Automotive & Powersports

# THE FACTS ABOUT YOUR INTAKE & AIR FILTER

*ISO 5011 Tested to Make Sure You Maximize Airflow While Still Protecting Your Engine.*

**Part Number:** 75-6002 **Test Date:** 4/17/2020

**Description:** Open Air Intake **Test Report #:** 803

**Vehicle Applications:** 2020 Ford Powerstroke F250/F350 6.7L

## TECHNICAL BULLETIN

*There is a lot of misinformation in the marketplace. S&B publishes specific test results for each of our intakes & filters as shown below, so you can make an informed decision. Remember, improving your airflow is only good if your engine is still protected. That's the S&B difference!*

### FACT: S&B Flows 39.51% Better than Stock.

*In tests performed in our climate controlled laboratory according to the ISO5011 Test Standard, S&B's intake kit (and filter) had significantly lower restriction (better airflow) than the stock intake system. See the graph on the next page.*

### WATCH OUT: Some competitors overstate airflow.

*If they state that their filter will flow, let's say 1000 cfm, without stating at what restriction level, they are trying to mislead you.*

| Description | % S&B Flowed Better than Stock (tested @ 580 cfm) |
|---|---|
| S&B Intake w/ Oiled Filter (Secondary Inlet - Open) | |
| S&B Intake w/ Oiled Filter (Secondary Inlet - Closed) | 33.94% |
| S&B Intake w/ Dry Filter (Secondary Inlet - Open | |
| S&B Intake w/ Dry Filter (Secondary Inlet - Closed) | 29.81% |

| Test Conditions | |
|---|---|
| Barometric Pressure | 28.82 in. Hg |
| Airflow Setpoint | 580 CFM |
| Relative Humidity | 44% |
| Temperature | 66 deg. F |
| Type of Dust | A4 Coarse |
| Batch # | 14057C |
| Dust Feed Rate (grams/minute) | 1 g/min |

### FACT: S&B Protects Your Engine

*S&B Tests at the highest rated CFM for your vehicle when determining the efficienty rate (amount of dust the filter stops), so that we can be sure that your engine will be protected*

| Description | Efficiency Rate (Tested @ 580 cfm) |
|---|---|
| Stock | 99.21% |
| S&B Intake w/ Cleanable Filter | 99.19% |
| S&B Intake w/ Dry Filter | 99.90% |

### WATCH OUT: Some Competitors Use the Same Efficiency Rates for Multiple Part Numbers

*Many send one filter off to a lab to be tested at a low cfm and then publish this efficiency rate for all of their part numbers*

# Air Filter Full Life Efficiency Test Report

**Test #:** 803
**Sample #:** 2
**Filter #:** STOCK
**Housing #:** STOCK
**Date Code:** 43938

**Operator:** BL
**Report Date:** 4/17/2020
**Filter Mfg.:** FORD
**Housing Mfg.:** FORD

**Test Description:** 2020 FORD POWERSTROKE STOCK INTAKE

## Test Conditions

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.823 in. Hg | **Relative Humidity:** | 44 % |
| **Air Flow Setpoint:** | 0 SCFM | **Type of Dust:** | |
| **Test Procedure:** | FICIENCY | **Batch #:** | |
| **Air Flow Type:** | SCFM | **Temperature:** | 66 deg. F |
| **Test Endpoint:** | 10 in. H2O | **Initial Add Rate:** | NaN g/min |
| **Number of Pleats:** | | **Accumulative Add Rate:** | 0 g/min |
| **Flow Direction:** | | **Pleat Depth:** | in. |

