



STELLA GRUPPE

German Precision Grinding Wheels

HONING - SUPERFINISHING

Long-stroke honing

Superfinishing of spherical and flat surfaces

Short-stroke honing with attachment

Throughfeed and plunge finishing





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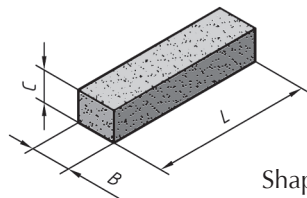
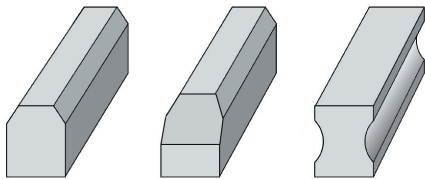
HONING - SUPERFINISHING

For the manufacturing of finest surfaces for highest precision STELLA KERAMIK produces honing and superfinishing tools that can be customized in shape, dimension and specification exactly to your individual requirements.

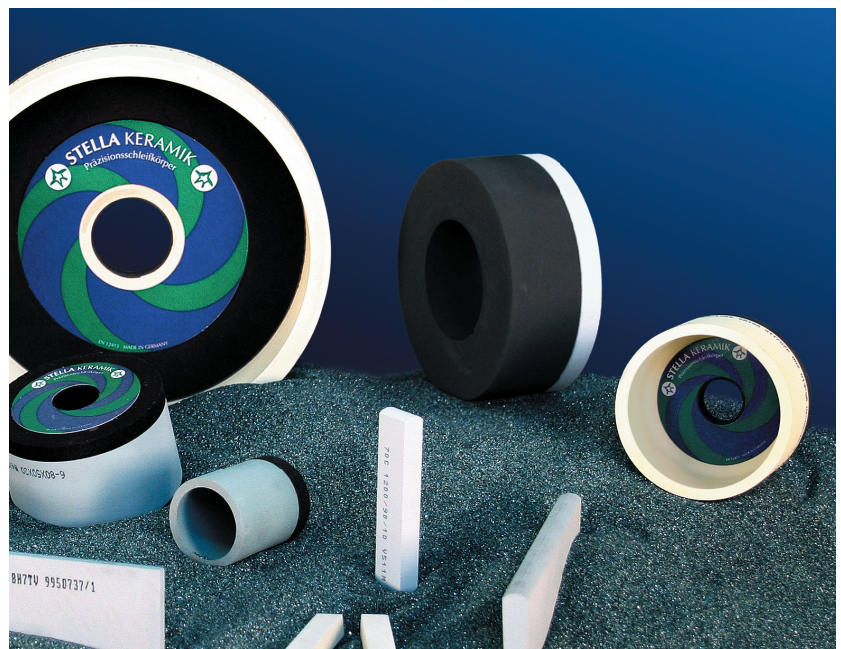
Best work results regarding surface finish, material removal and lifetime can be achieved with STELLA honing and superfinishing tools by using optimal grain mixtures, especially produced bonding systems and well-directed impregnations.

Long-stroke honing

current shapes



Shape 5410



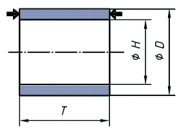
Machines of (e.g.):

Gehring, Nagel, Pleiger, Sunnen, Kadia

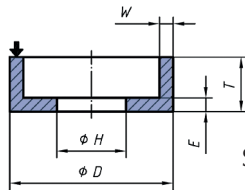
Field of application	Specification of honing stones		
Examples	Pre-honing	Finish honing	Micro honing
Steel, unhardened Internal honing of bores	20A 100 H15P0/1 V2S 20A 180 F8P1 V1S	20A 400/60 V511MS	20A 6000 G B
Steel, stainless and acid-proof Internal honing of pipes	23A 120/2 i15P0 V6S	61C 400 M8 V51S	
Steel, nitrided External honing of worm screws	70C 240 L8 V51S	80C 400/55 V51MS	
Steel, nitrided Internal honing of extruder barrels	90/253A 100/1 M12P0/1 V8S 90/253A 120 Jot12P0/1 V8S	80C 400/55 V51MS 902A 400/70 V8AZ	
Steel, hard-chromium plated Internal honing of bores	20A 120 i12P1 V55S	20A 400/110/8 V511MS	
Iron casting materials (GG) Internal honing of cylinder liners	60C 80 i8 V51S 61C 80 i12P02 V30S	70C 400/30 V51M	

