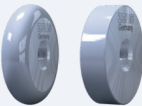
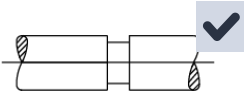
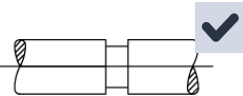
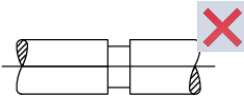




BURNISHING TECHNOLOGIES IN COMPARISON

	Roller burnishing with a fixed roll	Roller burnishing with spring stroke	Diamond burnishing with spring stroke
Rolls / Diamond burnishing tips	 Radii 2,0 / 6,0	 Radii 0,4 / 0,6 / 1,0	 Radii 0,2 / 0,4 / 0,6 / 0,8 / 1,0 / 2,0
Plunge cut		 *depending on the diameter difference	
Achievable Rz-values Depending on the material	Rz 2 µm	Rz 1,6 - 2 µm	Rz < 1 µm
Tensile strength	800 – 1000 N/mm²	1300 – 1500 N/mm²	up to approx. 64 HRC * * Depending on the hardness or tensile strength, it may be necessary to modify the spring assembly
Component geometries	• Cylindrical outer surfaces • Bores • Flat surfaces Other geometries are possible with customised burnishing rolls	• Cylindrical outer surfaces • Flat surfaces • Chamfers • Concave & convex outer contours • Transitions / corner radii • Positive & negative cone tapers	• Cylindrical outer surfaces • Flat surfaces • Chamfers • Concave & convex outer contours • Transitions / corner radii • Positive & negative cone tapers
Possible workpiece diameter	Up to 150 mm	Up to 60 mm	Up to 200 mm
Force and compensation principle	The burnishing roll always contacts the same point. With a cylindrical burnishing roll, the contact extends along the entire roller cylinder. With convex burnishing rolls, the contact is located at the center of the burnishing rolls width.	Multiple contact points are enabled through adjustments at the head and modifications of the swivel head. • Consistent burnishing / pressing force • Compensation for manufacturing tolerances	High diamond tip durability due to 8 possible position changes • Consistent burnishing / pressing force • Compensation for manufacturing tolerances



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For more information, please visit our website or contact us by email at:
sales@hommel-keller.de

