

Consumables Accessories



Index

Lapping / Polishing	Lapping plates / Polishing plates / Supporting plates	3
	Dressing rings	4
	Pressure plates	4
	Ceramic pellets	4
	Rubber pads	5
	Felt pads	5
	Templates	5
	Polishing foils	5
Flathoning	Diamond wheels / CBN wheels	6
	Dressing- and Resharpener rings	7
	Holder for Dressing and Resharpener rings	7
	Insertion plates	7
	Carriers	7
Lapping-/Polishing liquids	Lapping oil	8
	Honing oil	8
	Superfinish oil	8
	Lapping powder SIC	9
	Lapping powder BC	10
	Lapping powder WCA	10
	Diamond liquid	11
	Chemical polishing liquid	12
	Lubrication liquid	12
	Diamond suspension	12
Cleaning	Cleaning fluid	13
	Cleaning set	13
Measuring	Straight edge	14
	Precision straight edge	14
	Gauging bar	14
	Monochromatic inspection light / spare bulb	15
	Optical flats	15
Reconditioning	Hand lapping plates	16
	Polishing table	16
	Polishing / Trueing paper	17
Accessories	Diamond spray unit	18

Lapping plates



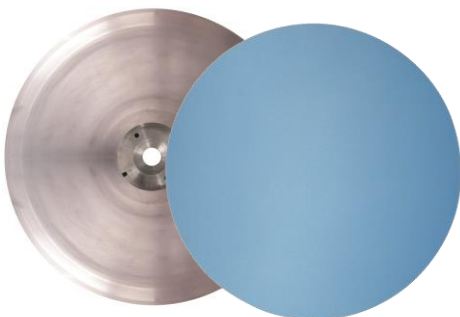
Material	Surface	Hardness
Steel	full, slotted, grooved	soft, half-hard
Cast Iron	full, slotted, grooved	soft, half-hard

Polishing plates



Material	Surface
Cast iron / Copper	full, grooved
Steel / Copper	full, grooved
Aluminium	full, grooved
Tin	full, grooved
Bronze	full, grooved

Supporting plates



Material	Surface
Aluminium supporting plate	For gluing of polishing foils (see page 5)

The plates are available in the following Stahli FLM (ML) diameters:
400, 500, 550, 750, 1000, 1250, 1500 mm

Other diameters on request

Dressing rings



Material	Surface	
Cast iron	full, slotted	
Cast iron, rust protected	full, slotted	With ring of synth. material
Cast iron, rust protected	full, slotted	With dellit ring
Cast iron, rust protected	full, slotted	With dellit ring + bronze
Cast iron, rust protected		With ceramic pellets
Cast iron, rust protected	full	With ceramic ring
Cast iron, rust protected		With diamond pellets

Pressure plates



Material	Surface	
Cast iron	full, grooved	
Aluminium	full, grooved	
Steel	full, grooved	Hardened and mirror polished

Ceramic pellets



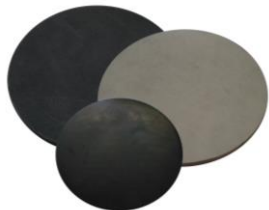
Description	Sizes
AWS-KP 56.0	18 x 1 mm
AWS-KP 56.0	18 x 2 mm
AWS-KP 56.0	18 x 4 mm
AWS-KP 670.0	16 x 5.5 mm

The dressing rings and pressure plates are available in the following StahlI FLM (ML) diameters:

400, 500, 550, 750, 1000, 1250, 1500 mm

Other diameters on request

Rubber pads



Material	Thickness
Cellular rubber plate	10 mm
Solid rubber plate	3 mm

Felt pads



Material	Thickness
Felt pad	3 / 10 mm

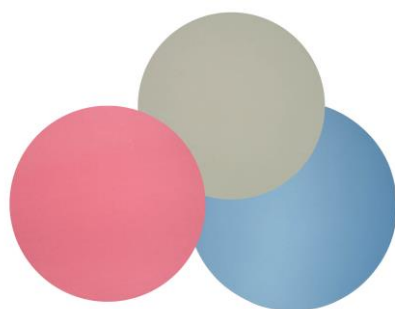
Templates



Material	Thickness
Hard paper	2.0 / 2.5 / 3.0 / 4.0 / 5.0 / 6.0 / 8.0 / 10.0 / 12.0 / 20.0 / 25.0 / 30.0 mm
Steel, Aluminium, Plastic	On request
Fiberglass	0.2 / 0.3 / 0.5 / 0.8 / 1.0 / 1.5 – 20.0 mm

The templates are manufactured individually according to work piece drawings.

