

## P530 - Non-magnetic Steel Datasheet

P530 is a Special non-magnetic, austenitic Mn-Cr-N-steel with a Nickel-content of < 2%. Stainless steel for non-magnetic drill collars

### Chemical Composition

Grade
P530

### Mechanical Properties

- OD less than 4"
  - Tensile strength  $R_m$  N/mm<sup>2</sup>: Min 900
  - Yield Strength  $R_p$  N/mm<sup>2</sup>: Min 830
  - Elongation A %: min 25%
  - Reduction of area %: min 50%
  - Impact energy %: min 122 J
  - Hardness Brinell: 260-350
- OD 4" to 9 1/4"
  - Tensile strength  $R_m$  N/mm<sup>2</sup>: Min 830
  - Yield Strength  $R_p$  N/mm<sup>2</sup>: Min 760
  - Elongation A %: min 25%
  - Reduction of area %: min 50%
  - Impact energy %: min 122 J
  - Hardness Brinell: 260-350

### Physical Properties

Relative permeability: < 1,001.

Magnetic inspection: Drill collars are 100% tested by a proprietary probe-testing process using a F ö rster Magnetomat 1.782. ( " Hot Spot " -test).

Magnetic permeability of each collar is certified with the printout of probe-testing. - Ultrasonic inspection: Each collar is ultrasonically inspected over 100% of the volume according to ASTM E 114, last edition as a minimum level.

## Heat Treatment

## Welding Properties

## Machining Properties

## Similar or Equivalents Steel Grade

P530