Superfinishing of spherical and flat surfaces

current shapes



Shape 5420



Shape 6

Machines of (e.g.):
Nagel, Supfina, Thielenhaus

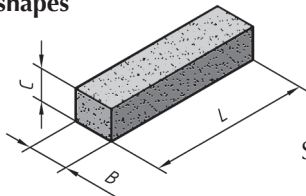
Field of application

Specification of honing tools

Examples	Pre-honing	Finish honing	Micro honing
Steel, high-alloy hardened Surface finishing of nozzle bodies	20A 320/115 V70/14S 20A 400/75 V71/10S 902A 320/90 V8AS 6A2B126V180	60C 600/130 V51MS 80C 600/180 V70/19Z 60C 800/130 V70/16Z 60C 800/160 V51MZ	
Steel, hardened Finishing of planetary gear wheels		902A 320/70 V8AS	
Steel, hardened Finishing of spherical joints		20A 600 MVGS	
Steel, stainless and acid-proof Finishing of balls	60C 320/55 V51MS	60C 600/55 V51MS	
Ceramic-plastic joint Finishing of implants	70C 150/2 Jot7 V51S 60C 320/60 V51MS	60C 400/60 V51MS 60C 600/60 V51MS	60C 1200/60 V51MS

Short-stroke honing with attachment

current shapes



Shape 5410

Machines of (e.g.):
Nagel, Supfina, Thielenhaus

Field of application

Specification of honing stones

Examples	Pre-honing	Finish honing	Micro honing
Steel, quenched and tempered Finishing of hydraulic pistons		20A 600/130/8 V511MS	
Steel, hardened Finishing of strip rollings	60C 400/120 V51MS 60C 400/60/8 V51M	60C 600/55 V51M	
Steel, hardened Finishing of drill spindles	20A 500/115 V51MS	20A 1200/130 V51MS	20A 8000 G B
Steel, hardened Finishing of gear shafts		70C 1000/45 V51M 70C 800/110/18 V511M	
Steel, hardened Finishing of piston rods		20A 800/80/5 V511MS	
Steel, hardened Finishing of the main drive shaft		20A 1000/130 V511MS	
Steel, hardened Finishing of bearing seats		70C 800/24/65/14P0 V70/8,5S 70C 1200/20/10 V70/7	
Steel, nitrided Finishing of piston rods	20A 600/150/8 V511MS	20A 1000/115/8 V511MS	

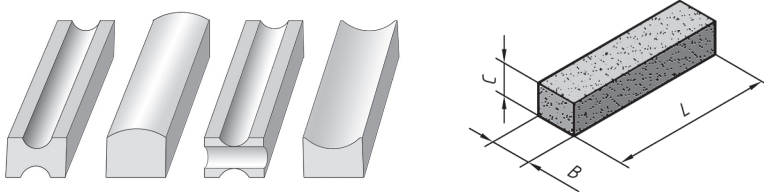


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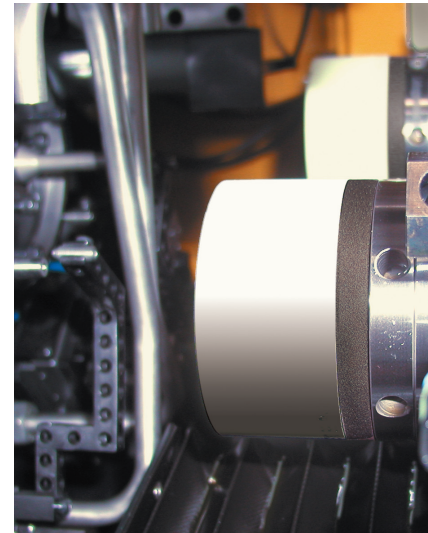
Throughfeed and plunge finishing

current shapes



Machines of (e.g.):
Nagel, Supfina, Thielenhaus, WMW

Shape 5410



Field of application

Specification of honing stones

Examples Throughfeed finishing	Stone sequence →				
Steel, hardened	20A 600/150/8 V511MS	20A 800/200/8 V511MS	60C 800/100 V51MS	60C 1200/90/10 V511M	20A 6000 G B
Finishing of piston rods	20A 600/110 V511MS		60C 800/100 V51MS	20A 1000/70/8 V511MS	20A 8000 G B
Steel, hard-chromium plated	20A 600/200/8 V511MS	20A 800/150/12 V511MS	20A 1000/200/8 V511MS	70C 1200/60/10 V511M	20A 10000 G B
Steel, hardened	20A 500/100 V511MS	20A 800/85 V511MS			
Finishing of liners for injection pumps					
Ball bearing steel, hardened	20A 600/150 V511MS	20A 800/150 V511MS	60C 600/100 V51MS	60C 800/150 V51MS	60C 800/100 V51MS
Finishing of cylindrical rollers	73C 800/70/12P01 V70/8Z	60C 1000/55 V51MZ			

Field of application

Specification of honing stones

Examples Plunge finishing	Pre-honing	Finish honing	Micro honing
Iron casting materials (GG,GGG)			
Finishing of crankshafts	60C 500/20 V51M	60C 800/30/10 V511M	
Ball bearing steel, hardened		20A 800/250/8 V511MS	70C 1200/120 V51M
Finishing of guide rails	60C 400/40/12 V511M	60C 600/40/12 V511M 60C 600/80 V51MS	70C 1200/85 V51M 70C 1200/90/10 V511M

For special applications we customize shape, dimension and specification to your individual operating conditions and requirements.

Please observe the FEPA safety recommendations for the correct use of grinding tools.

www.fepa-abrasives.org

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