FROM COTS TO COMBAT: AFFORDABLE MASS REDEFINED

EXPENDABLE JET ENGINES WITH PROVEN HIGH-RATE PRODUCTION







FROM COTS TO COMBAT

Model	P190-PRO-S	P220-PRO-S2-R1.2	P250-PRO-S-V2	P250-PRO-S-V2-R2	P300-PRO	P300-PRO-GH
Туре	Turbojet	Turbojet	Turbojet	Turbojet	Turbojet	Turbojet
RPM range	38000-126000	35000-117000	35000-117000	55000-117000	35000-106000	35000-106000
Performance @ max RPM						
Thrust	42.7 lbf	49.5 lbf	56.2 lbf	56.2 lbf	67.4 lbf	67.4 lbf
Fuel consumption	66.7 lb/h	76.7 lb/h	82.5 lb/h	82.5 lb/h	103.7 lb/h	103.7 lb/h
SFC	1.561 lb/lbf/h	1.551 lb/lbf/h	1.469 lb/lbf/h	1.469 lb/lbf/h	1.538 lb/lbf/h	1.538 lb/lbf/h
Mass flow (air)	0.77 lb/s	0.99 lb/s	1.04 lb/s	1.04 lb/s	1.1 lb/s	1.1 lb/s
Operating Conditions						
Maximum start altitude	15000 ft	15000 ft	15000 ft	15000 ft	9000 ft	9000 ft
Maximum operating altitude	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft
Max. flight Mach						
Weight	3.95 lb	4.76 lb	4.75 lb	5.89 lb	6.33 lb	6.33 lb
Diameter	4.25 in	4.61 in	4.76 in	4.76 in	5.2 in	5.2 in
Length, incl. starter motor	11.85 in	18.66 in	12.68 in	16.57 in	15 in	14.84 in
Supply voltage range	10-32VDC	10-32VDC	10-32VDC	20-50VDC	10-32VDC	10-32VDC
Generator function		Optional: B, D, E(1kW)		C (20-43V), 25A/1kW		A, B, C, E (1kW)
Fuel	Jet-A1, Jet TS-1, JP8, JP10, Premium Diesel Aral Ultimate, with 3% - 5% oil (MIL-L-23 699)					
Accelerations	along engine axis: +25G ; perpendicular to engine axis: +/- 15g					
Availability (COTS / MIL)	COTS	COTS	COTS	COTS	COTS	COTS
А	Stabilized DC output, 10-30V (programmable), max 7.4A					
В	Stabilized DC output, 10-30V (programmable), max 14,8A					
C	Unstabilized DC output, max 25A (external DC/DC converters for voltage stabilisation available)					
D	Unstabilized DC output, max 50A (external DC/DC converters for voltage stabilisation availiable)					
E	Unstabilized 3-phase AC output (external AC/DC converters for voltage stabilisation availiable)					

All techical data subject to be changed without notice



AFFORDABLE MASS REDEFINED

P350-PRO-S	P400-PRO-LN	P400-PRO-GH-LN	P550-PRO	P550-PRO-GH	P850-PRO	P850-PRO-GH
Turbojet	Turbojet	Turbojet	Turbojet	Turbojet	Turbojet	Turbojet
30000-105000	30000-98000	30000-98000	26000-83000	26000-83000	23000-65000	23000-65000
80.9 lbf	95.5 lbf	95.5 lbf	123.6 lbf	123.6 lbf	197.8 lbf	197.8 lbf
125.4 lb/h	147.3 lb/h	147.3 lb/h	174.6 lb/h	174.6 lb/h	269.8 lb/h	269.8 lb/h
1.549 lb/lbf/h	1.549 lb/lbf/h	1.549 lb/lbf/h	1.412 lb/lbf/h	1.412 lb/lbf/h	1.364 lb/lbf/h	1.364 lb/lbf/h
1.43 lb/s	1.48 lb/s	1.48 lb/s	2.05 lb/s	2.05 lb/s	2.59 lb/s	2.59 lb/s
15000 ft	9600 ft	9600 ft	9600 ft	9600 ft	13500 ft	13500 ft
32800 ft	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft
6.37 lb	8.84 lb	9.13 lb	11.7 lb	10.8 lb	22.27 lb	23.15 lb
5.35 in	5.84 in	5.84 in	7.03 in	7.03 in	7.87 in	7.87 in
13.78 in	15.35 in	14.8 in	16.5 in	16.38 in	17.44 in	17.44 in
10-32VDC	10-32VDC	10-32VDC	10-32VDC	10-32VDC	10-32VDC	10-32VDC
Optional: A, B, C, E (1kW)		A, B, C, E (1kW)		A, B, C, E (1kW)	В	B, D, E (2,2kW)
		Jet-A1, Jet TS-1, JP8, JP10, Pre	mium Diesel Aral Ultimate, w	ith 3% - 5% oil (MIL-L-23 699)		
		along engine ax	is: +25G ; perpendicular to en	gine axis: +/- 15g		
COTS	COTS	COTS	COTS	COTS	COTS	COTS
					Preliminary technical data	Preliminary technical data