Polishing foils



Description	Application
AWS-PF- ...	Steel, Nickel, Glass, Gold, Si ₃ N ₄ , Titanium, Sapphire

Polishing foils are available for different material and requirements.
For an optimal application please contact a Stahli Sales Manager



Tip: For a optimal application please use our diamond suspension (see page 12)

The rubber pads, felt pads and Templates are available in the following Stahli FLM (ML) diameters:

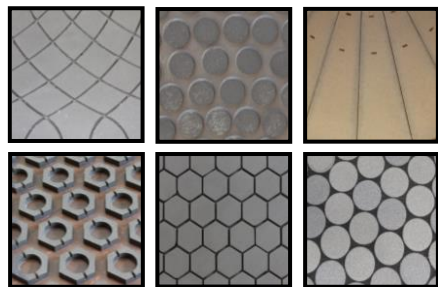
400, 500, 550, 750, 1000, 1250, 1500 mm

The polishing foils are available in the following Stahli FLM (ML) diameters:

400, 500

Other diameters on request

Diamond wheels / CBN wheels



Description	Surface	Application
Diamond wheel CBN wheel	full	1-wheel or 2-wheel
	slotted	
	hexagonal pellets	
	round pellets	
	ring pellets	
	square/rectangular p.	

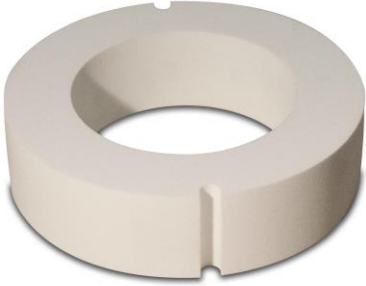
Carriers



Material	Thickness
Spring steel	0.3 – 3.0 mm
Fiberglass	from 1.0 mm
Plastic	from 3.0 mm

The templates are manufactured individually according to work piece drawings.

Dressing and Resharpener rings



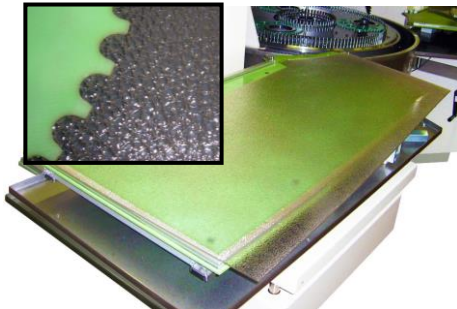
Sizes	Grain size
Ø 139 x 50 mm	150 G / 320 G
Ø 184 x 40 mm	150 G / 320 G
Ø 224 x 60 mm	150 G / 320 G
Ø 265 x 55 mm	150 G / 320 G
Ø 320 x 80 mm	150 G

Holder for dressing rings



Sizes
Ø 139 mm
Ø 184 mm
Ø 224 mm
Ø 265 mm
Ø 320 mm

Insertion plates for tables



Surface	Side
Rough	Left / Right
Plane	Left / Right

Sizes on request

Lapping oil



Description	VOC	Application
AWS-LO-20 PLUS	VOC free	Oil for general lapping work with SIC powder
AWS-LO-S3	38% VOC	Oil especially for SIC powder 320-1200
AWS-LO-S2	45% VOC	Oil especially for SIC powder 800-1200
AWS-LO-S	37% VOC	Oil especially for steel clichés with SIC powder
AWS-LO-S1R	37% VOC	Oil especially for soft steel
AWS-LO 41.5	20% VOC	Oil especially for brass with WCA powder
AWS-LO-152IM/3	6.7% VOC	Oil especially for brass with LPA powder

Quantities:	5 L	10 L	25 L	200 L
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Oil for flathoning



AWS-HO 5 1246.0	Honing oil for general use
AWS-HO 3 35.0	Honing oil for ceramic work pieces

Quantities:	5 L	10 L	25 L	200 L
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Superfinish oil



AWS-SFO-32/6	Superfinish oil
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Quantities:	5 L	10 L	25 L	200 L
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For use with superfinish stones

Our products for lapping purposes correspond to the latest requirements.

