

DMS™ Disposable Motor System™ Data Sheet

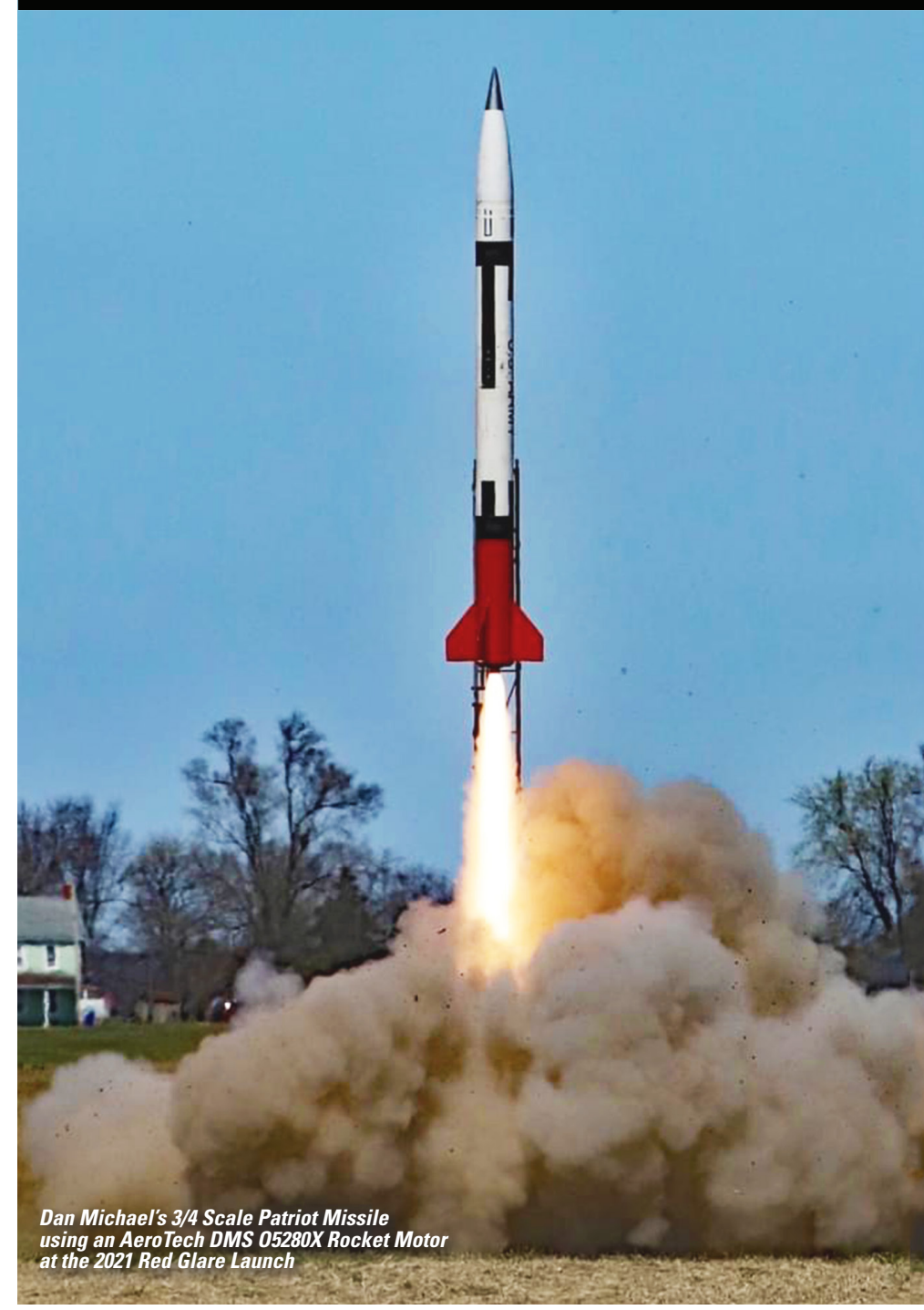
AeroTech produces a variety of composite propellant formulations including White Lightning (W), Super White Lightning (WS), Blue Thunder (T), Black Jack (J), Black Max (FJ), Redline (9), Warp-9 (N), Mojave Green (G), Metalstorm (M), Dark Matter (DM), Super Thunder (ST), Classic (C) & Propellant-X (X). Rocket propellant abbreviations, indicated in the brackets, are listed after the average thrust number on the DMS rocket motors listed below. All rocket motors listed have TRA certification.

