

## APPENDIX A

### Glossary

Painting operations employ terms that are peculiar to this field and, as such, may require some explanation or definition. This glossary is designed to provide the reader with some basic understanding of terms commonly used in painting and thus, eliminate possible misunderstandings resulting from conflicting interpretations of terms and improve communication between all persons involved in the painting operation.

#### A

abrasive--the agent used for abrasive blast cleaning; for example, sand, grit, steel shot, etc.

absorption--process of soaking up, or assimilation of one substance by another.

accelerator--catalyst; a material which accelerates the hardening of certain coatings.

acetone--a fast evaporating, highly flammable solvent. acoustic paint--paint which absorbs or deadens sound.

acrylic resin--a clear resin derived from polymerized esters of acrylic acids and methacrylic acid.

activator--catalyst or curing agent; accelerator.

adhesion--bonding strength, the attraction of a coating to the surface to which it is applied.

adsorption--process of attraction to a surface; attachment; the retention of foreign molecules on the surface of a substance.

adulteration--the addition of unwanted materials.

agglomeration--formation of masses or aggregates of pigments; not dispersed

air adjusting valve--spray gun valve controlling input air.

air bubble--bubble in paint film caused by entrapped air.

air cap (or air nozzle)--perforated housing for atomizing air at head of spray gun.

air drying--drying by oxidation or evaporating by simple exposure to air.

air entrapment--inclusion of air bubbles in paint film.

air hose--hose of air supply quality, usually red.

air jet (blast cleaning)--type of blast cleaning gun in which the abrasive is conveyed to the gun by partial vacuum.

airless spraying--spraying using hydraulic pressure to atomize the paint.

air manifold--common air supply chamber for several lines.

air transformer--device for controlled reduction in air pressure.

air valve--control valve in air line system.

air volume--quantity of air in cubic feet (usually per minute) at atmospheric pressure.

alcohol--a flammable solvent; alcohols commonly used in painting are ethyl alcohol (ethanol) and methyl alcohol (methanol, wood alcohol).

aliphatic hydrocarbons--flammable solvents of low solvent power, usually derived from petroleum.

alkali--caustic, such as sodium hydroxide, lye, etc.

alkyd resins--resins prepared from polyhydric alcohols and polybasic acids.

alligatoring--surface imperfections of paint having the appearance of alligator hide.

ambient temperature--room temperature or temperature of surroundings.  
American gallon--231 cubic inches.  
amides--curing agent combined with epoxy resins.  
amines--curing agent combined with epoxy resins.  
anchor pattern--profile of a surface, usually attained by blasting.  
angle blasting--blast cleaning at angles less than 90 degrees.  
angle of degree (airless spray cap)--orifice angle; controls width of spray, pattern angle.  
anhydrous--dry, free of water in any form.  
applicator--one who applies; tool for applying.  
arcing--swinging spray gun away from the work.  
aromatic hydrocarbons--strong solvents such as benzene, toluene, xylene.  
asphalt--residue from petroleum refining; also a natural complex hydrocarbon.  
atomize--break steam into small particules.

## B

baking finish--product requiring heat cure.  
banding--identifying with strips of tape.  
barrier coating--shielding or blocking coating or film.  
binder--resin; drying oil; latex emulsion; film former; vehicle.  
bituminous coating--coal tar or asphalt based coating.  
blast angle--angle of nozzle with reference to surface; also angle of particle propelled from rotating blast cleaning wheel with reference to surface.  
blast cleaning--cleaning with propelled abrasives.  
bleaching--removing color.  
bleeder gun--a spray gun with no air valve; trigger controls fluid flow only.  
bleeding--penetration of color from the underlying surface.  
blisters--bubbles in dry or partially dry paint film.  
blooming--whitening; moisture blush; blushing.  
blow-back (spray term)--rebound of atomized sprayed material.  
blushing--whitening and loss of gloss due to moisture or improper solvent balance.  
body--viscosity; middle or under coat; to thicken.  
boilers (solvent)--solvents of particular evaporation rate.  
bonding--adhesion.  
bounce-back--spray rebound similar to blow-back.  
boxing--mixing by pouring back and forth from one container to another.  
bridging--forming a skin over a depression.  
bright blast--white blast; See 4.4.2.4.  
brittleness--degree of resistance to cracking, breaking or bending.  
broadcast--to sprinkle solid particles on a surface.  
bronze tools--non-sparking tools; used when fire hazards are particularly acute.  
bronzing--formation of metallic sheen on a paint film.  
brushability--ability to be brushed.  
brush-off blast--lowest blast cleaning standard; see 4.4.2.4.  
bubbling--a term used to describe the appearance of blisters on the surface while a coating is being applied.

