

TYPES OF OELS



TWA

Time Weighted Average

Used to evaluate full shift exposure. Sometimes is followed by the shift duration, for clarity, e.g. TWA(8), TWA(10) and TWA(12).



STEL

Short Term Exposure Limit

Used to evaluate 15 minute exposures. This level should not be exceeded at any time throughout the day, even if the TWA(8) is below the 8-hour exposure limit. Workers cannot be exposed to levels above the TWA but below the STEL more than 4 times a day, with at least one hour intervals between each incidence.



C

Ceiling Limit

Hard limit that cannot be exceeded during any part of the working exposure.



ALARA

As Low As Reasonably Achievable

Exposure should be eliminated or reduced as much as possible. Usually used in the case of carcinogens or other toxic substances for which there is no known "safe" level of exposure.



Peak Limits

3 by 5 Rule

Used to limit transient peak exposures during a work shift that may result in acute adverse health effects, even when there is no published STEL or Ceiling limit.

SOURCES:

ACGIH TLVs and BEIs
Canadian Center for Occupational Health and Safety
OSHA Permissible Exposure Limits

