

## A890 1B

### CHEMICAL COMPOSITION

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Carbon	0.04% Max
Manganese	1.0% Max
Silicon	1.0% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	4.7 – 6.0%
Chromium	24.5 – 26.5%
Molybdenum	1.7 – 2.3%
Copper	2.7 – 3.3%
Nitrogen	0.15 – 0.25%

### PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	70,000 PSI Min
Elongation at 2in.	16.0% Min

## A890 1C

### CHEMICAL COMPOSITION

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Carbon	0.030% Max
Manganese	1.20% Max
Silicon	1.10% Max
Phosphorus	0.030% Max
Sulfur	0.030% Max
Nickel	5.6 – 6.7%
Chromium	24.0 – 26.7%
Molybdenum	2.9 – 3.8%
Copper	1.40 – 1.90%
Nitrogen	0.22 – 0.33%

### PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A890 2A

### CHEMICAL COMPOSITION

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Carbon	0.08% Max
Manganese	1.00% Max
Silicon	1.50% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	8.0 – 11.0%
Chromium	22.5 – 25.5%
Molybdenum	3.0 – 4.5%
Nitrogen	0.10 – 0.30%

### PHYSICAL PROPERTIES

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Tensile Strength	95,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A890 3A

### CHEMICAL COMPOSITION

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Carbon	0.06% Max
Manganese	1.00% Max
Silicon	1.00% Max
Phosphorus	0.040% Max
Sulfur	0.040% Max
Nickel	4.0 – 6.0%
Chromium	24.0 – 27.00%
Molybdenum	1.75 – 2.5%
Nitrogen	0.15 – 0.25%

### PHYSICAL PROPERTIES

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Tensile Strength	95,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A890 4A

### CHEMICAL COMPOSITION

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Carbon	0.03% Max
Manganese	1.50% Max
Silicon	1.00% Max
Phosphorus	0.04% Max
Sulfur	0.020% Max
Nickel	4.5 – 6.5%
Chromium	21.0 – 23.5%
Molybdenum	2.5 – 3.5%
Copper	1.00% Max
Nitrogen	0.10 – 0.30%

### PHYSICAL PROPERTIES

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Tensile Strength	90,000 PSI Min
Yield Strength	60,000 PSI Min
Elongation at 2in.	25.0% Min

## A890 5A

### CHEMICAL COMPOSITION

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Carbon	0.03% Max
Manganese	1.50% Max
Silicon	1.00% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	6.0 – 8.0%
Chromium	24.0 – 26.0%
Molybdenum	4.0 – 5.0%
Nitrogen	0.10 – 0.30%

### PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	75,000 PSI Min
Elongation at 2in.	18.0% Min

# A890 6A

## CHEMICAL COMPOSITION

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Carbon	0.03% Max
Manganese	1.00% Max
Silicon	1.00% Max
Phosphorus	0.030% Max
Sulfur	0.025% Max
Nickel	6.5 – 8.5%
Chromium	24.0 – 26.0%
Molybdenum	3.0 – 4.0
Copper	0.5 – 1.0%
Tungsten	0.5 – 1.0%
Nitrogen	0.20 – 0.30%

## PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

# A890 7A

## CHEMICAL COMPOSITION

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Carbon	0.030% Max
Manganese	1.00 – 3.00%
Silicon	1.00% Max
Phosphorus	0.030% Max
Sulfur	0.020% Max
Nickel	6.0 – 8.0%
Chromium	26.0 – 28.0%
Molybdenum	2.0 – 3.5%
Copper	1.00% Max
Tungsten	3.0 – 4.0%
Nitrogen	0.30 – 0.40%
Barium	0.0010 – 0.0100%
Boron	0.0010 – 0.0100%
Ce + La	0.005 – 0.030%

## PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	75,000 PSI Min
Elongation at 2in.	20.0% Min



## A995 1B

### CHEMICAL COMPOSITION

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Carbon	0.04% Max
Manganese	1.0% Max
Silicon	1.0% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	4.7 – 6.0%
Chromium	24.5 – 26.5%
Molybdenum	1.7 – 2.3%
Copper	2.7 – 3.3%
Nitrogen	0.15 – 0.25%

### PHYSICAL PROPERTIES

---

Tensile Strength	100,000 PSI Min
Yield Strength	70,000 PSI Min
Elongation at 2in.	16.0% Min

## A995 2A

### CHEMICAL COMPOSITION

---

Carbon	0.08% Max
Manganese	1.00% Max
Silicon	1.50% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	8.0 – 11.0%
Chromium	22.5 – 25.5%
Molybdenum	3.0 – 4.5%
Nitrogen	0.10 – 0.30%

### PHYSICAL PROPERTIES

---

Tensile Strength	95,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A995 3A

### CHEMICAL COMPOSITION

---

Carbon	0.06% Max
Manganese	1.00% Max
Silicon	1.00% Max
Phosphorus	0.040% Max
Sulfur	0.040% Max
Nickel	4.0 – 6.0%
Chromium	24.0 – 27.00%
Molybdenum	1.75 – 2.5%
Nitrogen	0.15 – 0.25%

### PHYSICAL PROPERTIES

---

Tensile Strength	95,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A995 4A

### CHEMICAL COMPOSITION

---

Carbon	0.03% Max
Manganese	1.50% Max
Silicon	1.00% Max
Phosphorus	0.04% Max
Sulfur	0.020% Max
Nickel	4.5 – 6.5%
Chromium	21.0 – 23.5%
Molybdenum	2.5 – 3.5%
Copper	1.00% Max
Nitrogen	0.10 – 0.30%

### PHYSICAL PROPERTIES

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Tensile Strength	90,000 PSI Min
Yield Strength	60,000 PSI Min
Elongation at 2in.	25.0% Min

# A995 5A

## HEMICAL COMPOSITION

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Carbon	0.03% Max
Manganese	1.50% Max
Silicon	1.00% Max
Phosphorus	0.04% Max
Sulfur	0.04% Max
Nickel	6.0 – 8.0%
Chromium	24.0 – 26.0%
Molybdenum	4.0 – 5.0%
Nitrogen	0.10 – 0.30%

## PHYSICAL PROPERTIES

---

Tensile Strength	100,000 PSI Min
Yield Strength	75,000 PSI Min
Elongation at 2in.	18.0% Min

# A995 6A

## CHEMICAL COMPOSITION

---

Carbon	0.03% Max
Manganese	1.00% Max
Silicon	1.00% Max
Phosphorus	0.030% Max
Sulfur	0.025% Max
Nickel	6.5 – 8.5%
Chromium	24.0 – 26.0%
Molybdenum	3.0 – 4.0
Copper	0.5 – 1.0%
Tungsten	0.5 – 1.0%
Nitrogen	0.20 – 0.30%

## PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	65,000 PSI Min
Elongation at 2in.	25.0% Min

## A995 7A

### CHEMICAL COMPOSITION

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Carbon	0.030% Max
Manganese	1.00 – 3.00%
Silicon	1.00% Max
Phosphorus	0.030% Max
Sulfur	0.020% Max
Nickel	6.0 – 8.0%
Chromium	26.0 – 28.0%
Molybdenum	2.0 – 3.5%
Copper	1.00% Max
Tungsten	3.0 – 4.0%
Nitrogen	0.30 – 0.40%
Barium	0.0010 – 0.0100%
Boron	0.0010 – 0.0100%
Ce + La	0.005 – 0.030%

### PHYSICAL PROPERTIES

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Tensile Strength	100,000 PSI Min
Yield Strength	75,000 PSI Min
Elongation at 2in.	20.0% Min