| 29mm DMS | | | | | | | | |
|----------|----------|--------------------|--|-------------------------------------|---------------------------------------|----------------------------------|-----------------|------------------|
| Motor | Part No. | Length (inches/mm) | Total Impulse I _T (N-sec./lb-sec) | Peak Thrust T _{MAX} (N/lb) | Thrust Duration T _B (sec.) | Time Delay T _D (sec.) | Prop Wt. (g/oz) | Total Wt. (g/oz) |
| G8ST | 070800 | 5.79 / 147 | 130 / 29.5 | 8 / 1.8 | 19.8 | P | 83.4 / 2.9 | 157 / 5.5 |
| G12ST | 071200 | 5.79 / 147 | 144 / 32.4 | 31 / 7.0 | 12.7 | P | 82 / 2.9 | 150 / 5.3 |
| G72DM | 077214 | 4.88 / 124 | 105 / 23.6 | 106 / 23.8 | 1.3 | 14 | 63 / 2.2 | 132 / 4.7 |
| G75M | 077513 | 4.88 / 124 | 115 / 25.9 | 111 / 25.0 | 1.3 | 13 | 67 / 2.4 | 133 / 4.7 |
| G80NT | 078014 | 4.88 / 124 | 137 / 30.8 | 109 / 24.5 | 1.7 | 14 | 62.5 / 2.2 | 128 / 4.5 |
| G125T | 071214 | 4.88 / 124 | 128 / 28.8 | 160 / 36.0 | 0.95 | 14 | 59.6 / 2.1 | 125 / 4.4 |
| H13ST | 081300 | 8.00 / 203 | 211 / 47.4 | 50 / 11.2 | 15.20 | P | 116 / 4.1 | 203 / 7.2 |
| H115DM | 081114 | 8.00 / 203 | 172 / 38.7 | 126 / 28.3 | 1.5 | 14 | 113 / 4.0 | 205 / 7.2 |
| H135W | 081314 | 8.00 / 203 | 226 / 50.8 | 152 / 34.2 | 1.7 | 14 | 121 / 4.3 | 211 / 7.4 |
| H169WS | 081613 | 8.00 / 203 | 233 / 52.4 | 231 / 51.9 | 1.4 | 13 | 112 / 4.0 | 202 / 7.1 |
| H182R | 081814 | 8.00 / 203 | 218 / 49.0 | 192 / 43.2 | 1.2 | 14 | 115 / 4.1 | 207 / 7.3 |
| H195NT | 081914 | 8.00 / 203 | 236 / 53.1 | 254 / 57.1 | 1.16 | 14 | 107 / 3.8 | 196 / 6.9 |
| I205W | 092014 | 12.00 / 305 | 345 / 77.6 | 253 / 56.9 | 1.7 | 14 | 188 / 6.6 | 315 / 11.1 |
| 38mm DMS | | | | | | | | |
| Motor | Part No. | Length (inches/mm) | Total Impulse I _T (N-sec./lb-sec) | Peak Thrust T _{MAX} (N/lb) | Thrust Duration T _B (sec.) | Time Delay T _D (sec.) | Prop Wt. (g/oz) | Total Wt. (g/oz) |
| H100W | 081014 | 6.12 / 155 | 234 / 52.6 | 131 / 29.3 | 2.3 | 14 | 121 / 4.3 | 261 / 9.2 |
| H219T | 082114 | 6.12 / 155 | 234 / 52.6 | 267 / 60.0 | 1.1 | 14 | 109 / 3.8 | 256 / 9.0 |
| H283ST | 082815 | 6.12 / 155 | 201 / 45.2 | 325 / 73.1 | 0.7 | 15 | 97 / 3.4 | 247 / 8.7 |
| H45W | 0845P | 7.98 / 202 | 320 / 71.9 | 87 / 19.6 | 6.0 | PS | 180 / 6.4 | 364 / 12.8 |
| H550ST | 085514 | 7.98 / 202 | 320 / 71.9 | 667 / 150.0 | 0.57 | 14 | 145 / 5.1 | 315 / 11.1 |
| I140W | 091414 | 7.98 / 202 | 336 / 75.5 | 181 / 40.7 | 2.4 | 14 | 183 / 6.6 | 356 / 12.6 |
| I175WS | 091713 | 7.98 / 202 | 333 / 74.9 | 260 / 58.5 | 1.9 | 13 | 168 / 5.9 | 348 / 12.3 |
