

What is Clean Fuel?

Achieving the Target Cleanliness of a Fluid

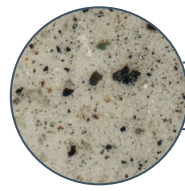
ISO 4406 contamination codes are a way to express fluid cleanliness. The three numbers correspond to the number of particles 4 microns and larger, 6 microns and larger, and 14 microns and larger present in the fluid. This page illustrates what it means to start with a contamination of ISO 22/21/18 and target a cleanliness of ISO 14/13/11.

ISO 4406 CONTAMINATION CODES

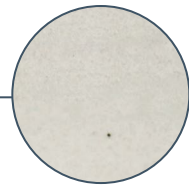
Range of number of particles per 100 milliliters

CODE	MORE THAN	UP TO & INCLUDING
24	8,000,000	16,000,000
23	4,000,000	8,000,000
22	2,000,000	4,000,000
21	1,000,000	2,000,000
20	500,000	1,000,000
19	250,000	500,000
18	130,000	250,000
17	64,000	130,000
16	32,000	64,000
15	16,000	32,000
14	8,000	16,000
13	4,000	8,000
12	2,000	4,000
11	1,000	2,000
10	500	1,000
9	250	500
8	130	250
7	64	130
6	32	64
5	16	32
4	8	16
3	4	8
2	2	4
1	1	2

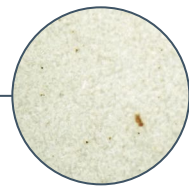
RECOMMENDED ISO CLEANLINESS RATINGS



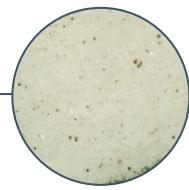
ISO 22/21/18
Typical cleanliness as fluid goes into your equipment



ISO 14/13/11
Target rating for diesel fuel



ISO 16/14/11
Target rating for hydraulic/transmission oils



ISO 18/16/13
Target rating for heavy gear/engine oils

