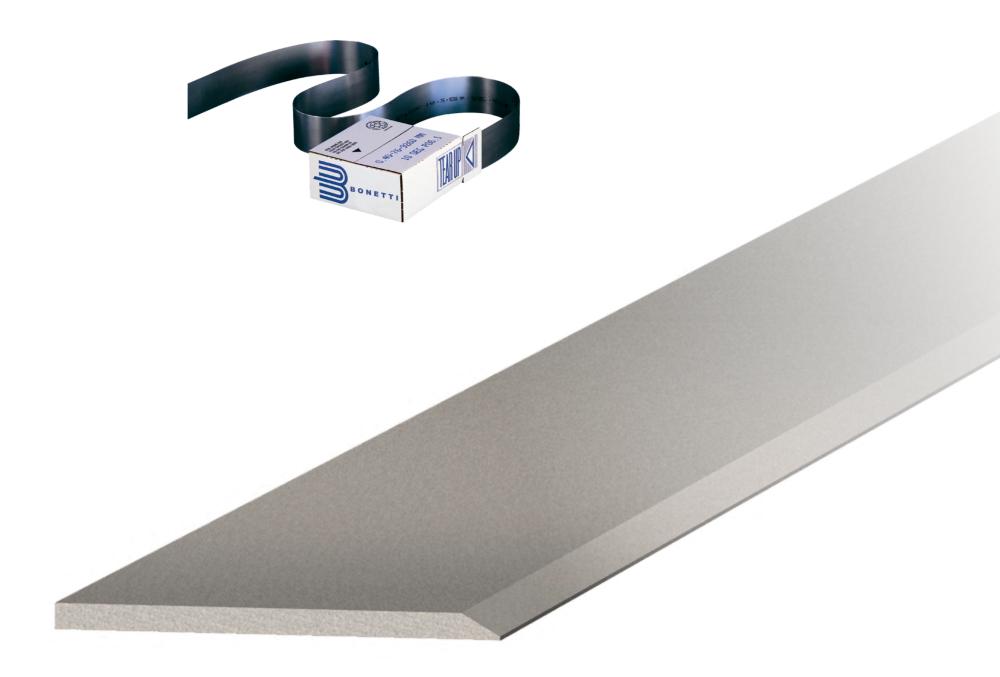
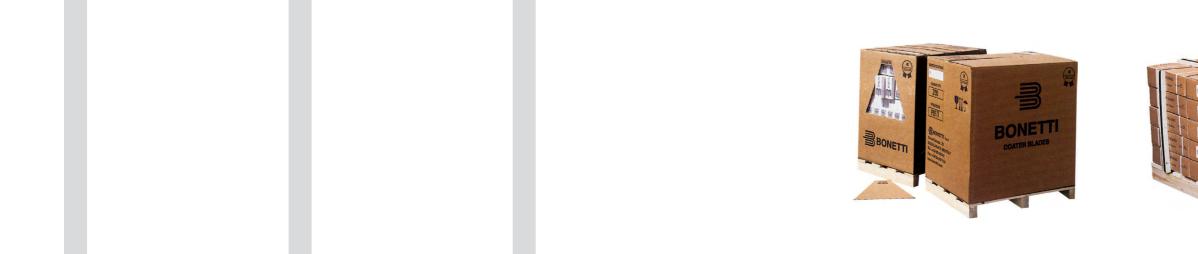


# Coater blades









A rigid blade body with a flexible tip is but a dream for many paper makers who work with a stiff blade mode.

A mechanical process of the highest accuracy makes it possible to attain results unexpected with a traditional-geometry blade.

The thickness reduction at the tip is normally 0,1 mm (.0039") for a height of 5 mm (.2").

- Working load is reduced for a given amount of coating or, as an alternative:
- Less coating for a given load

ADVANTAGES

- Possible increase in solids for better paper quality and a drop in drying costs
- Better runnability tied to lower loads and a more flexible blade
- Faster profile setting than with thicker blades

Bonetti's long experience in supplying coating operations worldwide, the continuous efforts of our R&D operating in close partnership with our customers and suppliers, has developed Hardlam®: an alloy steel coater blade with the bevel area harder than the body of the blade itself.

The hardening process changes the original structure of the steel, making it finer and more compact for better paper smoothness.



- Excellent run-in time
- Great adaptability
- Wide range of applications
- Stable profiles over time
- Extended life

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ADVANTAGE

- Better sheet quality (Helio test results on rotogravure paper)
- Competitive price

Body of the blade HV20 560+/-20

Hardened area HV20 740 +/- 30

HARDNESS

Width of hardened area 2,10 mm +/- 0,20 mm .083" +/- .0079"

- single boxes in palbox
- square carton boxes on pallet



The constant technological evolution in the production of coated paper demands the use of increasingly sophisticated and high-performance coater blades. The primary aim of Bonetti's R&D has been

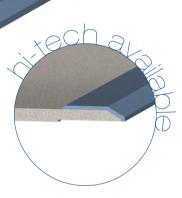
the continuous development and testing of advanced applications on materials, in order to enhance production efficiency and the overall runnability of coater machines. The result is called Supernova, a blade with the tip coated with **tungsten carbide**.

Bonetti has designed state-of-the-art manufacturing equipments to produce the best available blade on the market. Bevels are manufactured to customer's tight specifications, to attain a correct and consistent coat weight and outstanding paper quality right from the start and throughout the blade's lifetime.

