

ACE™ - Advanced Cutting Explosive

PRODUCT TECHNICAL DATA SHEET

DESCRIPTION:

ACE™ is an easy-to-use explosive cutting system with a flexible shaped charge liner and optimized standoff. The improved ACE™ is the highest level of Advanced Cutting Explosive offered by Ensign-Bickford Aerospace & Defense Company. The relative shock insensitivity of the explosive minimizes accidental or inadvertent detonation. The design meets MIL-PRF-46676 and OES-DTL-0006 standards for use by United States Military and International Forces.

KEY FEATURES:

- Optimized explosive geometry
- Advanced liner geometry and composition
- Optimized built-in foam stand-off
- Improved adhesive system
- Superior penetration and severance performance
- Increased multi-axis flexibility
- Low fragmentation hazard



APPLICATION:

ACE™ fulfills a wide variety of uses in military and demolition applications, including specialized demolition and breaching operations where precise cutting is required. With its variety of coreloads and ability to sever from 0.125 inches (3.2 mm) to over 1.5 inches (38 mm) of steel, ACE™ can remove or neutralize most obstacles encountered during combat operations. Due to its flexibility and self-adhesion, ACE™ is easy to apply, greatly assisting the speed of attachment to the target and minimizing personnel exposure time.

PROPERTIES:

- Built-in water displacing stand-off
- Consistent penetration/severance
- Suitable for underwater use
- No harmful sheath fragmentation
- Lead free
- Easy to cut with a sharp knife
- Compliant with Montreal Protocol



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SPECIFICATIONS:

PART NUMBER	CORD LOAD (NOMINAL)		CHARGE DIMENSIONS W x H (NOMINAL)		MASS PER LENGTH (NOMINAL)		COLD ROLLED MILD STEEL AISI 1018 STEEL PLATE PENETRATION		COLD ROLLED MILD STEEL AISI 1018 STEEL PLATE PENETRATION		COLD ROLLED MILD STEEL AISI 1018 STEEL PLATE SEVERANCE	
	gr/f	gr/m	in	mm	lb/ft	kg/m	Typical (in)	Typical (mm)	EBA&D Requirement (in)	EBA&D Requirement (mm)	Typical (in)	Typical (mm)
ACE 300	300	63	0.78 x 0.68	19.8 x 17.2	0.07	0.11	0.160	4.1	0.125	3.2	0.20	5.1
ACE 450	450	100	0.90 x 0.82	22.8 x 20.8	0.12	0.18	0.220	5.6	0.180	4.6	0.28	7.1
ACE 600	600	125	1.01 x 0.96	26.6 x 24.3	0.15	0.22	0.270	6.9	0.225	5.7	0.36	9.1
ACE 1200	1200	250	1.20 x 1.34	30.4 x 34	0.30	0.45	0.440	11.2	0.340	8.6	0.50	13.7
ACE 2400	2400	500	1.67 x 1.69	42.4 x 42.9	0.60	0.89	0.670	17.0	0.530	13.5	0.81	20.6
ACE 3600	3600	765	1.89 x 1.97	48 x 50	1.06	1.58	0.900	22.9	0.710	18.0	1.10	27.9
ACE 5400	5400	1150	2.16 x 2.35	54.8 x 59.6	1.50	2.23	1.110	28.2	0.935	23.7	1.35	34.3

Standard charge length (nominal) is 20 feet (6.1 meters) for all available parts.

PACKAGING OPTIONS:

ACE™ has two shipping options. The Commercial Pack holds the product in a fiberboard drum and the Military Pack is packaged in a metal ammunition can.



Commercial Pack



Military Pack

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