Standard 40,000 Litre Capacity Aircraft Refueller





A semi-articulated refueller incorporating a 4x2 chassis and single trailer axle configuration for optimal manoeuvres on the airport ramp. The elevating platform and refuelling unit are mounted on the chassis unit immediately behind the cab, with the semi-trailer tank attached by means of a liquid 5th wheel. The refueller is designed and constructed in accordance with the latest European Standards BS EN 12312-5 and JIG 1 Issue 11 requirements where applicable.

Operating Temperature of -20°C to +50°C

Features

Dimensions Height: 2.90m +/- 50mm (excluding beacon)

> Width: 3.00m Length: 17.00m

Flowrate

Fuelling 2,850 LPM through 2 x deck hoses

1,000 LPM through 1 x reel hose

300LPM through 1 x overwing reel hose Defuelling 300LPM through 2 x deck hoses or reel hoses

100LPM through 1 x overwing hose

Bottom Loading 2,500LPM

Fuel Pump Gorman Rupp 06D1 GAR Self-priming centrifugal pump (PTO driven)

Filtration Filter water monitor or filter water separator constructed in carbon steel with

> epoxy coat lining meeting the latest requirements of IP1583 and IP1581 respectively and is fitted with high differential pressure shutdown system.

Meters Satam or Avery Hardoll positive displacement meter with Veeder Root

> EMR3 or Masterload II electronic display. Flowrate up to 3000LPM for deck hoses

Flowrates up to 300/1,000LPM (separately) for reel hoses

Aviation hoses meeting EN1825 type 'C' Elaflex or Goodyear Hoses

Reel Hose Underwing Ø50mm x 20m long Reel Hose Overwing **Deck Hoses**

Ø38mm x 25m long Ø63mm x 3.5m long

Elevating platform

Hydraulically operated scissor mechanism platform front mounted with floor to ground height range from 1.5m to 4.2m. Platform equipped with

raise/lower control and emergency lower control valve

Hose End Equipment Controller (HEPC) Liquid 5th Wheel

Hose end pressure control (HEPC) couplings equipped with 45psi

regulator, vacuum breaker, 100mesh screen.

Fuel transfer from the refueller tank to the suction side of the pump is through a liquid 5th wheel assembly incorporating a Ø150mm swivel.

The mechanical connection to the chassis unit is via a Ø1000mm turntable.

Refueller Tank

40,000L useable capacity constructed in aluminium alloy with 3% expansion allowance.

Three external Ø500mm manholes/lids with pressure vacuum vents with Roll over safety valve and flame traps on vent valves

Internal Ø610mm access manholes

Single Ø254mm Bayham gauge

Calibrated dipstick Two jacking points

Valenced tank top to protect the handrails and manlids in the event of a roll over.

Rear access ladder, pneumatically actuated single-sided folding safety rail and non-slip walkway

Bottom loading system overspill prevention system fitted, with secondary safety cut out.

Safety Systems

Fire extinguisher – 2 x 9kg BC dry powder fitted inside enclosed containers Bonding reel – manual rewind with 30m of clear PVC insulated copper cable

Lanyard reel – manual rewind with 30m of red PVC coated stainless steel cable

ATEX approved electrical barrier system.

Interlocks

FuelTronic© refuelling management system incorporating deadman timer and monitoring unit for up to 16 interlocks.

Interlock override system

Brake interlock system preventing the vehicle from being moved if any item is left unstowed. Items protected are:

- Product pump drive mechanism
- Reel hose HEPC stowage's
- Bottom loading connections
- Outside source connection
- Bonding reel

Pipework

Constructed in grade 304L schedule 5 and 10s seamed Stainless Steel tubing throughout.

Hosereel

Single pedestal mounted hosereel with double race ball bearing internals and hydraulic rewind.

Dumptank

60L capacity fully draining tank with visual contents window and high level float switch system for manual emptying and emergency fuel system cut off in the event of overfilling. Maual emptying as standard.

Options

HEPC

Choice of Avery Hardoll, Carter or Whittaker.

Chassis

Chassis manufacturer typically chosen from: MAN, Mercedes-Benz, Volvo, Renault, or DAF, in either 4x2 or 6x4 format. Other chassis manufacturers available by request.

