



Tungum Alloy UNS C69100 Tubing For Defence Applications

Fighting vehicle applications:

- 1) Main Battle Tanks - hydraulic controls, brake pipes, fuel lines and climatic control circuits.
- 2) Anti-aircraft autocannon gun controls.
- 3) Armoured Personnel Carriers - hydraulic controls, brake & fuel lines, climatic control circuits.

Naval military marine applications:

- 1) Hydraulic ring mains on naval ships.
- 2) Pneumatic ring mains on naval ships.
- 3) Steering gear/stabilisers - hydraulic control & actuation.
- 4) Deck winch and Lifeboat davit system pipework.
- 5) RAS (refuelling at sea) rig control lines.
- 6) Castings and bar for non-magnetic engine mounts.
- 7) Strip material for "J"-Strap resilient equipment mountings.
- 8) Diving system pipework.
- 9) Aircraft lifts and ammunition hoists.
- 10) Gun & missile control hydraulics and pneumatics.

Tungum specified for the following benefits:

- High strength.
- High resistance to shock and vibration.
- Very low magnetic signature – particularly essential for minesweepers and stealth technology.
- Superior corrosion resistance in seawater and its environment.
- Clean bore characteristics.
- Safety enhancement - non sparking material.
- Ease of manipulation and installation. No hot-work necessary.
- Low cost alternative to more expensive stainless steel alloys, further decreasing asset lifetime costs.
- Decreased need for repetitive maintenance during storage of assets.
- Compatible and approved with all industry recognized tube fittings.

Approvals & Accreditations:

- DNV GL – Det Norske Veritas ISO 9001
- ASME – American Society of Mechanical Engineers Section 1, VIII, B31.1 & B31.3 Code Cases
- USCG – United States Coast Guard
- NORSOK – M-650 Qualification of Manufacturers of Special Materials
- ABS – American Bureau of Shipping Type Approval
- IMCA – International Marine Contractors Association – Document D012 – approved for use in Oxygen systems
- BAM – Federal Institute for Gaseous Oxygen Service, tested in accordance with ASTM G124-10 (2010)
- Lloyds Register of Shipping