

Medium Tank M4A1(76)W

GENERAL DATA

Crew: 5 men
 Length: Gun forward w/sandshields and muzzle brake 294 inches
 Length: Gun to Rear w/sandshields and muzzle brake 287 inches
 Length: w/o Gun, w/Sandshields 244 inches
 Gun Overhang: Gun forward and muzzle brake 50 inches
 Width: w/sandshields 105 inches
 Height: Over cupola 117 inches
 Tread: 83 inches
 Ground Clearance: 17 inches
 Fire Height: 90 inches
 Turret Ring Diameter: (inside) 69 inches
 Weight Combat Loaded: 70,600 pounds *
 Weight Unstowed: 64,600 pounds*
 Power to Weight Ratio: Net 11.3 hp/ton
 Gross 13.0 hp/ton
 Ground Pressure: Zero penetration 14.5 psi

*all weights based on T48 or T51 tracks

ARMOR

Type: Turret, cast homogeneous steel; Upper hull, cast lower hull
 rolled homogeneous steel; Welded assembly

Hull Thickness:	Actual	Angled w/Vertical
Front, Upper	2.5 inches	37 to 55 degrees
Lower	4.25 to 2.0 inches	0 to 56 degrees
Sides	1.5 inches	0 degrees
Rear	1.5 inches	10 to 20 degrees
Top	0.75 inches	83 to 90 degrees
Floor, Front	1.0 inches	0 degrees
Rear	0.5 inches	90 degrees
Turret Thickness: T23 Turret		
Gun Shield	3.5 inches	0 degrees
Front	2.5 inches	40 to 45 degrees
Sides	2.5 inches	0 to 13 degrees
Rear	2.5 inches	0 degrees
Top	1.0 inches	90 degrees

ARMAMENT

Primary: 76mm Gun M1A1, M1A1C, or M1A2 in mount M62 in turret
 Traverse: Hydraulic and Manu 360 degrees
 Traverse Rate: (max) 15 seconds/360 degrees
 Elevation: Manual -25 to -10 degrees
 Tiring Rate: (max) 20 rounds/minute
 Loading System: Manual
 Stabilizer System: Elevation only

Secondary:

(1) .50 caliber MG HB M2 flexible AA mount on turret
 (1) .30 caliber MG M1919A4 coaxial w/75mm gun in turret
 (1) .30 caliber MG M1919A4 in bow mount
 (1) 2 inch smoke Mortar (smoke) fixed in turret
 Provision for (5) .45 caliber SMG M3

AMMUNITION

71 rounds of 76mm 12 hand grenades
 600 rounds .50 caliber 18 rounds 2 inch smoke
 900 rounds .45 caliber
 6250 rounds .30 caliber

FIRE CONTROL AND VISION EQUIPMENT

Primary Weapon: Direct Indirect
 Telescope M71D Azimuth Indicator M19
 Periscope M4A1 with Gunner's Quadrant M1
 Telescope M47A2 Elevation Quadrant M9
 Vision Devices: Direct Indirect
 Driver Hatch Periscope M6 (2)
 Asst. Driver Hatch Periscope M6 (2)
 Commander Vision cupola Periscope M6 (1)
 Gunner None Periscope M4A1 (1)
 Loader Hatch and Pistol Port Periscope M6 (1)
 Total Periscopes: M4A1 (1), M6 (6)
 Total Pistol Ports: Hull (0), Turret (1)
 Vision Cupolas: (1) w/6 vision blocks on turret top

ENGINE

Make and Model: Continental R975 C4
 Type: 9 cylinder, 4 cycle, radial
 Cooling System: Air Ignition: Magneto
 Displacement: 973 cubic inches
 Bore and Stroke: 5 X 5.5 inches
 Compression Ratio: 5.7:1
 Net Horsepower (max): 400 hp at 2400 rpm
 Gross Horsepower (max): 460 hp at 2400 rpm
 Net Torque (max): 940 ft-lb at 1700 rpm
 Gross Torque (max): 1025 ft-lb at 1800 rpm
 Weight: 1212 lb. dry
 Fuel: 80 octane gasoline 175 gallons
 Engine Oil: 36 quarts

POWER TRAIN

Clutch: Dry disc, 2 plate
 Transmission: Synchronesh, 5 speeds forward, 1 reverse
 Gear Ratios: 1st 7.56:1 4th 1.11:1
 2nd 3.11 5th 0.73:1
 3rd 1.78 Reverse 5.65:1

Steering: Controlled differential

Bevel Gear Ratio: 3.53:1 Steer Ratio: 1.5515:1
 Brakes: Mechanical, external contracting
 Final Drive: Herringbone gear Gear ratio: 2.84:1
 Drive Sprocket: At front of vehicle with 13 teeth
 Pitch Diameter: 25.038 inches

RUNNING GEAR

Suspension: Vertical volute Spring
 12 wheels in 6 bogies (3 bogies/track)
 Tire Size: 20 X 9 inches
 4 Dual track return rollers (2/tracks)
 6 return rollers (1 at rear of each bogie)
 Adjustable idler at rear of each track
 Idler Size: 22 X 9 inches

Tracks: Outside guide: T48, T49, T51 and T54E1

Type: (T48) Double pin, 16.56 inch width, chevron, rubber
 (T49) Double pin, 16.56 inch width, parallel bar, steel
 (T51) Double pin, 16.56 inch width, smooth, rubber
 (T54E1) Double pin, 16.56 inch width, Chevron, steel
 Pitch: 6 inches
 Shoes per Vehicle: 158 (79/track)
 Ground Contact Length: 147 inches

ELECTRICAL SYSTEM

Nominal Voltage: 24 volts DC
 Main Generator: (1) 30 volts, 50 amperes, driven by power take-off from main engine
 Auxiliary Generator: (1) 30 volts, 50 amperes, driven by the auxiliary engine
 Battery: (2) 12 volts in series

COMMUNICATIONS

Radio: SCR 508, 528 or 538 in rear of turret; SCR 506 (command tank only) in right front sponson
 Interphone: (part of radio) 5 stations
 Flag Set M238, Panel Set AP50A, Spotlight, Siren
 Flares: 3 each, M17, M18, M19, and m21 (command tanks only)
 Ground Signals Projector M4 (command tanks only)

FIRE AND GAS PROTECTION

(2) 10 carbon dioxide, fixed
 (2) 4 pound carbon dioxide, portable
 (2) 1 ½ Quart decontaminating apparatus

PERFORMANCE

Maximum Speed: Sustained, level road 21 miles/hour
 Short periods level 24 miles/hour
 Maximum Grade: 60 percent
 Maximum Trench: 7.5 feet
 Maximum Vertical Wall: 24 inches
 Maximum Fording Depth: 36 inches
 Minimum Turning Circle: (diameter) 62 feet
 Cruising Range: Roads approx. 100 miles

