Aircraft Refuelling Equipment
JET and AVGAS

Refuelling equipment for the transfer of aviation fuels must provide a high level of safety over the whole transport chain. Operators require that their equipment works reliably and will not contaminate the fuel. According to the standard EI 1530, section 10.3.3.2 this is required over the whole supply chain, from refinery to the aircraft. ELAFLEX equipment meets these requirements.

Due to their construction, ‘YELLOW BAND’ aircraft refuelling hoses (types HD-C, VHD-C, PHD-F, TW-E) to ISO 1825 / API 1529 are lightweight, highly flexible also at low temperatures, very safe to operate and show a superior lifetime. Most types are available with optional NEON bands for improved visibility in darkness and also in Low Temperature version for use in extremely cold regions.

Safeguarding media purity, hose couplings with BSP or NPT thread are available in stainless steel or tin plated brass (‘Sn’ version). Swiveling or fixed hose flanges to DIN or ASA are usually of stainless steel. All couplings are assembled with reusable SPANNLOC or SPANNFIX safety clamps which allow self-assembling and repair in the field. On request, non reattachable NR clamps are available as well.

Most customers require complete hose assemblies, tested and ready to use. Elaflex is certified for assembling and testing to the European Pressure Equipment Directive and Nato AQAP-2130. After a pressure and electrical continuity test, hose assemblies are marked with a unique serial number, for easy traceability.

For the loading of aviation refuellers (airfield tank trucks), Mann Tek DAC Dry Aviation Couplings to ISO 45 have proven themselves in practice for a quick and clean connection without spill. Further Mann Tek products for the installation in aviation refuellers incorporate e.g. DDC couplings for fuel sampling or FFB Full Flow Ballvalves.

For overwing and helicopter refuelling, the following nozzle types are commonly used: ZVF 25 (manual, 140 l/min), ZVA 25 AF (automatic, 140 l/min), ZVA 32 (automat., 200 l/min) and ZVF 50 (manual, 400 l/min). Several options for AVGAS or JET-A1 distinction and a large choice of accessories are available.

For installation within the pipe systems of aviation refuellers we recommend our renowned ERV-G rubber expansion joints which reliably dampen vibrations occurring during operation.

Detailed information: www.elaflex.de/en
Photos:
1) Hose assembling
2) Hydrostatic testing
3) Electrical continuity testing
4) Underwing refuelling, HD-C
5) Underwing refuelling, HD-C
6) Overwing refuelling, ZVF 50 JET