



JMB

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Over 40 years of knifemaking craftsmanship

Supreme quality confirmed by research

Continuous pursuit of excellence by the selection of only the best materials, technology development, and products improvement

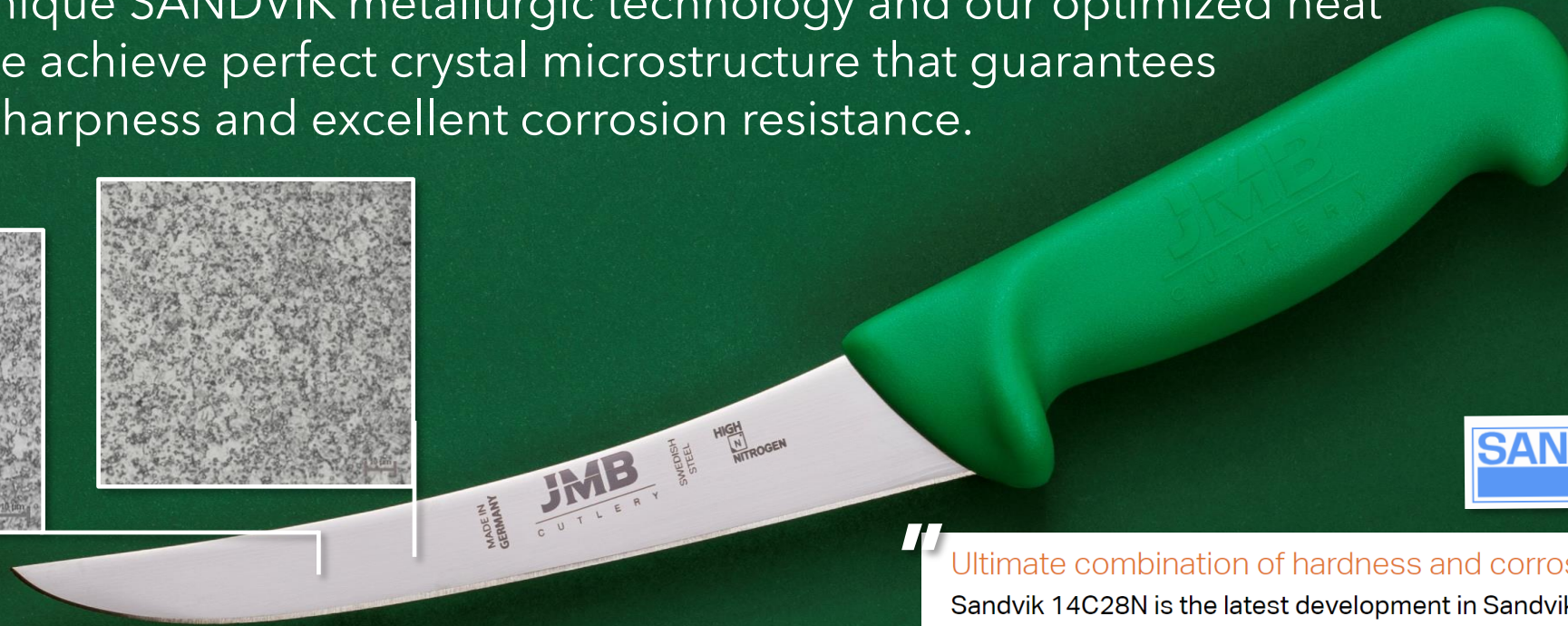
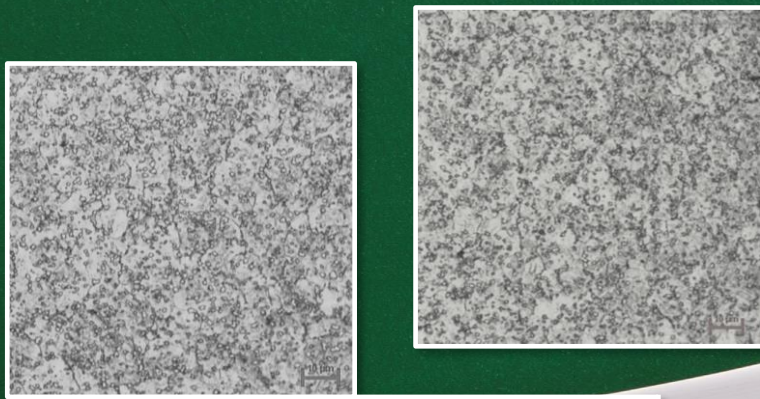
Own world-leading R&D center



It all starts with the best material...

Steel is the foundation for all crucial features of a blade. In JMB Cutlery we use the top grade of SANDVIK Swedish knife steels **14C28N** that contains a high amount of nitrogen to provide excellent edge performance.

