



A2200

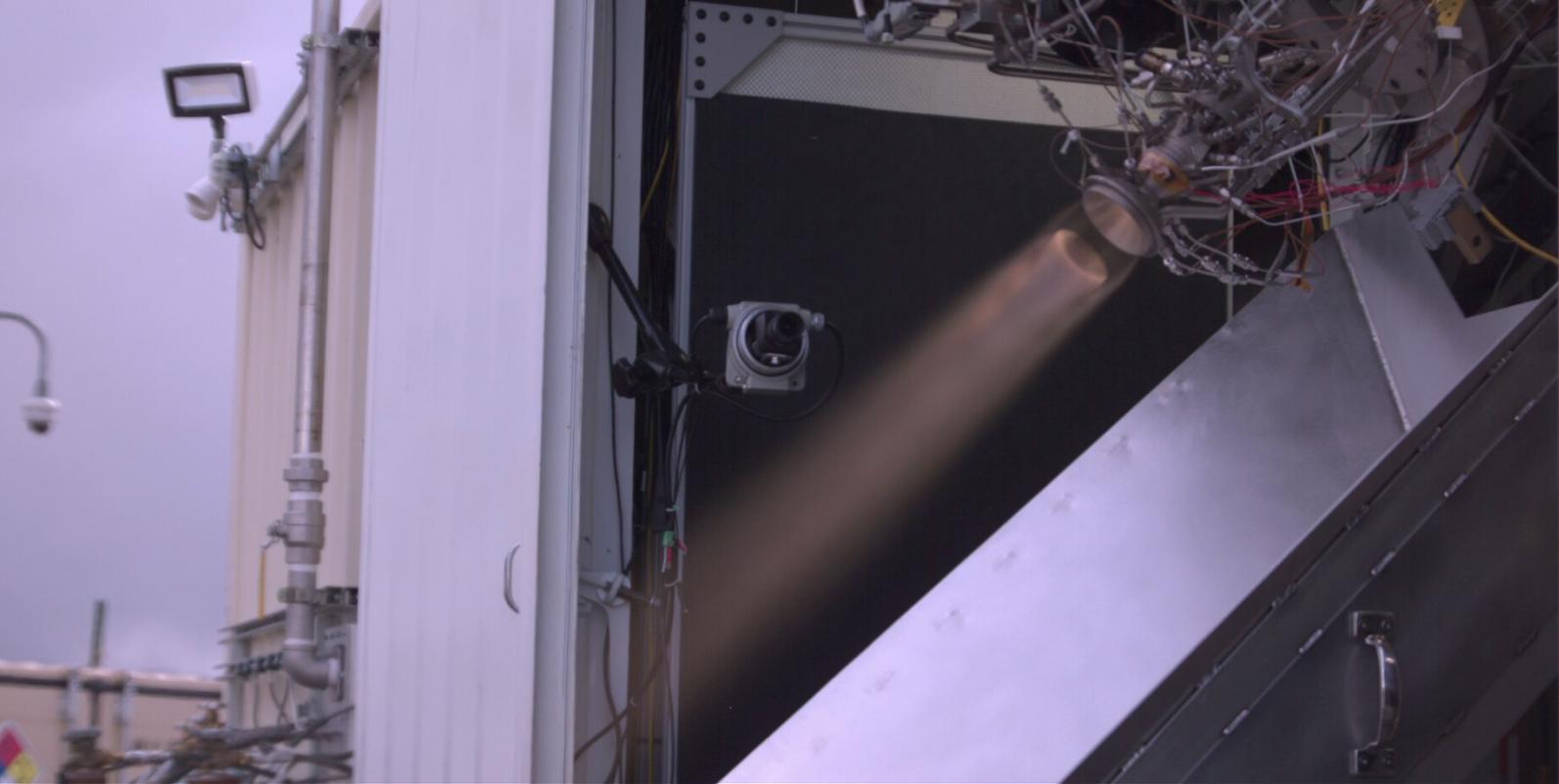
BIPROPELLANT ENGINE

A2200 is a 500-lbf bipropellant hypergolic engine developed by Agile to provide maximum performance on demanding missions, with a specific impulse of more than 318 seconds.

Using an integral pintle sleeve throttling mechanism, the engine is capable of deep throttling, providing a smooth ride, and fine control for a variety of missions. The engine can throttle from 50 to 100% thrust in under 650 milliseconds.

The MON3 and M20 propellants are provided to half-inch inlets at pressures between 470 and 530 psia. The A2200 engine design extensively leverages additive manufacturing, resulting in an engine that is only 5.9 kilograms. The engine is qualified for 1,000 seconds of firing time after delivery and 30 starts.





