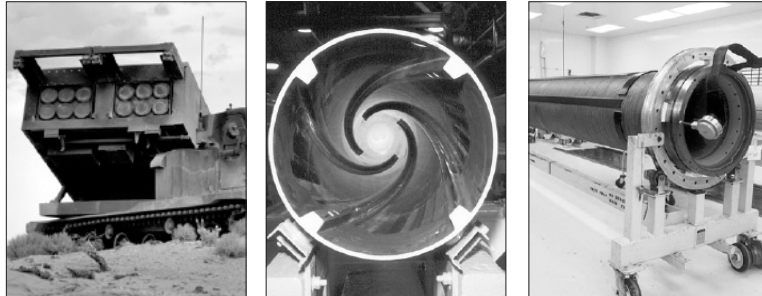


# Composite Rocket and Missile Launch Tubes

product information



Launch Tube Heritage	Dimensions (in.) Diameter x Length	Description/End Use
ADATS	9.185 x 84.7	Fiberglass launch tube incorporating vapor/EMI protection and hollow internal rails. Vehicle-mounted, air defense, anti-tank missile system.
CATFAE	12.770 x 68.938	Fiberglass launch tube with dome end. Used for catapult-launched fuel air explosives.
Dragon	5 x 34	Fiberglass launch tube. Surface-to-surface, one-man portable, medium range anti-tank missile system.
FOG-M	11.0 x 9.7 (rectangular) x 86.0	Kevlar <sup>®</sup> /epoxy launch/storage canister incorporating EMI/vapor barrier. Medium-range fiber optic guided missile.
Javelin	5.67/6.2 x 42.9	Carbon/epoxy launch tube with machined build-ups. Surface-to-surface, man-portable, "fire and forget" anti-armor missile.
MLRS	12.2 x 157	Fiberglass launch tube with integrally wound rails. Vehicle-mounted, multiple launch rocket system.
RAM	7 x 115	Fiberglass launch tube with 7.9" helix molding compound rails. Surface-launch rolling airframe missile.
Redeye	2.78 x 54	Fiberglass launch tube. One-man portable, shoulder-fired anti-aircraft missile.
SADARM	12.2 x 157	Fiberglass launch tube with integrally wound rails. Derivative of MLRS launch tube.
Stinger	2.78 x 58.3	Kevlar <sup>®</sup> launch tube. One-man portable, shoulder-fired anti-aircraft missile.
STLS	2.78 x 58.3	Kevlar <sup>®</sup> launch tube for Stinger trainer.
CCLS TOMAHAWK	24.8 x 285	Graphite launch tube with fiberglass protective skin with wound-in metal rings. Sea-launched Tomahawk cruise missile.
TOW	6 x 48	Fiberglass launcher/container with electrical harness and connector. Tube launched, optically tracked, wire-guided missile system.
Viper	2.756 Inner 3.145 Outer 27 Collapsed 44.5 Extended	Two-piece fiberglass launch tube with integrally molded external features. Shoulder-fired, short range, anti-tank weapon.
VT-1	9.555 x 94.28	Graphite and fiberglass launch tube for surface to air missile.
SMAW-CS	3.26 x 38.8	Graphite and fiberglass launch tube for assault weapon.
LOSAT	7.7 x 114.5	Graphite tube with conductive features and internal helical rails.

# Composite Rocket Motor Cases

Motor Case Heritage	Dimensions (in.) Diameter x Length	Structural Material	Application
AAWS-M Flight Demo	6 x 5.5	Graphite	Interceptor
Altair III	19.6 x 40	Glass	Orbital Insertion
AMRAAM	7 x 50	Kevlar®	Tactical
ASAS	28 x 185	Graphite	Interceptor
ASAT	19.6 x 40	Glass	Interceptor
ERINT	10 x 100	Graphite	Tactical
HS-393	52 x 70	Glass	Orbital Insertion
HVR	2.75 x 47	Graphite	Tactical
Improved SPRINT	29 x 58	Kevlar®/Graphite	Interceptor
ORBUS-6	63 x 48	Kevlar®	Orbital Insertion
ORBUS-21	92 x 72	Kevlar®	Orbital Insertion
ORBUS-21D	92 x 72	Kevlar®	Orbital Insertion
INTELSAT VI	92 x 72	Kevlar®	Orbital Insertion
KEW Upper Stage	14 x 14	Graphite	Interceptor
KEW Lower Stage	16.5 x 41	Graphite	Interceptor
Minuteman III, Stage III	52 x 70	Glass	Ballistic
MX, ADP, 2nd Stage, Full Scale	66 x 93	Kevlar®	Ballistic
MX, 2nd Stage, Half Scale	33 x 46	Kevlar®	Ballistic
PAC-3	10 x 100	Graphite	Interceptor
Peacekeeper, Stage II	93 x 158	Kevlar®	Ballistic
Polaris A-3, 2nd Stage	54 x 76	Glass	Ballistic
Scout/Delta, 4th Stage	19.6 x 40	Glass	Orbital Insertion
Sea Lance	16.5 x 88	Graphite	Ballistic
Second Source	3 x 19	Graphite/Glass	Tactical
Sentry	35 x 114	Kevlar®/Graphite	Interceptor
SICBM- Stage I	46 x 183	Graphite	Ballistic
SICBM - Stage III	46 x 41	Graphite	Ballistic
SPBD	20-28 x 70 (tapered)	Graphite	Interceptor
SPIKE	2 x 32	Kevlar®/Graphite	Tactical
SPRINT, 1st Stage	47 x 88	Glass	Interceptor
SPRINT, 2nd Stage	29 x 58	Glass	Interceptor
SVM, 5,6,7 - Apogee Kick Motor	30 x 25	Glass	Orbital Insertion
SVM 4A, INTELSAT IV	37 x 32	Glass	Orbital Insertion
THAADS Demo	Tapered	Graphite	Tactical
Trident C-4, 1st Stage	74 x 179	Kevlar®	Ballistic
Trident C-4, 2nd Stage	74 x 84	Kevlar®	Ballistic
Trident C-4, 3rd Stage	30 x 100	Kevlar®	Ballistic
Trident II, D-5 Stage III	31 x 103	Graphite	Ballistic
Viper	2.75 x 10	Glass	Tactical
VT-1	6.5 x 48	Graphite	Tactical
SMAW-CS	3 x 18	Graphite	Tactical
NLOS	7 x 20	Graphite	Tactical
JAGM / JCM	7 x 26	Graphite	Tactical
FW-5	27.4 x 24.5	Glass	Orbital Insertion



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