



URBAN PUMPER SCANIA P310/320 Series



Role

The Urban Pump (UP) series provides a first response role for structural fire fighting, road crash rescue and hazardous material incidents, predominately in Gazetted fire districts. Introduced in 2010 to replace Iveco ACCO and Scania S3 Medium pump series, the Urban pump over time will become the standard design across FESA's Career Fire and Rescue Service, both Metropolitan and Regional based. A number of appliances in the series are configured with a Heavy Rescue capability, these appliances being designated as UPHR.

Appliance Summary

Appliance Type: Scania P310/P320 Series Urban Pump

Year of Introduction: 2010 **Next Replacement Year:** From 2025

Design Status: Current **Proposed Series Duration:** 2011/12 - 2017/18

Number in Fleet: 12 (+ 7 not commissioned as of 13 July 2012)

Total Series Number Indicated: 36 appliances

Asset ID's (Commissioned): UP01/07/08/09/10/11/13

UPHR 02/03/04/05/06.

Dimensions

Height: 3.4 Metres.

Width: 2.9 Metres (mirror to mirror)

Length: 8.4 Metres.

Weight: 13.3 Tonnes.

Specifications

Model: Scania P310/320 DB 4x2 MNA.

Engine: 310/320 HP – 5 cyl – 9 Litre – Euro 5.

Transmission: Allison 4020 with retarder.

Brakes: Four wheel disc with ABS/EBS.

Suspension;

Rear – Air bag.

Front – Parabolic spring.

Tyres: Michelin 295/80 R22.5.

Seating Capacity: Four.

Specialised Equipment: Draeger Breathing Apparatus/ Lukas Hydraulic road crash rescue equipment/ Teklite RTTM1 Mast light/ Full LED lighting /Draeger Thermal Imaging Camera/ Cross fire ground monitor

Pump: Waterous: CM (Mid-ship).

Pump Capacity: 4,750L/m @7 bar.

Water Tank Capacity: 1,200 Litres.

Foam System;

'B' Class – Total Walther HLZ-4 inductor.

Capacity – 200 Litres.

'A' Class – Waterous Advantus 3.

Capacity – 60 Litres.

Electrics: Class 1 Multiplex system.

Design and Manufacturing Profile

UP Series appliance design is a continuous improvement upgrade to the Heavy Pump appliance series first commissioned in 2008.

The UP series development process incorporates the commissioning by Fleet and Equipment Services of FESA generated drawings and specifications, proto type manufacture under direction, and full scale manufacturing. This process was adapted in recognition of the variations experienced across the preceding MP and HP series where the contracted manufacturer directed the appliance build process.

The process provides for standardisation across the series irrespective of manufacturers (provided capability has been demonstrated) and has resulted in reduced delivery timelines.

The design process allows manufacturer from a complete set of production and profile drawings and specifications. Variations from previous designs include the introduction of Multiplex (CAN- Bus) electrics, LED lighting technology and ergonomic and perfected use of storage areas. This is best illustrated in the design of the water ways storage (locker 5) and the RCR equipment storage and deployment (locker 1).

Western Australian appliance manufacturers contracted to FESA (RFT1072/06) have completed the UP series builds to date, these being South West Fire (Collie) and MacDonald Johnston Engineering (Bayswater).

Scania P310/320 cab chassis were supplied to the manufacturers' via FESA contract (RFT 1062/06). The build process undertaken by manufacturers' includes;

- The supply, manufacture of pump module and associated plumbing and systems, and installation of pump and pump module to the chassis;
- Manufacture, assembly and installation of appliance body to the chassis;
- Fit out of locker internals;
- Interface of electrical systems with cab chassis; and
- Testing and Commissioning.

Financials Associated in Manufacture

Financial outlays associated with the supply and manufacture include;

- Cab Chassis: \$ 255,818
- Appliance build costs: \$432,490
- Associated costs (non-direct build costs): \$52,527

Financials Associated in Maintenance and Running Costs

To be provided.

Forward Orders – Replacement Program Status

The MP Replacement program is aligned to Treasury Project 14578/611 and is currently in recess (in between replacement cycles). The RP duration is 2011/12 to 2017/18 and includes 30 appliances. A number of both additional appliances and appliances outside of this funding cycle will complete the series (36 appliances in total).

Two (2) appliances are currently work in progress (additional appliances) with completion scheduled by December 2012. The replacement program proper recommences in 2014/15 (final 13 appliances over 4 years).