C

caking--hard settling of pigment from paint.  
camouflage--the art or system for deception or concealment.  
catalyst--accelerator; curing agent; promoter. cat-eye--hole or holiday shaped like a cat's eye; cratering. chalking--powdering of surface.  
checking--formation of slight breaks in the film that do not penetrate to the underlying surface.  
chipping--(1) cleaning steel using special hammers.  
--(2) type of paint failure.  
chlorinated rubber--a particular film former used as a binder, made by chlorinating natural rubber.  
cleaner--(1) detergent, alkali, acid or other cleaning material; usually water o? steam borne.  
--(2) solvent for cleaning paint equipment.  
coal tar pitch--black residue remaining after coal tar is distilled.  
coal tar-epoxy paint--paint in which binder or vehicle is a combination of coal tar with epoxy resin.  
coatings--surface coverings; paints; barriers.  
coat of paint--layer of dry paint resulting from a single wet application  
cobwebbing--a spider web effect caused by premature drying.  
cohesion--property of holding self together.  
cold-checking--checking caused by low temperatures.  
cold-cracking--cracking occurring at low temperatures.  
color-fast--non-fading.  
color retention--ability to retain original color.  
commercial blast--see 4.4.2.4  
compatibility--ability to mix with or adhere properly to other components or substances.  
composition--analysis; make-up.  
conditioner--see surface conditioner.  
continuity--degree of being intact or pore free.  
copolymer--large molecule resulting from simultaneous polymerization of different monomers.  
copper sulfate test (for mill scale)--copper color indicates absence of mill scale when steel is swabbed with 5 to 10 percent solution.  
corrosion--oxidation; deterioration due to interaction with environment.  
cracking--splitting, disintegration of paint by breaks through film to substrate.  
cratering--formation of holes or deep depressions in paint film.  
crawling--shrinking of paint to form uneven surface shortly after application.  
crazing--development of non-uniform surface appearance of myriad tiny scales or cracks.  
creepage--see crawling.  
cross-linking--a particular method by which chemicals unite to form films.  
cross-spray--spraying first in one direction and then at right angles.  
curing--setting up; hardening.  
curing agent--hardener; promoter.  
curtaining--sagging.  
curtains--sags having appearance of drapes.  
cycling (of pump)--interval between strokes.

## D

deadman valve--shut-off valve at blast nozzle, operated by remote control.  
decorative painting--painting for appearance.  
degreaser--chemical solution (compound) for grease removal.  
delamination--separation of layers of paint films.  
density--weight per unit volume. detergent--cleaning agent.  
dew point--temperature at which moisture condenses.  
diluent--see thinners.  
discoloration--color change.  
dispersion--suspension of one substance in another.  
distensibility--ability to be stretched.  
distillation--purification or separation by volatilizing and condensing.  
doctor blade--knife applicator of fixed film thickness.  
double regulation--regulation of both pot and gun air pressure.  
drier--chemical which promotes oxidation or drying of paint.  
drift (overspray)--spray loss.  
drop (scaffold)--one vertical descent of the scaffold.  
drop cloth--protective cover.  
dry film thickness--depth of applied coating when dry, expressed in mils (1/1000 in.).  
dry spray--overspray or bounce back; sand finish due to spray particle being partially dried before reaching the surface.  
drying oil--an oil which hardens in air.  
drying time--time interval between application and a specified condition of dryness.  
dry to handle--time interval between application and ability to be picked up without damage.  
dry to recoat--time interval between application and ability to receive next coat satisfactorily.  
dry to touch--time interval between application and ability to be touched lightly (tack-free time).  
dulling--loss of gloss or sheen.

