

Bulletin: MACH-2014-TD01

Date: 04/02/2014

Supercedes: MACH-2013-001

Technical Data



| Size | Units | CM-300 | CM-399 | CM-500 | C-300 | C-450 | C-750 | C-900 | C-1050 | C-1500 | C-1500H | C-2000 | C-2000H | C-2500 | C-3000 | C-4000 |
|--------------------------|----------------|--------|--------|--------|-------|-------|-------|-------|--------|--------|---------|--------|---------|--------|--------|--------|
| Input | Mbtu/hr | 300 | 399 | 500 | 300 | 450 | 750 | 900 | 1,050 | 1,500 | 1,500 | 2,000 | 2,000 | 2,500 | 3,000 | 4,000 |
| Output | Mbtu/hr | 281 | 371 | 460 | 276 | 414 | 713 | 846 | 987 | 1,440 | 1,440 | 1,920 | 1,920 | 2,375 | 2,850 | 3,800 |
| Output | BHP | 8.4 | 11.1 | 13.7 | 8.2 | 12.4 | 21.3 | 25.3 | 29.5 | 43.0 | 43.0 | 57.3 | 57.3 | 70.9 | 85.1 | 113.5 |
| Fuel Rate | CFH | 291 | 387 | 485 | 291 | 437 | 728 | 874 | 1,019 | 1,456 | 1,456 | 1,942 | 1,942 | 2,427 | 2,913 | 3,883 |
| Air Requirement | SCFM | 70 | 93 | 117 | 70 | 105 | 175 | 210 | 245 | 350 | 350 | 467 | 467 | 584 | 629 | 839 |
| Theoretical Air | SCFM | 47 | 62 | 78 | 47 | 70 | 117 | 140 | 163 | 233 | 233 | 311 | 311 | 388 | 466 | 621 |
| Excess Air | % | 50.2% | 50.0% | 50.6% | 50.2% | 50.2% | 50.2% | 50.2% | 50.2% | 50.2% | 50.2% | 50.3% | 50.3% | 50.4% | 35.0% | 35.0% |
| Flue Gas Flow | ACFM | 92 | 122 | 153 | 92 | 138 | 229 | 275 | 321 | 458 | 458 | 611 | 611 | 764 | 825 | 1100 |
| Flue Gas Flow | fps | 17.5 | 23.3 | 29.2 | 13.4 | 16.8 | 19.5 | 13.1 | 15.3 | 14.0 | 14.0 | 18.7 | 18.7 | 23.3 | 25.2 | 33.6 |
| Emmissions: | | | | | | | | | | | | | | | | |
| Dry Flue Gas Flow | lb/hr | 312 | 416 | 521 | 312 | 469 | 781 | 937 | 1094 | 1562 | 1562 | 2083 | 2083 | 2604 | 3125 | 3729 |
| Wet Flue Gas Flow | lb/hr | 345 | 459 | 575 | 345 | 517 | 862 | 1034 | 1207 | 1724 | 1724 | 2298 | 2298 | 2873 | 3116 | 4155 |
| CO₂ | lb/hr | 35 | 47 | 59 | 35 | 53 | 89 | 106 | 124 | 177 | 177 | 236 | 236 | 295 | 355 | 473 |
| CO | ppm | 44 | 67 | 67 | 67 | 67 | 64 | 64 | 64 | 19 | 20 | 19 | 20 | 21 | 23 | 33 |
| NO_x | ppm | 8.1 | 13.6 | 13.6 | 7 | 7 | 9 | 9 | 9 | 14 | 7.9 | 14 | 7.9 | 9.2 | 7.2 | 7.2 |