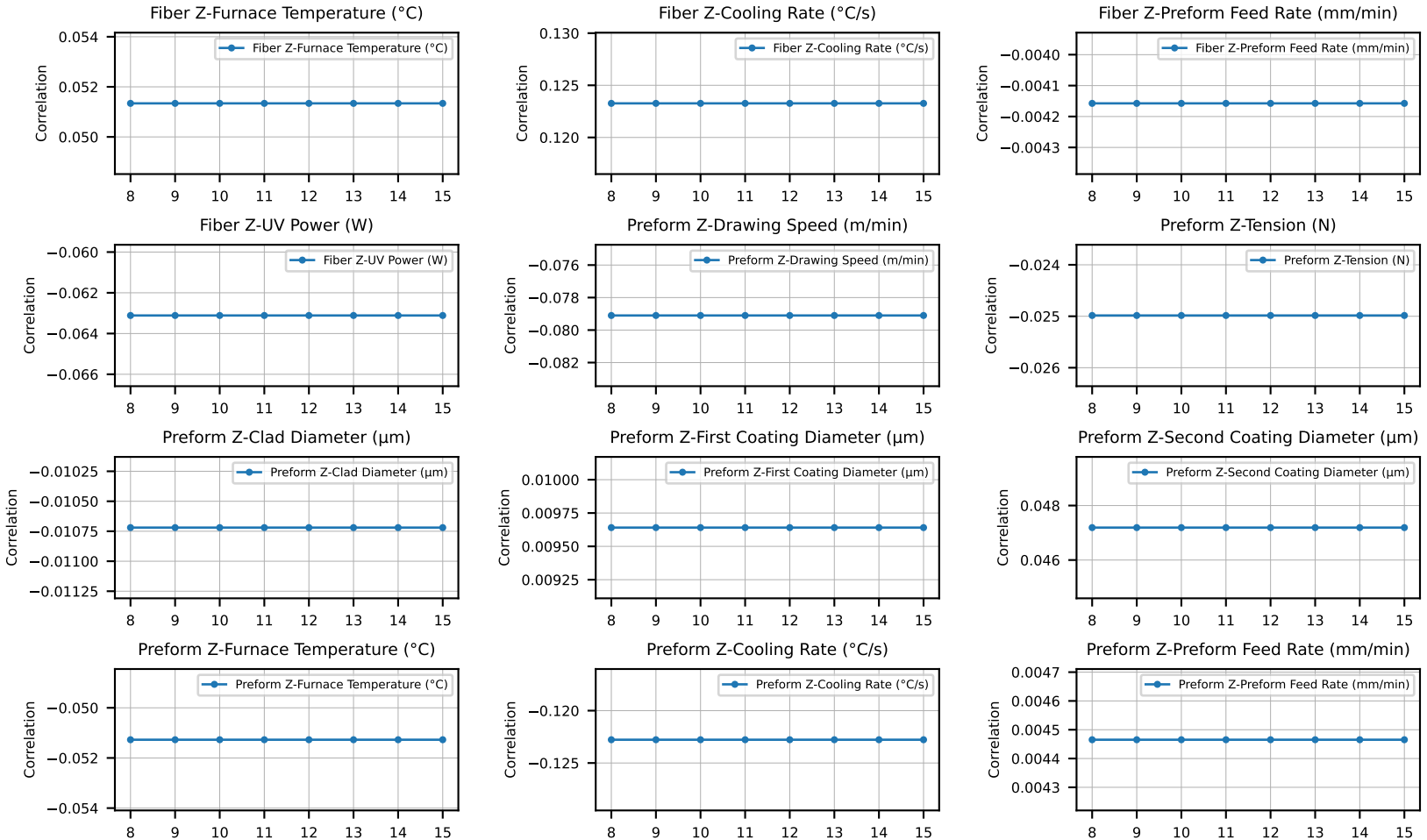

Drawing Speed (m/min)-Tension (N)
Drawing Speed (m/min)-Tension (N)
Correlation
Drawing Speed (m/min)-Clad Diameter (μm)
Drawing Speed (m/min)-Clad Diameter (μm)
Correlation
Drawing Speed (m/min)-First Coating Diameter (μm)
Drawing Speed (m/min)-First Coating Diameter (μm)
Correlation
Drawing Speed (m/min)-Second Coating Diameter (μm)
Drawing Speed (m/min)-Second Coating Diameter (μm)
Correlation
Drawing Speed (m/min)-Furnace Temperature (°C)
Drawing Speed (m/min)-Furnace Temperature (°C)
Correlation
Drawing Speed (m/min)-Cooling Rate (°C/s)
Drawing Speed (m/min)-Cooling Rate (°C/s)
Correlation
Drawing Speed (m/min)-Preform Feed Rate (mm/min)
Drawing Speed (m/min)-Preform Feed Rate (mm/min)
Correlation
Drawing Speed (m/min)-UV Power (W)
Drawing Speed (m/min)-UV Power (W)
Correlation
Drawing Speed (m/min)-Fiber Z
Drawing Speed (m/min)-Fiber Z
Correlation
Drawing Speed (m/min)-Preform Z
Drawing Speed (m/min)-Preform Z
Correlation
Tension (N)-Clad Diameter (μm)
Tension (N)-Clad Diameter (μm)
Correlation
Tension (N)-First Coating Diameter (μm)
Tension (N)-First Coating Diameter (μm)
Correlation

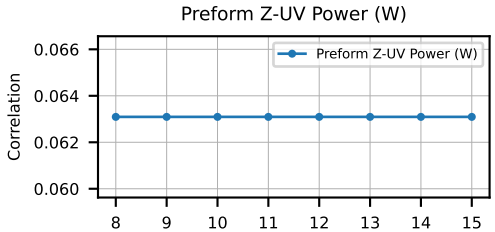

Tension (N)-Second Coating Diameter (µm)
Tension (N)-Second Coating Diameter (µm)
Correlation
Tension (N)-Furnace Temperature (°C)
Tension (N)-Furnace Temperature (°C)
Correlation
Tension (N)-Cooling Rate (°C/s)
Tension (N)-Cooling Rate (°C/s)
Correlation
Tension (N)-Preform Feed Rate (mm/min)
Tension (N)-Preform Feed Rate (mm/min)
Correlation
Tension (N)-UV Power (W)
Tension (N)-UV Power (W)
Correlation
Tension (N)-Fiber Z
Tension (N)-Fiber Z
Correlation
Tension (N)-Preform Z
Tension (N)-Preform Z
