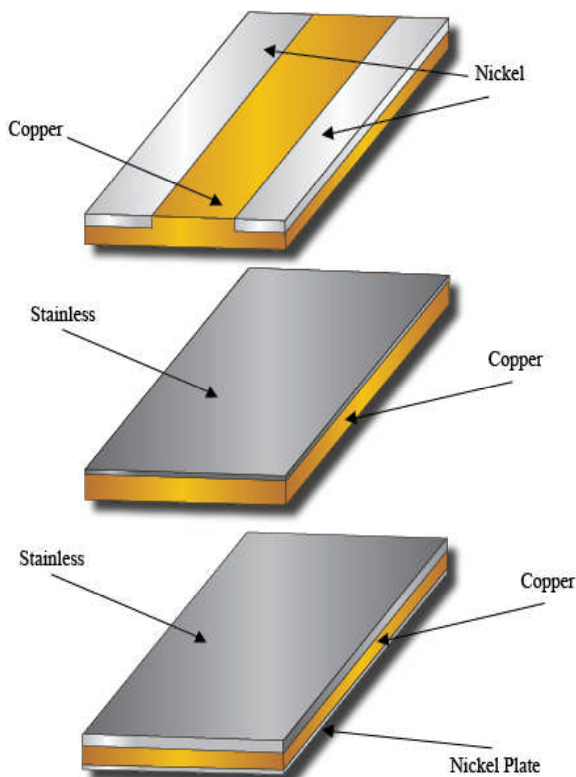


## BATTERY PACK CONNECTION MATERIALS

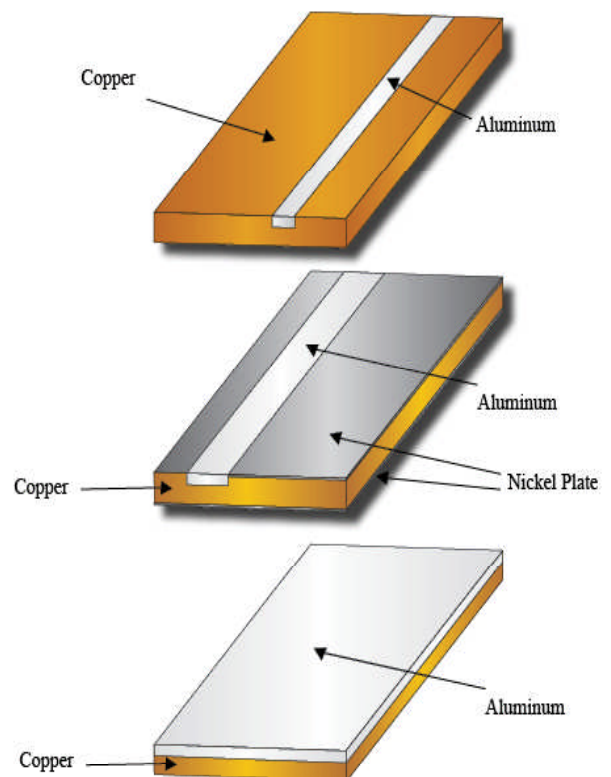
TMI, the world's leading resource for cladding, electroplating, solder coating, and other specialty strip products, offers the widest range of technologies and alloys for demanding, high-performance battery applications. Today we offer a wide range of composite materials designed to maximize your Battery Connection Performance featuring:

- ◆ Increased Bulk Conductivity
- ◆ Robust Weldability
- ◆ High-Power Carrying Capacity
- ◆ Corrosion Resistance
- ◆ Weight Reduction
- ◆ Reduce Total Cost

### Laser Weld Attachment



### Ultrasonic Attachment

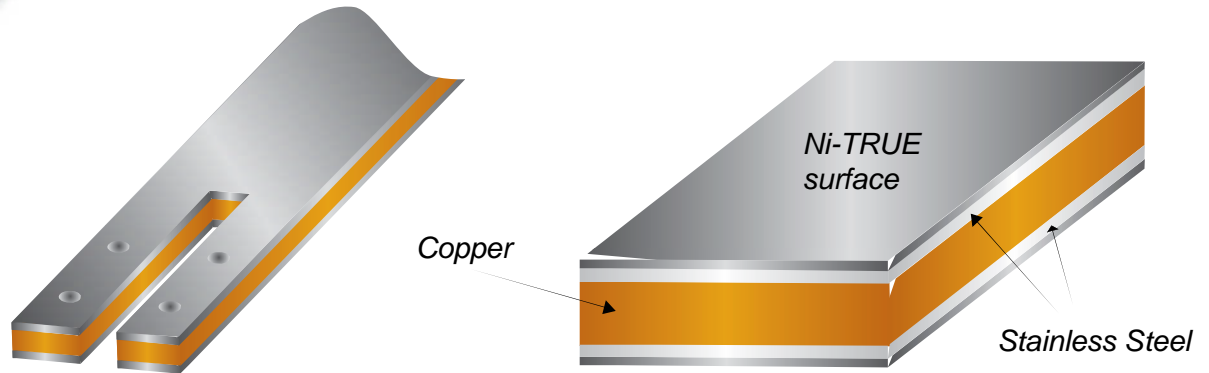


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# RESISTANCE WELD ATTACHMENT



**Ni-TRUEclad 36**  
 New Battery Pack Connection Material

## FEATURES

- ◆ **CONDUCTIVITY**  
Copper Core provides twice the Electrical Conductivity of Nickel
- ◆ **WELDABILITY**  
Stainless Steel layers provide Robust Resistance and Laser Weld Performance
- ◆ **CORROSION RESISTANT**  
Nickel Outer surface provides Corrosion Protection

## ADVANTAGES

- High Power Carrying Capacity
- 5% Weight Savings Per Part at Same Gauge
- Bulk Conductivity allows material thickness to be reduced up to 50%

<i>Comparison of Ni-TRUEclad 36 and Commercial Pure Nickel</i>						
<i>Material</i>	<i>Density</i>	<i>Electric Conductivity</i>	<i>0.2% Yield Strength</i>	<i>Tensile Strength</i>	<i>Elongation</i>	<i>Micro Hardness</i>
	lb/in <sup>3</sup> (g/cm <sup>3</sup> )	%IACS	ksi (MPa)	ksi (MPa)	%(in 2")	HV
<b>Ni-TRUE EF</b>	0.304 (8.41)	36	24-30 (165-207)	40-50 (275-345)	22-31	56-65 (Cu) 130-155 (SS)
<b>Ni-TRUEclad 36</b> 1/4 Hard	0.304 (8.41)	36	45-60 (310-414)	53-65 (365-448)	9 min.	93-120 (Cu) 190-220 (SS)
<b>Solid Ni 201</b> 1/4 Hard	0.321 (8.89)	18	45-66 (310-455)	60-75 (414-517)	17-26	120-150

## STANDARD SIZES

- Gauges:  $\geq .003$ " (0.076 mm)
- Widths: .080" to 7.250" (2 to 184 mm)
- Custom sizes and tempers available upon request