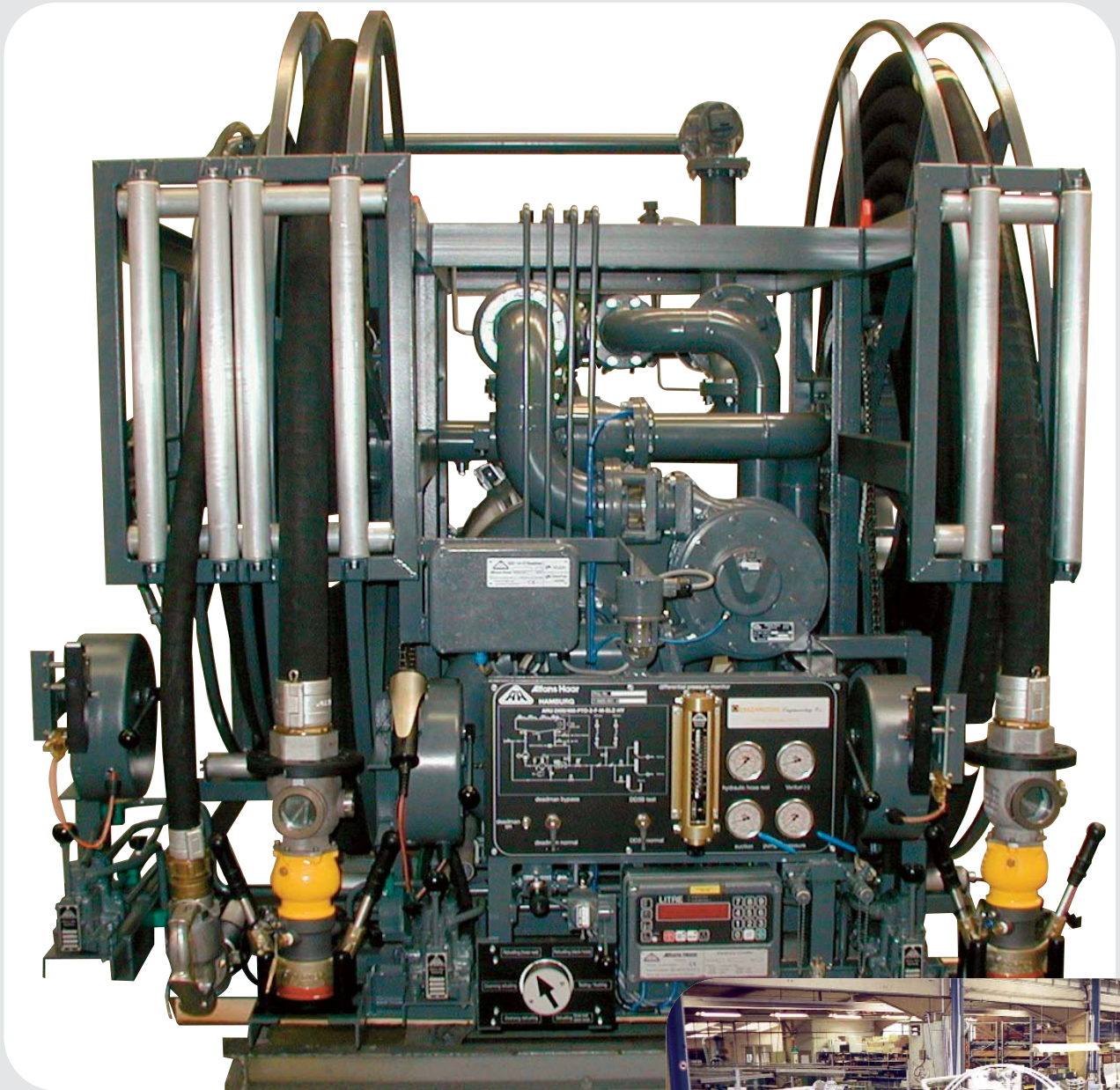


ARU

Aircraft Refuelling Unit

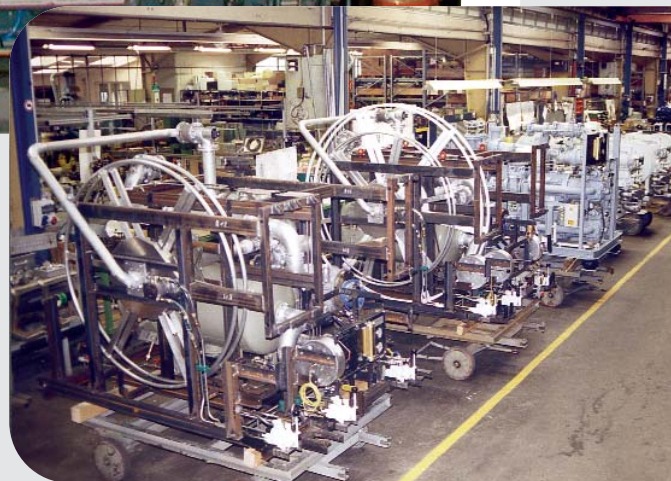


Alfons Haar



EACH ARU IS:

- designed and constructed to meet specific requirements
- delivered with predefined interfaces
- delivered fully operational tested
- delivered on time to fixed cost
- delivered with service and operating manual
- value for years of safe refuelling



ARU

Aircraft Refuelling Unit



In the past 20 years the Alfons Haar Aircraft Refuelling Unit ARU has proven itself as the very successful concept of modular design for aircraft refuellers. The ARU comprises all required refueller components including pump, filter water separator or monitor, meter, the special in-line pressure and deadman control valve, hose reels, all valves to control refuelling modes and of course the control logic box. All is assembled on a common base frame and tested at the Alfons Haar works in Hamburg. Operation of the unit is simply by rotary selector.

The new generation of ARU is centrally controlled by the ARU Master, a computer specially designed for Ex Zone 1 in the tough airport and even tougher Military environment. The ARU Master not only controls the meter and

converts temperature compensated volumes in kilogram but more important controls all fuelling modes and supervises interlocks using Field-Bus and PLC technology. Refuelling pressure to the aircraft, differential pressure of the filter, optimized engine speed are integrated into the control system. Well proven technology has been adopted to assure operational reliability and safety and most important of all dry and clean fuel to the aircraft under all operating conditions.

Design and construction is to international standards, EC regulations, ISO 9001 and spare parts are available guaranteed for 15 years.

The integrated proven PreciLINK communication assures that all fuel delivery data are transmitted either in real time or as required to the fuelling station office PC.