| I280DM | 092814 | 14.03 / 356 | 561 / 126.1 | 386 / 86.8 | 1.9 | 14 | 355 / 12.5 | 616 / 21.7 |
| I500T | 095014 | 14.03 / 356 | 620 / 139.4 | 613 / 137.8 | 1.24 | 14 | 312 / 11.0 | 576 / 20.3 |
| J270W | 102714 | 14.03 / 356 | 703 / 158.1 | 356 / 80.0 | 2.6 | 14 | 381 / 13.4 | 642 / 22.7 |
| J425R | 104214 | 14.03 / 356 | 676 / 152.0 | 452 / 101.6 | 1.6 | 14 | 364 / 12.8 | 631 / 22.3 |
| J435WS | 104314 | 14.03 / 356 | 737 / 165.7 | 607 / 136.5 | 1.7 | 14 | 352 / 12.4 | 624 / 22.0 |
| 54mm DMS | | | | | | | | |
| Motor | Part No. | Length (inches/mm) | Total Impulse I _T (N-sec./lb-sec) | Peak Thrust T _{MAX} (N/lb) | Thrust Duration T _B (sec.) | Time Delay T _D (sec.) | Prop Wt. (g/oz) | Total Wt. (g/oz) |
| I65W | 096510 | 8.58 / 218 | 640 / 143.9 | 178 / 40.0 | 9.0 | PS | 377 / 13.3 | 752 / 26.5 |
| J250W | 102514 | 8.58 / 218 | 716 / 161.0 | 331 / 74.4 | 2.8 | 14 | 363 / 12.8 | 708 / 25.0 |
| J450DM | 104514 | 14.10 / 358 | 1,097 / 246.6 | 556 / 125.0 | 2.4 | 14 | 662 / 23.4 | 1,209 / 42.7 |
| K400C | 114014 | 14.10 / 358 | 1,361 / 306.2 | 549 / 123.4 | 3.3 | 14 | 650 / 22.9 | 1,194 / 42.1 |
| K535W | 115314 | 14.10 / 358 | 1,434 / 322.4 | 655 / 147.3 | 2.8 | 14 | 745 / 26.3 | 1,264 / 44.6 |
| K455NW | 114517 | 25.00 / 635 | 2,328 / 523.4 | 1,308 / 294.1 | 5.1 | 17 | 1,361 / 48.0 | 2,286 / 80.6 |
| K850DM | 118516 | 25.00 / 635 | 1,867 / 419.7 | 974 / 219.0 | 2.2 | 16 | 1,149 / 40.5 | 2,022 / 71.3 |
| L1000W | 121018 | 25.00 / 635 | 2,714 / 610.2 | 1,261 / 283.5 | 2.7 | 18 | 1,400 / 49.4 | 2,194 / 77.4 |
| 75mm DMS | | | | | | | | |
| Motor | Part No. | Length (inches/mm) | Total Impulse I _T (N-sec./lb-sec) | Peak Thrust T _{MAX} (N/lb) | Thrust Duration T _B (sec.) | Time Delay T _D (sec.) | Prop Wt. (g/oz) | Total Wt. (g/oz) |
| L875DM | 12875P | 25.12 / 638 | 3,800 / 854.3 | 1,035 / 232.7 | 4.3 | PS | 2,472 / 87.2 | 4,577 / 161.5 |
| M1350W | 13135P | 25.12 / 638 | 5,293 / 1,190.0 | 1,779 / 400.0 | 3.9 | PS | 2,690 / 94.9 | 4,808 / 169.6 |
| 98mm DMS | | | | | | | | |
| Motor | Part No. | Length (inches/mm) | Total Impulse I _T (N-sec./lb-sec) | Peak Thrust T _{MAX} (N/lb) | Thrust Duration T _B (sec.) | Time Delay T _D (sec.) | Prop Wt. (g/oz) | Total Wt. (g/oz) |
| M1340W | 13143P | 21.90 / 556 | 7,673 / 1,725.0 | 1,928 / 433.5 | 5.7 | PS | 4,036 / 142.4 | 6,998 / 246.8 |
| O5280X | 15528P | 55.44 / 1408 | 22,680 / 5,098.9 | 6,990 / 1,571.5 | 4.5 | PS | 9,779 / 344.9 | 15,345 / 541.3 |

