

# GARBAFLEX CrSi75

## Flat and shaped wire

GARBAFLEX CrSi75 is especially intended for application requiring high fatigue properties and good relaxation properties at moderately increased working temperatures.

## Chemical composition

| Element | Weight %      |
|---------|---------------|
| C       | 0.50% - 0.70% |
| Si      | 1.20% - 1.65% |
| Mn      | 0.50% - 0.80% |
| Cr      | 0.50% - 1.00% |
| V       | 0.05% - 0.20% |
| P max.  | 0.020%        |
| S max.  | 0.020%        |

## Mechanical properties

### For flat wire

| Width (mm)   | Tolerance (mm) |
|--------------|----------------|
| 1.00 - 5.00  | ±0.050         |
| 5.01 - 8.00  | ±0.070         |
| 8.01 - 10.00 | ±0.100         |
| 0.30 - 0.80  | ±0.013         |
| 0.81 - 1.00  | ±0.019         |
| 1.01 - 1.60  | ±0.025         |
| 1.61 - 2.30  | ±0.050         |

### For shaped wire

| Width (mm)  | Tolerance (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         |

## Surface conditions

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Bright or oxide.

Surface defects max. 1% of thickness.

## Technical specification

| Property                | Value                                |               |
|-------------------------|--------------------------------------|---------------|
| E modulus of elasticity | 206 kN/mm <sup>2</sup>               |               |
| G modulus of shear      | 79.5 kN/mm <sup>2</sup>              |               |
| Density                 | 7.95 kg/dm <sup>3</sup>              |               |
| Camber                  | Max. 4 mm measured on 1 m length.    |               |
| Microstructure          | Tempered martensite with no ferrite. |               |
| Execution (flat)        | Rolled on 2 sides                    |               |
| Execution (shaped)      | Rolled on 4 sides                    | Profile drawn |
| Coil set                | Max. 20 mm measured on 1 m length.   |               |

## Steel grades and product standards

|                                      |             |               |             |
|--------------------------------------|-------------|---------------|-------------|
| Nearest equivalent product standards | EN 10270-2  |               |             |
| Nearest equivalent steel grades      | EN/DIN 2090 | AISI/SAE 2090 | JIS 67SiCr5 |

## Additional

### Additional information

#### **Decarburization**

No total decarburisation. Partial decarburisation (no continuous zones) max. 1.2% of a corresponding round wire dimension.