Thanks to unique SANDVIK metallurgic technology and our optimized heat treatment we achieve perfect crystal microstructure that guarantees persistent sharpness and excellent corrosion resistance.



SANDVIK says:

Ultimate combination of hardness and corrosion resistance
Sandvik 14C28N is the latest development in Sandvik's range of knife steels. Optimized chemistry provides a top grade knife steel with a unique combination of excellent edge performance, high hardness and good corrosion resistance.

We test knives to the max!

JMB Cutlery's mission is to constantly improve our knives. We investigate materials, optimize processes, and examine every aspect of our final products.

In our world-leading laboratory, we designed and created the most sophisticated testing rigs to assess sharpness, cutting ability, edge retention, and simulate the full life-cycle of a knife.

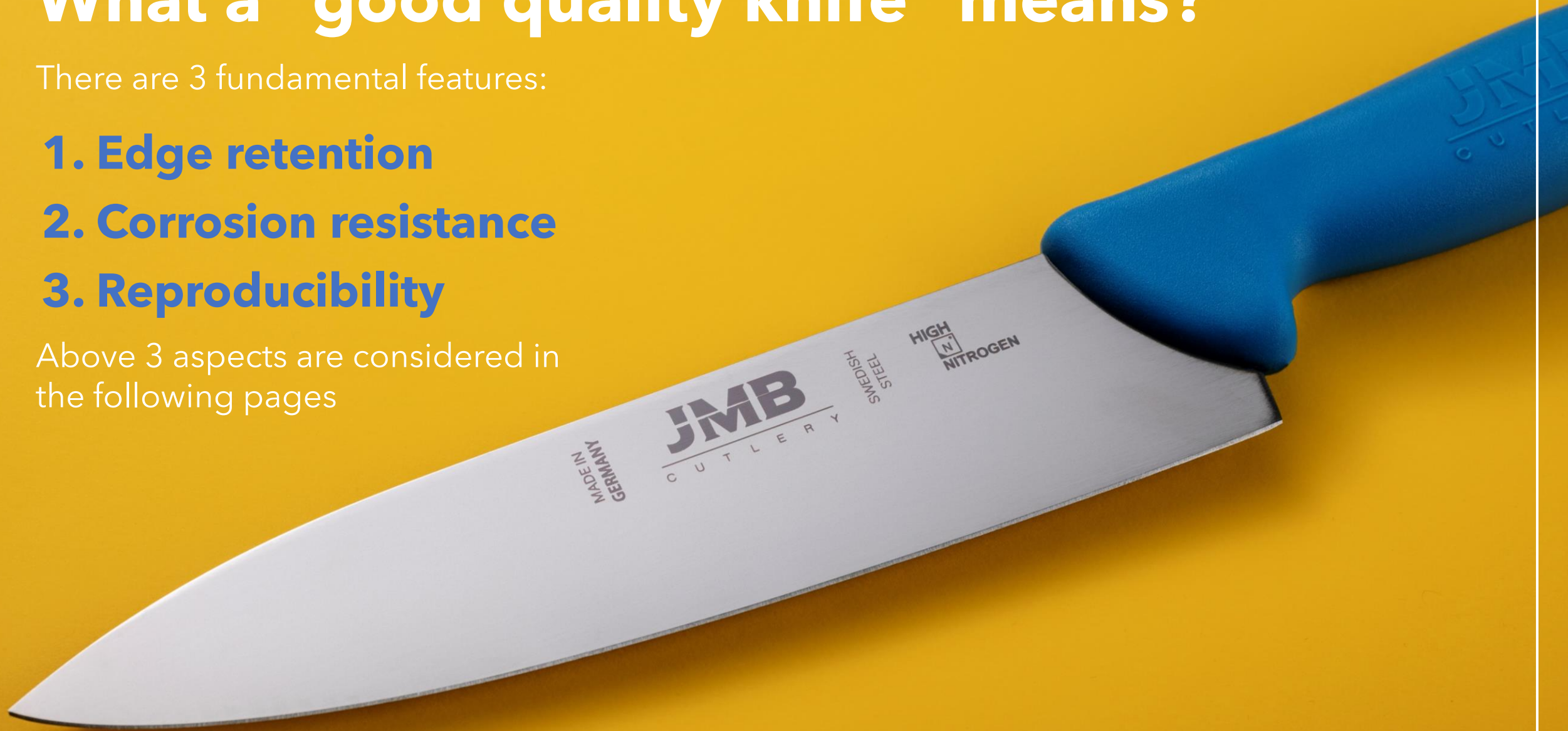


What a "good quality knife" means?

There are 3 fundamental features:

- 1. Edge retention**
- 2. Corrosion resistance**
- 3. Reproducibility**

Above 3 aspects are considered in the following pages



1. Edge retention

Edge retention describes how cutting abilities change in time. It is the most important aspect of every knife. JMB Cutlery designed and created the most sophisticated testing rig to assess edge retention and sharpness called Sharpness Analysis Center (SAC).

