

CORROSION PREVENTION vs. CORROSION PROTECTION

CORROSION PREVENTION

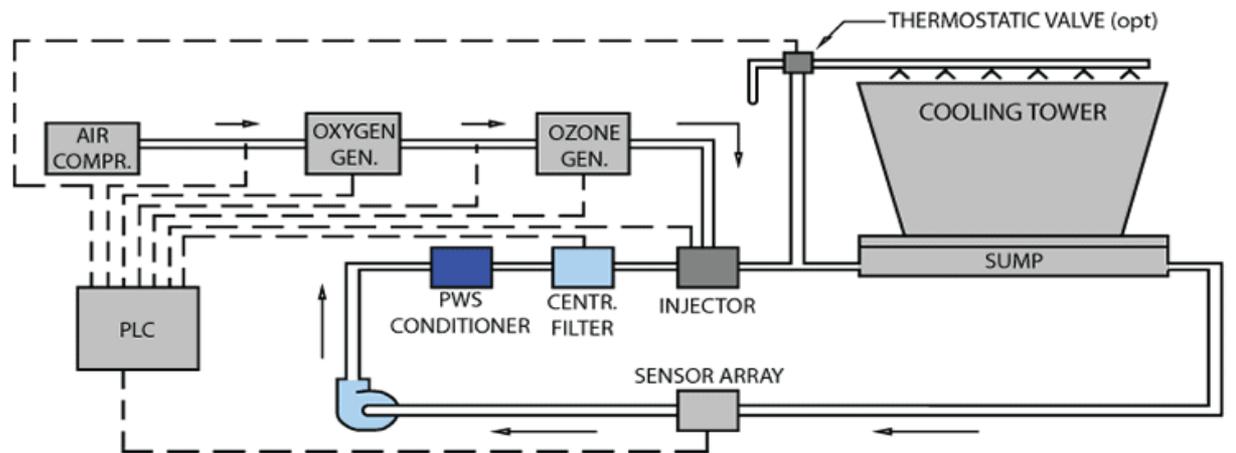
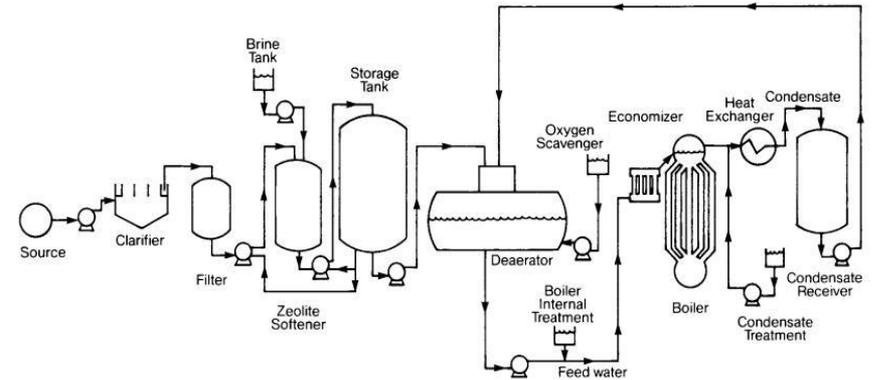
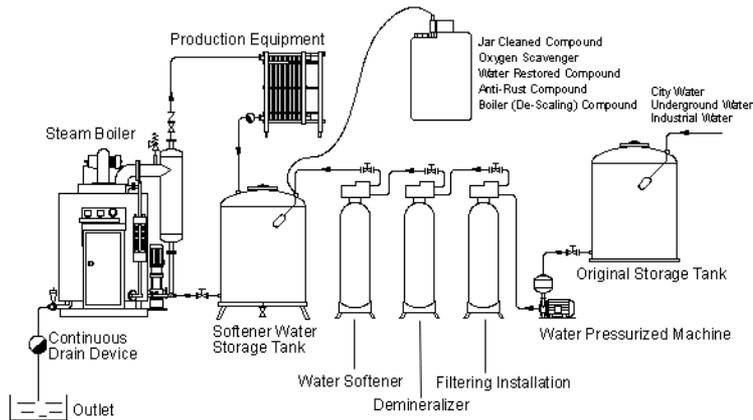
- MODIFICATION OF CORROSIVE MEDIA/ENVIRONMENT
- PROPPER SELECTION OF MATERIALS AND JOINING METHODS
- AVOIDANCE OF CORROSION PROMOTING CONSTUCTION SHAPES AND COFIGURATIONS
- LIMITATION OF EXCCESIVE STRESSES, VIBRATIONS AND MICRO OSCILATIONS