## Test Results

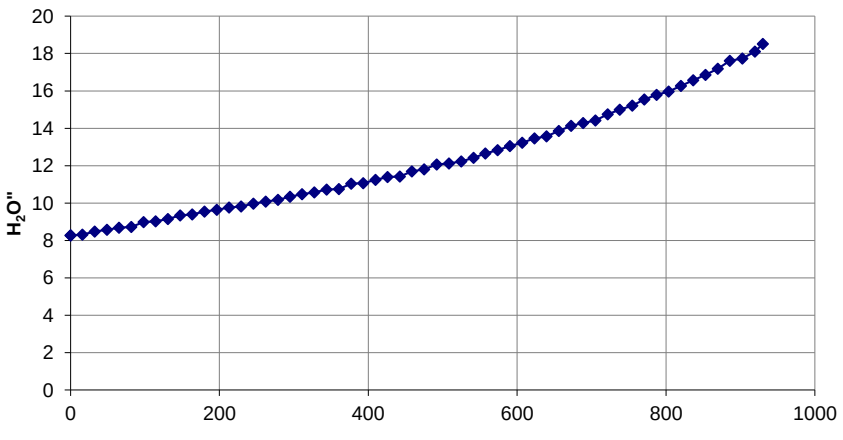
**Initial Delta P** 8.16 in. H2O

**Accumulative Capacity:** 884.40 g
**Test Time:** 56.69 min

| | Initial | | Accumulative | |
|---|---|---|---|---|
| | | Blanket | | Blanket |
| Start | | | 4010.50 | 589.02 |
| End | | | 4894.90 | 596.07 |
| Gain | | | 884.40 | 7.05 |
| Efficiency | | | 99.21% | |

Standard Restriction

Pressure Differential




| Dust Loading Curve Data | |
|---|---|
| **Dust Fed (g)** | **Pressure ("H2O)** |
| 0 | 8.267 |
| 15.94 | 8.317 |
| 32.468 | 8.475 |
| 48.835 | 8.576 |
| 65.115 | 8.684 |
| 81.679 | 8.716 |
| 98.027 | 8.976 |
| 114.255 | 9.019 |
| 130.591 | 9.144 |
| 147.053 | 9.338 |
| 163.54 | 9.397 |
| 180.041 | 9.54 |
| 196.4 | 9.64 |
| 212.969 | 9.762 |
| 229.066 | 9.817 |
| 245.48 | 9.969 |
| 262.109 | 10.076 |
| 278.485 | 10.175 |
| 294.756 | 10.343 |
| 311.036 | 10.469 |
| 327.481 | 10.572 |
| 344.087 | 10.727 |
| 360.371 | 10.753 |
| 377.106 | 11.03 |

# Air Filter Full Life Efficiency Test Report

**Test #:** 736
**Sample #:** 10
**Filter #:** KF-1070R
**Housing #:** 75-6000/75-6001
**Date Code:** 4.25.2019

**Operator:** BEN LONG
**Report Date:** 4/25/2019
**Filter Mfg.:** S&B FILTERS
**Housing Mfg.:** S&B FILTERS

**Test Description:** CAPACITY AND EFFICIENCY TEST OF THE FORD POWERSTROKE 6.7L 2011-2019 S&B INTAKE WITH FILTER KF

## Test Conditions

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.819 in. Hg | **Relative Humidity:** | 52 % |
| **Air Flow Setpoint:** | 580 SCFM | **Type of Dust:** | A4 COARSE |
| **Test Procedure:** | FICIENCY | **Batch #:** | 13985C |
| **Air Flow Type:** | SCFM | **Temperature:** | 69 deg. F |
| **Test Endpoint:** | 10 in. H2O | **Initial Add Rate:** | NaN g/min |
| **Number of Pleats:** | 100 | **Accumulative Add Rate:** | 16.42 g/min |
| **Flow Direction:** | | **Pleat Depth:** | 0.9 in. |

