

Original series Doctor Blades

Carbon Steel



300

Our basic high quality carbon steel blade, used at printing houses worldwide.

Consists of genuine Swedish steel optimized for print quality and high press speed.

Developed together with our raw material suppliers and end users.

For Solvent & UV inks.

PrimeBlade 300 advantages

- High quality Swedish steel
- Good wear resistance
- Optimized print quality
- Excellent value


Available thicknesses: 0,076 mm – 0,38 mm (0,0030" – 0,015")

Straightness: 1,4 mm / 3000 mm (0,055"/118")

C	Si	Mn
1.00%	0.30%	0.40%

Tensile strength: 1960 N/mm² Elongation: 5% Hardness: 590 HV

Contact:

P.O BOX 70, 686 22, Sunne Sweden 

+46 (0) 565 10109

www.primeblade.se

sales@primeblade.se

Original series Doctor Blades

Refined Carbon Steel



600

Our finest Swedish carbon steel, with a high carbon content and excellent carbide particle microstructure.

The microstructure has been refined by a small addition of chromium and by subsequently optimizing the heat treatment.

For Solvent & UV inks.

PrimeBlade 600 advantages

- Increased print quality and blade lifetime
- Improved microstructure
- Less risk of metal hair formation and burr
- Balanced hardness to limit wear on rollers


Available thicknesses: 0,076 mm – 0,30 mm (0,003" – 0,012")

Straightness: 1,4 mm/3000 mm (0,055"/118")

C	Si	Cr	Mn
1.00%	0.25%	1.40%	0,30 %

Tensile strength: 2100 N/mm² Elongation: 5% Hardness: up to 630 HV

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Nano series Doctor Blades

Nano Treated Alloyed Tool Steel



Nano III



Innovation is key to development and growth. At PrimeBlade we take such truths to heart and proudly offer our world-class 900 Nano series products.

The Nano series is a unique range of doctor blades with enhanced properties, produced using our patented Nano treatment.

The process induces changes in the steel that provide reduced wear and thus longer lifetime, as well as improved surface quality.

This is achieved in an environmentally friendly and safe process, free from the hazardous chemicals typically used for producing, e.g., coated blades.

For Solvent & UV inks.

PrimeBlade **Nano III** advantages

Nano I: High-carbon steel

The Nano blade types have been tailored to meet the demands from our customers with regards to blade lifetime, print quality and ease of use.

PrimeBlade Nano series advantages:

- Long lifetime
- Environmentally friendly treatment, free from hazardous chemicals

Available for all inks
Suitable for highly abrasive inks, e.g., white

Unique and based on patented technology

Nano series Doctor Blades

High Carbon Steel



Nano I



Innovation is key to development and growth. At PrimeBlade we take such truths to heart and proudly offer our world-class 900 Nano series products.

The Nano series is a unique range of doctor blades with enhanced properties, produced using our patented Nano treatment.

The process induces changes in the steel that provide reduced wear and thus longer lifetime, as well as improved surface quality.

This is achieved in an environmentally friendly and safe process, free from the hazardous chemicals typically used for producing, e.g., coated blades.

For Solvent & UV inks.

PrimeBlade **Nano I** advantages

Nano I: High-carbon steel

We currently offer Nano blades made from three different premium quality Swedish steels: Nano II – Martensitic stainless steel

The Nano blade types have been tailored to meet the demands from our customers with regards to blade lifetime, print quality and ease of use.

PrimeBlade Nano series advantages:

- Long lifetime
- Environmentally friendly treatment, free from hazardous chemicals

Unique and based on patented technology

Original series Doctor Blades

Stainless Steel



400

If blade corrosion is your main issue, then PrimeBlade 400 is our answer, our most corrosion resistant doctor blade.

The moderate carbon content, while high enough to allow for an appropriate hardening, allows for retention of chromium where it is most needed, i.e., for corrosion protection.

