# AIRCRAFT GROUND SERVICE PIT MODEL 1463FM

#### FOR AIRPORT APRON AND HANGER MAINTENANCE FACTILITIES







The standard Model 1463FM pit consists of a two piece cast aluminum cover assembly and a one piece molded fiberglass shell, having a bottom entrance, pipe collar, flexible fuel-resistant boot type seal, and stainless steel clamps. **Outer cover equipped with four anchored bolts and inner cover is tethered to outer-cover**. 1463FM-Boltdown assy. compliance to JIG Bulletin 90. Flexible Buna-N boot provides vertical and horizontal movement. For "Water Resistant" feature, review Model 1463WR, equipped with additional Hinged-block and dual seals, sealing outer-cover and inner-cover assy.

#### **APPLICATIONS:**

FUEL HYDRANT For all commercial aviation fuel hydrant valves.

WATER SERVICE For water hydrant outlets and/or water service.

HIGH POINT VENT For piping systems venting connections (fuel, water and air).

LOW POINT VENT For piping systems low point drain connections (fuel, water and air).

COMBINATION VENT/DRAIN For combination high point vent and low point drain connections.

ELECTRICAL For 120 volt and 240 volt, 60 hertz and 400 hertz service and other

various voltages and frequencies. Special application for

communication service.

AIR START For air starts hose, coupler, and coupler holder.

PRECONDITIONED AIR OUTLET For conditioned air hose and adapter storage.

SURGE SUPPRESSOR For installation of 5 and 7-1/2 gallon surge suppressors.

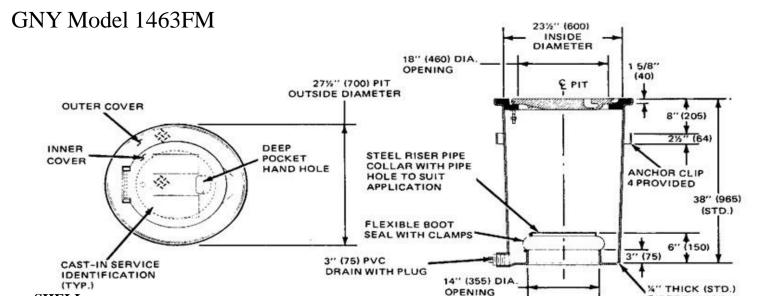
SUMP For low point collection of fluids.

MAINTENANCE AND ACCESS For access manways into underground vaults.

SPECIAL APPLICATIONS Consult factory for custom application.

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The Model 1463FM pit shell is a one piece molded unit. The inside dimensions of the shell are 23.5 inches (600mm) in diameter by 38 inches (965mm) deep. The shell wall is nominally one-quarter (.25) inch (6.4mm) thick and has four (4) integral brackets for concrete anchors equally spaced around the outside circumference of the shell below the cover seat. The pit shell is a glass fiber reinforced plastic (GRP) structure composed of 30 percent glass fiber and 70 percent polyester resin. The glass fiber is high quality, commercial grade. The polyester resin is a premium grade, corrosion resistant isophthallic type resistant to soil borne chemicals as well as aircraft fuels, hydraulic oils, and deicing solutions. The shell interior is coated with resin-rich gel coat having a white pigment to provide a bright, clean environment and appearance. Fluids collected in the pit may be drained through a 3 inch IPS rigid PVC pipe coupling installed in the shell's sump for connection to a suitable collection system.

#### **COVER:**

**SHELL:** 

The pit cover is a two piece, non-skid, non-sparking, assembly consisting of one stationary outer ring, and an inner access cover. The inner cover can be opened a full 180 degrees with a 25 Lb. (11.4kg) single hand lift on a non-weightbearing hinge, to expose an 18 inch (460mm) diameter clear opening. Each inner cover is available with cast in service identification (one inch (25mm) high by .062 inch (1.5mm) raised letters), a deep pocket hand-hole, and an edge finger-The cover assembly is completely removable for maximum access to internal equipment. Each cover is manufactured from an aluminum-zinc alloy casting conforming to Federal Specification (USA) QQ-A-601F alloy 712.0 (formerly 40E). This alloy provides high strength, excellent machinability and ductility, very good shock and corrosion resistance, and uniform material properties throughout the casting.

#### **LOADING RATING:**

The cover assembly (part numbers 6533774 and 6533772(H) is guarantee to withstand a single 200,000 pound (90720 kg) load applied over a 200 square inch (1290cm2) tire footprint area placed anywhere on it (1000psi (70.3kg/cm2) rating). This represents a 4 to 1 safety factor.

#### **OUALITY ASSURANCE:**

All covers are proof loads tested and evaluated in accordance with the United States Military Standard MIL-STD-105. "Sampling Procedures and Tables for Inspection Attributes".

#### **OPTIONS:**

FLANGED STEEL SUPPORT

FRAME FOR COVER Integrally bonded to the fiberglass shell.

**OVER-ALL-DEPTH** Presently available optional depths 18, 30, 52, 60, and 72 inches (460, 760, 1320,

1525, and 1830mm). Other depths are available on special order.

**CUSTOM SHELL** 

CONFIGURATIONS Side entrance or extensions available on special order.

SHELL THICKNESS 3/8 inch (9.5mm) thick shells are available.

SHELL PENETRATIONS Liquid tight penetrations through shell walls or floor are available for piping,

electrical Conduit, etc.

SPLIT TOP SHELL A special slip-fit, removable top section is available to enable a continuous

concrete apron Panel pour. The removable upper section is supplied with four (4)

additional integral brackets for Concrete anchors.

Glass fiber reinforced plastic "mud covers" are available to prevent concrete from

entering. The pit during the continuous concrete pours.

SHELL BOTTOM A solid, liquid tight, flat bottom is available.

Fuel resistant "O" ring seal installed in a machined groove.

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FIBERGLASS PIT

# GNY AIRCRAFT GROUND SERVICE PIT TESTING OF PITS FOR LOAD-BEARING

FOR AIRPORT APRON AND HANGER MAINTENANCE FACTILITIES

One of the first products designed by our engineers was **the first aluminum fuel hydrant pit cover, capable of withstanding aircraft wheel loads on the ramp.** Since that time in early 1950's, we have designed and manufactured thousands (10,000+) of steel and fiberglass ground service pits, in 22+ different models for fuel, water, preconditioned air, air, air-start and electrical services to aircraft. This covers all requirements of Airports, Airlines, Military, Fueling Service Companies, Oil Companies and Corporates. Larger versions of the pits have been designed and installed for maintenance of isolation valves or for equipment vaults.

### GNY Model 6000 (left) and Model 7038 (right) Proof Load Test

The cover assembly is load-tested and **guaranteed** to withstand a single 200,000-pound (90720 kg) load applied over a 200 square inch (1290cm<sup>2</sup>) tire footprint area placed anywhere on it (1000psi (70.3kg/cm<sup>2</sup>) rating). **This represents a 4 to 1 safety factor.** 





## Testing: GNY Model 1463FM - Under Proof Load Test:



The cover assembly (part numbers 6533774 and 6533772(H) is under load test guarantee to withstand a single 200,000 pound (90720 kg) load applied over a 200 square inch (1290cm2) tire footprint area placed anywhere on it (1000psi (70.3kg/cm2) rating). This represents a 4 to 1 safety factor.



# AIRCRAFT GROUND SERVICE PIT MODEL 1463FM-Boltdown

