## Laser cutting

## Our material selection Stainless steel sheets - shapes, thicknesses, properties

This PDF provides you with a comprehensive overview of the stainless steel materials we offer for our precision laser cutting. Discover different qualities, material thicknesses and specifications that are perfectly tailored to your individual requirements. Our selection is constantly being expanded so that we can always offer you the best solutions.



| Material | Specification | Thickness in mm | Properties  |
|----------|---------------|-----------------|---|
| 1.4021   | X20Cr13       | 0,50            | • Stainless martensitic steel   |
|          |               | 1,00            | <ul> <li>High chromium content and good corrosion resistance in moderately aggressive,</li> </ul> |
|          |               | 1,20            | non-chlorinated media   |
|          |               | 1,50            | <ul> <li>Highly polishable and can be used up to 400°C</li> </ul>                                 |
|          |               | 2,00            | Mainly used for surgical instruments  |
|          |               | 2,50            |   |
|          |               | 3,00            |   |

|        |             | 3,50 |  |
|--------|-------------|------|--|
|        |             | 4,00 |  |
|        |             | 4,50 |  |
|        |             | 5,00 |  |
|        |             | 5,50 |  |
|        |             | 6,00 |  |
|        |             | 7,00 |  |
|        |             | 8,00 |  |
|        |             |      |  |
| 1.4301 | X5CrNi18-10 | 0.50 | Austenitic chromium-nickel steel   |
|        |             | 1,00 |  |
|        |             | 1,25 | <ul> <li>High corrosion resistance</li> </ul>  |
|        |             | 2,00 | <ul> <li>In the welded condition, however, 1.4301 is not resistant to intergranular corrosion</li> </ul> |
|        |             | 2,25 |  |
|        |             | 2,50 |  |
|        |             | 3,00 |  |
|        |             | 4.00 |  |

|        |             | 5,00 |  |
|--------|-------------|------|--|
|        |             | 6,00 |  |
|        |             |      |  |
|        |             |      |  |
| 1.4310 | X12CrNi17-7 | 0,20 | <ul> <li>A stainless austenitic chromium-nickel steel</li> </ul>   |
|        |             | 0,30 | <ul> <li>Combination of high chromium and nickel content</li> </ul>  |
|        |             | 0,40 |  |
|        |             | 0,50 | <ul> <li>Forms a metastable austenitic structure that hardens very strongly during cold forming</li> </ul> |
|        |             | 0,60 | <ul> <li>High proportion of friction martensite, material becomes magnetic</li> </ul>                      |
|        |             | 0,70 |  |
|        |             | 0,80 | <ul> <li>Spring-hard rolled</li> </ul>   |
|        |             | 1,00 |  |
|        |             | 1,20 |  |
|        |             | 1,50 |  |
|        |             |      |  |



| Material | Specification   | Thickness in mm | Properties  |
|----------|-----------------|-----------------|---|
|          |                 |                 |   |
| 1.4034   | X46Cr13         | 0,50            | Stainless martensitic chromium steel  |
|          |                 | 1,50            | <ul> <li>High hardness acceptance, combined with good corrosion resistance in moderately</li> </ul>                         |
|          |                 | 2,00            | aggressive media with high carbon content   |
|          |                 | 2,50            | <ul> <li>Good hardenability due to high carbon content</li> </ul>   |
|          |                 | 3,00            | <ul> <li>Suitable for chisels and shears</li> </ul>   |
|          |                 | 3,50            |   |
|          |                 | 4,00            |   |
|          |                 | 4,50            |   |
|          |                 | 5,00            |   |
|          |                 | 6,00            |   |
|          |                 |                 |   |
|          |                 |                 |   |
| 1.4404   | X2CrNiMo17-13-2 | 0,80            | <ul> <li>Stainless, austenitic chromium-nickel-molybdenum steel with low carbon<br/>content</li> </ul>                      |
|          |                 |                 | <ul> <li>Resistant to intercrystalline corrosion when welded</li> </ul>   |
|          |                 |                 | . Dust and asid resistant sect stad   |
|          |                 |                 | • Rust and acid-resistant cast steel  |
|          |                 |                 |   |
| 1.4024   | X15Cr13         | 1 80            | Stainless martensitic chromium steel  |
|          |                 | 2 25            | <ul> <li>High chromium content and good corrosion resistance in moderately aggressive,<br/>non-chlorinated media</li> </ul> |
|          |                 | 2,50            |   |
|          |                 | 3,00            |   |
|          |                 | 5,00            |   |