Addition of molybdenum further enhances the anti-corrosive properties of this blade

For waterbased inks.

PrimeBlade 400 advantages

- Excellent corrosion resistance
- Corrosion protection from both chromium and molybdenum
- Balanced carbon content
- Good hardenability

Available thicknesses: 0,15 mm – 0,38 mm (0,0059" – 0,015")
Straightness: 1,4 mm / 3000 mm (0,055"/118")

C	Si	Cr	Mo	Mn
0,38%	0,45%	13,50%	1,0%	0,55%

Tensile strength: 1960 N/mm² Elongation: 7% Hardness: 600 HV

Original series Doctor Blades

Refined Stainless Steel



500

Our standard martensitic stainless steel, with a medium-high carbon content and an optimized trade-off between hardness, abrasive wear resistance and corrosion resistance.

For waterbased inks.

PrimeBlade 500 advantages

- Excellent performance for water-based inks
- Very good corrosion resistance
- Optimized for wear resistance
- Excellent hardenability

Available thicknesses: 0,076 mm – 0,30 mm (0,0030" – 0,012")
Straightness: 1,4 mm / 3000 mm (0,055"/118")

C	Si	Cr	Mn
0,65%	0,30%	13,00%	0,55%

Tensile strength: 1910 N/mm² | Elongation: 3-4% | Hardness: up to 600 HV

Original series Doctor Blades

Ceramic Coated



700

The PrimeBlade® 700 series is our coated doctor blade, developed by combining our unique edge preparation and surface treatment technologies.

This guarantees excellent bonding between steel and coating, providing the highest level of wear resistance.

The uniquely smooth surface finish of the blade translates to a clean and smooth wipe, which gives excellent print quality.

For all inks.

PrimeBlade 700 advantages

- Excellent print quality
- Excellent performance for all ink types, water or solvent based inks
- Good for abrasive inks
- Reduced friction between blade and cylinder

Available thicknesses:	0,15 mm – 0,20 mm	(0,0030" – 0,015")
Straightness:	1,0 mm / 3000 mm	(0,055"/118")

Hardness: 850-900 HV (coated surface only)

Original series Doctor Blades

Micro Alloyed Tool Steel



800

When it comes to low- to medium-alloyed tool steels, PrimeBlade 800 is as good as it gets. The microstructure of the steel consists of evenly distributed and very small carbide particles, originating from the molybdenum and vanadium additions, giving it an exceptional wear resistance and performance better than many alternatives.

For abrasive inks.

PrimeBlade 800 advantages

- Excellent wear resistance
- High hardness
- Perfect for abrasive inks

Available thicknesses: 0,15 mm – 0,20 mm (0,0059" – 0,00787")
 Straightness: 1,0 mm / 3000 mm (0,039"/118")

C	Si	Cr	Mn	Mo	V
0,55%	1,00%	2,60%	0,75%	2,25%	0,85%

Tensile strength: 2100 N/mm² Hardness: 650 HV

Nano series Doctor Blades

Nano Treated Stainless Steel



Nano II



Innovation is key to development and growth. At PrimeBlade we take such truths to heart and proudly offer our world-class 900 Nano series products.

The Nano series is a unique range of doctor blades with enhanced properties, produced using our patented Nano treatment.

The process induces changes in the steel that provide reduced wear and thus longer lifetime, as well as improved surface quality.

This is achieved in an environmentally friendly and safe process, free from the hazardous chemicals typically used for producing, e.g., coated blades.

For water based inks.

PrimeBlade **Nano II** advantages

Nano Treated Stainless Steel

We currently offer Nano blades made from three different premium quality Swedish steels: Nano II – Martensitic stainless steel

The Nano blade types have been tailored to meet the demands from our customers with regards to blade lifetime, print quality and ease of use.

PrimeBlade Nano series advantages:

- Long lifetime
- Environmentally friendly treatment, free from hazardous chemicals

Unique and based on patented technology