CORROSION PROTECTION METHODS AND TECHNIQUES

- CORROSION INHIBITORS
- TEMPORARY (TRANSPORT, STORAGE) PROTECTION
- CORROSION PROTECTION COATINGS
- ELECTROCHEMICAL/GALVANIC PROTECTION

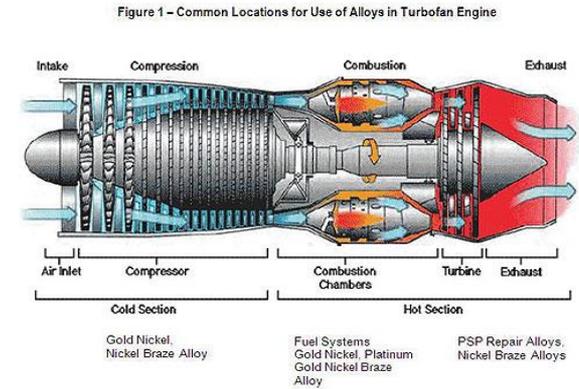
CORROSION PREVENTION

MODIFICATION OF CORROSIVE MEDIA/ENVIRONMENT



CORROSION PREVENTION

PROPPER SELECTION OF MATERIAL



CORROSION PREVENTION

PROPPER SELECTION OF JOINING METHODS

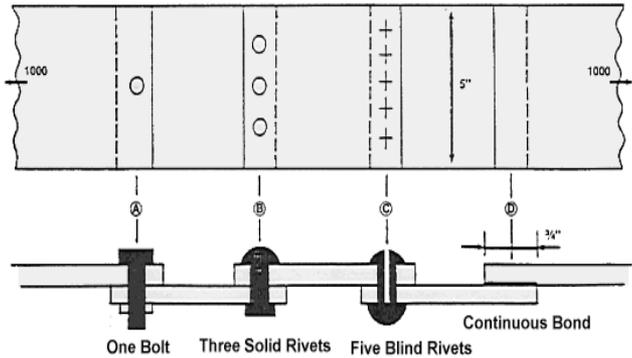


Fig. 1

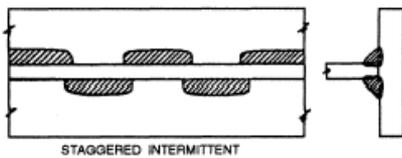
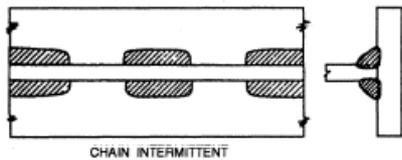
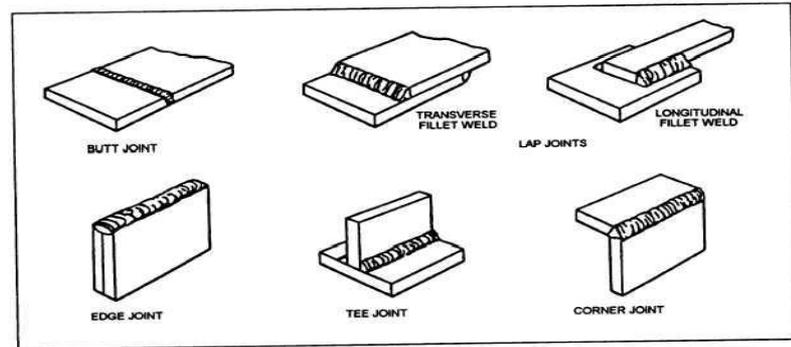


Figure 7-29. Intermittent fillet welds.