EXPENDABLE JET ENGINES WITH PROVEN HIGH-RATE PRODUCTION

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Model	P1000-PRO	P1000-PRO-GH	F175 B1600	S 8	TF880	TF880-1
Туре	Turbojet	Turbojet	Turbojet	Turbojet	Turbofan	Turbofan
RPM range	19000-61500	19000-61500	40000-55600	27000-36000	18000-29500	18000-32000
Performance @ max RPM						
Thrust	247.3 lbf	247.3 lbf	337.21 lbf	850 lbf	966.7 lbf	880 lbf
Fuel consumption	328 lb/h	328 lb/h	397.9 lb/h	1063.7 lb/h	785.72lb/h	696.96lb/h
SFC	1.327 lb/lbf/h	1.327 lb/lbf/h	1.18 lb/lbf/h	1.25 lb/lbf/h	0.814 lb/lbf/h	0.761 lb/lbf/h
Mass flow (air)	3.97 lb/s	3.97 lb/s	4.85 lb/s	13.67 lb/s	22.48 lb/s	17.636 lb/s
Operating Conditions						
Maximum start altitude	13500 ft	13500 ft	19680 ft	19680 ft	16400 ft	16400 ft
Maximum operating altitude	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft	32800 ft
Max. flight Mach			0.9M	0.9M	0.9M	0.9M
Weight	25.02 lb	25.51 lb	50.71 lb	194 lb	167.55 lb	143.3 lb
Diameter	9.21 in	9.21 in	10.83 in	13 in	12.99 in	11.22 in
Length, incl. starter motor	17.48 in	19.88 in	20.47 in	51.18 in	43.31 in	36.61 in
Supply voltage range	10-32VDC	10-32VDC	24-30V	24-30V	24-30V	24-30V
Generator function	В	B, D, E (2,2kW)	1KW	2KW	48-67V to 24-30V3kw	48-72.5V to 24-30V3kw
					continously/4kw in peak	continously/4kw in peak
Fuel		Jet-A1, Jet TS-1, JP8, JP10, Prei	mium Diesel Aral Ultimate	e, with 3% - 5% oil (MIL-L-23 6	99)	
Accelerations	along engine axis: +25G ; perpendicular to engine axis: +/- 15g		along engine axis: +8G ;	along engine axis: +12G ;	along engine axis: +25G ; perpendicular to engine axis: +/- 15g	
			perpendicular to engine	perpendicular to engine axis:		
			axis: +/-6G	+/-15G		
Availability (COTS / MIL)	COTS	COTS		COTS /MIL		

Preliminary technical data





3 CONTINENTS, 5 LOCATIONS, 9 FACILITIES, I300 EMPLOYEES, 300\$M REVENUE



BSEL Group: A Global Leader for the Jet Engine Industry.

For over 57 years, Bet Shemesh Engines Ltd. (BSEL Group) has been a trusted Tier 1 supplier of critical jet engine parts to major manufacturers like Pratt & Whitney, GE, MTU, ITP Aero and Safran.

BSEL's MRO division provides services for P&W F100, PT6, RR250 and GE T700 engines to international customers including the Israeli Air Force and the USAF. BSEL is also an OEM of expendable jet engines for cruise missiles, anti-ship missiles and loitering munitions. Designated as a "Technology Center of Excellence", BSEL drives innovation in propulsion technologies. Its advanced capabilities and vertically integrated operations—including forging, casting, 3D printing, machining, treatments, assembly and testing—ensure precision, reliability and efficiency. With facilities in the U.S., Israel, and Serbia, BSEL is committed to advancing global defense and aerospace excellence.

PIONEERING INNOVATION IN JET ENGINE SOLUTIONS



JetCat; A non-traditional Jet Engine OEM.

JetCat provides cost-effective, Commercial Off-The-Shelf (COTS) jet engines for unmanned systems.

Since 2000, JetCat has manufactured over 80,000 engines and currently produces 15,000 units annually at its state-of-the-art 20,000 sq. ft. facility. Operating outside traditional aerospace constraints, JetCat utilizes mission-focused designs and a diversified supply chain to deliver high-performance engines at significantly reduced costs. While most engines are available as COTS versions, customer-specific modifications can also be accommodated to meet unique requirements. With full vertical integration, JetCat manages every stage of development and production, including electronics and accessories. Originally catering to RC model aircraft, JetCat now supports a range of commercial and specialized applications requiring scalable and efficient propulsion solutions.

Customers: Raytheon, Kratos, MBDA, Airbus.



JETCAT DEFENSE: FROM COTS TO COMBAT: AFFORDABLE MASS REDEFINED

EXPENDABLE JET ENGINES WITH PROVEN HIGH-RATE PRODUCTION



JetCat Defense, the exclusive U.S. distributor for JetCat and BSEL Group engines, unites the innovative agility of JetCat's COTS technology with the combat-proven expertise of BSEL. Together, they deliver affordable, expendable, BAA-compliant propulsion solutions tailored for mass-deployment of strike-weapon, PGM and UAV programs like the DoD Replicator Initiative. This partnership combines JetCat's costeffective design approach and proven high-rate production know-how with BSEL's extensive military engine experience and U.S. based operational resources.

JetCat Defense prioritizes mission-specific designs over traditional aerospace constraints, delivering turnkey COTS engines optimized for military performance with significant cost-efficiency. Its 20,000 sq. ft. space within BSEL's Ohio-based MRO facility is dedicated to expendable engine assembly and has ample room for on-site expansion.

Ample on-site expansion option. Combined with a proven mass manufacturing methodology, JetCat Defense is equipped to provide surgeready production capabilities, meeting U.S. defense requirements on accelerated timelines.

With a commitment to leveraging commercial off-the-shelf components and minimizing reliance on expensive materials, JetCat Defense provides innovative solutions that mitigate supply chain bottlenecks and redefine affordability in defense propulsion.





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