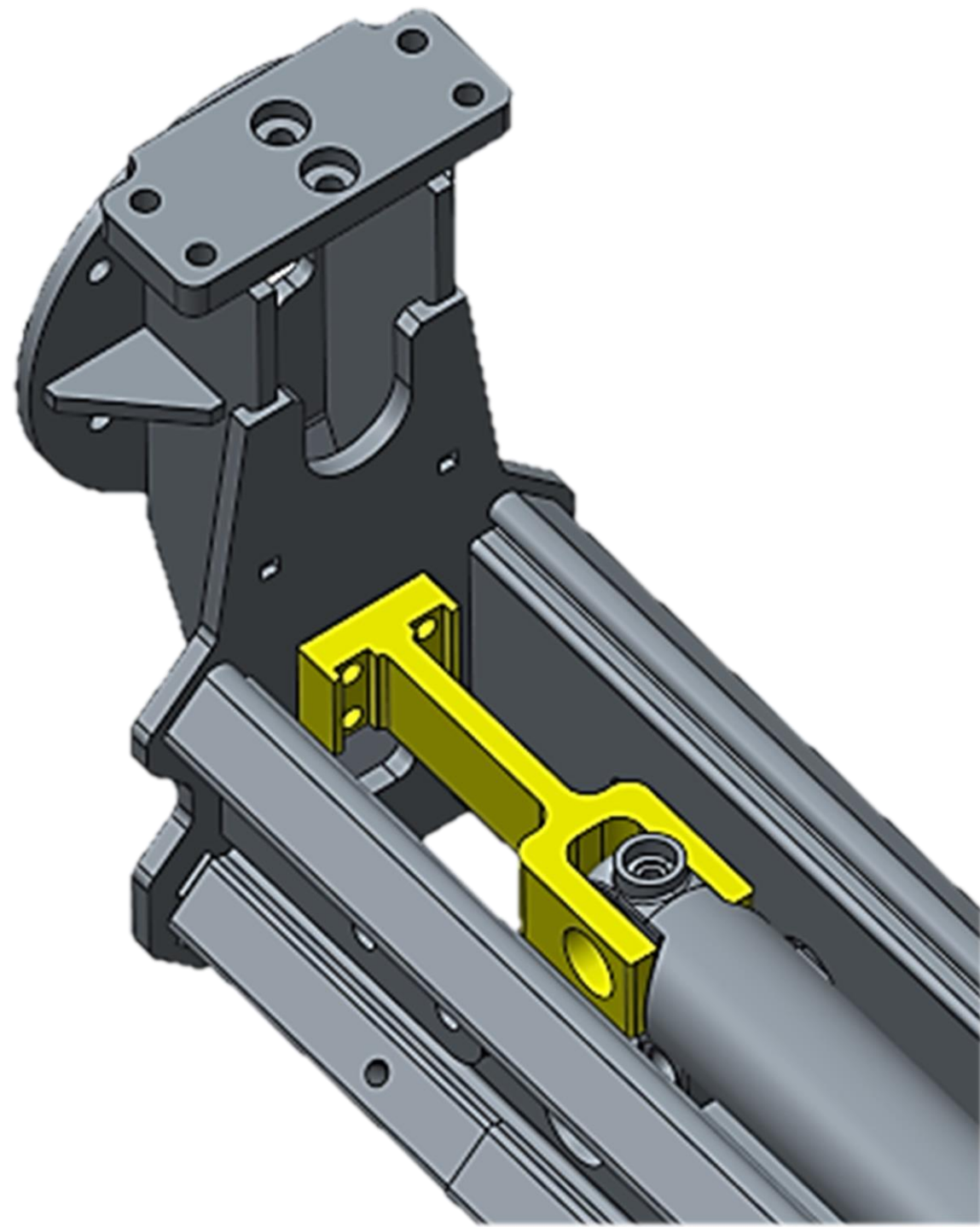


# Light Weight Additive Manufactured Mining Components



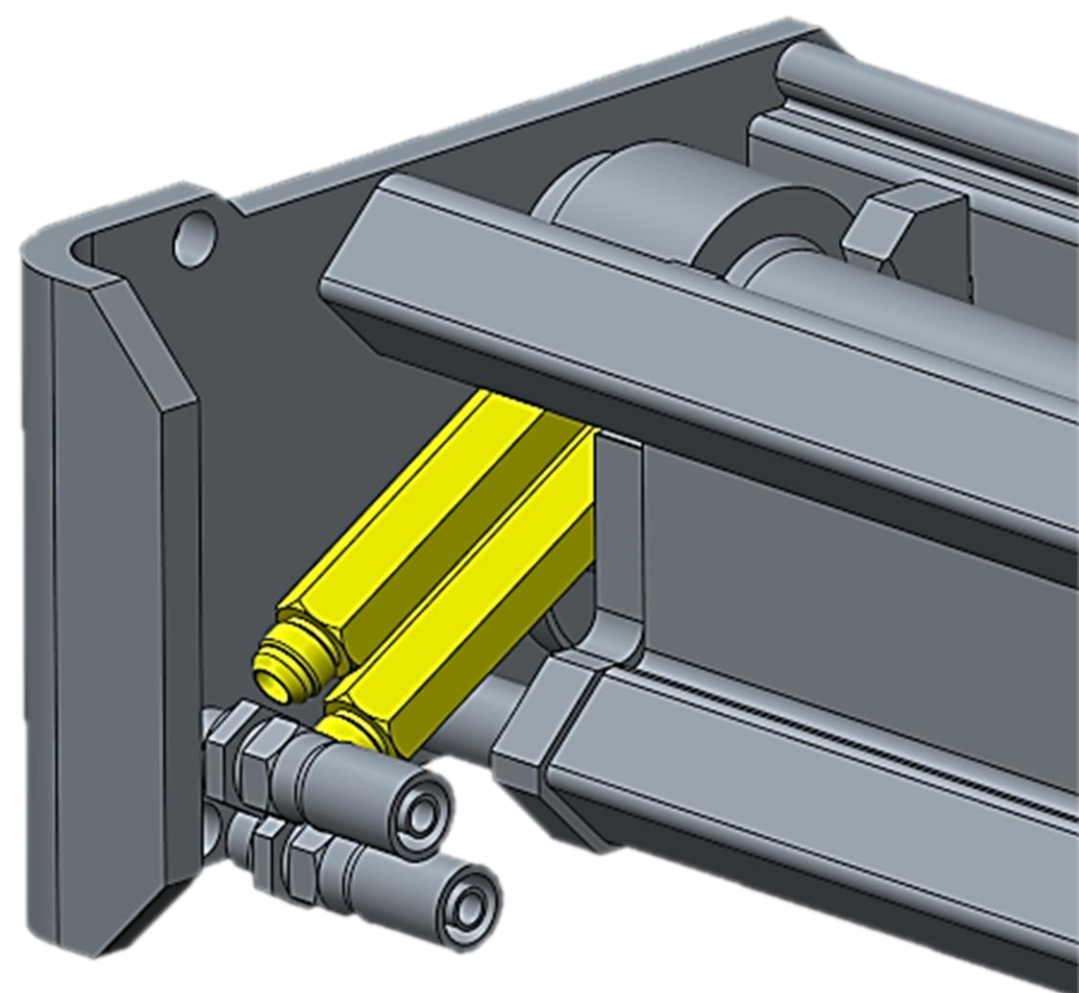
**2.4kg**

**Dog bone**

**0.5kg**

- Topology optimized