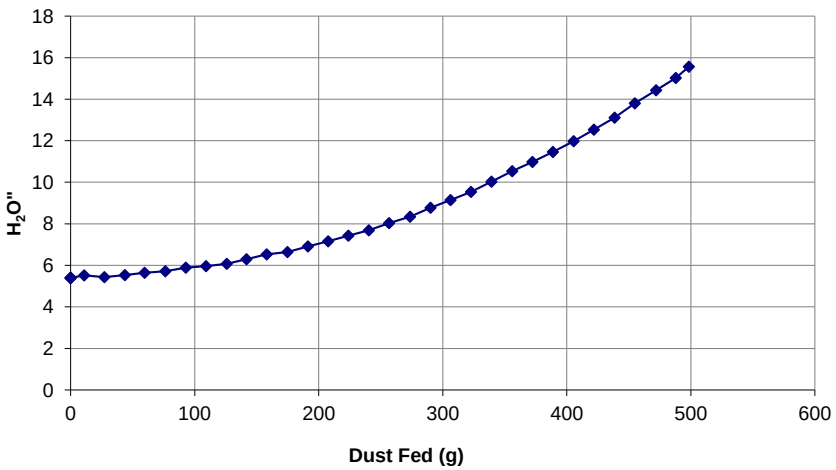
## Test Results

**Initial Delta P** 1.45 in. H2O

**Accumulative Capacity:** 403.70 g
**Test Time:** 30.39 min

| | Initial | | Accumulative | |
|---|---|---|---|---|
| | | Blanket | | Blanket |
| Start | | | 2676.90 | 614.00 |
| End | | | 3080.60 | 614.40 |
| Gain | | | 403.70 | 0.40 |
| Efficiency | | | 99.90% | |

(•) Standard Restriction
( ) Pressure Differential




| Dust Loading Curve Data | |
|---|---|
| **Dust Fed (g)** | **Pressure ("H2O)** |
| 0 | 5.414 |
| 0 | 5.397 |
| 10.881 | 5.521 |
| 27.32 | 5.432 |
| 43.672 | 5.531 |
| 59.637 | 5.647 |
| 76.3 | 5.719 |
| 92.955 | 5.885 |
| 109.204 | 5.96 |
| 125.962 | 6.075 |
| 141.837 | 6.291 |
| 158.175 | 6.524 |
| 174.706 | 6.637 |
| 191.238 | 6.915 |
| 207.69 | 7.163 |
| 223.93 | 7.429 |
| 240.516 | 7.683 |
| 256.711 | 8.028 |
| 273.653 | 8.342 |
| 290.151 | 8.779 |
| 306.325 | 9.147 |
| 322.838 | 9.537 |
| 339.194 | 10.032 |
| 355.991 | 10.533 |

# Air Filter Full Life Efficiency Test Report

**Test #:** 757
**Sample #:** 2
**Filter #:** KF-1070
**Housing #:** 75-6000/75-6001
**Date Code:** 43692

**Operator:** BEN L
**Report Date:** 8/16/2019
**Filter Mfg.:** S&B FILTERS
**Housing Mfg.:** S&B FILTERS

**Test Description:** EFFICIENCY OF THE OPEN INTAKE OILED FILTER

## Test Conditions

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.778 in. Hg | **Relative Humidity:** | 37 % |
| **Air Flow Setpoint:** | 580 SCFM | **Type of Dust:** | A4 COARSE |
| **Test Procedure:** | EFFICIENCY | **Batch #:** | 13985C |
| **Air Flow Type:** | SCFM | **Temperature:** | 74 deg. F |
| **Test Endpoint:** | 10 in. H2O | **Initial Add Rate:** | NaN g/min |
| **Number of Pleats:** | 77 | **Accumulative Add Rate:** | 16.42 g/min |
| **Flow Direction:** | | **Pleat Depth:** | 0.9 in. |

## Test Results

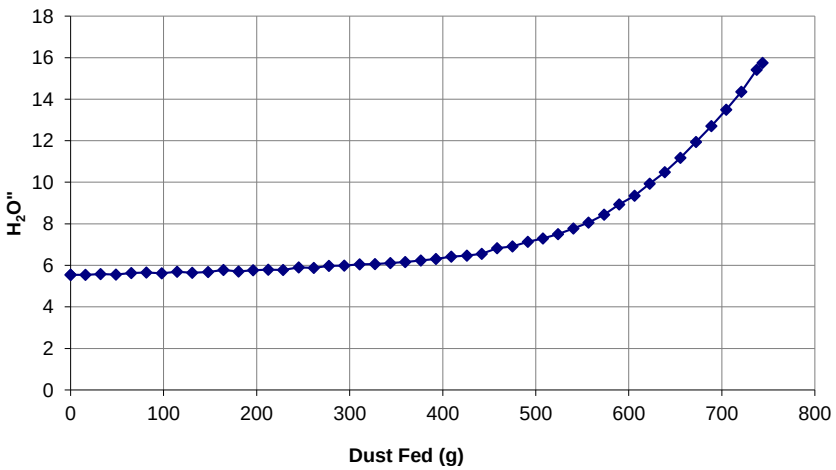
**Initial Delta P** 5.54 in. H2O

**Accumulative Capacity:** 650.70 g
**Test Time:** 45.38 min

| | Initial | | Accumulative | |
|---|---|---|---|---|
| | | Blanket | | Blanket |
| Start | | | 4413.60 | 584.49 |
| End | | | 5064.30 | 589.81 |
| Gain | | | 650.70 | 5.32 |
| Efficiency | | | 99.19% | |

