

# GARBAFLEX 11R51

1/3

Flat and shaped wire

GARBAFLEX 11R51 is an austenitic stainless steel wire alloyed with molybdenum, supplied in the cold rolled or annealed condition.

## CHEMICAL COMPOSITION

| C (%)       | Si (%)      | Mn (%)      | P max. (%) | S max. (%) | Cr (%)        | Ni (%)      | Mo (%)      |
|-------------|-------------|-------------|------------|------------|---------------|-------------|-------------|
| 0.07 - 0.09 | 1.20 - 1.80 | 1.50 - 2.00 | 0.025      | 0.010      | 16.00 - 18.00 | 7.00 - 8.50 | 0.50 - 0.80 |

## MECHANICAL PROPERTIES

### Tensile strength

As cold rolled max. 2400 N/mm<sup>2</sup>.

As annealed max. 850 N/mm<sup>2</sup>.

### FOR FLAT ROLLED WIRE

| Width (mm)   | Tolerance (± mm) |
|--------------|------------------|
| 1.00 - 5.00  | 0.050            |
| 5.01 - 8.00  | 0.070            |
| 8.01 - 10.00 | 0.100            |

| Thickness (mm) | Tolerance (± mm) |
|----------------|------------------|
| 0.30 - 0.80    | 0.015            |
| 0.81 - 1.00    | 0.019            |
| 1.01 - 1.60    | 0.025            |

### FOR SHAPED WIRE

# GARBAFLEX 11R51

2/3

| Width (mm)  | Tolerance ( $\pm$ mm) |
|-------------|-----------------------|
| -1.50       | 0.020                 |
| 1.51 - 3.00 | 0.030                 |
| 3.01 - 5.00 | 0.040                 |
| 5.01 - 7.00 | 0.050                 |
| 7.01 -      | 0.060                 |

## ELONGATION

As annealed min. 40%.

## MICROSTRUCTURE

Austenite.

## EXECUTION

Rolled on 2 sides (flat).  
Rolled on 4 sides (shaped).

## CAMBER

Max. 3 mm measured on 1 m length.

## SURFACE CONDITIONS

### SURFACE

Bright. Surface defects max. 1% of thickness.

## PHYSICAL PROPERTIES

### E AND G MODULUS OF ELASTICITY

Abt. 180 kN/mm<sup>2</sup> in drawn condition.  
Abt. 185 kN/mm<sup>2</sup> after heat treatment.

### E AND G MODULUS OF SHEAR

Abt. 70 kN/mm<sup>2</sup> in drawn condition.  
Abt. 73 kN/mm<sup>2</sup> after heat treatment.  
Density: 7.90 kg/dm<sup>3</sup>.

# GARBAFLEX 11R51

3/3

## STANDARDS

### NEAREST EQUIVALENT STEEL GRADES

EN/DIN 1.4310, AISI/SAE 302, JIS SUS 302

### NEAREST EQUIVALENT STANDARDS

EN 10270-3, ISO 6931-1, ASTM A313

## ADDITIONAL

### ADDITIONAL INFORMATION

#### **Delivery form**

On wooden spools, max. 250 kg.