



CPDUR®1000 [1.7734/15CDV6] -  
Technical information and benefits

Due to its excellent mechanical properties, CPDUR®1000 meets the requirements of **international quality and safety standards**. The special remelting process, results in an extremely pure and homogenic material. It is excellently suitable for service temperatures ranging from **-75°C to +500°C** and the production of components intended for application ranges with maximum demands:

- Safety structures
- Safety cages
- Suspension components
- Driveshafts
- Track and push rods
- Aviation safety structures
- etc.



a Nedschroef company

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## High Performance Materials - Less Weight, Excellent Safety!

The perfect solution for applications with stringent requirements:

motorsports	high performance cars	aviation
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CP Tech in cooperation with Benteler Steel/Tube **always keeps extensive stocks** of a wide range of cold drawn tubes made of the material:

CPDUR®1000 [1.7734/15CDV6]  
CPDUR®500 [25CrMo4/1.7218]

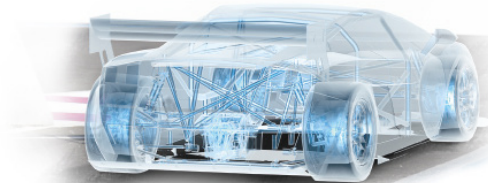
We also offer a large quantity of

- sheet metal
- welding rods
- round / square material
- flat steel

The material is cut to the specifications in your CAD drawings by means of a laser process.

The air-hardenend tubes and all sheet metals **satisfy international standards** and can be **traced back to original batch**.

**Acceptance test certificates** according to EN 10204-3.1 B are available on request for all materials.



a Nedschroef company

in cooperation with  
**BENTELER**

# High Performance Materials

Development - Production - Sales



**MATERIAL PROPERTIES**

Material number	Tensile strength	Yield strength	Elongation
	[MPa]	[MPa]	[%]
<b>CPDUR®1000</b>			
1.7734.4	> 700	> 550	> 7
1.7734.5	980 - 1180	> 790	> 6
<b>CPDUR®500</b>			
25CrMo4	540-900	350-700	> 12
For comparison:			
SAE 4130	650 - 1030	480 - 930	> 6

**WELDABILITY**

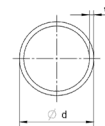
	Carbon Equivalent		
	1.7734	25CrMo4	4130
<b>CET</b>	0.40	0.41	0.42
<b>PCM</b>	0.35	0.37	0.40

**CHEMICAL COMPOSITION**

	1.7734	25CrMo4	4130
<b>C [%]</b>	0.12-0.18	0.22-0.29	0.28-0.33
<b>Cr [%]</b>	1.25-1.50	0.90-1.20	0.80-1.10
<b>Mn [%]</b>	0.80-1.10	0.60-0.90	0.40-0.60
<b>Mo [%]</b>	0.80-1.00	0.15-0.30	0.15-0.25
<b>V [%]</b>	0.20-0.30		
<b>Si [%]</b>		0.15-0.35	0.15-0.35

**TUBES CPDUR®1000**

Dimensions in mm  
Outer Ø x wall thickness  
10 - 45 x 1.0 - 4.0



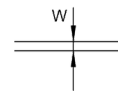
**ROUND MATERIAL CPDUR®1000**

All dimensions on request



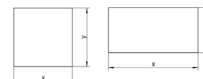
**CUT SHEET METAL CPDUR®1000**

Thickness in mm  
0.8 / 1.0 / 1.2 / 1.5 / 2.0 / 2.5 / 3.0 / 4.0 / 5.0 / 6.0 / 8.0 / 10.0



**FLAT STEEL CPDUR®1000**

Thickness in mm  
40 x 40 / 85 x 85 / 105 x 105 / 125 x 60



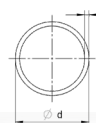
**WELDING WIRE CPDUR®1000**

All dimensions from 1mm Ø

**CPDUR®500 [25CrMo4/1.7218]**

**TUBES CPDUR®500 [25CRMO4/1.7218]**

Dimensions in mm  
Outer Ø x wall thickness  
40 / 45 / 50 x 1.0 - 3.0



Additional information and dimensions available on request or via [cp-tech.com/material/stock-list](http://cp-tech.com/material/stock-list)

**Material Quality Standards - A Higher Level Of Strength**

**SPECIAL PROPERTIES**

Its special properties ensure top-level quality:

- High yield strength and excellent welding properties
- Can be welded in both conditions (.4/.5) No subsequent heat treatment needed
- Very strong around the welded joint without additional hardening (UTS > 980 MPa)
- Tubes are demagnetised up to a residual field intensity of max. 12 A/cm
- Material standard: CPDUR®1000 according to WL 1.7734, and 15CDV6 AIR 9160C

Other materials available on request: Titanium, aluminium, 17-4 PH, 15-5 PH etc.

**MATERIALIZED STRENGTH**