Standard Restriction

Pressure Differential




| Dust Loading Curve Data | |
|---|---|
| **Dust Fed (g)** | **Pressure ("H2O)** |
| 0 | 5.545 |
| 15.933 | 5.542 |
| 32.258 | 5.576 |
| 48.78 | 5.561 |
| 65.133 | 5.626 |
| 81.529 | 5.658 |
| 98.038 | 5.614 |
| 114.35 | 5.695 |
| 130.618 | 5.637 |
| 147.787 | 5.676 |
| 164.314 | 5.777 |
| 180.499 | 5.707 |
| 196.16 | 5.767 |
| 212.331 | 5.787 |
| 228.459 | 5.78 |
| 245.198 | 5.897 |
| 261.447 | 5.878 |
| 277.758 | 5.973 |
| 294.279 | 5.992 |
| 310.654 | 6.049 |
| 327.25 | 6.061 |
| 343.769 | 6.117 |
| 359.769 | 6.166 |
| 376.305 | 6.229 |

# Air Filter Restriction Test Report

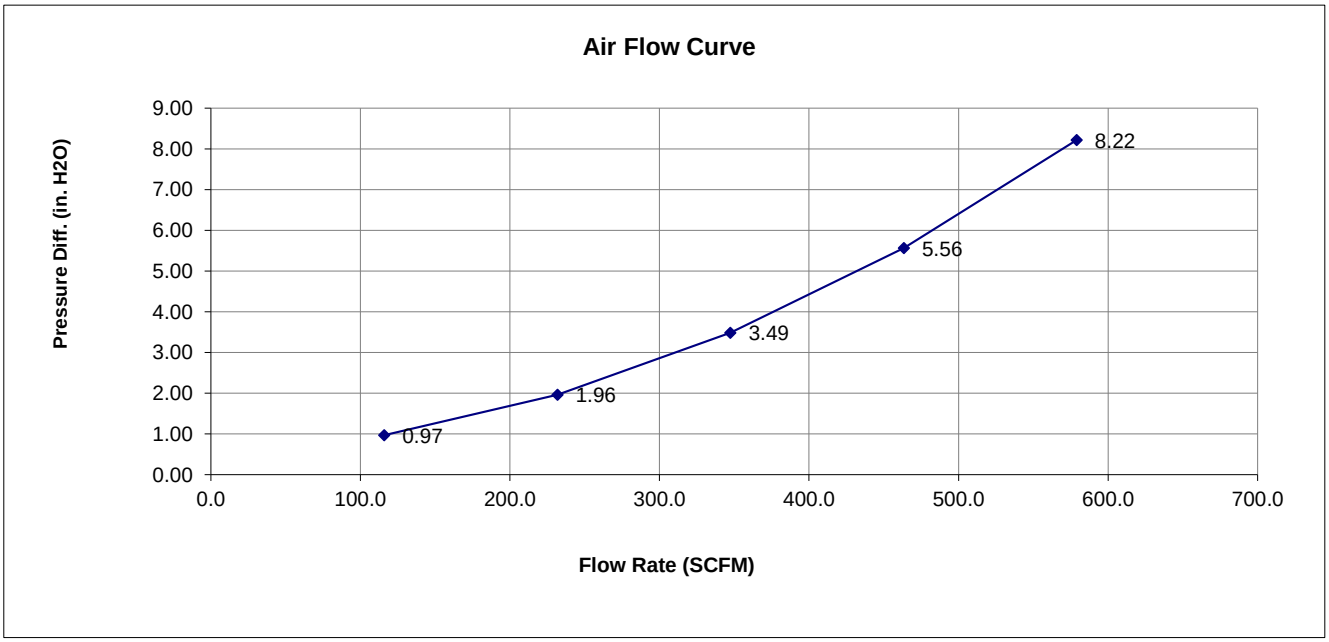
**Test #:** 803
**Sample #:** 1
**Filter #:** STOCK
**Housing #:** STOCK
**Date Code:** 43938