SAC is a 5 axis CNC machine that can replicate the motions of a human arm. It cuts special test media multiple times and measures generated forces and torques. High-precision sensors enable monitoring of the cutting process with unmatched accuracy. Collected data are utilized to determine objective measures of sharpness - Initial Sharpness Score (ISS), and persistence of cutting edge - Sharpness Persistence Score (SPS). SAC reproduces real working conditions and reveals the actual quality of professional knives.

It gives us unique scientific knowledge and helps to make JMB knives even superior. With SAC we can also provide unparalleled support for our clients who need personalized products or look for specific features of professional knives and cutting tools.

Take a look at SAC in action!



Click on the picture or use the link below:
<https://www.youtube.com/watch?v=-9oCxLLxUak>

1. Edge retention - SAC test results



1. Edge retention - SAC test results

No.	Knife producer	Sharpness Persistence Score (SPS) range: 0-100 the bigger the better	Initial Sharpness Score (ISS) range: 0-100 the bigger the better
1	JMB Cutlery	61,27 (61,39; 59,25; 63,17; ...)	68,96 (68,73; 67,15; 70,99; ...)
2	Swiss	55,09 (55,29; 54,69; 55,29; ...)	64,37 (64,94; 63,83; 64,34; ...)
3	Swedish	50,03 (50,33; 49,73; 50,05; ...)	60,57 (61,49; 59,71; 60,48; ...)
4	German 2	45,07 (44,41; 45,88; 44,91; ...)	66,16 (66,76; 65,78; 65,93; ...)
5	German 1	38,92 (38,81; 39,62; 38,34; ...)	64,59 (66,37; 62,29; 65,13; ...)

