“MIX AND MATCH” MATERIALS SELECTION

Advantages for 
Design and Performance, 
Availability and Cost

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Design and Performance

- Mechanical Properties
  - Strength
  - Hardness
  - Toughness
  - Physical Properties

- Corrosion Resistance
  - General
  - Pitting & Crevice
  - Stress Corrosion Cracking
Availability

- **Standard Product Forms**
  - Plate and Sheet
  - Tube
  - Pipe

- **Hardware**
  - Filler Materials
  - Bolts and Nuts
  - Fittings, Flanges, Nozzles etc.
Cost

- Material Cost
  - Dollars per Pound
  - or Dollars per Square Foot

- Fabrication cost
  - Welding
  - Cutting and Forming
  - Machining

- Erection and Installation Cost
  - Transportation
  - Structural
  - Erection Equipment
Combinations

- Heat Exchanger
  Shell, Tube Sheet, Heads and Tubes

- Pressure Vessel
  Shell and Heads, Nozzles, and Internals

- Tank
  Walls, Floor and Roof, Nozzles, Manways and Internals
A well thought out “mix and match” design can provide long lasting performance at an affordable price.