BL
4/17/2020
FORD
FORD

**Test Description:** 2020 FORD POWERSTROKE STOCK INTAKE

**Test Conditions**

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.83342 in. Hg | **Relative Humidity:** | 35 % |
| **Air Flow Type:** | SCFM | **Temperature:** | 72 deg. F |
| **Number of Pleats:** | | **Pleat Depth:** | in. |
| **Flow Direction:** | | | |




## Air Flow Curve Data

| Flow Rate | Differential Pressure |
|---|---|
| 116 | 0.97 |
| 232 | 1.96 |
| 347 | 3.49 |
| 463 | 5.56 |
| 579 | 8.22 |

# Air Filter Restriction Test Report

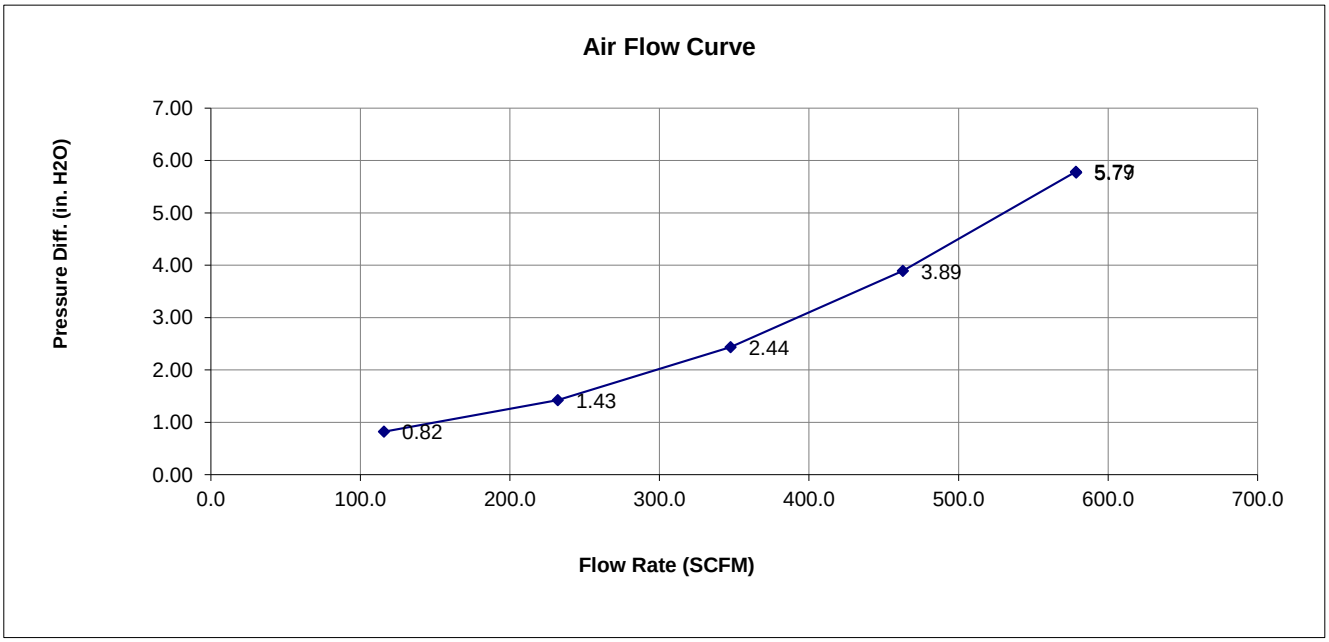
**Test #:** **753**
**Sample #:** 4
**Filter #:** KF-1070R
**Housing #:** 75-6000/75-6001
**Date Code:** 43635

BEN L
8/16/2019
S&B FILTERS
S&B FILTERS

**Test Description:** RESTRICTION VERSUS 75-5085 AND 75-5104 DRY FILTER (WITH INSERT)

**Test Conditions**

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.8787 in. Hg | **Relative Humidity:** | 58 % |
| **Air Flow Type:** | SCFM | **Temperature:** | 68 deg. F |
| **Number of Pleats:** | 100 | **Pleat Depth:** | 1 in. |
| **Flow Direction:** | | | |