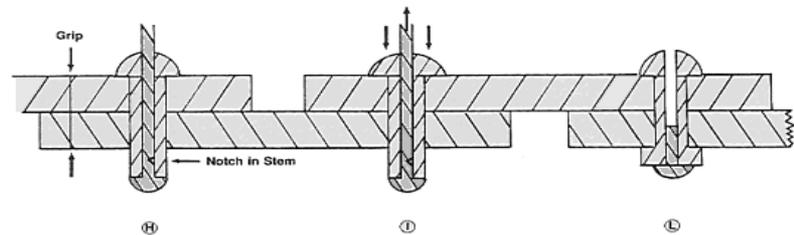
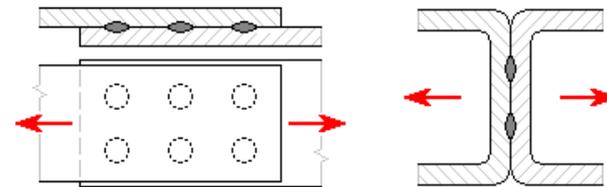
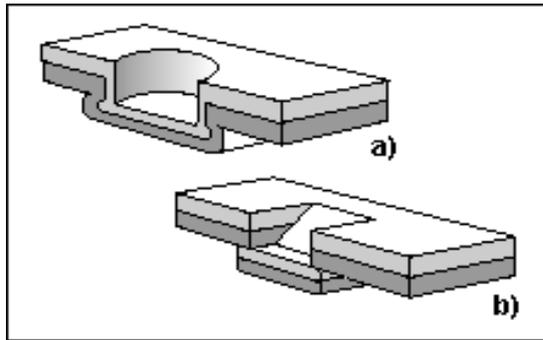