## E

edging--stripping.  
efflorescence--deposit of soluble white salts on surface of brick and other masonry.  
eggshell--between semi-gloss and flat.  
elasticity--degree of recovery from stretching.  
electrostatic spray--spraying in which electric charge attracts paint to surface.  
emulsion paint--water-thinned paint with an emulsified oil and/or resin or latex vehicle.  
enamel--a paint which is characterized by an ability to form an especially smooth film.  
epoxy amine--amine cured epoxy resin.  
epoxy ester--epoxy modified oil; single package epoxy.  
epoxy resins--film formers usually made from bisphenol A and epichlorohydrin.  
erosion--wearing away of paint films to expose the substrate or undercoat.  
estimate--compute; calculate cost of a job.  
etch--surface preparation of metal by chemical means.

evaporation rate--rate at which a solvent evaporates.  
evaporation rate, final--time interval for complete evaporation of all solvents.  
evaporation rate, initial--time interval during which low boiling solvent evaporates completely.  
explosive limits--a range of the ratio of solvent vapor to air in which the mixture will explode if ignited. Below the lower or above the higher explosive limit, the mixture is too lean or too rich to explode. The critical ratio runs from about one to twelve percent of solvent vapor by volume at atmospheric pressure.  
extender--pigment which can contribute specific properties to paint, generally low in cost.  
extension gun--pole gun.  
external mix--spray equipment in which fluid and air join outside of aircap.

## F

fading--reduction in brightness of color.  
fallout (spray)--overspray.  
fanning (spray gun technique)--arcing; moving the spray gun away from the work.  
fan pattern--geometry or shape of spray pattern.  
feather edge--tapered edge.  
feathering--(1) triggering a gun at the end of each stroke; (2) tapering edge.  
Federal specifications--Government specifications for products, components and/or performance.  
ferrous--iron coating.  
field painting--painting at the job site.  
filler--extender; building agent; inert pigment.  
film build--dry thickness characteristics per coat.  
film-former--a substance which forms a skin or membrane when dried from a liquid state.  
film integrity--a degree of continuity of film.  
film thickness gauge--device for measuring film thickness; both wet and dry gauges are available.  
filter--strainer; purifier.  
fineness of grind--measure of particle size or roughness of liquid paint; degree of dispersion of pigment in the binder.  
fingers (airless spray)--broken airless spray pattern.  
fire-retardant paint--a paint which will delay flaming or over-heating of substrate.  
fish eye--see cratering.  
flaking--disintegration in small pieces or flakes; see scaling.  
flammability--measure of ease of catching fire; ability to burn.  
flame cleaning--method of surface preparation of steel using flame.  
flash point--the lowest temperature at which a given flammable material will flash if a flame or spark is present.  
flatting--loss of gloss in coating film.  
flexibility--ability to be bent without damage.  
floating--separation of pigment colors on surface.  
flooding--see floating.  
flow--a measure of self leveling.

fluid adjusting screw--a screw on a spray gun which controls the amount of fluid entering the gun.  
fluid flow--a measure of flow through a gun with atomizing air shut off.  
fluid hose--specially designed hose for paint materials; usually black.  
fluid nozzle--fluid tip with orifice; in a broader sense it means needle and tip combination.  
fluid tip--orifice in gun into which needle is seated.  
foaming--frothing.  
fogging--misting.  
forced drying--acceleration of drying by increasing the temperature above ambient temperature using an oven, infra red lamp or other heat source.  
fungicide--a substance poisonous to fungi; retards or prevents fungi growth.  
furane resins--dark chemical resistant resins made from furfuryl alcohol, furfural, and phenol.

## G

galvanized steel--steel plated in a molten bath of zinc.  
gas checking--fine checking; wrinkling, frosting under certain drying conditions; said to be caused by rapid oxygen absorption or by impurities in the air.  
gel--a jelly-like substance.  
gelling (gelation)--conversion of a liquid to a gel state. glazing (puttying)-setting glass.  
gloss--shininess; lustre; ability to reflect in mirror direction.  
gloss retention--ability to retain original gloss. grain--surface appearance, usually of wood.  
gray blast cleaning--commercial blast. See 4.4.2.4.  
grind gauge--instrument for measuring degree of pigment dispersion in liquid paint. Hegman is a common proprietary instrument.  
grit--an abrasive obtained from slag and various other materials. ground wire--a wire attached to dissipate electrostatic charge in airless spraying.  
guide coat--a coat similar in composition to the finish or color coat, but of a different color to help obtain complete coverage.  
gun distance--space between tip of gun and work.

