
skyward
cutting wheels

METALLOGRAPHIC CUTTING WHEELS

The cutting off is the most important and delicate preliminary stage of the metallographic sample.
The use of an unfit wheel might irreparably prejudice the final results of the analysis because an overheated surface irretrievably changes the main features of its structure.
Getting an optimal finish at the end of the cutting action, is also essential to reduce the polishing time of the sample or the possible coupling with other surfaces (in case of bar or linear slide cutting).

In cooperation with some Italian companies in this field, we have developed a whole range of metallographic cutting wheels realized using first quality raw materials providing very high performances.

The constant introduction in the market of new and efficient alloys, has persuaded us to develop a product to be up to the market's demands. This philosophy, along with a consolidated production method and a wide experience in the abrasive field, has made possible the makeready of a metallographic wheel with very high endurance and yield.

Distinguishing elements of SKYWARD cutting wheels, are the reproducibility and the immutability of the cutting features. These conditions are granted by the strict controls on each wheel throughout the production chain.

Thanks to its versatility, our company can offer the most suitable cutting solutions also customized in accordance with the different trade sectors: steelworks, forges, thermal treatments, bar and linear slides productors, productors of vanes for turbines and so on.

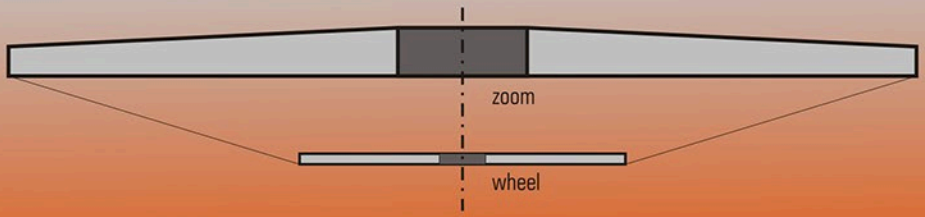
SELF-COOLING CUTTING SYSTEM

A new kind of mixture, enriched with some components having the hallmark of heat absorption, gives to the wheel an undeniable property of self-cooling. This way it can keep much more heat during the cutting without giving it to the sample whose surface layer is unchanged.

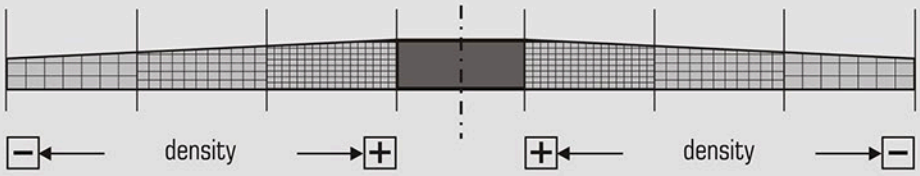
micrographic structure view

ERGONOMIC CUTTING SYSTEM

The revolutionary distribution method of the abrasive grain inside the wheel, according to the latest studies on the structure of the same, keep the cutting quality unchanged .
This method prevents the excessive overheating of the sample surface in spite of the decrease of the peripheral speed during the cutting stage.