Fig. ③

AVDEL-AVEX Blind Rivet

CORROSION PREVENTION

PROPPER SELECTION OF JOINING METHODS



Example bonded composite structural joints

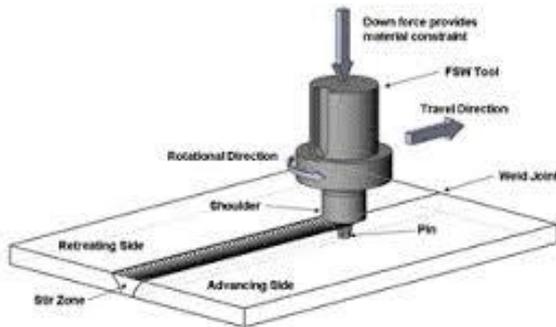
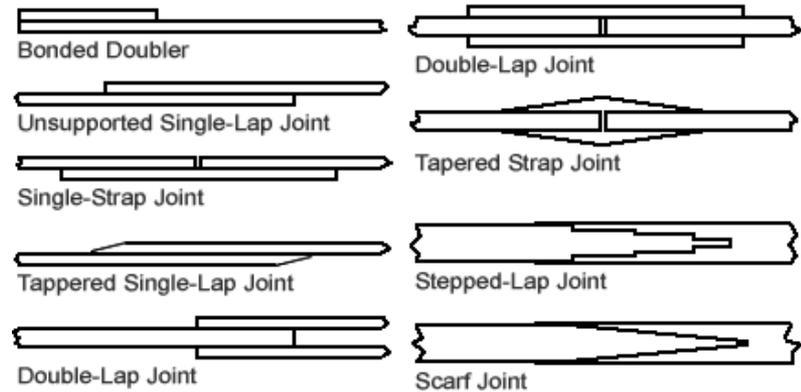
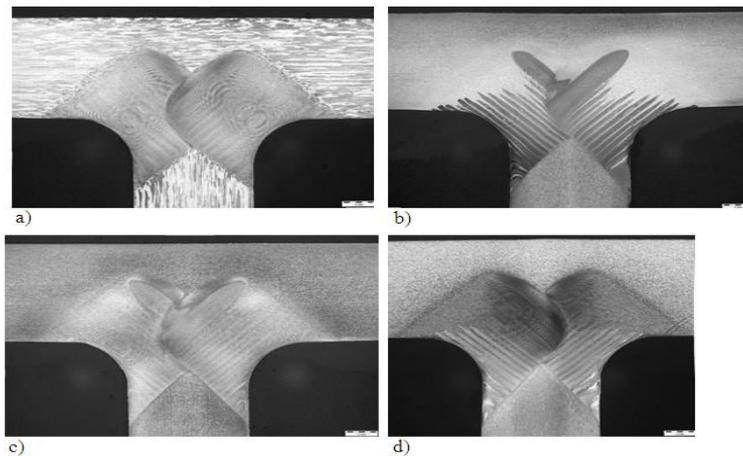
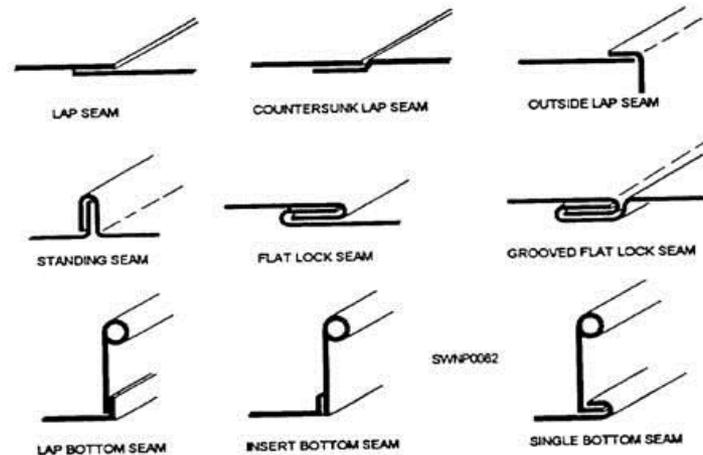
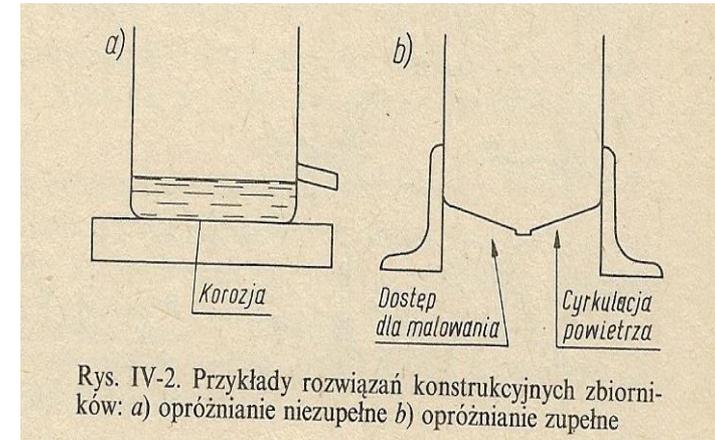
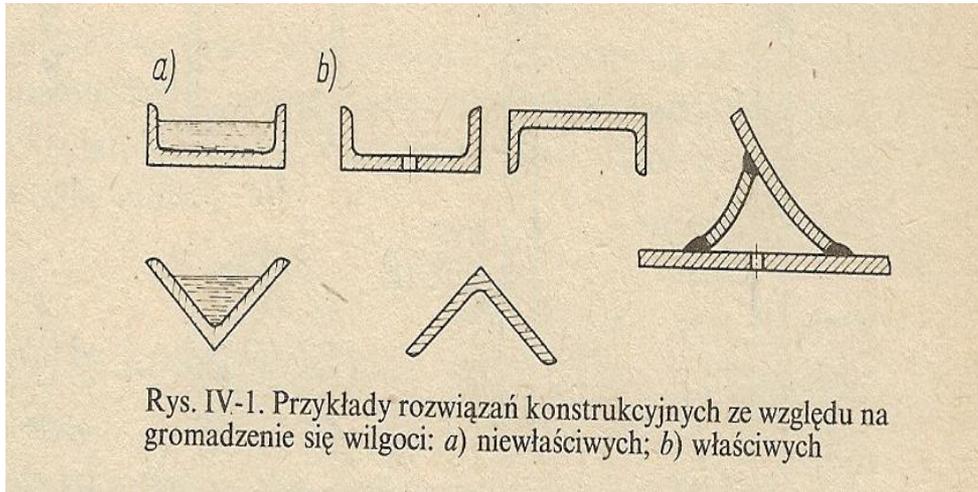