## H

hardener--curing agent; promoter; catalyst.  
hardness--the degree to which a material will withstand pressure without deformation or scratching.  
hazing--clouding.  
heavy centered pattern--spray pattern having most paint in center, less at edges.  
hiding power--ability to obscure underlying surface.  
high boiling solvent--solvent with a high boiling point such as diacetone alcohol or cellosolve acetate.  
high build--producing thick dry films per coat.  
high flash naphtha--aromatic solvent having a high flash point, (min. 113° F, 45° C).  
hold out--ability (or property) to prevent soaking into substrate.  
holiday--pinhole; skip; discontinuity; void.  
holiday detector--device for detection of pinholes or holidays. See spark testing.

hot spray--spraying material heated to reduce viscosity.  
humidity--measure of moisture content; relative humidity is the ratio of the quantity of water vapor in the air compared to the greatest amount possible at the given temperature. Saturated air is said to have a humidity of 100 percent.  
hydraulic spraying--spraying by hydraulic pressure. (See airless spraying.)

#### I

incompatibility--inability to mix with or adhere to another material.  
indicator (pH) paper--a vegetable dyed paper indicating relative acidity or basicity (alkalinity). inert pigment--a non-reactive pigment.  
inflammability--measure of ease of catching fire; ability to burn; use of the wood flammability is preferred to inflammability due to the possible misinterpretation of the prefix "in" as a negative.  
inhibitive pigment--one which retards the corrosion process.  
inorganic coatings--those employing inorganic binders or vehicles.  
intermediate coat--middle coat; guide coat.  
internal mix--a spray gun in which the fluid and air are combined before they leave the gun.  
intumesce--to form a voluminous char on ignition; foaming or swelling when exposed to flame.  
iron phosphate coating--conversion coating; chemical deposit.  
isocyanate resins--urethane resins.

#### K

KB (Kauri-Butanol) Value--measure of solvent power.  
ketones--flammable organic solvents; commonly used ketones are acetone; methyl ethyl ketone (MEK); and methyl isobutyl ketone (MIBK).  
Krebs Unit (K.U.)--arbitrary units of viscosity.

#### L

lacquers--coatings which dry by evaporation of the solvent.  
laitance--milky white deposit on new concrete.  
laminar scale--rust formation in heavy layers.  
latex--rubber like; a common binder for emulsion (water) paints; there are natural and synthetic latexes.  
leafing--orientation of pigment flakes in horizontal planes.  
leveling--flowing out to films of uniform thickness; tendency of brush marks to disappear.  
lifting--softening and raising of an undercoat by application of a top coat.  
livering--formation of curds or gelling.  
long oil varnish--varnish with a high ratio of oil to resin; a resin having a large quantity of oil cooked per 100 pounds of resin (25 gallons or more per 100 pounds of resin).  
low boiling solvent--solvent with a low boiling point such as acetone or methyl alcohol.  
low pressure spraying--conventional air spraying.

## M

MAC (maximum allowable concentration)--see Threshold Limit Value.  
maintenance painting--(1) repair painting; any painting after the initial paint job; in a broader sense it includes painting of items installed during maintenance; (2) all painting except that done solely for aesthetics.  
mandrel test--a physical bending test for adhesion and flexibility.  
masking--covering areas not to be painted.  
mastic--a heavy bodied high build coating.  
(MEK) methyl ethyl ketone--a strong flammable organic solvent.  
(MIBK) methyl isobutyl ketone--a strong flammable organic solvent.  
mil--one one-thousandth of an inch; .001"; 1/1000 in.  
mildew--fungus, mold.  
mildewcide--substance poisonous to mildew; prevents or retards growth of mildew.  
mild steel--structural steel; SAE 1020  
mill scale--oxide layer formed on steel by hot rolling.  
mineral spirits--aliphatic hydrocarbon solvent.  
miscible--capable of mixing or blending uniformly.  
misses--holidays; skips; voids.  
mist-coat--thin tack coat; thin adhesive coat.  
moisture and oil separator--trap on air compressor or in air lines.  
mottling--speckling; a nonuniform paint color.  
mud-cracking--irregular cracking of dried film, as in a dried mud puddle.  
multicolor finishes--speckled finishes; paints containing flecks of colors different from the base color.  
MVT (moisture vapor transmission)--moisture vapor transmission rate through a known membrane.

