

Propriétés physiques de l'acier inoxydable

Propriétés physiques de l'acier inoxydable :

- **Ductilité** : C'est un matériau qui peut se déformer facilement sans se briser, à condition qu'on lui applique une force adéquate.
- **Ténacité** : L'acier inoxydable est très résistant aux chocs.
- **Dureté** : L'acier inoxydable ne se raye pas facilement en raison de sa haute résistance aux agents abrasifs.
- **Hygiénique** : C'est un matériau facile à nettoyer avec n'importe quel produit d'entretien traditionnel.
- **Densité** : 8 g/cm³
- **Point de fusion** : 1400-1450°C
- **Résistivité électrique** : 72 ??-cm
- **Conductivité thermique** : 15 W/m·K
- **Coefficient de dilatation thermique** : 17,2 ?m/m K



Information technique

| CARACTERÍSTICAS | PROPIEDADES MECANICAS | | PROPIEDADES FÍSICAS | | | | | | |
|-----------------|-------------------------|-----------------------|---------------------|-----------------------|----------------------------------|-------------------------------|-----------------|------------------|-------------------|
| | CALIDADES | | DENSIDAD | MÓDULO de ELASTICIDAD | COEF. MEDIO de EXPANSIÓN TÉRMICA | | CONDUCT. TERMAL | CALOR ESPECÍFICO | RESIST. ELÉCTRICA |
| | Designación AISI / ASTM | Designación EN Número | | | a 20° C [kg/dm ³] | a 20° C [kN/mm ²] | | | |
| AUSTENITICO | 201 | 1.4372 | 7.8 | 200 | 15.7 | 17.5 | 15 | 500 | 0.7 |
| | 202 | 1.4373 | 7.8 | 200 | 17.5 | 18.4 | 15 | 503 | 0.7 |
| | 301 | 1.431 | 7.9 | 200 | 17.92 | 18 | 15 | 500 | 0.73 |
| | 301L | | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 301LN | 1.4318 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 302 | | 8.06 | 193 | 17.2 | 17.8 | 16.3 | 503 | 0.72 |
| | 303 | 1.4305 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 304 | 1.4301 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |

| | | | | | | | | | |
|--|----------|--------|------|-----|------|------|------|-----|------|
| | 304LN | 1.4311 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 304H | 1.4948 | 7.9 | 200 | 16.9 | 17.8 | 17 | 450 | 0.71 |
| | 304L | 1.4307 | 7.9 | 200 | 16.5 | 18 | 15 | 500 | 0.73 |
| | 304L | 1.4306 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 304N | | 8.06 | 196 | 16.5 | 17.5 | 15 | 503 | 0.72 |
| | 305 | 1.4303 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | | 1.4828 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.85 |
| | 309S | 1.4833 | 7.9 | 200 | 16 | 17.5 | 15 | 500 | 0.78 |
| | 310S | 1.4845 | 7.9 | 200 | 15.5 | 17 | 15 | 500 | 0.85 |
| | 314 | 1.4841 | 7.9 | 200 | 15.5 | 17 | 15 | 500 | 0.9 |
| | 316 | 1.4401 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316 | 1.4436 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316N | | 8.06 | 196 | 15 | 17.5 | 15 | 503 | 0.74 |
| | 316H | | 8.03 | 193 | 15.9 | 16.2 | 16.3 | 500 | 0.74 |
| | 316L | 1.4404 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316L | 1.4435 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316 L | 1.4432 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316LN | 1.4406 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316LN | 1.4429 | 8 | 200 | 15 | 17.5 | 15 | 500 | 0.75 |
| | 316Ti | 1.4571 | 8 | 200 | 17.5 | 18.5 | 15 | 500 | 0.75 |
| | 316 Cb | 1.458 | 8 | 200 | 17.5 | 18.5 | 15 | 500 | 0.75 |
| | 317 | | 8.06 | 193 | 16 | 16.2 | 16.3 | 503 | 0.74 |
| | 317 L | 1.4438 | 8 | 200 | 16.5 | 17.5 | 14 | 500 | 0.85 |
| | 317 LN | 1.4434 | 8 | 200 | 16.5 | 17.5 | 15 | 500 | 0.75 |
| | 317 LMN | 1.4439 | 8 | 200 | 16.5 | 17.5 | 14 | 500 | 0.85 |
| | 321 | 1.4541 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 321 H | 1.4878 | 7.9 | 200 | 17 | 18 | 15 | 500 | 0.73 |
| | 347 | 1.455 | 7.9 | 200 | 16.5 | 17.5 | 15 | 500 | 0.73 |
| | 347 H | | 8.03 | 193 | 16.6 | 18.2 | 16.1 | 500 | 0.72 |
| | | 1.4335 | 7.9 | 195 | 16.1 | 16.9 | 14 | 450 | 0.85 |
| | 310 MoLN | 1.4466 | 8 | 195 | 15.7 | 17 | 14 | 500 | 0.8 |
| | | 1.4361 | 7.7 | 200 | 15.7 | 17 | 14 | 500 | 0.8 |
| | | 1.4563 | 8 | 195 | 16.1 | 16.9 | 12 | 450 | 1 |
| | 904 L | 1.4539 | 8 | 200 | 16.1 | 16.9 | 12 | 450 | 1 |
| | | 1.4547 | 8 | 195 | 17 | 18 | 14 | 500 | 0.85 |
| | | 1.4529 | 8.1 | 195 | 16.1 | 16.9 | 12 | 450 | 1 |
| | 330 | 1.4864 | 8 | 196 | 15 | 16 | 12.5 | 550 | 1 |
| | | 1.4835 | 7.8 | 196 | 17 | 18 | 15 | 500 | 0.85 |
| | | 1.4876 | 8 | 196 | 15 | 16 | 12 | 550 | 1 |
| | | 1.4877 | 8 | 196 | 15.5 | 16.5 | 12 | 450 | 0.96 |

