

## DESIGN APPLICATION



### ***Shipbuilding***

Salt water corrosion resistance  
Pressure vessel service  
Thick plate welding  
Complex certification standards

<u>WELDING APPLICATION</u>	<u>SPECIAL CONSIDERATIONS</u>	<u>COMMON BASE ALLOYS</u>	<u>WELDING ALLOY SELECTION (Most Commonly Used)</u>
STRUCTURAL FRAMES	Strength and Fatigue, Corrosion, Extrusions, & Cut Plate	6061 to 6061	5356
		6061 to 5086	5356
		5086 to 5086	5356
		5083 to 5083	5183
SKIN	Strength & Corrosion	5052 to 5052	5356 - 2nd 4043
		5086 to 5086	5356
		6061 to 6061	5356
		5083 to 5083	5183
DESALINATION UNITS	Corrosion & High temperatures	5454 to 5454	5554
		5052 to 5052	5554
TUBE RAILINGS	Strength & Anodize (color match)	6061 to 6061	5356
		6063 to 6063	5356
STRUCTURAL PLATE & LNG TANKS	Impact Strength, Cold Temperatures, & Properties	5083 to 5083	5183
MARINE CAST HARDWARE	Strength & Corrosion	518.0 to 518.0	5356
		535.0 to 535.0	5356

### AlcoTec Wire Corporation