## Air Flow Curve Data

| Flow Rate | Differential Pressure |
|---|---|
| 116 | 0.82 |
| 232 | 1.43 |
| 347 | 2.44 |
| 463 | 3.89 |
| 578 | 5.79 |
| 579 | 5.77 |

# Air Filter Restriction Test Report

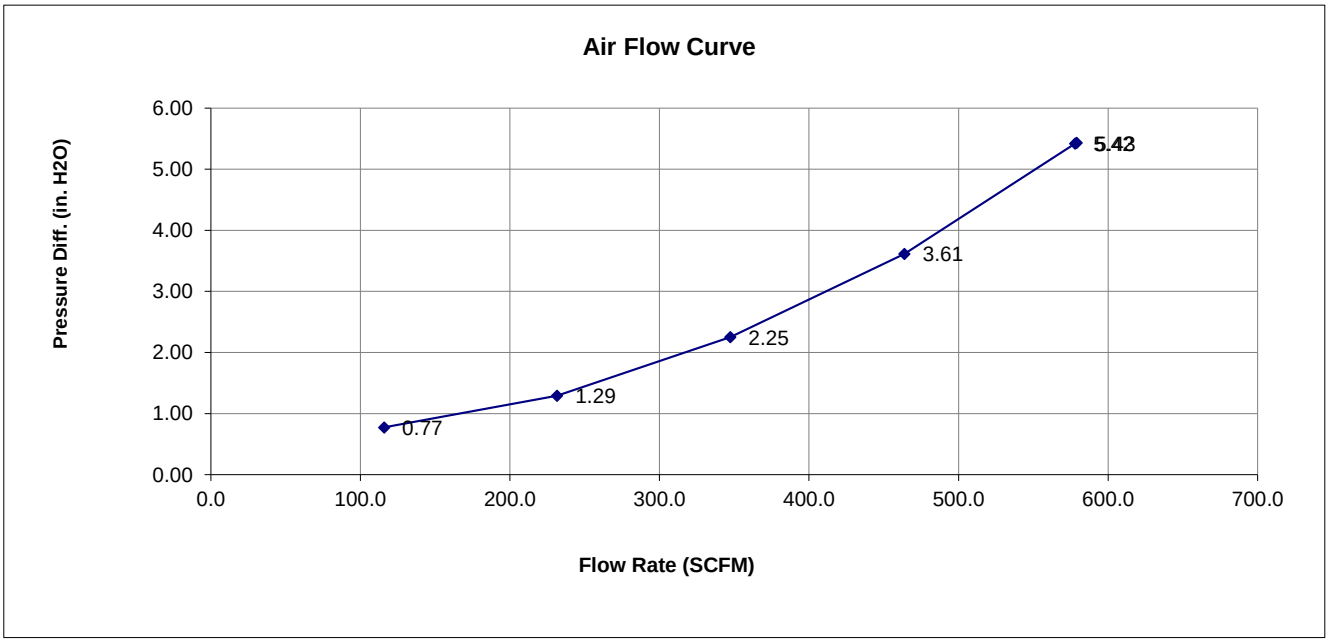
**Test #:** **753**
**Sample #:** 5
**Filter #:** KF-1070
**Housing #:** 75-6000/75-6001
**Date Code:** 43635

BEN L
8/16/2019
S&B FILTERS
S&B FILTERS

**Test Description:** RESTRICTION VERSUS 75-5085 AND 75-5104 OILED FILTER (WITH INSERT)

**Test Conditions**

| | | | |
|---|---|---|---|
| **Barometric Pressure:** | 28.87909 in. Hg | **Relative Humidity:** | 59 % |
| **Air Flow Type:** | SCFM | **Temperature:** | 68 deg. F |
| **Number of Pleats:** | 77 | **Pleat Depth:** | 1 in. |
| **Flow Direction:** | | | |




## Air Flow Curve Data

| Flow Rate | Differential Pressure |
|---|---|
| 116 | 0.77 |
| 232 | 1.29 |
| 347 | 2.25 |
| 464 | 3.61 |
| 578 | 5.42 |
| 579 | 5.43 |


CAUTION
2011 FORD
F-150 6.7L