Correlation
Clad Diameter (µm)-First Coating Diameter (µm)
Clad Diameter (µm)-First Coating Diameter (µm)
Correlation
Clad Diameter (µm)-Second Coating Diameter (µm)
Clad Diameter (µm)-Second Coating Diameter (µm)
Correlation
Clad Diameter (µm)-Furnace Temperature (°C)
Clad Diameter (µm)-Furnace Temperature (°C)
Correlation
Clad Diameter (µm)-Cooling Rate (°C/s)
Clad Diameter (µm)-Cooling Rate (°C/s)
Correlation
Clad Diameter (µm)-Preform Feed Rate (mm/min)
Clad Diameter (µm)-Preform Feed Rate (mm/min)
Correlation


Clad Diameter (µm)-UV Power (W)
Clad Diameter (µm)-UV Power (W)
Correlation
Clad Diameter (µm)-Fiber Z
Clad Diameter (µm)-Fiber Z
Correlation
Clad Diameter (µm)-Preform Z
Clad Diameter (µm)-Preform Z
Correlation
First Coating Diameter (µm)-Second Coating Diameter (µm)
First Coating Diameter (µm)-Second Coating Diameter (µm)
Correlation
First Coating Diameter (µm)-Furnace Temperature (°C)
First Coating Diameter (µm)-Furnace Temperature (°C)
Correlation
First Coating Diameter (µm)-Cooling Rate (°C/s)
First Coating Diameter (µm)-Cooling Rate (°C/s)
Correlation
First Coating Diameter (µm)-Preform Feed Rate (mm/min)
First Coating Diameter (µm)-Preform Feed Rate (mm/min)
Correlation
First Coating Diameter (µm)-UV Power (W)
First Coating Diameter (µm)-UV Power (W)
Correlation
First Coating Diameter (µm)-Fiber Z
First Coating Diameter (µm)-Fiber Z
Correlation
First Coating Diameter (µm)-Preform Z
First Coating Diameter (µm)-Preform Z
Correlation
Second Coating Diameter (µm)-Furnace Temperature (°C)
Second Coating Diameter (µm)-Furnace Temperature (°C)
Correlation
Second Coating Diameter (µm)-Cooling Rate (°C/s)
Second Coating Diameter (µm)-Cooling Rate (°C/s)
Correlation


