

The Momentum.

The Unmatched.



Rule Die Steel

**böhlerstrip®**



# Rule Die Steel

What makes our rule die steel so unique?

It is in shape for a fast and changing world.

## Leading the Industry

Bohlerstrip is the premium rule die steel manufacturer and the specialist which does not accept any compromise in quality.

Our metallurgical know-how combined with highest standards in cold rolling, profiling and edge machining guarantee best cutting results for all kind of applications.

In our industry we offer the widest range of products. These are available world-wide through our own subsidiaries and a professional distribution network in over 60 countries.

We are partner of the industry and develop optimized solutions with enhanced properties for our customers.

### Product Features:

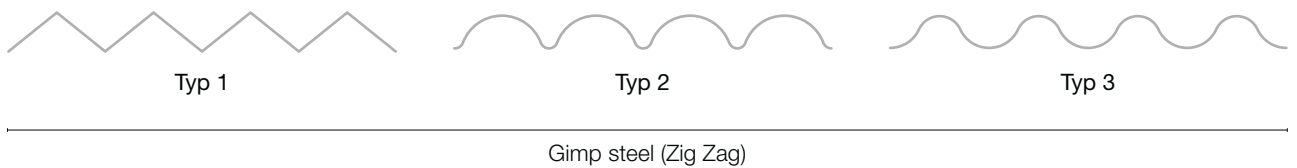
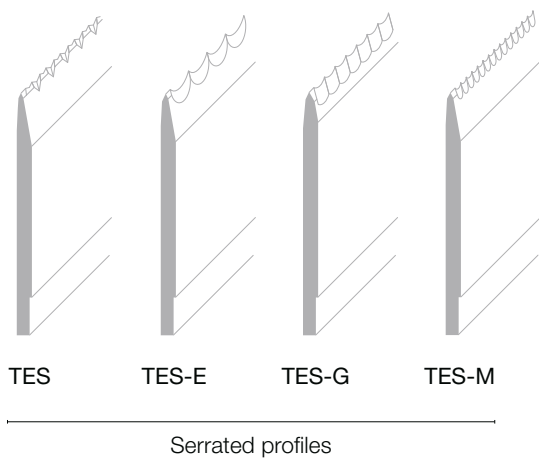
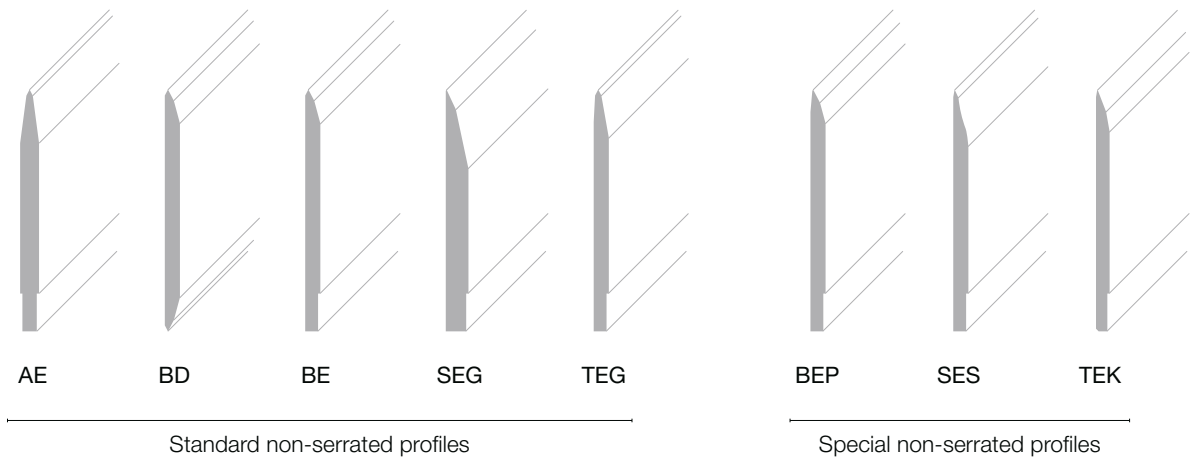
- Best bendability
- High rule die lifetime
- Best dimensional tolerances
- Uniform and stable top quality



# Bohlerstrip Rule Die Steel

Meeting the requirements of each cutting job in the perfect way, Bohlerstrip offers the widest range of profiles in the rule die steel industry:

Standard non-serrated profiles, Special non-serrated profiles, Serrated profiles and Gimp steel.