## N

naphtha--flammable aliphatic hydrocarbon solvent.  
near-white blast cleaning--see 4.4.2.4.  
needle (spray gun)--fluid metering pin.  
neoprene--a rubber-like film former based on the polymerization of chloroprene.  
non-drying oil--one which will not oxidize in air.  
non-ferrous--containing no iron.  
non-flammable--incombustible, will not burn.  
non-toxic--not poisonous.  
non-volatile--solid; non-evaporating; the portion of a paint left after the solvent evaporates.

## O

oil color--coloring (pigment or dye) dispersed in oil.  
oil length--gallons of oil reacted with 100 pounds of resin.  
oleoresinous--film former containing oil and resin.  
opacity--hiding power.  
orange peel--dimpled appearance of dry film; resembling an orange peel.  
organic--containing carbon compounds.  
organosol--film former containing resin plasticizer and solvent.  
orifice--opening; hole.

overatomized--dispersed too finely by use of excessive atomizing air pressure.  
overcoat--second coat; top coat.  
overlap--portion (width) of fresh paint covered by next layer.  
overspray--spared paint which did not hit target; waste.

P

PVAc--see polyvinyl acetate.  
PVC--see polyvinyl chloride or pigment volume concentration.  
paint--all coating materials used in painting.  
paint failure--the loss of usefulness of the paint coating.  
paint heater--device for lowering viscosity of paint by heating.  
paint program--comprehensive painting plan.  
paint project--single paint job.  
paint system--the complete number and type of coats comprising a paint job. In a broader sense, surface preparation, pre-treatments, dry film thickness, and manner of application are included in the definition of a paint system.  
painting--all operations required to use paints properly.  
painting materials--all materials required to adequately paint a surface.  
pass (spray)--motion of the spray gun in one direction only.  
passive defense--blending of colors to make structures less conspicuous.  
pattern length--length of spray pattern.  
pattern width--width of a spray pattern at vertical center.  
peeling--failure in which paint curls or otherwise strips from substrate.  
perm--unit of permeance; grains of water vapor per hour per square foot per inch of mercury--water vapor pressure difference.  
phenolic resins--particular group of film formers; resins made from phenols and aldehydes.  
phosphatize--form a thin inert phosphate coating on surface usually by treatment with phosphoric acid or other phosphate compound.  
phthalic resins--a particular group of film formers; alkyd resins.  
pH value--measure of acidity or alkalinity; pH 7 is neutral; the pH values of acids are less than 7, and of alkalis (bases) greater than 7.  
pickling--a dipping process of cleaning steel and other metals; the pickling agent is usually an acid.  
pigment grind--dispersion of pigment in a liquid vehicle.  
pigments--solid coloring agents.  
pigment volume concentration (PVC)--percent by volume occupied by pigment in dry film.  
pitting--formation of small, usually shallow depressions or cavities.  
pin-holing--formation of small holes through the entire thickness of coating; see cratering.  
plasticizer--a paint ingredient which imparts flexibility.  
plastisol--film former containing resin and plasticizer with no solvents.  
pock marks--pits; craters.  
pole-gun--spray gun equipped with an extension tube.  
polymer--a large molecule formed by polymerization.  
polymerization--chemical reaction in which small molecules combine to form large molecules.  
polyvinyl acetate (PVAc)--a synthetic resin used extensively in emulsion (water) paints; produced by the polymerization of vinyl acetate.

polyvinyl chloride (PVC)--a synthetic resin used in solvent type coatings produced by the polymerization of vinyl chloride.

porosity--degree of integrity or continuity.

pot-life--time interval after mixing of reactive components during which liquid material is usable with no difficulty.

pressure balance--in spray painting, relationship of pot pressure to atomizing air pressure.

pressure drop--loss in pressure due usually to length or diameter of line or hose.

pressure feed--fluid flow caused by application of air or hydraulic pressure to paint.

pressure feed paint tank (pressure pot)--fluid container in which fluid flow is caused by air pressure.

pretreatment--chemical alteration of the surface to make it suitable for painting.

preventive maintenance painting--period touch-up painting or application of full coats of paint before deterioration starts.

prime coat--first coat on a substrate.

primer--material used for prime coat; usually a rust-inhibitive coating when used over ferrous metals.

production rate (sq. ft./day)--measurement of surface cleaned or coated in one working day by one man.

profile--surface contour of a blast-cleaned surface as viewed from the edge; cross section of the surface.

profile depth--average distance between top of peaks and bottom of valleys on the surface.

proprietary--available on open market under brand name.

protective life--interval of time during which a paint system protects substrate from deterioration.

pump ratio--multiplier of input pressure to indicate output pressure; ratio of air piston area to fluid piston area.