All lapping preparations made in STAHLI-Group such as lapping powders, lapping oils and lapping liquids comply with the highest quality standards

Accessories and consumable materials are optimally matched to our machines and their applications. This not only guarantees the faultless functioning of our machines but also contributes considerably to a high quality of machining. All accessories and consumable articles are exclusively produced according to our specifications by selected suppliers and manufacturers. They are subject to constant quality control and are continuously adapted to the latest technological demands.

Silicon carbide SiC



Mixing ration for lapping:
powder / oil
100 g – 200 g / L

Description	Size Micron	Norm Description
AWS-SIC-180-I 2.0	69	F180
AWS-SIC-220-I 2.0	58	F220
AWS-SIC-240-I 2.0	44.5 ± 2	F240
AWS-SIC-280-I 2.0	36.5 ± 1.5	F280
AWS-SIC-320-I 2.0	29.2 ± 1.5	F320
AWS-SIC-360-I 2.0	22.8 ± 1.5	F360
AWS-SIC-400-I 2.0	17.3 ± 1	F400
AWS-SIC-500-I 2.0	12.8 ± 1	F500
AWS-SIC-600-I 2.0	9.3 ± 1	F600
AWS-SIC-800-I 2.0	6.5 ± 1	F800
AWS-SIC-1000-I 2.0	4.5 ± 0.8	F1000
AWS-SIC-1200-I 2.0	3.0 ± 0.5	F1200
AWS-SIC-2000-I 2.0	1.2 ± 0.3	F2000

Quantities:	10 kg	25 kg	5 kg upon request
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Boron carbide BC



Mixing ratio for lapping:
powder / oil
100 g – 200 g / L

Description	Size Micron	Norm Description
AWS-BC-280	36.5 ± 1.5	F280
AWS-BC-320	29.2 ± 1.5	F320
AWS-BC-360	22.8 ± 1.5	F360
AWS-BC-400	17.3 ± 1	F400
AWS-BC-500	12.8 ± 1	F500
AWS-BC-600	9.3 ± 1	F600
AWS-BC-800	6.5 ± 1	F800
AWS-BC-1000	4.5 ± 0.8	F1000
AWS-BC-1200	3.0 ± 0.5	F1200

Quantities:	5 kg	10 kg	25 kg
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Aluminium oxide WCA



Mixing ratio for lapping:
powder / oil
100 g – 200 g / L

Description	Size Micron
AWS-WCA-40	30.0
AWS-WCA-30	20.0
AWS-WCA-25	17.0
AWS-WCA-20	14.0
AWS-WCA-15	10.0
AWS-WCA-12	7.8
AWS-WCA-9	6.0
AWS-WCA-5	4.5
AWS-WCA-3	3.0
AWS-WCA-1	1.2

Quantities:	5 kg	10 kg	25 kg
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Diamond liquid (oil based)



Ready for use

Polishing

Description	Size Micron
AWS-GLP-DRS...	0.25 – 0.5
	0.5 – 1.5
	1 – 2
	2 – 3
	2 – 4

Fine lapping

AWS-GLP-DRS...	4 – 6
	4 – 8

Lapping

AWS-GLP-DRS...	6 – 12
AWS-GLP...	8 – 12
	12 – 22
	22 – 36

Quantities:

1 L

Diamond liquid (water based)



Ready for use

Description

Description	Size Micron
AWS-V9 ...	1 – 3
	2 – 3
	2 – 4
	4 – 8
	6 – 10
	6 – 12
	8 – 16
	12 – 22
	22 – 36

Quantities:

1 L

The diamond liquids are available for different material and different concentrations.

