Determination of mean peak-to-valley height $R_z$ for specified mean roughness index $Ra$ and of mean roughness index $Ra$ for specified mean peak-to-valley height $R_z$ with due allowance for scatter area and adequate safety margin.

Should the upper boundary line of the scatter area be chosen to determine the upper $R_z$ value limit for specified $Ra$ value, it can be assumed that the specified $Ra$ value is not exceeded. The same applies to the specified $R_z$ value when the bottom line is used to determine the $Ra$ boundary value.

If values converted in the diagram are entered in drawings, the next lower preferred value to DIN 4763 should be chosen.

Conversion of the maximum peak-to-valley height $R_{max}$ into $Ra$, and vice versa is not meaningful as both surface roughness values have totally different import. $R_{max}$ is used only when the highest single values is to be recorded.

1)2) Footnotes see page 3