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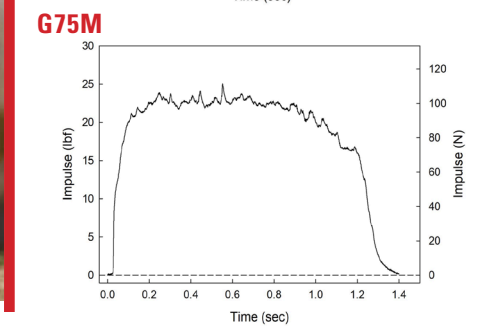
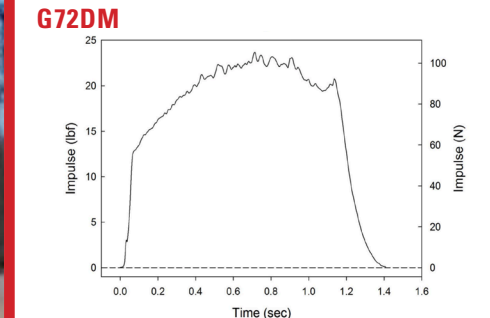
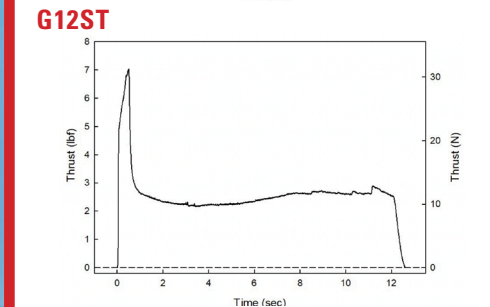
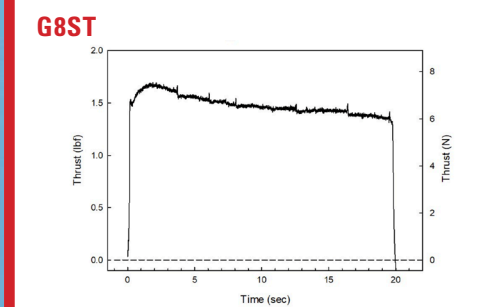
DISPOSABLE MOTOR SYSTEM™



