

## STAINLESS STEEL ROLL JACKETING

### Product Description:

InsulGLOBAL High Performance Stainless Steel Roll Jacketing is produced from T-304 Stainless Steel Series Meeting ASTM A-240 Standards. Stainless Steel Roll Jacketing is available in smooth, Stucco embossed or 1-1/4 corrugation (cross crimped) finishes, and 0.10", 0.01", 0.020", 0.024", 0.032" thickness with a 2b mill finish stainless steel jacketing has extensive corrosion resistance properties and a high resistance to heat. InsulGLOBAL stainless steel Roll Jacketing has a soft-annealed temper, making it easy to handle to fabricate.

### Melting Temperatures

|                        |                   |
|------------------------|-------------------|
| T-304 Stainless Steel  | 2550 ° F- 2650 °F |
|                        | 1399 ° C- 1454 °C |
| T-316L Stainless Steel | 2550 ° F- 2550 °F |
|                        | 1371 ° C- 1399 °C |

### Product Application

Stainless Steel Roll Jacketing is used in areas where extra protection from corrosion and abuse is needed it is used in refineries, plants and mills to protect pipes, vessels and tanks where chemical attack is a problem it can also be used in areas where high temperatures are or could be an issue



### Stainless Steel Jacketing is Recommended for use in the following:

- \* Areas that require a high degree of protection from corrosion
- \* Areas that require a high degree of protection of fire protection
- \* Areas that require a high degree of protection protection from abuse
- \* Freezers
- \* Food processing plants
- \* Paper Mills

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### InsulGLOBAL Stainless Steel Properties Sheet - ASTM A-240

#### General Description and Characteristics:

InsulGLOBAL Stainless Steel T-304, 316/L series alloys conforming to ASTM A-240 are widely used group of stainless steel. They offer good toughness, formability, corrosion resistance and have good mechanical properties. These grades are non-magnetic in the annealed condition.

#### Finish:

The material finish for banding can either be 2B(Matt Finish) or BA(Bright Finish). The finish will not affect its application or its properties.

#### Chemical Composition

##### Stainless Steel Grade T-304, 316/L-ASTM A-240

| Grade | Carbon (C) max | Silicon (Si) max | Manganese (MN) max | Phosphorus (P) max | Sulfur (S) max | Chromium (CR) | Nickel (NI) | Molybdenum (MO) | Nitrogen (N) max |
|-------|----------------|------------------|--------------------|--------------------|----------------|---------------|-------------|-----------------|------------------|
| 304   | 0.07           | 0.75             | 2.0                | 0.045              | 0.015          | 18.0-19.5     | 8.0-10.5    | -               | 0.10             |
| 316   | 0.07           | 0.75             | 2.0                | 0.045              | 0.015          | 16.0-18.0     | 10.0-13.0   | 2.0-2.5         | 0.10             |
| 316L  | 0.03           | 0.75             | 2.0                | 0.045              | 0.015          | 16.0-18.0     | 10.0-13.0   | 2.0-2.5         | 0.10             |

#### Physical Properties

##### Stainless Steel Grade T-304, 316/L-ASTM A-240

| Grade | Density (Kg/m3) | Elastic Modulus (GPA) | Mean Coefficient of Thermal Expansion (mm/m/°C) |          |          | Thermal Conductivity (W/m.k) |          | Specific Thermal Capacity at 20°C 9j/kg.k) | Electrical Resistivity (w.mm2/m) |
|-------|-----------------|-----------------------|-------------------------------------------------|----------|----------|------------------------------|----------|--------------------------------------------|----------------------------------|
|       |                 |                       | 20-100°C                                        | 20-300°C | 20-500°C | At 100°C                     | At 500°C |                                            |                                  |
| 316/L | 8000            | 200                   | 16                                              | 17       | 18       | 16.3                         | 21.5     | 500                                        | 0.75                             |

#### Mechanical Properties

##### Stainless Steel Grade T-304, 316/L-ASTM A-240

| Grade | Ultimate tensile Strength (MPA) Min | Yield Strength 0.2% Proof (MPA) Min | Elongation (% on 50 mm) Min | Hardness         |                       |
|-------|-------------------------------------|-------------------------------------|-----------------------------|------------------|-----------------------|
|       |                                     |                                     |                             | Brinell (HB) Max | Rockwell B (HR B) Max |
| 304   | 540                                 | 230                                 | 45                          | 201              | 92                    |
| 316/L | 530                                 | 240                                 | 40                          | 04-Aug           | 95                    |

#### Safety:

Stainless Steel and its alloys are inert and non-reactive when used correctly. Potential health and safety risks are extremely low. While handling sharp edges gloves should be worn to prevent injury.

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