Corrosion Glossary

vacuum deposition
: Condensation of thin metal coatings on the cool surface of work in vacuum.

valence
: A positive number that characterizes the combining power of an element for other elements, as measured by the number of bonds to other atoms that one atom of the given element forms upon chemical combination: hydrogen is assigned valence 1, and the valence is the number of hydrogen atoms, or their equivalent, with which an atom of the given element combines.

vapor deposition
: See *chemical vapor deposition, physical vapor deposition* and *sputtering.*

vapor plating
: Deposition of a metal or compound on a heated surface by reduction or decomposition of a volatile compound at a temperature below the melting points of the deposit and the base material. The reduction is usually accomplished by a gaseous reducing agent such as hydrogen. The decomposition process may involve thermal dissociation or reaction with the base material. Occasionally used to designate deposition on cold surfaces by vacuum evaporation. See also *vacuum deposition.*

voids
: A term generally applied to paints to describe *holidays,* holes, and skips in a *film.* Also used to describe shrinkage in castings and weld.