Figure 1. Friction Stir Welding Schematic



CORROSION PREVENTION

AVOIDANCE OF CORROSION PROMOTING CONSTRUCTION SHAPES AND CONFIGURATIONS



CORROSION PROTECTION METHODS

CORROSION INHIBITORS

1. Sublimation

2. Diffusion

3. Adsorption

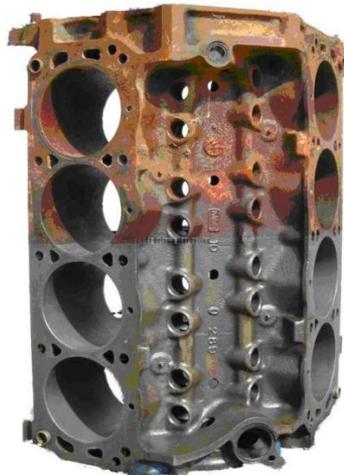
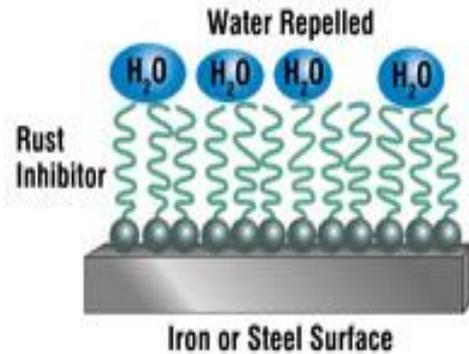


1. Sublimation (evaporation) of the VCI molecules from the carrier material
2. Diffusion (distribution) of the VCI molecules in the packaging space
3. Adsorption of a closed VCI film at the metal's surface.



CORROSION PROTECTION METHODS

CORROSION INHIBITORS



CORROSION PROTECTION METHODS

TEMPRARY (TRANSPORT, STORAGE) PROTECTION



CORROSION PROTECTION METHODS

CORROSION PROTECTION COATINGS

- PAINT COATINGS

. SOLVENT PAINTS and WATER BASED PAINTS

- MANUAL PAINTING
- SPRAY APPLICATION
- DIP or DIP SPIN APPLICATION
- CONTINUOUS FLOW APPLICATION
- AUTOPHORETIC DIP APPLICATION
- E-COATING

