

Avg Port Height, in

Port Length, in

| Port Flow Analyzer v3.0 Performance V |  |             |              |                            | e World                              | World  |                        |              | This Report Prin       | ted:                      |            |
|---------------------------------------|--|-------------|--------------|----------------------------|--------------------------------------|--|------------------------|--------------|------------------------|---------------------------|------------|
| Test: PW SBM 63171A-2 www.performance |  |             |              |                            | <u>ce-world.com</u>                  | -world.com   |                        |              | 11:30:00 AM 07/08/2015 |                           |            |
| Folder: SB Mopar Performance Tre      |  |             |              |                            | nds © 1999                           |  |                        |              | Page: 1                |                           |            |
| Head #:                               |  |             |              |                            |                                      | Bore Adapt   | er Diamete             | r: 4.25"     |                        |                           |            |
| Customer                              | :  |             |              |                            |                                      | Int Port Ada   | apter: Radiu           | used Inlet   |                        |                           |            |
| Operator:                             |  |             |              |                            | Exh Port Adapter: Short "stub stack" |  |                        |              |                        |                           |            |
| Test Com                              | ments:   |             |              |                            |                                      |  |                        |              |                        |                           |            |
|                                       | PW 63171   | A-2 SB Mop  | oar aluminum | n head                     |                                      |  |                        |              |                        |                           |            |
| Report of:                            | :  |             | Test Time    |                            |                                      | Tested at  | Corr to                | # Vlvs       | Vlv Dia                | Stem Dia                  | Port Area  |
| Comparin                              | g  |             | 11:16 AM     |                            | Int:                                 | 28"  | 28.0"                  | 1            | 2.02"                  | .341"                     | .00 sq in  |
| 1 Cylinder                            | rs   |             | 05-23-14     |                            | Exh:                                 | 28"  | 28.0"                  | 1            | 1.60"                  | .341"                     | .00 sq in  |
| Port                                  | Lift   | L/D         | Avg          | Cyl 1                      |                                      |  |                        |              |                        |                           |            |
|                                       |  |             | CFM          | CFM                        |                                      |  |                        |              |                        |                           |            |
| Intake                                | 0.100  | 0.050       | 68.2         | 68.2                       |                                      |  |                        |              |                        |                           |            |
| Intake                                | 0.200  | 0.099       | 123.1        | 123.1                      |                                      | NOTE: ALL  | FLOWBENC               | HES ARE NO   | OT CREATED             | D EQUAL!                  |            |
| Intake                                | 0.300  | 0.149       | 174.2        | 174.2                      |                                      | Data from one bench to the next can be vastly different. |                        |              |                        |                           |            |
| Intake                                | 0.400  | 0.198       | 219.3        | 219.3                      |                                      | If you are n   | nodifying th           | nis head, it | is importan            | t to "baseline"           |            |
| Intake                                | 0.500  | 0.248       | 247.7        | 247.7                      |                                      | first to ensure accuracy.                                |                        |              |                        |                           |            |
| Intake                                | 0.600  | 0.297       | 263.1        | 263.1                      |                                      | The data or  | n this sheet           | is for refer | ence only.             |                           |            |
| Intake                                | 0.700  | 0.347       | 263.7        | 263.7                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.100  | 0.063       | 57.7         | 57.7                       |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.200  | 0.125       | 105.8        | 105.8                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.300  | 0.188       | 143.6        | 143.6                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.400  | 0.250       | 168.9        | 168.9                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.500  | 0.313       | 182.6        | 182.6                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.600  | 0.375       | 191.0        | 191.0                      |                                      |  |                        |              |                        |                           |            |
| Exhaust                               | 0.700  | 0.438       | 196.1        | 196.1                      |                                      |  |                        |              |                        |                           |            |
| Head File:                            | 63171A-2   |             |              |                            |                                      |  |                        |              |                        |                           |            |
| Head Corr                             | nments:  |             |              |                            |                                      |  |                        |              |                        |                           |            |
|                                       | PW 63171   | A-2 SB Mop  | oar aluminum | n head                     |                                      |  |                        |              |                        |                           |            |
| Head Nun                              | nber   |             |              |                            |                                      | Customer   | Customer               |              |                        |                           |            |
| Intake                                |  |             |              |                            |                                      | Exhaust  |                        |              |                        |                           |            |
|                                       | Layout:<br>Valve Diameter, in  |             |              | 1 valve & 1 port           |                                      |  | Layout:                |              |                        | 1 valve & 1 port<br>1.60" |            |
|                                       |  |             |              | 2.02"                      |                                      | Valve Diameter, in                                       |                        |              |                        |                           |            |
|                                       | Stem Diameter, in<br>Throat Diameter, in<br>Avg Seat Angle, deg<br>Port Shape: |             |              | .341"<br>45<br>Rectangular |                                      |  | Stem Diam              | eter, in     |                        | .341"                     |            |
|                                       |  |             |              |                            |                                      |  | Throat Diar            | neter, in    |                        |                           |            |
|                                       |  |             |              |                            |                                      |  | Avg Seat Angle, deg 45 |              |                        |                           |            |
|                                       |  |             |              |                            |                                      |  |                        |              |                        | Rectanglar                | Rectanglar |
|                                       | Port Volum   | ne, ccs     |              | 179cc                      |                                      |  | Port Volum             | ie, ccs      |                        | 79cc                      |            |
|                                       | Avg Port Di  | iameter, in |              |                            |                                      |  | Avg Port Di            | ameter, in   |                        |                           |            |
| I                                     |  |             |              |                            |                                      |  |                        |              |                        |                           |            |

