



## S450GD

Structural Steels

|                     |                               |
|---------------------|-------------------------------|
| <b>Material no.</b> | 1.0233                        |
| according to        | DIN EN 10346/<br>DIN EN 10143 |

### Mechanical properties (longitudinal)

|  |
|--|
| <b>Yield strength <math>R_e^{2)}</math> in MPa</b> |
| $\geq 450$   |

|   |
|---|
| <b>Tensile strength <math>R_m</math> in MPa</b> |
| $\geq 510$ ( $\leq 650^3)$                      |

|  |
|--|
| <b>Total elongation <math>A_{80}</math> in %</b> |
| $\geq 14$  |

### Available dimensions

|                        |                    |
|------------------------|--------------------|
| <b>Thickness in mm</b> | <b>Width in mm</b> |
| 2.00 – 3.00            | 900 – 1,500        |

### Surface finish

Thickness ranges

|    |             |
|----|-------------|
| MA | 2.00 – 3.00 |
|----|-------------|

### Chemical composition<sup>1)</sup>

(in percent by weight)

|    | min. in % | max. in % |
|----|-----------|-----------|
| C  |           | 0.20      |
| Si |           | 0.60      |
| Mn |           | 1.70      |
| P  |           | 0.10      |
| S  |           | 0.045     |

2)  $R_{eH}/R_{p0.2}$

3) Guide value

1) Heat analysis

Commitments regarding certain properties or a certain purpose of use require written agreements. Technical changes as well as typesetting and printing errors reserved.