## Steel Grades – Hardness

Not only profile design but also hardness matters.  
In order to achieve best results for a wide range of applications  
we offer the following steel grades:

### Standard hardness grades

#### HF Orange


High-frequency (HF) edge hardened top-quality steel, optimised for best bendability, best durability and outstanding cutting performance.

Thickness	≤2.0mm	2.5mm	2.8mm	3.0mm	>3.0mm
<b>Hardness</b>					
Body	36–40 HRC	35–39 HRC	35–39 HRC	34–38 HRC	30–35 HRC
Edge	~ 510 HV (50 HRC)				
Bendability	$\alpha = 60^\circ$	$\alpha = 80^\circ$	$\alpha = 85^\circ$	$\alpha = 90^\circ$	$\alpha = 90^\circ$
Packaging	orange 				

### Special hardness grades


#### Yellow

Increased body hardness for higher stability in die cutting — no HF hardened cutting edge.

Thickness	≤2.0mm	2.5mm	2.8mm	3.0mm	>3.0mm
<b>Hardness</b>					
Body	40–44 HRC	39–44 HRC	-	-	-
Edge	40–44 HRC	39–44 HRC	-	-	-
Bendability	$\alpha = 90^\circ$	$\alpha = 90^\circ$	-	-	-
Packaging	yellow 				

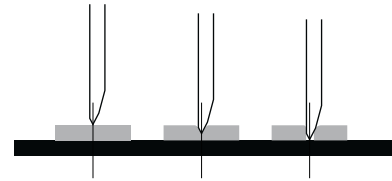
#### HF Yellow

Higher body hardness combined with HF hardened cutting edge for heavy duty applications.

Thickness	≤2.0mm	2.5mm	2.8mm	3.0mm	>3.0mm
<b>Hardness</b>					
Body	40–44 HRC	39–44 HRC	-	-	-
Edge	~ 510 HV (50 HRC)		-	-	-
Bendability	$\alpha = 90^\circ$	$\alpha = 90^\circ$	-	-	-
Packaging	yellow 				



# Single-layer Cutting



## Non-serrated profiles, for leather cutting

### AE

Symmetric profile for slitting knives



Dimensions [mm]	Application
19 x 2.0 / 2.5	Shoes
32 x 2.0 / 2.5	

### BD

Double-edge profile for single-layer leather cutting



Dimensions [mm]	Application
19 x 2.0 / 2.5	Shoes, gloves
32 x 2.0 / 2.5	

### BE

Basic-type profile for single-layer leather cutting



Dimensions [mm]	Application
19 x 2.0 / 2.5	Shoes, gloves, bags
32 x 2.0 / 2.5 / 2.8	
50 x 2.8	

### BEP

Polished inside bevel for extra clean cutting results

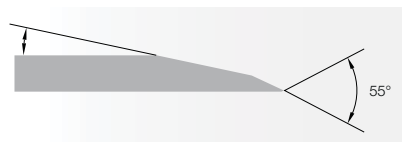


Dimensions [mm]	Application
19 x 2.0	Shoes
32 x 2.0	

## Non-serrated profiles, for cutting hard and rigid materials

### SEG

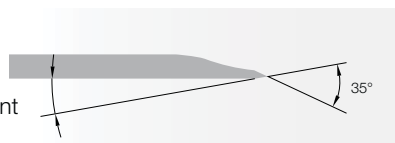
Profile for cutting hard and rigid materials, extra short inside bevel



Dimensions [mm]	Application
19 x 2.0 / 2.5	Outsoles, gaskets
32 x 2.0 / 2.5	

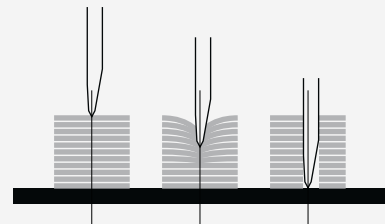
### SES

Extra sharp cutting edge angle which minimizes material displacement



Dimensions [mm]	Application
32 x 2.0 / 2.5	Rubber, plywood, insole material

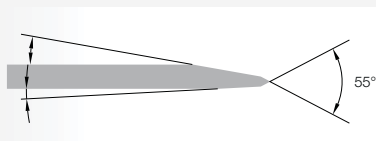
# Multi-layer Cutting



## Non-serrated profiles, for textile cutting

### TEG

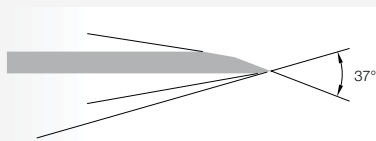
Very popular profile with standard bevel angle and long secondary inside bevel which guarantees best dimensional tolerances of material cut in multi-layers