For an optimal application please contact a Stähli Sales Manager

Chemical polishing liquid



Description			
AWS-PMC 2110.0	Chemical polishing liquid		
Quantities:	5 L	10 L	25 L

Lubrication liquid



To dilute the diamond liquid and wetting the cleaned lapping and polishing plate

Description			
AWS-GLP 32.0	Lubrication liquid		
Quantities:	5 L	10 L	25 L

Diamond suspension (oil based)

The definition of a suspension is the stable dispersion of a solid powder in a liquid. The suspension contains a stabilizer which prevents the diamond grains from sinking. A complete utilization of all diamond grains during the process is guaranteed by the agglomerate free merge and the regularly distributed diamond particles.

The carrier liquid is made of a high-grade alcohol solution which is 100% water and alcohol soluble. A high-grade calibrated DP polycrystalline diamond is being used, the concentration is high, the viscosity around 220cP.

These diamond suspensions provide good stock removal and polishing finish and can be used anywhere.



Description	Size Micron	Application		
AWS-DS-0-0.25	0 - 0.25	Mirror finish		
AWS-DS-0.75-1.5	0.75 - 1.5	Superfinish		
AWS-DS-2-4	2 - 4	Polishing		
AWS-DS-5-8	5 - 8	Fine lapping		
AWS-DS-8-15	8 - 15	Lapping		
AWS-DS-15-30	15 - 30	Pre lapping		
Quantities:	20 ccm	50 ccm	200 ccm	500 ccm

Cleaning fluid



Description	Application				
AWS-RM 2084.0	Cleaning fluid for mirror finished parts				
AWS-RM 2501.0	Cleaning fluid (concentrate) applicable as machine cleaner and for rough-cleaning of parts. Mixing proportion: 1 L Concentrate / 3 L Water				
Quantities:	<table border="1"> <tr> <td>5 L</td> <td>10 L</td> <td>25 L</td> <td>200 L</td> </tr> </table>	5 L	10 L	25 L	200 L
5 L	10 L	25 L	200 L		

Cleaning set



Description	
Vacuum-Cleaner, Coarse filter, Roller car, Brush	(only usable for water based liquids)



Wet vacuum cleaner with compressed air, Size 20	suitable for gas zone 2 (ATEX Cat. 2)
Wet vacuum cleaner with compressed air, Size 45	suitable for gas zone 2 (ATEX Cat. 2)

Compressed air is required (6 bar)

Straight edge

For checking whether the lapping/polishing plate is concave or convex.



Description	Size
Straight edge	400 x 40 x 8 mm
Straight edge	500 x 40 x 8 mm
Straight edge	750 x 50 x 10 mm
Straight edge	1000 x 50 x 10 mm
Straight edge	1500 x 60 x 12 mm

Precision straight edge

For the precise measurement of lapping- and polishing wheels. Higher quality requirements with respect to flatness of work pieces which have to be lapped or polished gave the signal to design a precision straight edge. A regular control of the wheel flatness is indispensable for the quality system and avoids time consuming correction works. 3 dial gauges, diameter 58 mm, mounted on light metal profile, allow the measurement of unevenness of 0.001 mm and more. The unit is provided with a 3-point-rest. Handling according to manual which also includes the inspection record sheets.



Description

Precision straight edge	With indicators analogue
Precision straight edge	With indicators digital

Gauging bar

Description

Gauging bar made of granite for precision straight edge	130 x 630 x 70 mm
Gauging bar made of granite for precision straight edge	160 x 800 x 100 mm
Gauging bar made of granite for precision straight edge	200 x 1000 x 100 mm
Gauging bar made of granite for precision straight edge	250 x 1600 x 80 mm



Monochromatic inspection light



The flatness of work pieces is measured with the interference tester. The lamp generates monochromatic light and thus permits the interference fringes to be seen using a precise optical flat. The distance from one so-called "light band" to the next is around 0.3 microns

Description	Size
Monochromatic inspection light direct	
Monochromatic inspection light indirect	Ø 200 mm
Monochromatic inspection light indirect	Ø 350 mm
Monochromatic inspection light indirect	Ø 410 mm
Monochromatic inspection light indirect	Ø 550 mm



Tip: For an optimal application please use our Trueing-/Polishing Table (see page 17)