4.5

Avg Port Height, in

4.75

Port Length, in

| Specifications 63171A-2  |                  |
|--------------------------|------------------|
| Material                 | A356 Aluminum    |
| Combustion Chamber CC    | 63cc             |
| Intake Port Volume CC    | 179cc            |
| Intake Port Dimension    | 2.28" x 1.16"    |
| Exhaust Port Volume CC   | 79cc             |
| Exhaust Port Dimension   | 1.75" x 1.25"    |
| Exhaust Port Location    | OE Stock         |
| Spark Plug Location      | Angled           |
| Intake Valve Size        | 2.02" (+.100")   |
| Exhaust Valve Size       | 1.60" (+.100")   |
| Valve Stem Diameter      | 11/32" (.343")   |
| Valve Angle              | 18 Degree        |
| Valve Seat Machining     | 3-Angle          |
| Valve Spring Pocket I.D. | 1.50"            |
| Valve Guide Material     | Manganese Bronze |
| Valve Guide O.D. (top)   | 0.530"           |
| Valve Guide O.D. (base)  | 0.560"           |
| Deck Thickness           | 5/8"             |
| Rocker Shaft Design      | OE Stock         |
| Valve Cover Mounting     | OE Stock         |

| Hyd Flat/Hyd Roller (up to .600" lift) (Check Cam Manufacturer Recommendation) |                               |                       |  |  |  |  |  |
|--|-------------------------------|-----------------------|--|--|--|--|--|
| Installed Components   | Size                          | Brand                 |  |  |  |  |  |
| Intake Valves  | 2.02" x 5.01" x 11/32"        | PW 360030             |  |  |  |  |  |
| Exhaust Valves   | 1.60" x 5.01" x 11/32"        | PW 360026             |  |  |  |  |  |
| Valve Springs Installed  | Beehive                       | PAC PAC-1219-16       |  |  |  |  |  |
| Valve Retainers  | 7-Degree                      | Comp Cams 787-16      |  |  |  |  |  |
| Valve Locks  | 7-Degree                      | PW 360410             |  |  |  |  |  |
| Valve Seals  | 11/32" x .530"                | PW 360480             |  |  |  |  |  |
| Valve Spring Locators  |                               | Comp Cams 4705-16     |  |  |  |  |  |
| Rocker Arm Studs   | Not Required                  |                       |  |  |  |  |  |
| Pushrod Guide Plates   | Not Required                  |                       |  |  |  |  |  |
| Recommended Head Bolts/Stu   | ds                            | ARP 144-3601/144-4005 |  |  |  |  |  |
| Spark Plugs  | Champion RC12YC or Equivalent |                       |  |  |  |  |  |

Valves Lapped & Checked Valve Spring Installed Height & Pressure Checked Vacuum Tested