

Compressor and Driver Selection

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BOARDWALK



PIPELINE PARTNERS®

Design Stage

Stage 0: Horsepower Ratings Only

Stage 1: Start Picking Compressors

Stage 2: Verifying Selections with OEMs

Stage 0 – HP Totals Only

-Capital Cost

-Not a primary concern yet.

-Turn Down/Ratios

-Not given at this stage.

-Operational Flexibility

-No turndown but max flow targets are given.

-Are existing units present?

-Operating Costs

-We do consider unit familiarity, customer satisfaction, and service. In other words we have OEMs in mind.

-Environmental

-Not a primary concern yet.

-Reliability

-Not a primary concern yet.

Stage 1 – Compressors

-Capital Cost

- Unit pricing and installation costs
- Future incremental needs?
- Pulsation concerns
- Contract types

-Turn Down/Ratios

- 1 large unit or 2 small ones?

-Operational Flexibility

- Other flow sources to make up for shortcomings? (Batching, other stations upstream or down stream, existing units, etc.)

-Operating Costs

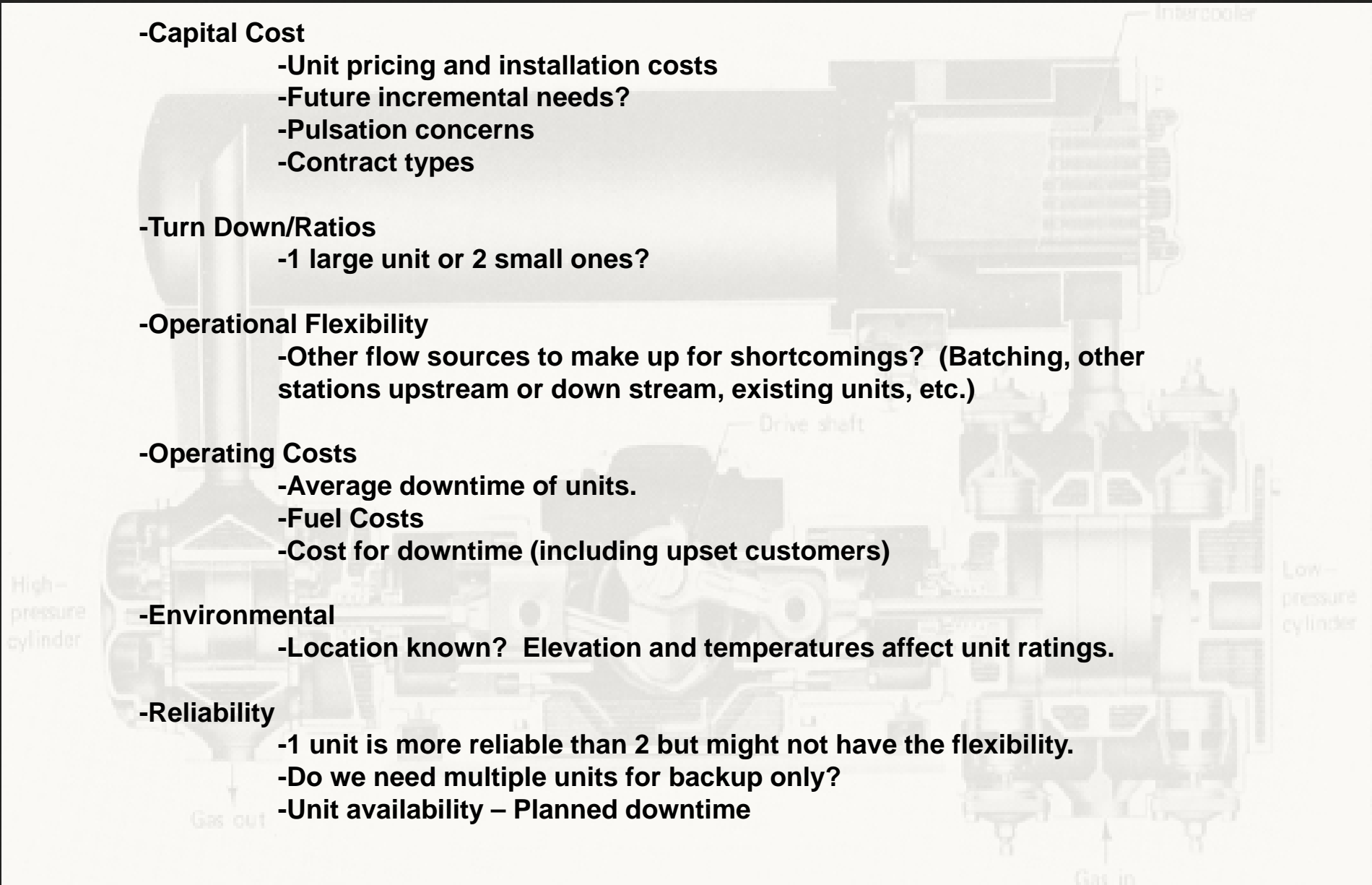
- Average downtime of units.
- Fuel Costs
- Cost for downtime (including upset customers)

-Environmental

- Location known? Elevation and temperatures affect unit ratings.

-Reliability

- 1 unit is more reliable than 2 but might not have the flexibility.
- Do we need multiple units for backup only?
- Unit availability – Planned downtime



Stage 2 – OEM Verification

- Capital Cost
 - Fine tune all capital costs
- Turn Down/Ratios
 - Conditions are set. Fine tune unit selection.
- Operational Flexibility
 - Quick start application?
 - Long or short duty cycles.
 - Changing gas analysis?
- Operating Costs
 - Fine tune all operating costs.
- Environmental
 - Emissions
 - Noise
- Reliability
 - Will the units we have chosen run as needed?

Time/Resources/Knowledge

- **Time to digest all the information**
- **Resources to make the right decision**
- **Knowledge to make the right selections**