When setting target ISO fluid cleanliness codes for hydraulic and lubrication systems it is important to keep in mind the objectives to be achieved. Maximizing equipment reliability and safety, minimizing repair and replacement costs, extending useful fluid life, satisfying warranty requirements, and minimizing production down-time are attainable goals. Once a target ISO cleanliness code is set following a progression of steps to achieve that target, monitor it, and maintain it will yield justifiable rewards for your efforts. Make an impact on reliability by controlling contamination.

**Set the Target.**
The first step in identifying a target ISO code for a system is to identify the most sensitive component on an individual system, or the most sensitive component supplied by a central system. If a central reservoir supplies several systems the overall cleanliness must be maintained, or the most sensitive component must be protected by filtration that cleans the fluid to the target before reaching that component.

**Other Considerations.**
Table 1 recommends conservative target ISO cleanliness codes based on several component manufacturers guidelines and extensive field studies for standard industrial operating conditions in systems using petroleum based fluids. If a non-petroleum based fluid is used (i.e. water glycol) the target ISO code should be set one value lower for each size $4\mu_{(g)}$, $6\mu_{(g)}$, $14\mu_{(g)}$). If a combination of the following conditions exists in the system the target ISO code should also be set one value lower:

- Component is critical to safety or overall system reliability.
- Frequent cold start.
- Excessive shock or vibration.
- Other severe operation conditions.

**Recommended* Target ISO Cleanliness Codes and media selection for systems using petroleum based fluids per ISO4406:1999 for particle sizes $4\mu_{(g)}$, $6\mu_{(g)}$, $14\mu_{(g)}$**

![Table 1](image-url)