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|--------------|-------|--------|------|-----|------|------|------|-----|------|
| | | 1.4818 | 7.8 | 196 | 16.5 | 18 | 15 | 500 | 0.85 |
| | | 1.4854 | 7.9 | 196 | 15.5 | 16.5 | 11 | 450 | 1 |
| DUPLEX | | 1.4462 | 7.8 | 200 | 13.5 | 14 | 15 | 500 | 0.8 |
| | | 1.4362 | 7.8 | 200 | 13.5 | 14 | 15 | 500 | 0.8 |
| | | 1.441 | 7.8 | 200 | 12.5 | 13.5 | 15 | 500 | 0.8 |
| | | 1.4507 | 7.8 | 200 | 12.5 | 13.5 | 15 | 500 | 0.8 |
| | | 1.4501 | 7.8 | 200 | 13.5 | 13.5 | 15 | 500 | 0.8 |
| FERRITICO | 405 | 1.4002 | 7.7 | 220 | 11 | 12 | 30 | 460 | 0.6 |
| | | 1.4003 | 7.7 | 220 | 10.8 | 11.6 | 25 | 430 | 0.6 |
| | 409 | 1.4512 | 7.7 | 220 | 11 | 12 | 25 | 460 | 0.6 |
| | 410 S | 1.4 | 7.7 | 220 | 11 | 12 | 30 | 460 | 0.6 |
| | 429 | | 7.78 | 200 | 10.3 | 12 | 25.7 | 460 | 0.59 |
| | 430 | 1.4016 | 7.7 | 220 | 10 | 10.5 | 25 | 460 | 0.6 |
| | | 1.452 | 7.7 | 220 | 10.8 | 11.6 | 20 | 430 | 0.7 |
| | | 1.4511 | 7.7 | 220 | 10 | 10.5 | 25 | 460 | 0.6 |
| | | 1.4017 | 7.7 | 220 | 10.2 | 10.8 | 30 | 460 | 0.7 |
| | 434 | 1.4113 | 7.7 | 220 | 10.5 | 10.5 | 25 | 460 | 0.7 |
| | | 1.4513 | 7.7 | 220 | 10.5 | 10.5 | 25 | 460 | 0.7 |
| | 439 | 1.451 | 7.7 | 220 | 10 | 10.5 | 25 | 460 | 0.6 |
| | | 1.4516 | 7.7 | 220 | 10.5 | 11.5 | 30 | 460 | 0.6 |
| | 444 | 1.4521 | 7.7 | 220 | 10.8 | 11.6 | 23 | 430 | 0.8 |
| | 436 | 1.4526 | 7.7 | 220 | 11.7 | 12.1 | 30 | 440 | 0.7 |
| | | 1.4509 | 7.7 | 220 | 10 | 10.5 | 25 | 460 | 0.6 |
| | 446 | 1.4749 | 7.7 | 200 | 10 | 11 | 17 | 500 | 0.7 |
| | | 1.4713 | 7.7 | 200 | 11.5 | 12 | 23 | 450 | 0.7 |
| | | 1.4724 | 7.7 | 200 | 10.5 | 11.5 | 21 | 500 | 0.75 |
| | | 1.4762 | 7.7 | 200 | 10.5 | 11.5 | 17 | 500 | 1.1 |
| MARTENSITICO | 410 | 1.4006 | 7.7 | 215 | 11 | 12 | 30 | 460 | 0.6 |
| | 420 | 1.4021 | 7.7 | 215 | 11 | 12 | 30 | 460 | 0.6 |
| | 420 | 1.4028 | 7.7 | 215 | 11 | 12 | 30 | 460 | 0.65 |
| | 420 | 1.4031 | 7.7 | 215 | 11 | 12 | 30 | 460 | 0.55 |
| | 420 | 1.4034 | 7.7 | 215 | 11 | 12 | 30 | 460 | 0.55 |
| | | 1.4116 | 7.7 | 215 | 11 | 11.5 | 30 | 460 | 0.65 |
| | | 1.4122 | 7.7 | 215 | 10.8 | 11.6 | 15 | 430 | 0.8 |
| | | 1.4313 | 7.7 | 200 | 10.9 | 11.6 | 25 | 430 | 0.6 |
| | | 1.4418 | 7.7 | 200 | 10.8 | 11.6 | 15 | 430 | 0.8 |
| PH | 630 | 14542 | 7.8 | 200 | 10.8 | 11.6 | 16 | 500 | 0.71 |
| | 631 | 14568 | 7.8 | 200 | 11 | 11.6 | 16 | 500 | 0.8 |