

Cleanroom Cleanliness Levels  
 ISO Standard 14644-1 and  
 Federal Standard 209 E  
 Cross Reference

| Fed Std 209 | ISO 1466 | 0.1 micro meter  |           |                           | 0.5 micro meter            |                          |                           | 5 micro meter            |                          |                           |                          |
|-------------|----------|------------------|-----------|---------------------------|----------------------------|--------------------------|---------------------------|--------------------------|--------------------------|---------------------------|--------------------------|
|             |          | Fed Standard 209 |           | ISO                       | Fed Standard 209           |                          | ISO                       | Fed Standard 209         |                          | ISO                       |                          |
|             |          | Class            | Class     | Particles/ft <sup>3</sup> | 3 Particles/m <sup>3</sup> | Particles/m <sup>3</sup> | Particles/ft <sup>3</sup> | Particles/m <sup>3</sup> | Particles/m <sup>3</sup> | Particles/ft <sup>3</sup> | Particles/m <sup>3</sup> |
|             | 1        |                  |           | 10                        |                            |                          |                           |                          |                          |                           |                          |
|             | 2        |                  |           | 100                       |                            |                          | 4                         |                          |                          |                           |                          |
| 1           | 3        | 35               | 1,230     | 1,000                     | 1                          | 35                       | 35                        |                          |                          |                           |                          |
| 10          | 4        | 345              | 12,200    | 10,000                    | 10                         | 353                      | 352                       |                          |                          |                           |                          |
| 100         | 5        | 3,450            | 122,000   | 100,000                   | 100                        | 3,530                    | 3,520                     |                          |                          |                           | 29                       |
| 1000        | 6        | 34,500           | 1,220,000 | 1,000,000                 | 1,000                      | 35,300                   | 35,200                    | 7                        | 247                      | 293                       |                          |
| 10,000      | 7        | 345,000          | 1.22E+07  |                           | 10,000                     | 353,000                  | 352,000                   | 65                       | 2,300                    | 2,930                     |                          |
| 100,000     | 8        | 3,450,000        | 1.22E+08  |                           | 100,000                    | 3,530,000                | 3.52E+06                  | 700                      | 24,700                   | 29,300                    |                          |
|             | 9        | 3.45E+07         | 1.22E+09  |                           |                            |                          | 35,200,000                |                          |                          |                           | 293,000                  |