# DECK006 baseline ring

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# SPEC-00-STR-DECKS-DECK006-0001-baseline-ring-EN-DE-v0.1.0-DRAFT

The Engineering of DECK006 - Baseline Ring

**Document status:** Draft (EVOL-00 baseline) **Date:** 2025-08-25 **Applies to:** Earth ONE class sphere station ( $\emptyset$  127 m)

### 1. Abstract / Zusammenfassung (EN/DE)

**EN:** DECK 006 is a baseline pressurized ring providing volume for future systems. It spans  $r_i = 28.0 \text{ m}$  to  $r_o = 31.5 \text{ m}$  (gross) with 0.5 m structural thickness (net  $r_o = 31.0 \text{ m}$ ).

**DE:** DECK 006 ist ein Baseline-Ring für zukünftige Systeme. Er erstreckt sich von  $r_i = 28.0$  m bis  $r_o = 31.5$  m (brutto) mit 0,5 m Strukturstärke (netto  $r_o = 31.0$  m).

## 2. Baseline Geometry & Environment (EVOL-00)

- Radial band: inner radius 28.0 m, outer radius 31.5 m, net outer radius 31.0 m, net deck height 3.0 m (gross 3.5 m).
- Circumference: ~175.9 m (inner) to ~194.8 m (outer net).
- Gravity: ~8.00 m/s² at net outer radius (EVOL-00 spin law).
- Deck role: TBD.

#### 3. Open Parameters (TBD/TBC)

Detailed functional layout & interfaces.

#### 4. Drawing & Data References

• DECK geometry baseline table.