  - PA2200
- Cheaper to manufacture

**-78%**



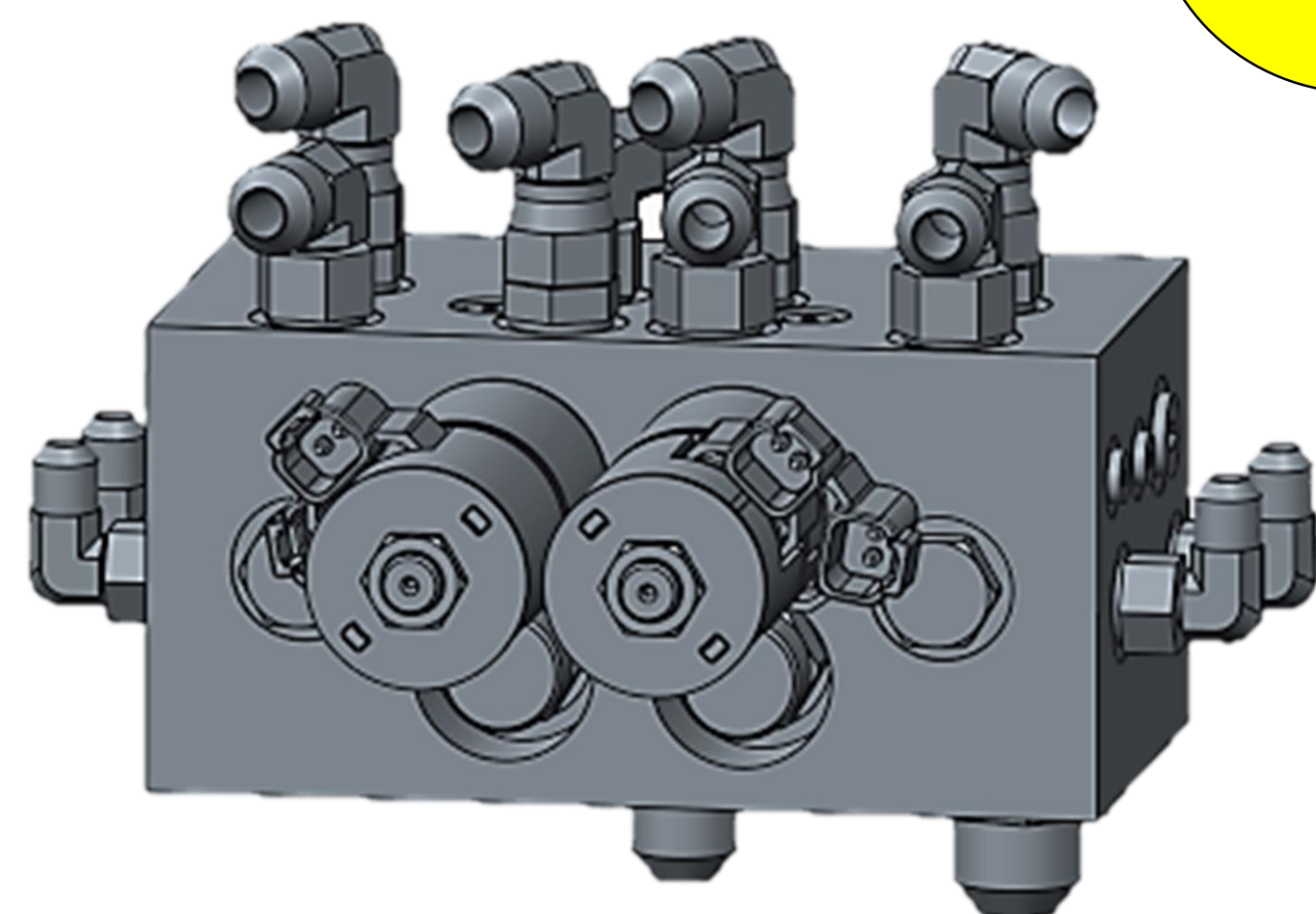
**1.1kg**

**Nipple-replacement**

**0.7kg**

- Easier hose handling
  - Stronger
- Improved supply chain

**-34%**



**14.7kg**

**Manifold**

**1.3kg**

- Easier hose handling
- No plugging required
- Same valve inlet and outlet positions

**-92%**



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