

Simple Way of Understanding ISO Cleanliness Codes

ISO Cleanliness codes are sourced from the International Standard of ISO 4406:99. ISO Codes show 3 sets of separated numbers.


The first number looks at the amount of particles larger than 4 micron
 The second number looks at the amount of particles larger than 6 micron
 The last number looks at the amount of particles larger than 14 micron

For Example if we get a reading of ISO 21/18/12:

In the first number being **21**, which looks at particles that are bigger than **4** micron the number of particles we find are between **1,000,000** and **2,000,000** per every 100ml of fuel

In the second number being **18**, which looks at particles that are bigger than **6** micron the number of particles we find are between **130,000** and **250,000** per every 100ml of fuel

In the last and third number being **12**, which looks at particles that are bigger than **14** micron the number of particles we find are between **2000** and **3000** per every 100ml of fuel

The table to the right,  Shows us the number of particles you would get per 100ml of fuel which is specified against each number in the micron range. As the above text depicts when the ISO reading of **21/18/12** is explained.

The most Damaging microns are found between the **6-14** range and having a high particle count between this micron range of course causes damage to important parts of your operating machinery such as your injectors, which as we all know are a costly exercise to replace, especially on a truck engine.

Therefore monitoring your fuel and the contamination thereof by using an effective filtration system will ensure longer engine life and of course assist in decreasing your operating costs.

ISO 4406 Cleanliness Standards (number of particles per 100mL)*		
Range no.	More than	Up to and including
24	8,000,000	18,000,000
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