The superior mechanical features of tungsten carbide provides better gloss and a low surface roughness of paper. The coefficient of friction that is lower than that of a standard carbon steel blade translates in fewer streaks and a better runnability.

Supernova is highly wear-resistant, keeps its original geometry over time, thus ensuring stable production quality.





- BEST profile stability over time
- LONGEST blade life
- BEST paper quality PPS
- BEST paper gloss
- MAXIMUM machine efficiency

Coated area

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HARDNES

HV20 1100 +/- 50

• single boxes on pallet

DAOKAGING

• square carton boxes on pallet



ADVANTAGE

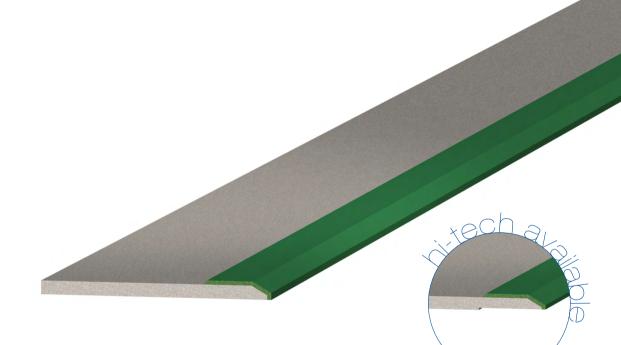
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The use of ceramic materials for coater blades goes back to the Eighties. The constant need to find specific solutions for the special needs of clients, has suggested the search for an oxide-based material that, combined with a specialised mechanical process, can ensure both a high quality of the paper and a long blade life. The result is called Mizar, a blade with the tip coated with **ceramic** material. The low thermal conductivity of the oxides used

in the Mizar blade helps out in the applications with an initial dry-touch in preserving the ceramic features for the blade's entire life.





- High profile stability over time
- Fewer streaks due to very low friction coefficient
- Long blade life

ADVANTAGES

- High resistance to thermal shocks
- Maximum machine efficiency
- Outstanding paper quality

# Coated area

HARDNESS

HV20 1050 +/- 50

• square carton boxes on pallet





STANDARD THICKNESSES AND CORRESPONDING TOLERANCES					
mm	inch				
0,305 mm +/-0,010	.012" +/00039"				
0,381 mm +/-0,010	.015" +/00039"				
0,457 mm +/-0,010	.018" +/00039"				
0,508 mm +/-0,010	.020" +/00039"				
0,635 mm +/- 0,020	.025" +/00078"				

#### **STANDARD WIDTHS AND CORRESPONDING TOLERANCES**

mm	inch				
76,2 mm +/- 0,15	3" +/0059"				
84,0 mm +/-0,15	3.307" +/0059"				
86,0 mm +/-0,15	3.385" +/0059"				
88,9 mm +/-0,15	3.5" +/0059"	•			
100,0 mm +/-0,15	3.937" +/0059"				

Other dimensions and combinations upon request

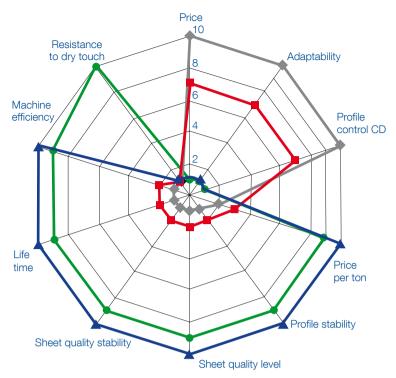
### **Straightness:**

Maximum camber on a length of 3000 mm (118") should not exceed 0,3 mm (.012"), distributed uniformly along the entire length.

## **Geometries:**

Stiff blade Bent blade Double bevel Hi-Tech

# **COATER BLADES' COMPARISON CHART**



	Carbon Steel	Hardlam	Mizar	Supernova
Price	10	7	1	1
Adaptability	10	7	1	1
Profile control CD	10	7	1	1
Price per ton	2	3	9	10
Profile stability	1	2	9	10
Sheet quality level	1	2	9	10
Sheet quality stability	1	2	9	10
Lifetime	1	2	9	10
Machine efficiency	1	2	9	10
Resistance to dry touch	1	1	10	1

10 Best mark

# **Packaging:**

Hardlam

Single boxes in palbox	
Square carton boxes on pallet	
Single boxes on pallet	
Legenda	





Established in 1923 Bonetti has been successfully supplying the pulp and paper industry since more than 50 years. The renown reliability and quality of coater blades gave rise to the first requests for doctor and creping steel blades in the late 1960's. Synthetic-material doctor blades became available in the 1980's. Challenged by ever-changing doctoring technology, Bonetti has then successfully developed "hi-tech" materials to meet specific Customer needs. In the mid-1990's Doctoring and Creping Systems were a natural addition to the Bonetti Product lines. High-quality Doctor Holders, Systems and Spare Parts, with innovative design



features have since been manufactured and installed throughout the world. To meet worldwide product demands, four (4) new manufacturing facilities were inaugurated in the 1990's and 2000. Sturtevant, WI USA; Hagen, Germany; Cantalupo, Italy; Trois-Rivieres, QC Canada; now complement world headquarters in Lainate, near Milan in Italy. Bonetti's success has always been based on a timely response to the needs and demands of the markets it serves. For more than 50 years, and now in the third generation of family ownership, Bonetti has been and will continue to be a global partner of paper mills and paper-machine manufacturers worldwide.

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