Dan Michael's 3/4 Scale Patriot Missile using an AeroTech DMS O5280X Rocket Motor at the 2021 Red Glare Launch

DMS ROCKET MOTORS

29mm



THRUST YOU CAN TRUST!™

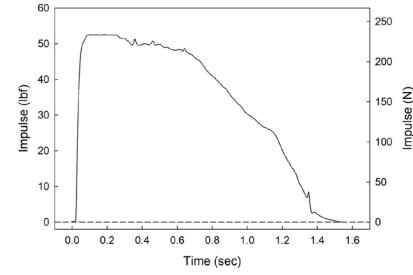
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The Leader in High Performance Rocketry

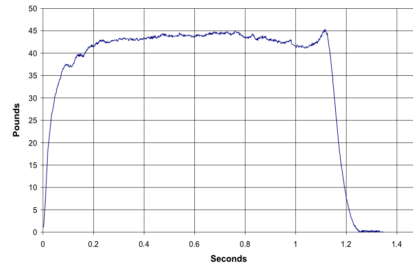
**ACTUAL CERTIFICATION
THRUST-TIME CURVES FOR
DMS™ ROCKET MOTORS.**
MANY DMS™ ROCKET MOTORS
FEATURE ADJUSTABLE TIME DELAYS.

29mm

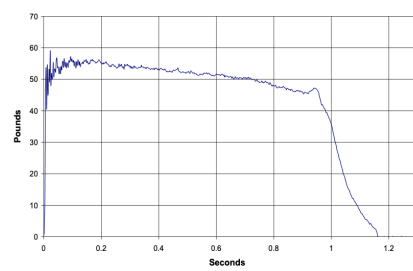
H169WS



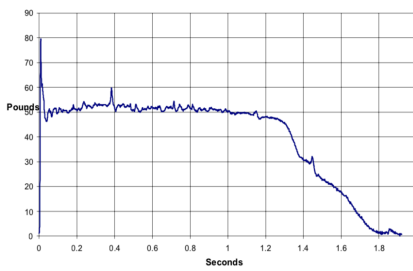
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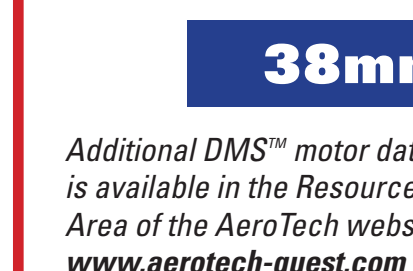
H195NT



I205W



H115DM



H135W



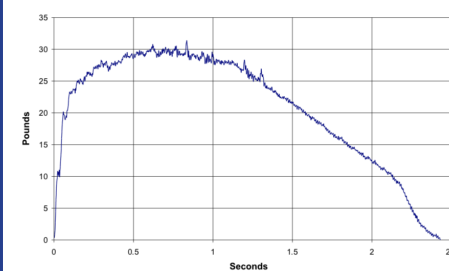
38mm

Additional DMS™ motor data
is available in the Resources
Area of the AeroTech website.
www.aerotech-quest.com

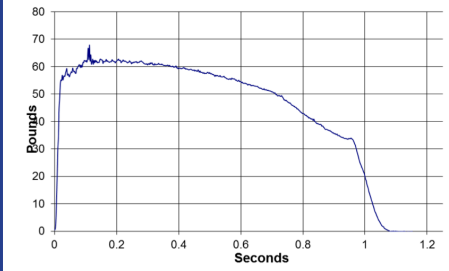


AeroTech Division of RCS,
Rocket Motor Components, Inc.
2113 W. 850 N.,
Cedar City, UT 84721 USA
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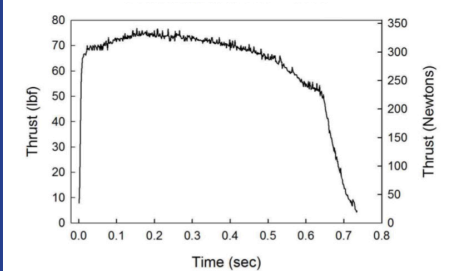
H100W