## R

reaching (spray gun)--extending spray stroke too far.

rebound--paint spray bounce back. See bounce back.

recoat time--time interval needed between application of successive coats.

red label--flammable or explosive materials with flash points below 80° F. (26.7° C.)

reducer--a material which lowers viscosity but is not necessarily a solvent for the particular film-former; thinner.

reflectance--degree of light reflection.

repainting--a complete painting operation including surface preparation.

repair of surfaces--all procedures required to return the surface to a satisfactory condition for painting.

resin--a material, natural or synthetic, contained in varnishes, lacquers, and paints; the film former.

respirator--safety breathing mask.

rise--height.

roller coating--the act of painting with a roller; the material used for roller painting.

round pattern--circular spray pattern.

runs--curtains; sags.

rust--corroded iron; red iron-oxide deposited on metal; also other metal oxides formed by corrosion.  
rust bloom--discoloration indicating the beginning of rusting.

## S

safety valve--pressure release valve preset to be released when pressure exceeds a safe operating limit.  
sandblast--blast cleaning using sand as an abrasive.  
sandy finish--a surface condition having the appearance of sandpaper; may result from overspray.  
saponify--convert to soap.  
scale--rust occurring in thin layers.  
scaler--a hand cleaning chisel.  
scaling--process of removing scale.  
seal coating--coating used to prevent excessive absorption of the first coat of paint by the substrate; a primer.  
sealer--a low viscosity (thin) liquid sometimes applied on wood, plaster, gypsum board, or masonry.  
seeding--formulation of small agglomerates.  
separation--division into components or layers by natural causes.  
settling--caking; sediment.  
shade--degree of color in a tint.  
shelf-life--maximum interval in which a material may be stored and still be in usable condition.  
shop coat--coating applied in fabricating shop.  
short oil varnish--a varnish prepared by cooking a relatively small quantity of oil within 100 pounds of resin, quick drying; brittle; less than 25 gallons of oil per 100 pounds of resin.  
shot blasting--blast cleaning using steel shot as the abrasive.  
shrinkage--decrease in volume on drying.  
silicate paints--those employing silicates as binders; used primarily in inorganic zinc rich coating.  
silicone resins--a particular group of film formers; used in water-repellent and high-temperature paints; organo-silicon polymers.  
silking--a surface defect characterized by parallel hair-like striations in coated films.  
skinning--formation of a solid membrane on top of a liquid.  
skips--holidays; misses; uncoated area; voids.  
slow drying--requiring 24 hours or longer before recoating is possible.  
solids--non-volatile portion of paint.  
solids by volume--percentage of total volume occupied by non-volatiles.  
solubility--degree to which a substance may be dissolved.  
solution--a liquid in which a substance is dissolved.  
solvency--measure of ability to dissolve.  
solvent--a liquid in which another substance may be dissolved.  
solvent balance--ratio of amounts of different solvents in a mixture of solvents.  
solvent pop--blistering caused by entrapped solvent.  
solvent release--ability to permit solvent to evaporate.  
solvent wash--cleaning with solvent.  
spolling--the cracking, breaking or splintering of materials, usually due to heat or freezing.

spark testing--detection of holidays (flaws). Using a special spark testing tool. See holiday detector.

spark-proof tools--bronze beryllium tools.

spar varnish--a varnish for exterior surfaces.

specular gloss--mirror-like reflectance.

spray cap--front enclosure of spray gun equipped with atomizing air holes.

spray head--combination of needle, tip, and air cap.

spray pattern--configuration of spray with gun held steady.

spreading rate--area covered by a unit volume of coating frequently expressed as square feet per gallon.

SSPC--Steel Structures Painting Council.

steam clean--a cleaning process using live steam.

streaks--a surface defect characterized by essentially parallel lines of different colors or shades.

stroke (spray)--a single pass with a spray gun in one direction.

styrene-butadiene resin--a copolymer of styrene and butadiene.

substrate--basic surface.

suction feed (sandblaster)--one in which the abrasive is syphoned to the nozzle.

suction feed (spray gun)--one in which the fluid is syphoned to the spray head.

surface conditioner--preparatory coating applied to chalked, painted masonry surface for bonding chalk to under surface.

surface preparation--all operations necessary to prepare a surface to receive a coating of paint.

surfacers--a paint used to smooth the surface before finish coats are applied.

sweating--condensing moisture on a surface.