Dimensions [mm]	Application
19 x 2.0	Synthetic, TPU
32 x 2.0 / 2.5	
50 x 2.5 / 2.8	

### TEK

Sharp cutting edge angle, optimized to cut thin and rigid material

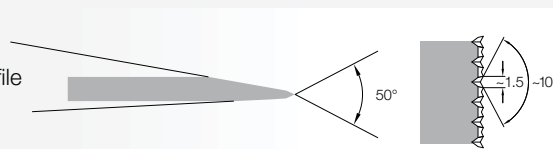


Dimensions [mm]	Application
32 x 1.8	Synthetic, TPU

## Serrated profiles, for cutting engineered and high performance materials

### TES

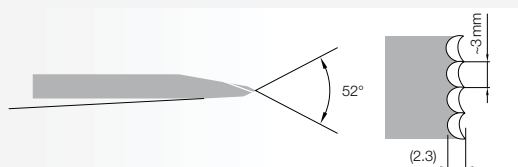
Basic serrated profile



Dimensions [mm]	Application
19 x 2.0	Elastic materials
32 x 2.0	

### TES-E

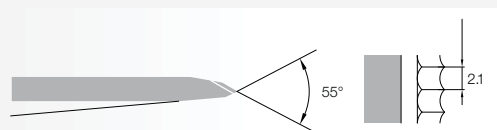
Economic version of serrated RDS



Dimensions [mm]	Application
19 x 2.0	Elastic materials, mesh,
32 x 2.0 / 2.5	engineered mesh

### TES-G

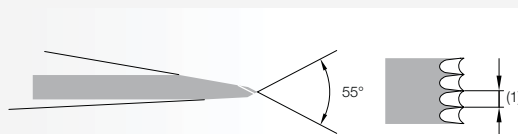
Fine serrated cutting edge RDS



Dimensions [mm]	Application
19 x 2.0 / 2.5	Mesh, engineered mesh,
32 x 2.0 / 2.5	Goretex

### TES-M

Super fine serrated cutting edge RDS



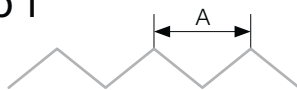
Dimensions [mm]	Application
32 x 2.0	Thin fibre materials, mesh,
50 x 2.8	engineered mesh

# Gimp Steel (Zig Zag)

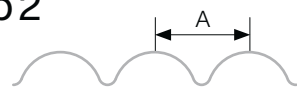
For decoration purposes in the fashion shoe industry.

E – Single-edge  
D – Double-edge

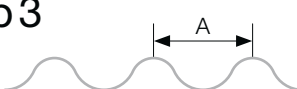
Typ 1



Typ 2



Typ 3



Dimensions [mm] E/D: 19x2.0, 32x2.0					
1/3	1/4	1/5	1/6	1/8	1/10
A=3mm	A=4mm	A=5mm	A=6mm	A=8mm	A=10mm
2/3	2/4	2/5	2/6	2/8	2/10
A=3mm	A=4mm	A=5mm	A=6mm	A=8mm	A=10mm
3/3	3/4	3/5	3/6	3/8	3/10
A=3mm	A=4mm	A=5mm	A=6mm	A=8mm	A=10mm

## Forms of Delivery

### Packaging:

All coils are secured with a steel strap for safety-reasons (outside-diameter 560mm or 700mm). Additionally the coils are double-wrapped in in anti-corrosion paper and packed in single carton boxes.

For transport each coil is packed in sliding boxes made of corrugated cardboard. Additional packing in wodden cases ensure safe overseas shipment.