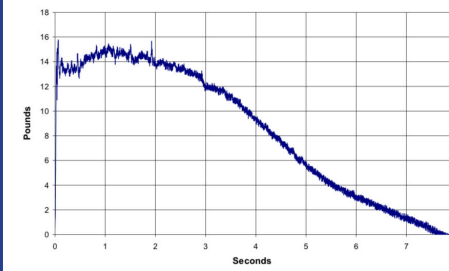
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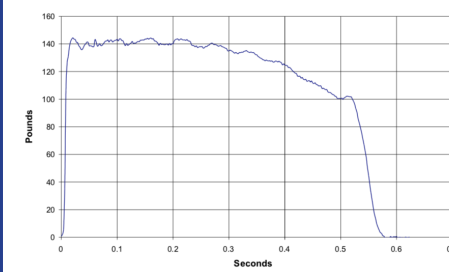
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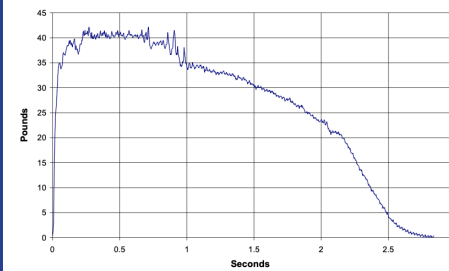
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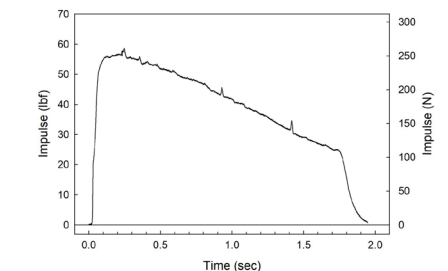
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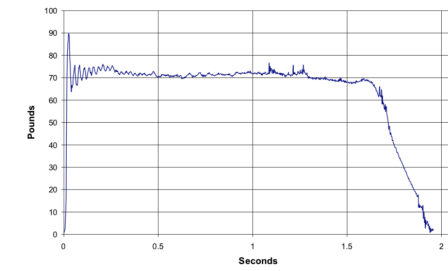
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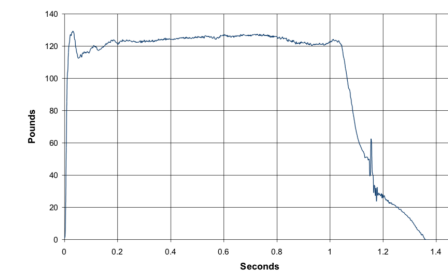
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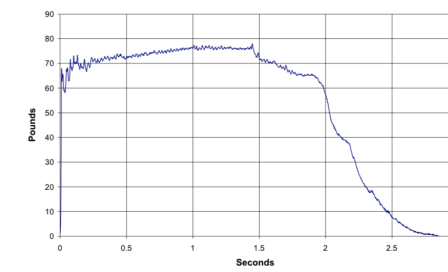
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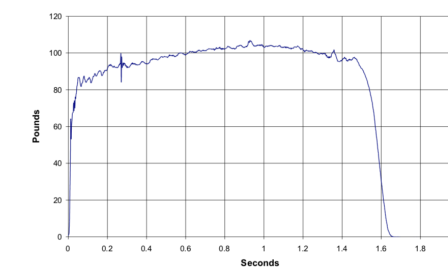
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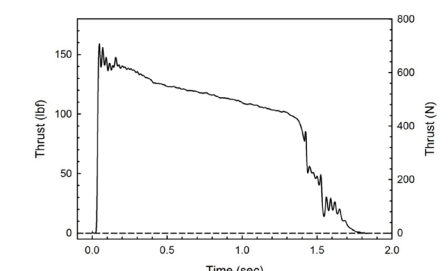
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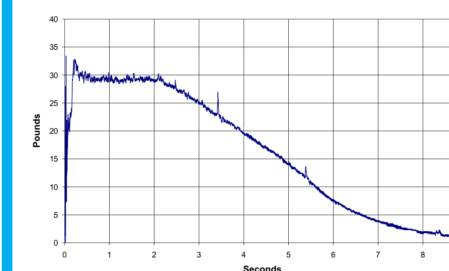
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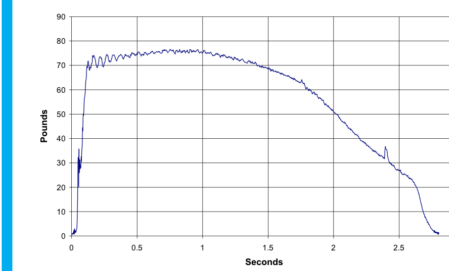
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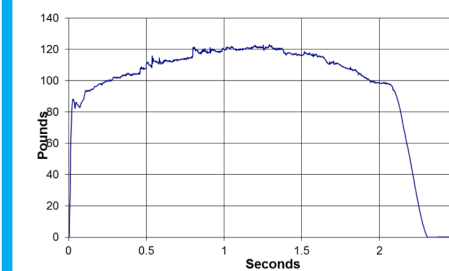
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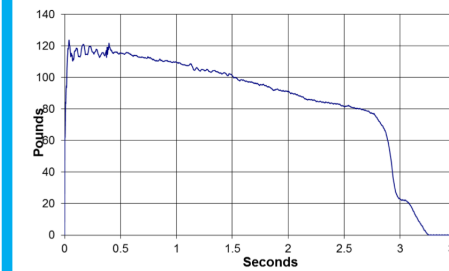
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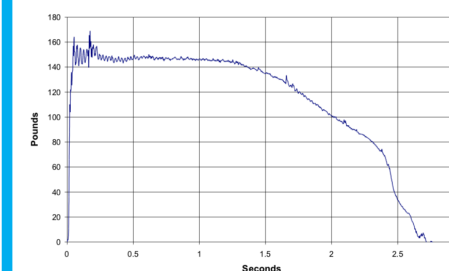
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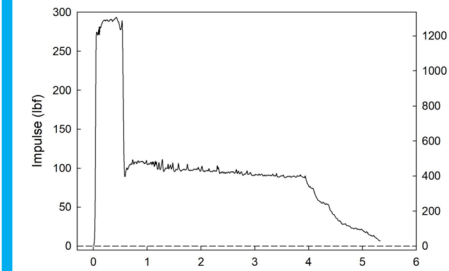
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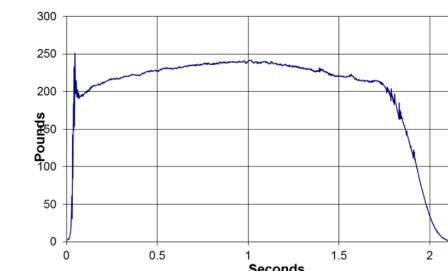
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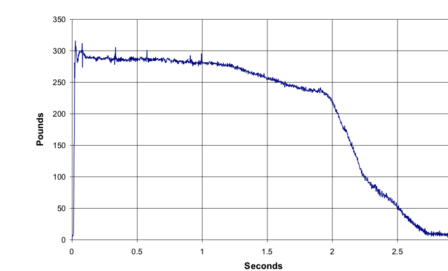
K455NW