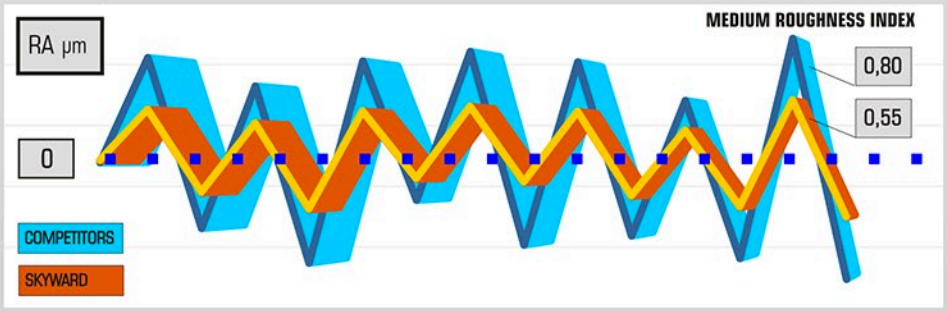


DISTRIBUTION OF THE ABRASIVE GRAIN ON THE WHEEL



SURFACE ROUGHNESS TEST

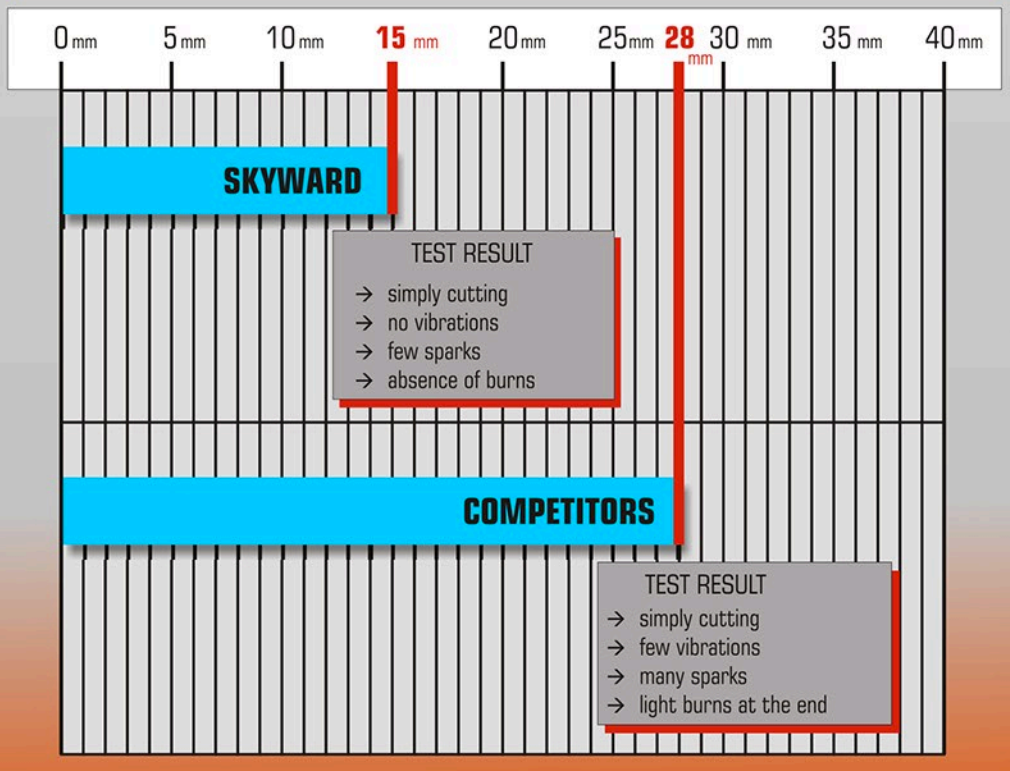
data in µm



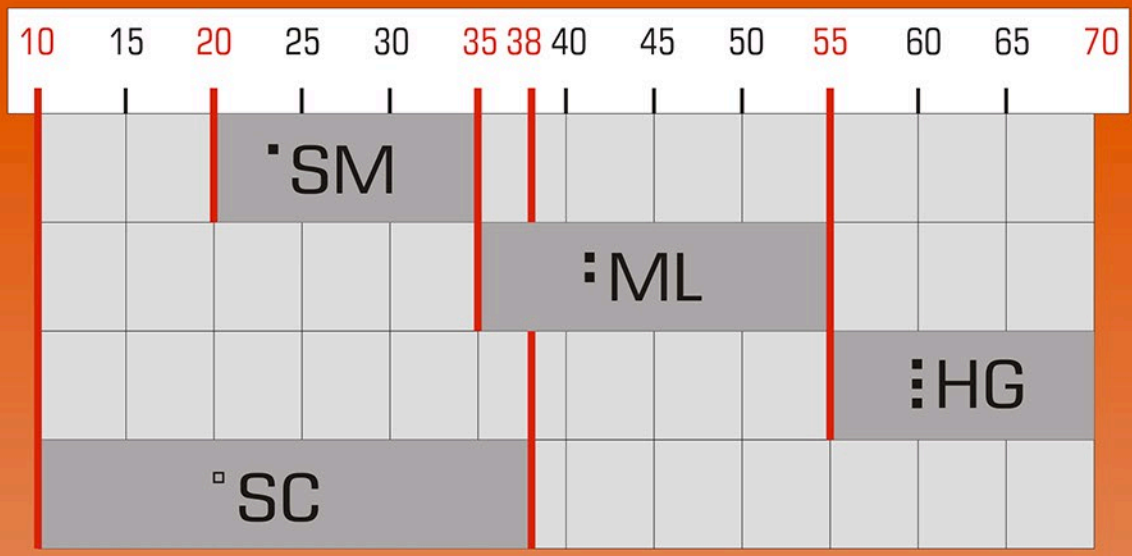
COMPARATIVE TEST OF WARE RESISTANCE

tested sample:a bar in carbon steel ∅ 50 mm HRC 62

WARE in mm - 30 seconds test.



HRC Hardeness Rockwell "C" scale



SM	SOFT AND MEDIUM SOFT FERROUS METALS
ML	MEDIUM HARD FERROUS METALS
HG	HARD AND VERY HARD FERROUS METALS
SC	NOT FERROUS AND DUCTILE METALS (cast iron, titanum, alloys)

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