

# APE D160-42 Single Acting Diesel Impact Hammer

*D160-42 driving 48" piles with a 54" offshore.*



## MODEL D160-42 (16.0 metric ton ram)

### SPECIFICATIONS

Stroke at maximum rated energy	135 in (343 cm)
Maximum rated energy (Setting 4)	403,603 ft-lbs (547.2 kNm)
Setting 3	362,033 ft-lbs (490.8 kNm)
Setting 2	311,582 ft-lbs (422.4 kNm)
Minimum rated energy (Setting 1)	258,710 ft-lbs (350.7 kNm)
<i>(Variable throttle allows for lower minimum energy and infinite fuel settings.)</i>	
Maximum obtainable stroke (to catch ring)	201 in (511 cm)
Maximum obtainable energy (to catch ring)	591,646 ft-lbs (802,153 Nm)
Speed (blows per minute)	34-53

### WEIGHTS

Ram	35,280 lbs (16,000 kg)
Anvil	10,223 lbs (4,642 kg)
Anvil cross sectional area	837.85 in <sup>2</sup> (5405.47 cm <sup>2</sup> )
Hammer weight (includes hydraulic trip device)	92,000 lbs (41,730 kg)
Hammer weight (includes trip device)	85,000 lbs (38,555 kg)
Typical operating (weight w/ 98"/2.5m offshore)	127,000 lbs (57,606 kg)

### CAPACITIES

Fuel tank (runs on diesel or bio-diesel)	63 gal (238 liters)
Oil tank	11 gal (41.63 liters)

### CONSUMPTION

Diesel or Bio-diesel fuel	12 gal/hr (54 liters/hr)
Lubrication	1 gal/hr (2.9 liters/hr)
Grease	8 to 10 pumps every 45 minutes of operation time.

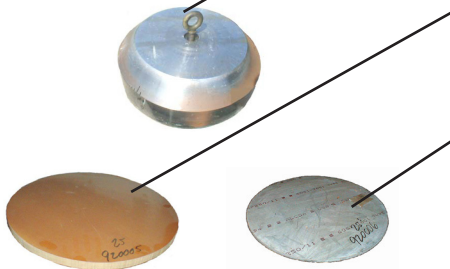
*Optional Variable Throttle Control.*



### 25" STRIKER PLATE

Weight	1,036 lbs (470 kg)
Diameter	25 in (57.15 cm)
Area	490 in <sup>2</sup> (3167 cm <sup>2</sup> )
Thickness	8 inches (20.32 cm)

*Cushion Material.*



### CUSHION MATERIAL

Type/Qty	Micarta/2 ea
Diameter	25 in (57.15 cm)
Thickness	1 in (25.4 mm)
Type/Qty	Aluminum/3 ea
Thickness	1/2 in (12.7 mm)
Diameter	25 in (57.15 cm)
Total Combined Thickness	3.5 inches (8.89 cm)
Area	490 in <sup>2</sup> (3167 square cm <sup>2</sup> )
Elastic-modulus	285 ksi (1,965 mpa)
Coeff. of restitution	.8

*Standard 54" Offshore.*



### OFFSHORE LEADER

Offshore for 98"/ 2.5 meter piles and under	42,000lbs (19,050 kg)
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### MINIMUM BOX LEAD SIZE/OPERATING LENGTH

Minimum box leader size	54 in (137 cm)
Hammer operating length with box helmet	441 in (11.19 m)



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