Second Coating Diameter (μm)-Preform Feed Rate (mm/min)
Second Coating Diameter (μm)-Preform Feed Rate (mm/min)
Correlation
Second Coating Diameter (μm)-UV Power (W)
Second Coating Diameter (μm)-UV Power (W)
Correlation
Second Coating Diameter (μm)-Fiber Z
Second Coating Diameter (μm)-Fiber Z
Correlation
Second Coating Diameter (μm)-Preform Z
Second Coating Diameter (μm)-Preform Z
Correlation
Furnace Temperature (°C)-Cooling Rate (°C/s)
Furnace Temperature (°C)-Cooling Rate (°C/s)
Correlation
Furnace Temperature (°C)-Preform Feed Rate (mm/min)
Furnace Temperature (°C)-Preform Feed Rate (mm/min)
Correlation
Furnace Temperature (°C)-UV Power (W)
Furnace Temperature (°C)-UV Power (W)
Correlation
Furnace Temperature (°C)-Fiber Z
Furnace Temperature (°C)-Fiber Z
Correlation
Furnace Temperature (°C)-Preform Z
Furnace Temperature (°C)-Preform Z
Correlation
Cooling Rate (°C/s)-Preform Feed Rate (mm/min)
Cooling Rate (°C/s)-Preform Feed Rate (mm/min)
Correlation
Cooling Rate (°C/s)-UV Power (W)
Cooling Rate (°C/s)-UV Power (W)
Correlation
Cooling Rate (°C/s)-Fiber Z
Cooling Rate (°C/s)-Fiber Z
Correlation


Cooling Rate (°C/s)-Preform Z
Cooling Rate (°C/s)-Preform Z
Correlation
Preform Feed Rate (mm/min)-UV Power (W)
Preform Feed Rate (mm/min)-UV Power (W)
Correlation
Preform Feed Rate (mm/min)-Fiber Z
Preform Feed Rate (mm/min)-Fiber Z
Correlation
Preform Feed Rate (mm/min)-Preform Z
Preform Feed Rate (mm/min)-Preform Z
Correlation
UV Power (W)-Fiber Z
UV Power (W)-Fiber Z
Correlation
UV Power (W)-Preform Z
UV Power (W)-Preform Z
Correlation
Fiber Z-Preform Z
1e−5−9.999e−1
Fiber Z-Preform Z
Correlation
Fiber Z-Drawing Speed (m/min)
Fiber Z-Drawing Speed (m/min)
Correlation
Fiber Z-Tension (N)
Fiber Z-Tension (N)
Correlation
Fiber Z-Clad Diameter (µm)
Fiber Z-Clad Diameter (µm)
Correlation
Fiber Z-First Coating Diameter (µm)
Fiber Z-First Coating Diameter (µm)
Correlation
Fiber Z-Second Coating Diameter (µm)
Fiber Z-Second Coating Diameter (µm)
Correlation


Fiber Z-Furnace Temperature (°C)
Fiber Z-Furnace Temperature (°C)
Correlation
0.054
0.052
0.050
Fiber Z-Cooling Rate (°C/s)
Fiber Z-Cooling Rate (°C/s)
Correlation
0.130
0.125
0.120
Fiber Z-Preform Feed Rate (mm/min)
Fiber Z-Preform Feed Rate (mm/min)
Correlation
−0.0040
−0.0041
−0.0042
−0.0043
Fiber Z-UV Power (W)
Fiber Z-UV Power (W)
Correlation
−0.060
−0.062
−0.064
−0.066
Preform Z-Drawing Speed (m/min)
Preform Z-Drawing Speed (m/min)
Correlation
−0.076
−0.078
−0.080
−0.082
Preform Z-Tension (N)
Preform Z-Tension (N)
Correlation
−0.024
−0.025
−0.026
Preform Z-Clad Diameter (µm)
Preform Z-Clad Diameter (µm)
Correlation
−0.01025
−0.01050
−0.01075
−0.01100
−0.01125
Preform Z-First Coating Diameter (µm)
Preform Z-First Coating Diameter (µm)
Correlation
0.01000
0.00975
0.00950
0.00925
Preform Z-Second Coating Diameter (µm)
Preform Z-Second Coating Diameter (µm)
Correlation
0.048
0.046
Preform Z-Furnace Temperature (°C)
Preform Z-Furnace Temperature (°C)
Correlation
−0.050
−0.052
−0.054
Preform Z-Cooling Rate (°C/s)
Preform Z-Cooling Rate (°C/s)
Correlation
−0.120
−0.125
Preform Z-Preform Feed Rate (mm/min)
Preform Z-Preform Feed Rate (mm/min)
Correlation
0.0047
0.0046
0.0045
0.0044
0.0043
8
9
10
11
12
13
14
15


Preform Z-UV Power (W)
Preform Z-UV Power (W)
Correlation
0.066
0.064
0.062
0.060
8
9
10
11
12
13
14
15