K850DM

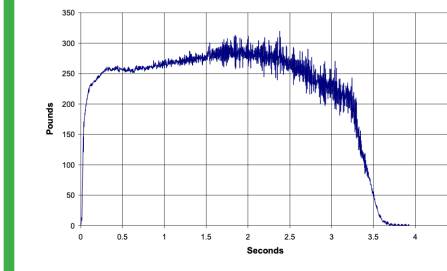


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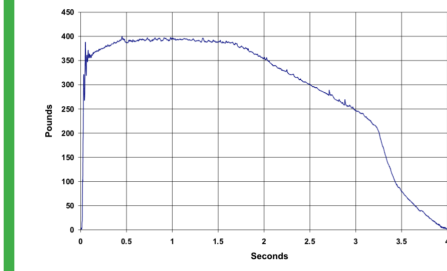


54mm

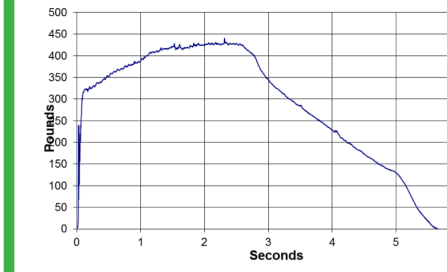
L875DM (75mm)



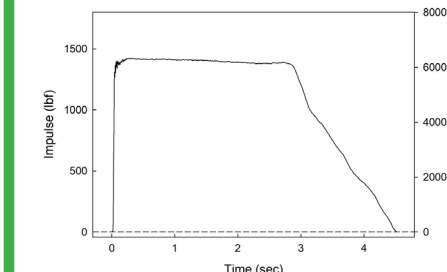
M1350W (75mm)



M1340W (98mm)



O5280X (98mm)



75mm & 98mm