

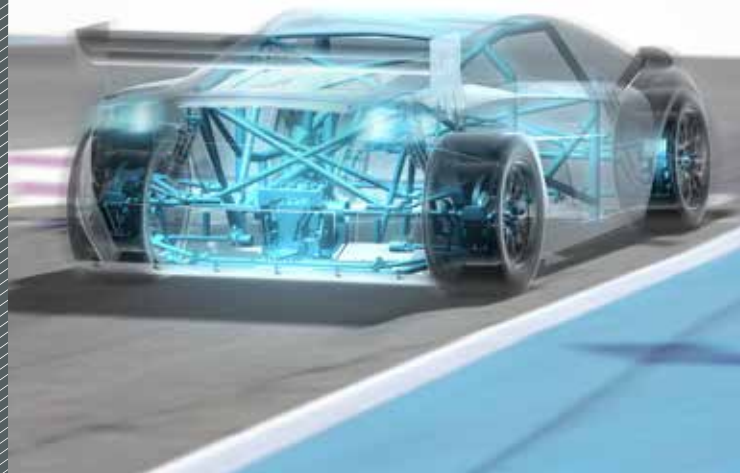
High Performance Materials

Development - Production - Sales

High Performance Materials – Less Weight, Excellent Safety!

The perfect solution for applications with stringent requirements: components for high performance cars, motorsports and aviation. CP autosport 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] and CPDUR®500 [25CrMo4/1.7218]. The air-hardened tubes satisfy international standards, each batch can be traced back.

We also offer a large quantity of sheet metal, welding rods, round/square material and flat steel. All sheet metal can be traced back to the original batch and is cut to the specifications in your CAD drawings within a laser process. Acceptance test certificates according to EN 10204-3.1 B are available on request for all materials.



MATERIAL PROPERTIES

Material number	Tensile strength	Yield strength
	RM (min.) RM N/mm ² (MPa)	RM (min.) Rp N/mm ² (MPa)
CPDUR®1000 1.7734.4/15CDV6	700	550
CPDUR®1000 1.7734.5/15CDV6	980 – 1180	790
For comparison: SAE 4130		
1.7214 (SAE 4130)	650 – 850	480 – 520

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

Due to its excellent mechanical properties, CPDUR®1000 [1.7734/15CDV6] meets the requirements of international quality and safety standards. This material is therefore excellently suitable for the production of components intended for application ranges with maximum demands: safety structures, safety cages, suspension components, drive shafts, track and push rods, aviation safety structures, rocket motor casings etc.



Tubes CPDUR®1000 [1.7734/15CDV6]

Dimensions in mm

10.0 x 1.0		
10.0 x 2.0		
12.0 x 1.0	14.0 x 1.0	16.0 x 1.0
12.0 x 1.5	14.0 x 1.5	16.0 x 1.5
12.0 x 2.0	14.0 x 2.0	16.0 x 2.0
18.0 x 1.0	20.0 x 1.0	22.0 x 1.0
18.0 x 1.5	20.0 x 1.5	22.0 x 1.5
18.0 x 2.0	20.0 x 2.0	22.0 x 2.0
25.0 x 1.0	28.0 x 1.0	30.0 x 1.0
25.0 x 1.5	28.0 x 1.5	30.0 x 1.5
25.0 x 2.0	28.0 x 2.0	30.0 x 2.0
25.0 x 2.5		30.0 x 3.0
32.0 x 1.0	35.0 x 1.0	40.0 x 1.0
32.0 x 1.5	35.0 x 1.5	40.0 x 1.5
32.0 x 2.0	35.0 x 2.0	40.0 x 2.0
		40.0 x 3.0
	38.0 x 1.5	
45.0 x 1.5	50.0 x 1.5	
45.0 x 4.0	50.0 x 2.0	

Additional dimensions and profiled cross-sections (aero profiles) available on request.

ROUND MATERIAL CPDUR®1000 [1.7734/15CDV6]

All dimensions on request.

CUT SHEET METAL CPDUR®1000 [1.7734/15CDV6]

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

WELDING WIRE CPDUR®1000 [1.7734/15CDV6]

All dimensions from 1 mm Ø

SQUARE MATERIAL CPDUR®1000 [1.7734/15CDV6]

Thickness in mm

40 x 40 / 85 x 85

FLAT STEEL CPDUR®1000 [1.7734/15CDV6]

Thickness in mm

85 x 85 / 105 x 105 / 125 x 60

CPDUR®500 [25CrMo4/1.7218]

TUBES CPDUR®500 [25CrMo4/1.7218]

Dimensions in mm

40.0 x 1.0		
40.0 x 1.5	45.0 x 2.5	50.0 x 2.0
40.0 x 2.0		
40.0 x 2.5		
40.0 x 3.0		

Additional dimensions available on request.

Material Quality Standards – A Higher Level Of Strength

SPECIAL PROPERTIES

The material CPDUR®1000 [1.7734/15CDV6] is available in the grain size 5 or finer (according to EN 103-71).

Its special properties ensure first-rate quality:

- High yield strength and excellent welding properties
- Can be welded in both conditions (.4/5) without heat treatment
- Very strong around the welded joint without additional hardening (Rm > 980 N/mm²)
- Tubes are demagnetised up to a residual field intensity of max. 12 A/cm.
- Material standard: CPDUR®1000 [1.7734] according to LN 9369 and CPDUR®1000 [15CDV6] according to AIR 9160/C

Other materials available on request: Titanium, aluminium, 17.4 PH, 15.5 PH etc.

Passion for Quality