## T

tack--degree of stickiness.

tail line--short piece of blast hose smaller than the main hose to permit better maneuverability.

tails (airless spray)--finger-like spray pattern.

tank white--good hiding, self-cleaning white paint for exterior metal surfaces.

tapered pattern--elliptical shaped spray pattern; a spray pattern with converging lines.

tape test--a particular type of adhesion test.

test pattern--spray pattern used in adjusting spray gun.

thermoplastic--becomes mobile or softens under heat.

thermosetting--becomes rigid under heat and cannot be remelted.

thinners--volatile organic liquids for reducing viscosity; solvents.

thixotropic--a gel which liquefies with agitation but gels again on standing.

Threshold Limit Value (TLV)--maximum concentration of solvent vapor in parts per million parts of air in which a worker may work eight consecutive hours without an air fed mask; the lower the TLV number; the more toxic the solvent.

through dry--ability of film to show no loosening, detachment, or evidence of distortion when the thumb, placed on film with maximum arm pressure, is turned through 90° in plane of film.

tip coat--intermediate coat used to bond different types of paint coats.

tint--a color produced by the mixture of white paint or pigment in a predominating amount with a non-white colored paint or pigment.

tone down--the process of reducing visual prominence of an installation by the application of external coatings; blending of overall color scheme with the surrounding environment.

tooth--profile; mechanical anchorage; surface roughness.

top coating--finish coat.

touch-up painting--spot repair painting usually conducted after initial painting.

toxic--poisonous.

toxicity--degree of poisonousness or harmfulness.

transition primer (block or barrier coat)--coating compatible with primer and with a finish coat, though the latter is not compatible with the primer.

triggering--intermittent squeezing and releasing of trigger.

two-component gun--one having two separate fluid sources leading to spray head, for spraying a coating and a catalyst simultaneously.

#### U

underatomized--not dispersed or broken up fine enough.

unit cost--cost per given area.

urethane resins--a particular group of film formers, i.e., isocyanate resins.

useful life--the length of time a coating is expected to remain in service.

#### V

VM&P naphtha--varnish and paint manufacturers naphtha; a low power flammable hydrocarbon solvent.

vapor degreasing--a cleaning process utilizing condensing solvent as the cleaning agent.

vaporization--conversion from liquid or solid to a gaseous state.

varnish--liquid composition of oil, resin thinners and driers, which converts to a transparent or translucent solid film after application as a coating.

vehicle--liquid carrier; binder; anything dissolved in the liquid portion of a paint is a part of the vehicle.

vinyl coating--one in which the major portion of the binder is of a vinyl resin.

vinyl copolymer--resins produced by copolymerizing vinyl monomers such as vinyl acetate and vinyl chloride.

vinyl resins--synthetic resins made from vinyl compounds such as vinyl acetate.

viscosity--a measure of fluidity.

viscosity cup--a device for measuring viscosity.

volatiles--fluids which evaporate rapidly.

volatile content--those materials which evaporate; usually expressed as a percentage.

#### W

washing--erosion of a paint film after rapid chalking.

wash primer--a thin rust-inhibiting paint which provides improved adhesion to subsequent coats.

water blasting--blast cleaning using high velocity water.

weld spatter--beads of metal left adjoining a weld.

wet edge--fluid boundary.

wet film gauge--device for measuring wet film thickness.

wet film thickness--thickness of liquid film immediately after application.  
wet spray--spraying so that surface is covered with paint that has not started to dry.  
wetting oils--products used to promote adhesion of applied coatings when all mill scale and rust cannot be removed.  
white blast--see 4.4.2.4 blast cleaning to white metal.  
wire brush--a hand cleaning tool comprised of bundles of wires; also the act of cleaning a surface with a wire brush, including power brushes.  
wrinkling--a surface defect resembling the skin of a prune.  
wrist action (spray gun)--swiveling of wrist without arcing forearm.

#### Y

yellowing--development of yellow color or cast, in whites, on aging.

#### Z

zinc phosphate coating--treatment used on steel to improve adhesion of coatings  
zinc silicate--inorganic zinc coatings.  
zinc yellow--commercial zinc chromate pigment.