Spare bulb



Bulb NA 35-W4	For monochromatic inspection light direct
Bulb NA 18-W4	For monochromatic inspection light indirect

Optical flats

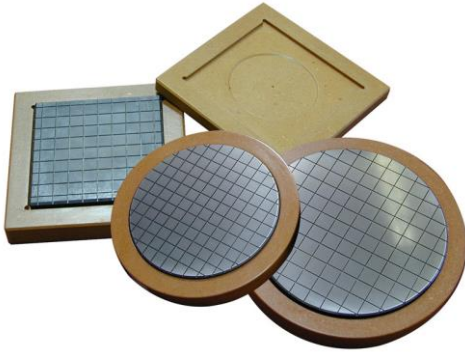


For flatness control in combination with our monochromatic inspection lights.

Standard size	LB (1/4 Standard)	Material	Application
Ø 50 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 75 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 100 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 125 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 150 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 200 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 250 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided
Ø 300 mm	1/4 , 1/10, 1/20	Zerodur	One sided, Double sided

Other sizes on request

Hand lapping plates



Description		Sizes
Hand lapping plate, round, cast iron	full	Ø 150 x 15 mm
Hand lapping plate, round, cast iron	full	Ø 200 x 20 mm
Hand lapping plate, round, cast iron	full	Ø 250 x 20 mm
Hand lapping plate, round, cast iron	full	Ø 300 x 25 mm
Hand lapping plate, round, cast iron	slotted	Ø 200 x 20 mm
Hand lapping plate, round, cast iron	slotted	Ø 300 x 25 mm
Hand lapping plate, round, cast iron	slotted	Ø 150 x 15 mm
Hand lapping plate, round, cast iron	slotted	Ø 250 x 20 mm
Hand lapping plate, square, cast iron	slotted	150 x 150 x 15 mm
Hand lapping plate, square, cast iron	slotted	200 x 200 x 20 mm
Hand lapping plate, square, cast iron	slotted	250 x 250 x 25 mm
Hand lapping plate, square, cast iron	slotted	300 x 300 x 30 mm



Tip: For an optimal application please use our diamond suspension (see page 12)
Please relap the hand lapping plates regularly at Stahli

Trueing- / Polishing table



For trueing of the matt-grey coat after lapping or removing of feathering before lapping or polishing

Description	Sizes
Polishing table PT 400 Excentric	400 x 400 mm
Polishing table PT 300 Excentric	300 x 310 mm

Trueing paper



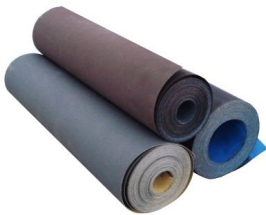
Upon request

For an optimal application please contact a Stahli Sales Manager

Quantities:

Roll of 10 m

Polishing paper



Upon request

For an optimal application please contact a Stahli Sales Manager

Quantities:

Roll of 10 m

Diamond spray unit



Ease of operation and the sturdy design ensure problem-free, low-maintenance operation. The diamond spray unit shortens machining times, saves on diamond suspension and allows a high, uniform surface quality of the unit and materials.

Description	Stroke	Liquid containers
Diamond spray unit	Without stroke	1 container
Diamond spray unit	With stroke	1 container
Diamond spray unit	With stroke	2 containers (1 container with stirring unit)
Diamond spray unit	With stroke	2 containers (2 containers with stirring unit)



Consumables and Accessories...

...are optimally matched to our machines and their applications. This not only guarantees the faultless functioning of our machines but also contributes considerably to a high quality of machining. All accessories and consumable articles are exclusively produced according to our specifications by selected suppliers and manufacturers. They are subject to constant quality control and are continuously adapted to the latest technological demands.



We are one of the leading companies worldwide in the manufacture of flat honing, lapping and polishing machines. At our customers we are known just as much by our standard products as by custom-made and need-oriented special products. This

Special know-how results from decades of experience from daily new assignments in contract work and the support of our expert and committed workforce. We are happy to pass on our know-how to our customers within the framework of contract

work, tests and complex or experimental project studies. Put to the test our reliability and innovative dynamism.

Further information may be obtained from the addresses listed or from our homepage.

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