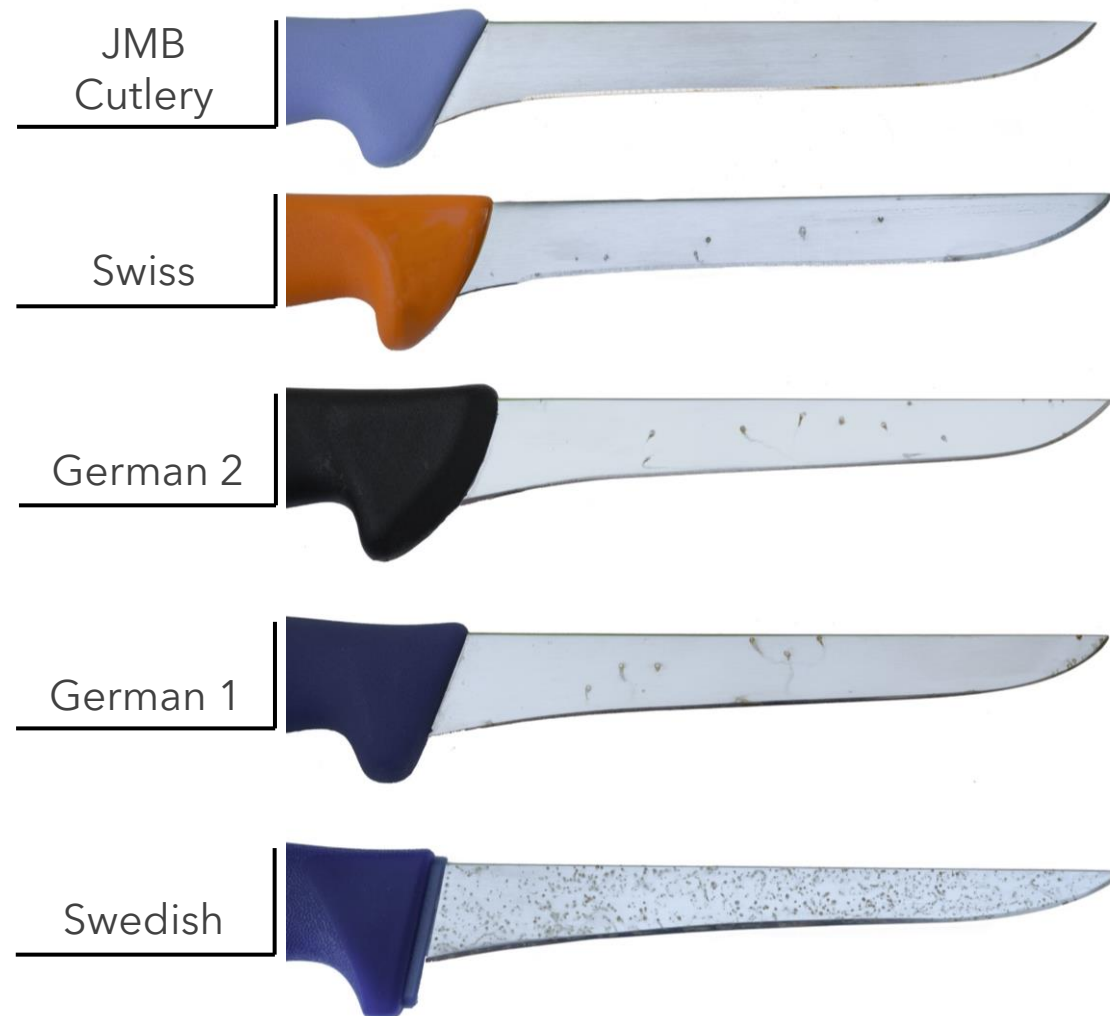
2. Corrosion resistance

Corrosion resistance is one of the crucial aspects of food safety. The corroded blade cannot be used anymore, but even barely visible microscale corrosion can annihilate blade properties.

Independent trials according to DIN EN ISO 9227 NSS proves that our blades guarantee the best corrosion resistance in the market and withstand without any corrosion even in difficult, acidic conditions.

No.	Knife producer	Time to first visible corrosion in DIN EN ISO 9227 NSS 1% trial
1	JMB Cutlery	7 hours
2	Swiss	2 hours
3	German 2	2 hours
4	German 1	1,5 hours
5	Swedish	0,5 hour

Knives after 24h in Ascott chamber (1% NSS):



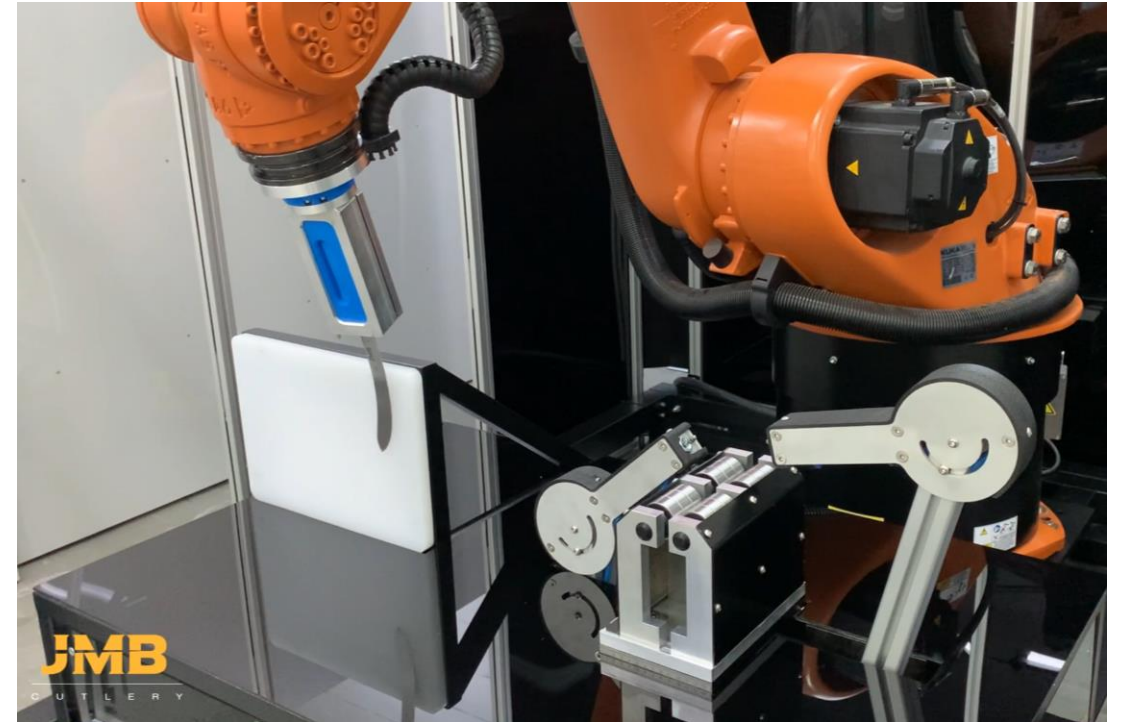
3. Reproducibility

At JMB Cutlery we know that only consistent quality is the true quality. We test our knives to the max to be sure that every time you buy our product you will get the same best experience.

We look into and measure every detail that influences the persistence and ergonomics of JMB knives. Our R&D department designed and build the most advanced Robotic Knife Tester (RKT) to ensure the highest quality of every JMB knife. It enables the assessment of aspects such as elasticity, strength, tribological properties, impact strength and crack resistance.

Our quality department takes care to ensure that every single product with the JMB logo is the perfect choice for professional and everyday use.

Take a look at RKT in action!



Click on the picture or use the link below:
<https://www.youtube.com/watch?v=jrudnu6wOp0>

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