SPECS:

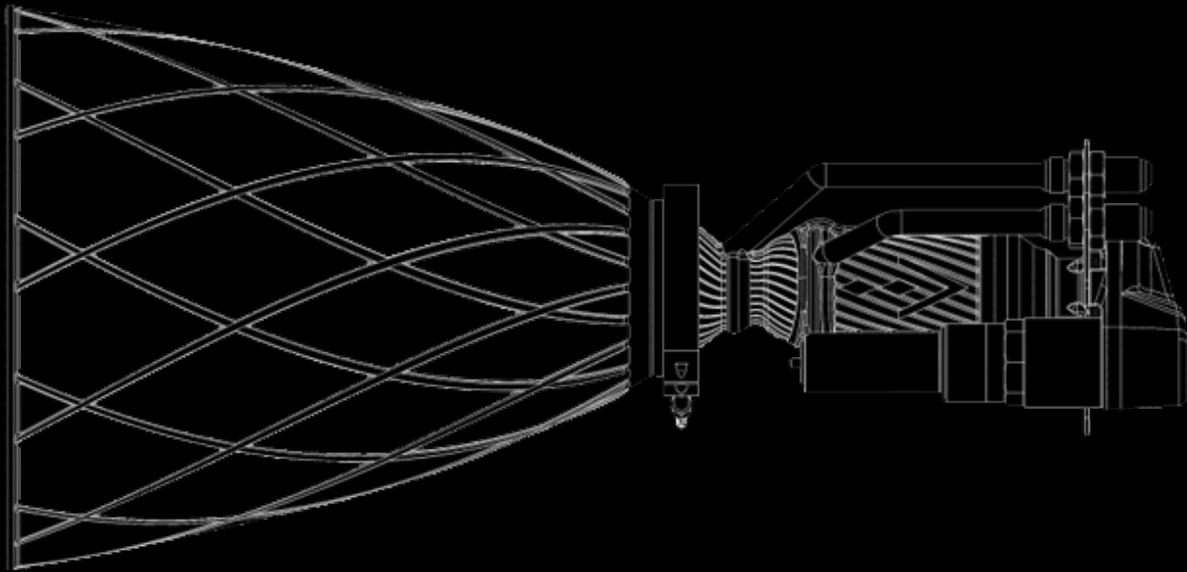
THROTTLING	650 ms
THRUST	2224 ± 156 N (500 ± 35 lbf)
FUEL	M20
OXIDIZER	MON3
INLET PRESSURES	480 +50/-10 psia
O/F RATIO	1.45
SPECIFIC IMPULSE	≥ 318 s
CHAMBER PRESSURE	380 psia
EXPANSION RATIO	160
THROTTLING RANGE	50-100%
THROTTLING RATE	Throttle between 50-100% within 3 s
CYCLES/LIFE	1,000 s
LONGEST SINGLE BURN CAPABILITY	500 s
START AND SHUTDOWN TIME	90% of steady state thrust in ≤ 650 ms
PEAK POWER	<120 W
TOTAL MASS	<5.9 kg
FLOW RATE	0.29 kg/s (M20) and 0.42 kg/s (MON3) at nominal O/F of 1.45

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ABOUT AGILE:

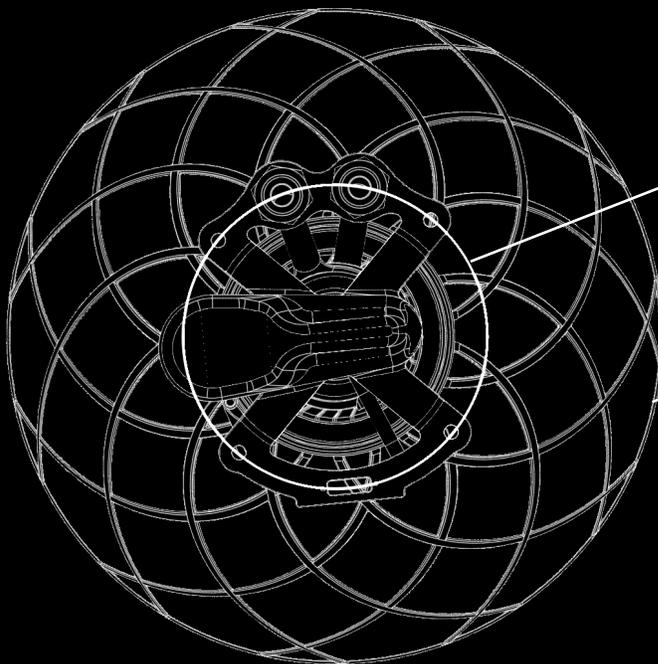
Based in beautiful Durango, CO, AGILE Space Industries is the premier innovation center for hypergolic propulsion systems.

Agile brings a unique blend of additive manufacturing experience, propulsion design capability, and world leading test facilities to enable the next generation of deep space missions.



22.100" NOZZLE TO INTERFACE

25.100" OVERALL



5.500" INTERFACE DIAMETER

>12.500" EXIT DIAMETER