

Platt Pit Fan (Measured in Fan Drift)

Whitfield Colliery
Dec. 1/27.

Measurements taken with
Davis Biram. 5 Vane
Anemometer No 210.
(Corrections taken from Chart)

Reference { square no. in Black.
Area - Blue.
Velocity - Red.
Quantity - Green.

Ar. of 2 min Readings in each case.

Engine Pulley 18' dia.
10 Grooves 2" Ropes.

Fan Pulley 6'6" dia.
8 Grooves 2" Ropes.
(7 Ropes working).

8 - 1 3/4" Ropes.
W.G. 5'30"
Steam 81 lbs.
Bar. 10 am. 29.7
 1 pm 29.7
Ther. 10 am. 40°F
 1 pm. 38°F

Engine Speed 54 RPM.
Fan — 144 "

These figures in Red
2/2/29.

| | | | |
|--|-------------------------------|-------------------------------|--------------------------------|
| 1. 4 sq. ft. Vel. 1923. 7692. | 2. 7. 2880. 11520. | 3. 7. 2046. 8184. | 4. 3.5. 1758. 6153. |
| 1592. 6368 | 2063. 8252 | 1765. 7060 | 1500. 5250 |
| 5. 7. 1118. 4472. | 6. 4. 2301. 9204. | 7. 7. 1708. 6832. | 8. 3.5. 1471. 5148. |
| 908. 3632 | 1830. 7320 | 1615. 6460 | 1300. 4550 |
| 9. 7. 1245. 4980. | 10. 4. 2264. 9056. | 11. 7. 2341. 9247. | 12. 3.5. 1841. 6447. |
| 959. 3836 | 1960. 7840 | 1888. 7552 | 1600. 5600 |
| 13. 7. 781. 3124. | 14. 4. 1803. 7212. | 15. 7. 2316. 9264. | 16. 3.5. 1903. 6660. |
| 673. 2692 | 1479. 5916 | 1890. 7560 | 1535. 5373 |
| 17. 3.8. 935. 3553. | 18. 3.8. 1686. 6407. | 19. 3.8. 2150. 8170. | 20. 3.36. 1883. 6327. |
| 176. 2949 | 1397. 5309 | 1925. 7315 | 1450. 4872 |

Total Area 76.76 sq. ft.
Quantity 139.646. 115,706

W.G. at 1 p.m. 5.8" Bar. 29.73. Ther. 43°F.
W.G. at 4 p.m. 5.8" " 29.73. " 43°F.
Av. R.P.M. 56.25. Ars. Press. 81 lbs a"

| | | |
|---------------------------------------|---------------------------------------|--------------------------------------|
| 1. 4. 1,298. 5,192. | 2. 4. 1,758. 7,032. | 3. 4-6. 2,185. 10,051. |
| 1025. 4100 | 1700. 6800 | 1365. 6279 |
| 4. 2. 1,348. 2,696. | 5. 2. 1,918. 3,836. | 6. 2.3. 2,214. 5,092. |
| 1337. 5348 | 1800. 7200 | 1780. 8080 |
| 7. 2. 1,573. 3,146. | 8. 2. 1,997. 3,994. | 9. 2.3. 2,145. 4,934. |
| 10. 2. 1,851. 3,702. | 11. 2. 2,304. 4,608. | 12. 2.3. 2,396. 5,511. |
| 1837. 7348 | 1845. 7680 | 1955. 8993 |
| 13. 2. 1,833. 3,666. | 14. 2. 2,231. 4,462. | 15. 2.3. 2,461. 5,660. |
| 16. 2. 1,393. 2,786. | 17. 2. 2,085. 4,170. | 18. 2.3. 2,084. 4,678. |
| 1837. 7348 | 1845. 7680 | 1955. 8993 |
| 19. 2. 1,515. 3,030. | 20. 2. 2,451. 4,902. | 21. 2.3. 2,552. 5,870. |
| 22. 2.32.2.66. 2,406. 5,582. | 23. 2.32.2.66. 1,270. 2,946. | 24. 2.60.3.3. 2,048. 5,325. |

Total Area 57.64 sq. ft. = 58.72
Quantity 113.021. 90,345

Area { 76.76
 57.64
 134.40 off. 135.48

Quantity { 139.646
 113.021
 252,667 (adding quantity
 in each square)

∴ 7/2/29 206051

Mean Vel. 1901.45
Area. 134.4
255.555. (taking mean vel.)

Platt Pit Fan.

Whitfield Colliery
7/2/29.

Engine Pulley 18'-0" dia
10 Grooves to
take 2" Ropes.

Fan Pulley 6'-6" dia
8 Grooves
to take 2" Ropes.

8 - 1 3/4" Ropes working

Engine Speed
54 R.P.M.

Fan Shaft

147 R.P.M.

Steam 8 lbs □"

W.G. 5:30"

Bar. 10 a.m. 29.7

" 1 p.m. 29.7

Ther. 10 a.m. 40°F

" 1 p.m. 38°F

| | | | | | | |
|--------------------------|---------------------|---------------------|----------------------|--------------------|----------------------|----------------------|
| 4 sq. ft 1592 6368 | 4 2063 8252 | 4 1765 7060 | 3.5 1500 5250 | 4 1025 4100 | 4 1700 6800 | 4.6 1365 6279 |
| 4 908 3632 | 4 1830 7320 | 4 1616 6460 | 3.5 1300 4550 | 4 1337 5348 | 4 1800 7200 | 4.6 1780 8188 |
| 4 959 3836 | 4 1960 7840 | 4 1888 7552 | 3.5 1600 5600 | 4 1837 7348 | 4 1895 7580 | 4.6 1955 8993 |
| 4 673 2692 | 4 1479 5916 | 4 1890 7560 | 3.5 1535 5373 | 4 1515 6060 | 4 2037 8148 | 4.6 995 4577 |
| 3.8 776 2949 | 3.8 1397 5309 | 3.8 1925 7315 | 3.36 1450 4872 | 2.66 278 740 | 2.66 1460 3884 | 3.00 1700 5100 |

Area 76.76 sq. ft.
Quantity 115,705 cu. ft. per. min.

Total Area = 135.48 sq. ft.
Total Quantity = 206,051 cu. ft. per. min.

Quantity 90,345 cu. ft. per. min.

Area 58.72 sq. ft.

Davis Biram
Anemometer
N^o 210 6 Vanes
Velocities reduced from
correction Chart.
Average of 2 min
readings in each case.

Area in Black. = 4.6.
Velocity Red. = 1365
Quantity Blue. = 6279