- POWDER COATINGS

- ELECTROSTATIC APPLICATION
- FLUIDIZED BED APPLICATION

PAINT COATINGS



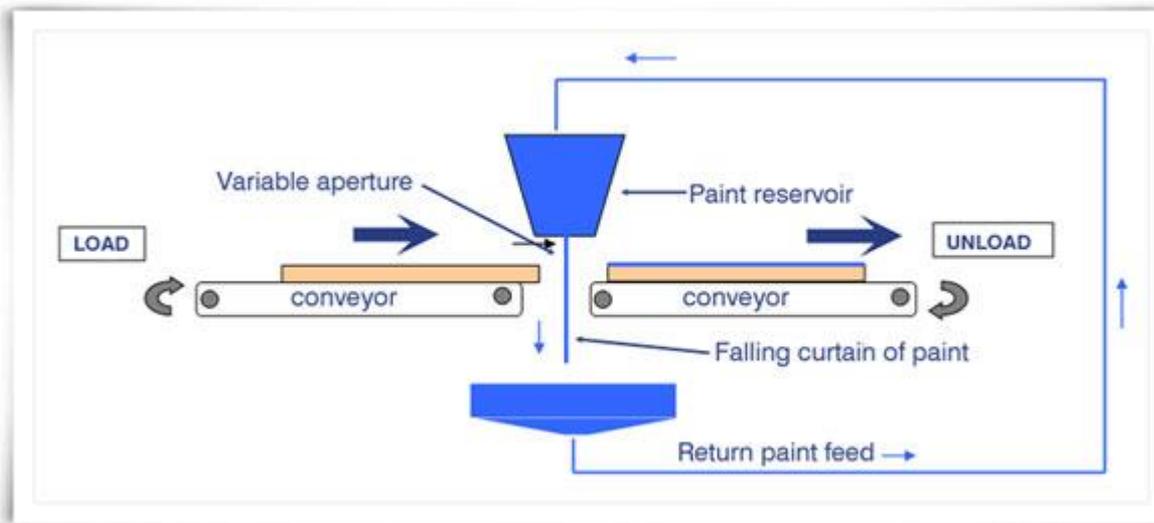
SPRAY APPLICATION



PAINT COATINGS



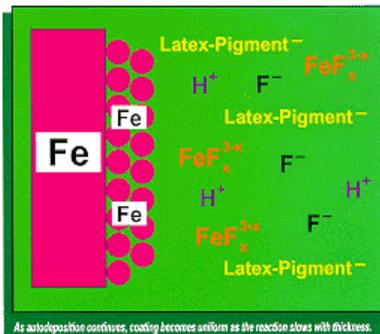
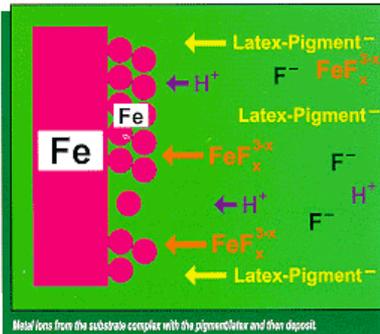
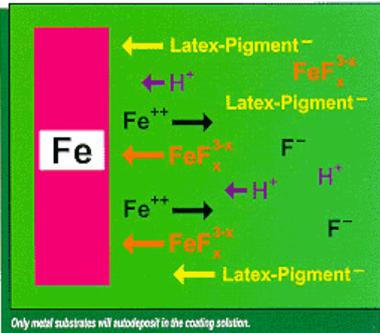
DIP or DIP SPIN APPLICATION



CONTINUOUS FLOW APPLICATION

PAINT COATINGS

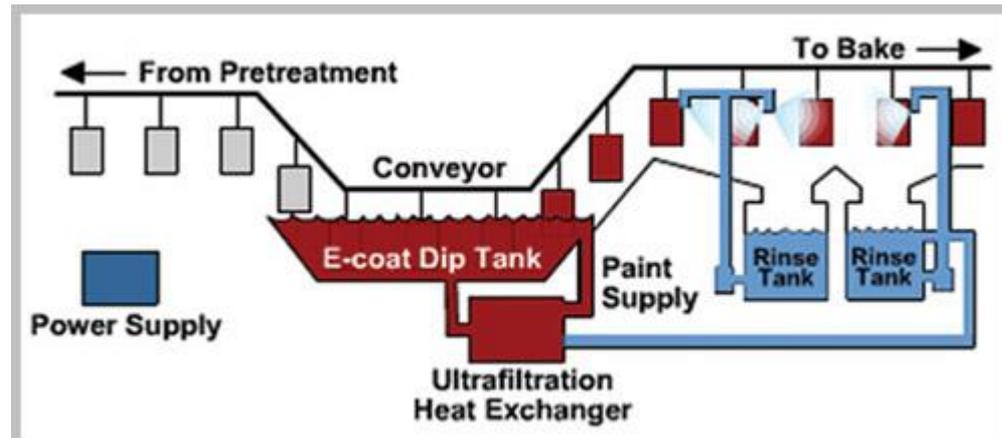
AUTOPHORETIC DIP and RINSE APPLICATION



PAIN T COATINGS



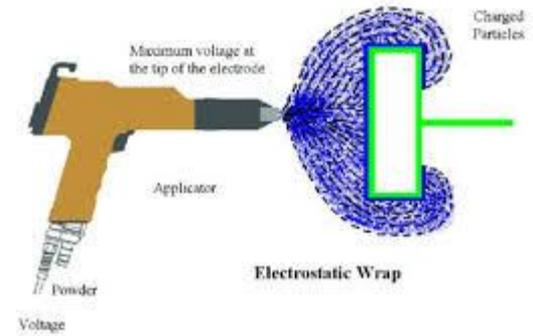
E-COATING
(ELECTROPHORETIC)



POWDER COATINGS

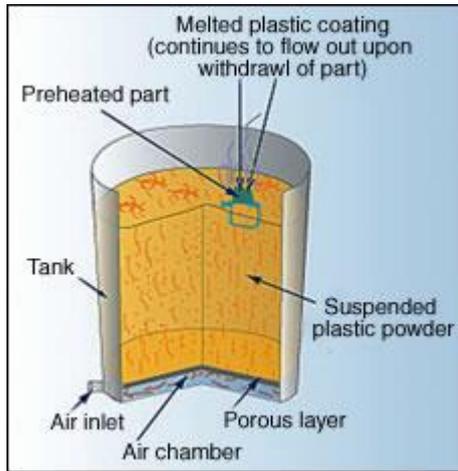


ELECTROSTATIC APPLICATION



POWDER COATINGS

FLUIDIZED BED APPLICATION



HYBRID FLUIDIZED BED- ELECTROSTATIC APPLICATION

