

# ALLOY 1.4539 UNS N08904 904L

AISI 904L is a high nickel – molybdenum austenitic stainless steel with a very high corrosion resistance specifically for handling medium concentrated sulfuric acid solutions. Good weldability and excellent formability.

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Approvals: ASTM A240, ASTM A276, ASTM A479, ASTM A480, EN 10088.

## APPLICATIONS

Areas of applications are process equipment in chemical industry, petrochemical industry, bleaching equipment in the pulp and paper industry, flue gas cleaning, desalination, seawater handling, hydrometallurgy, food and beverage, pharmaceuticals and heat exchangers.

### Heat Treatment

Solution annealing at 1050°C – 1150°C followed by rapid cooling in air or water.

### Weldability

Very good. Low heat input recommended.

## CHEMICAL COMPOSITION

Weight %	C	Si	Mn	Cr	Ni	Mo	N	Cu	S	P
Min.				19,00	24,00	4,00		1,20		
Max.	0,020	0,70	2,00	21,00	26,00	5,00	0,15	2,00	0,010	0,030

## MECHANICAL PROPERTIES

	Yield strength Rp0.2, MPa	Tensile strength Rm, MPa	Elongation [%]	Hardness [HB]	Impact, Charpy-V, -196°C [J]
ASTM A240	≥ 230	520 - 720	≥ 35	≤ 90	60

## PLATE

2 x 1500 x 3000 mm	4 x 2000 x 6000 mm	10 x 2000 x 6000 mm
2 x 1500 x 6000 mm	5 x 2000 x 1000 mm	12 x 2000 x 6000 mm
2 x 2000 x 6000 mm	5 x 2000 x 4000 mm	15 x 2000 x 6000 mm
3 x 2000 x 1000 mm	5 x 2000 x 6000 mm	20 x 2000 x 6000 mm
3 x 2000 x 4000 mm	6 x 2000 x 1000 mm	25 x 2000 x 6000 mm
3 x 2000 x 6000 mm	6 x 2000 x 4000 mm	30 x 2000 x 6000 mm
4 x 2000 x 1000 mm	6 x 2000 x 6000 mm	
4 x 2000 x 4000 mm	8 x 2000 x 6000 mm	

## COIL

1500 mm	2 mm			
2000 mm	3 mm	4 mm	5 mm	6 mm