

# Doctor Blades with Tungsten Carbide

All metal-qualities are also available with a ceramic or tungsten carbide coating on the top of the blade. A longer

life-time and a lower friction coefficient of the blade are just two advantages of this improved technology.

## Qualities

**Material No.:**  
PW 100

**Description:**  
Cold rolled and hardened

**Range of application:**  
Depending on roll cover material

**Alloy No.:**  
2.4375 (Monel)

**Tensile strength:**  
850 - 1050 N/mm<sup>2</sup>

- Breast Rolls
- Press Rolls
- Steel Calanders

**Description:**  
Ni Cu 30 AL

**Surface:**  
bright

**Hardness:**  
HRC: 26 - 32  
HV: 270 - 320

## Coating

**Substrate:**  
Monel

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

**Colour Tungsten Carbide:**  
silver



**Material No.:**  
PW 110

**Description:**  
Acid resistant and cold rolled

**Range of application:**  
Depending on roll cover material

**Alloy No.:**  
2.1020 (Bronze)

**Tensile strength:**  
650 - 740 N/mm<sup>2</sup>

- Dryers
- Reel Drum
- Steel Calanders

**Description:**  
Cu Sn 6

**Surface:**  
bronze cold rolled

**Hardness:**  
HB: 200 - 230

**Substrate:**  
Bronze

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

**Colour Tungsten Carbide:**  
silver



**Material No.:**  
PW 130

**Description:**  
Cold rolled stainless steel (18% chrome)

**Range of application:**  
Depending on roll cover material

**Alloy No.:**  
1.4310 (AISI 301)

**Tensile strength:**  
1500 - 1700 N/mm<sup>2</sup>

- Hard rubber

**Description:**  
X10CrNi18-8

**Surface:**  
bright

**Hardness:**  
HRC: 46 - 49  
HV: 460 - 500

**Substrate:**  
Stainless steel

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

**Colour Tungsten Carbide:**  
silver



**Material No.:**  
PW 140

**Description:**  
Hardened and tempered stainless steel (13% chrome)

**Range of application:**  
Depending on roll cover material

**Alloy No.:**  
1.4021 (AISI 420)

**Tensile strength:**  
1500 - 1700 N/mm<sup>2</sup>

- Dryers
- Press Rolls

**Description:**  
X20Cr13

**Surface:**  
bright polished

**Hardness:**  
HRC: 47 - 50  
HV: 470 - 520

**Substrate:**  
Stainless steel

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

**Colour Tungsten Carbide:**  
silver



**Material No.:**  
PW 150

**Description:**  
Hardened and tempered carbon steel with 0,75% C

**Range of application:**  
Depending on roll cover material

**Alloy No.:**  
1.0605 (AISI 1075)

**Tensile strength:**  
1500 - 1700 N/mm<sup>2</sup>

- Dryers
- Steel Calanders
- MG Cylinders
- Yankee Creping

**Description:**  
C 75 S

**Surface:**  
bright polished

**Hardness:**  
HRC: 46 - 49  
HV: 460 - 500

**Substrate:**  
Carbon steel

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

**Colour Tungsten Carbide:**  
silver



# Doctor Blades with Tungsten Carbide

## Qualities

**Material No.:**  
PW 160

**Description:**  
Hardened and tempered carbon steel with 1,0% C

**Alloy No.:**  
1.1274 (AISI 1095)

**Tensile strength:**  
1500 - 1700 N/mm<sup>2</sup>

**Description:**  
C 100 S

**Surface:**  
bright polished

**Hardness:**  
HRC: 50 - 54  
HV: 530 - 600

**Range of application:**  
Depending on roll cover material

- Yankee Creping
- Dryers
- MG Cylinders

## Coating

**Substrate:**  
Carbon steel

**Lay:**  
Tungsten Carbide

**Hardness Tungsten Carbide:**  
approx. 1200 HV

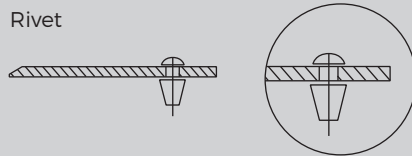
**Colour Tungsten Carbide:**  
silver



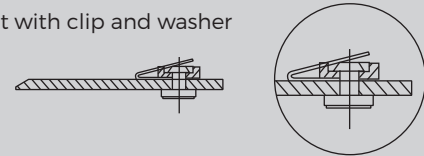
## Design

**Type of holder:**  
We deliver finished Doctor Blades for every type of holder and system, e.g.

Rivet



Rivet with clip and washer

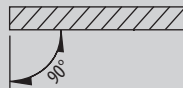


## Individual design

- Holes
- Slots
- Notches

## Bevel

**Typ 1**  
ground squared edges  
1 x 90°



**Typ 2**  
oneside bevel (standard)  
5° - 90°