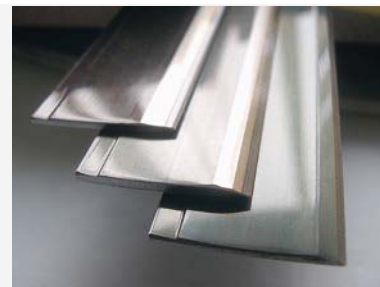


Coil lengths	at steel heights of [mm]	
	19–36	37–52
Thickness [mm]		
1.8	~ 75m	~ 70m
2.0	~ 75m	~ 65m
2.5	~ 60m	~ 50m
2.8	~ 55m	~ 45m
3.0	~ 50m	~ 40m
3.5	~ 45m	~ 35m
4.0	~ 40m	~ 30m



# Matrix

## Böhlerstrip Rule Die Steel



Profiles		Single-layer cutting						Multi-layer cutting					Gimp Steel			
		AE	BD	BE	BEP	SEG	SES	TEG	TEK	TES	TES-E	TES-G	TES-M	TYP1	TYP2	TYP3
Edge	Single	•		•	•	•	•	•	•	•	•	•	•	•	•	•
	Double		•											•	•	•

Applications		Single-layer cutting						Multi-layer cutting					Gimp Steel			
Leather shoes		•	•	•	•									•	•	•
Leather gloves			•	•												
Leather bags				•												
Outsoles						•										
Gaskets						•										
Rubber, plywood, insole material							•									
Synthetic, TPU								•	•							
Elastic materials										•	•					
Mesh, engineered mesh												•	•			
Goretex												•				
Thin fibre materials													•			

Dimension [mm]	Heights	Thickness	Single-layer cutting						Multi-layer cutting					Gimp Steel			
	19	2.0	•	•	•	•	•		•		•	•	•		•	•	•
		2.5	•	•	•		•						•				
	32	1.8								•							
		2.0	•	•	•	•	•	•			•	•	•	•	•	•	•
		2.5	•	•	•		•	•	•				•	•			
		2.8			•												
	50	2.5							•								
		2.8			•				•					•			
Profiles			AE	BD	BE	BEP	SEG	SES	TEG	TEK	TES	TES-E	TES-G	TES-M	TYP1	TYP2	TYP3

# Quality Assurance

There are many ways to define quality but only one standard that really matters: Your satisfaction!

## Our Target – Competence in Quality

With almost 150 years of experience in converting steel into components for high-grade final products we honor the concept of partnership.

For us the first step towards an optimum solution is to understand our customers' demands.

Quality is an essential part of our corporate culture, and this is reflected in all areas of our business activities.

Close relationship with customers, reliability and quick decision-making are essential elements of our organisation.

Many of our innovations and solutions are permanently enhanced for customers benefit.

voestalpine Precision Strip has the most up-to-date laboratory equipment and testing knowledge. We are certified according to the highest industrial standards, EN ISO 9001 and EN ISO 14001 (environmental approval).



# Bohlerstrip Facts

Words are nice. Facts are better.

## The Company

Experience in steel manufacturing – from iron ore to serrated rule die steel – the entire production chain is within our group.

Continuous innovation and investment to be one step ahead – we are world market leader in high quality rule die steel.

Product developments and new solutions for market demands – our in-house R&D center with profound knowledge in steel processing and application guarantees our success.

Customer care and direct contact with the factory – our global distribution network and experienced outside sales staff take care of your specific needs.

Strip Steel Technology since 1872.

voestalpine Precision Strip GmbH  
Böhlerwerk, Austria, Europe

Production locations in Austria and Sweden.

Production in Europe's most modern cold rolling mill  
in Kematen an der Ybbs, Austria, since 2011.

Stockholding subsidiaries offices in Austria, Sweden,  
China, United States, Spain and Mexico.

Worldwide more than 1,000 employees.

Core business:

Bimetal strip for the metal saw industry  
Special precision strip for different applications  
e.g. for knives, springs, special saws, electronic parts,  
razor blades, scalpels and flapper valves  
Steel rules for the packaging industry  
Rule die steel for the leather and textile industry  
Wood band saw and circular saw steel  
Stone saw steel for marble cutting  
Coating and crêping blades for the pulp and paper industry



Since 2007 member of the voestalpine AG, Austria.

Since 2012 member of the voestalpine Metal Forming Division, Krems

2015 renaming from Böhler-Uddeholm Precision Strip GmbH to voestalpine Precision Strip GmbH



**voestalpine  
Precision Strip GmbH**

Waidhofner Strasse 3  
3333 Boehlerwerk  
Austria

Tel. +43/7442/600-0  
bohlerstrip@voestalpine.com  
www.bohlerstrip.com