

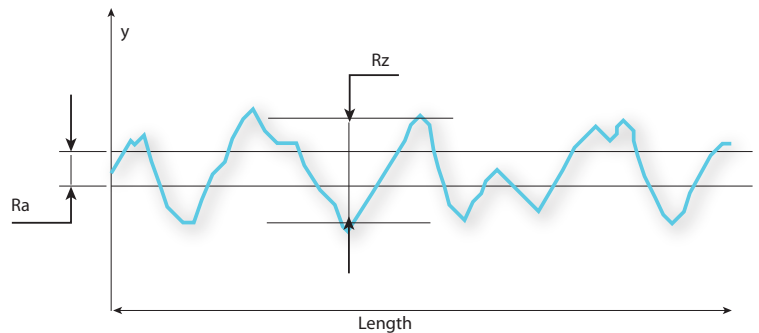
# TERMINOLOGY OF THE SURFACE CHARACTERISTICS OF COVERED ROLLS

All elements referenced in this document refer to the international standard ISO 6123/2-1982 in which the requirements for surface roughness of coated rolls is defined.

## MEASURING THE SURFACE ROUGHNESS

The finishing of rubber covered rolls is quantitatively expressed in one of the following units:

- Ra: Arithmetical average deviation from the profile, in micrometer ( $\mu\text{m}$ )
- Rz: Average height of the roughness depths at 5 points, in micrometer ( $\mu\text{m}$ )



## POSSIBLE FINISHING

### 1. Polishing

With flexible elastomers, the surface is rather velvety, with harder elastomers it rather smooth. Traces of grinding and sanding can not be detectable for the naked eye. Insulated grinding deviations are allowed.

Attention : not all elastomers can be polished.

### 2. Regrinding

With the naked eye light traces of grinding and progress are visible; these are however imperceptible when touching the cylinder.

### 3. Standard grinding

Very light traces of grinding and progress are visible but hardly detectable when touching the cylinder.

### 4. Rotation

The surface is completely rotated with a minimal progress per rotation. The turning grooves are visible and noticeable when touching the cylinder.

### 5. Unworked

Surface structure of the coating does not undergo any treatment and preserves the aspect that is obtained after the vulcanization or after curing. A printout of the used textile bands (rubber) or casting spores (polyurethane) may remain visible.

### 6. Special finishing

This type of finishing refers to any form of surface treatment that is different from the above-described types and/or the standards listed below.

## THE RELATION BETWEEN HARDNESS AND SURFACE ROUGHNESS

It should be noted that the same treatment can give different values of surface roughness.

This is the case for coverings that not only have a different hardness, but in addition also consist of various compounds.

### MORE INFORMATION?

For more information, please contact your local Hannecard partner or visit our website at : [www.hannecard.com](http://www.hannecard.com)

Hardness of the covering								
Shore A	< 50	50 to 70	71 to 99	≈ 100				
Pusey & Jones	> 120	120 to 70	69 to 10	9 tot 10				
Type surface operation	Normalized value of roughness ( $\mu\text{m}$ )							
	Ra	Rz	Ra	Rz	Ra	Rz	Ra	Rz
Polishing	5	31,5	3,15	20	1,6	10	1	6,3
Precision grinding	6,3	40	4	25	2,5	16	1,6	10
Standard grinding	10	63	6,3	40	4	25	2,5	16
Rotating	* Not available *							
Unworked	* Not available *							