



STELLA GRUPPE

German Precision Grinding Wheels

RAIL GRINDING

Grinding wheels

Cup wheels / Cylinder wheels

Cut-off and snagging wheels

Grinding blocks

Customized solutions in respect of shape, dimension and specification





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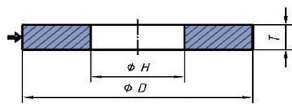
RAIL GRINDING

The **SCHMIRGELWERK** Chemnitz has a lot of experience in producing efficient precision abrasive tools for all current grinding machines.

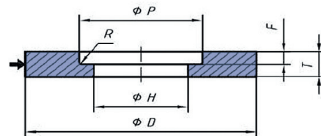
The various kinds of rail steels call for properly adapted abrasives during the rail grinding process. Therefore **SCHMIRGELWERK** Chemnitz is permanently developing new products with a view to improve grinding performance, to increase lifetime and to reduce grinding costs consequently.

Peripheral machining

current shapes



Shape 1



Shape 5

Speeds: 50 m/s, 63 m/s, 80 m/s

Machines

Autech, Cemafer, Linsinger, Luddeneit & Scherf, Möser, Rixen, Robel, Schweerbau

Grinding wheels which are exposed to high mechanical stress are delivered fabric-reinforced.

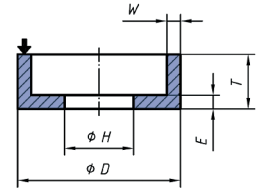


Field of application	Specification of grinding wheels (reliable qualities)	current shapes, dimensions in mm
Grinding of the railhead generally	1A 14/6 R5 B-50 61A 24/6 R4 B-50 61A 14/20 R4 BF-63 1A 16 O5 BF-50 63A 16/00 R5 B-63	1-200x20 bis 30x22(25) 1-230x20 bis 30x22(25) 1-250x20x25,4(76) 5-254x32x25,4 P153xF12
Grinding of the railhead on stationary milling machine	20A 46/5 Jot22P03 VX12	1-600x75x305,2
Grinding of the groove bottom	1A 14/6 S4 BF-50 61A 20/00 P4 B2-63	1-200x10 bis 25x22(25) 1-230x10 bis 25x22(25)
Grinding of applied weldings partly of switches	1A 16/6 P-Qu5 BF-80	1-200x20 bis 25x22(25)
Grinding of grooves	1A 14/6 R5 B-50 61A 24/6 R4 B-50 61A 14/20 R4 BF-63	1-230x8 bis 15x22(25)
Deburring of the running edge	1A 16/20 R-S5 BF-50 61A 16/6 R-S5 BF-50 61A 14/20 R4 BF-63	1-260x15 bis 25x120

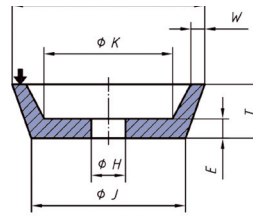


Side machining

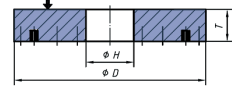
current shapes



Shape 6 with bore or thread



Shape 11



Shape 36

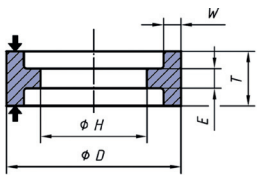
Machines

Autech, Cemafer, Harsco, Luddeneit & Scherf, Matix, Möser, Rixen, Robel

Speeds: 40 m/s, 50 m/s

Field of application	Specification of grinding wheels (reliable qualities)	current shapes, dimensions in mm
Grinding of the railhead of hot and cold Thermit weldings – cup wheels	1A 16 Qu5 B 1A 16/20 S5 B 60A 20/2 O7 B	6-80x100xM20 W19xE23 6-100x90x20 W25xE20 6-100x100xM20 W25xE23 6-125x65xM20 W35xE23 6-156x80xM20 W53xE23
Grinding of the railhead of hot and cold Thermit weldings – cylinder wheels	1A 14 Qu5 B 62A 16/11 Qu-R5 B 43A 20/00 P1 B	36-125x60x55 4xM8 36-150x60x80 4xM8 36-200x80x130 4xM10
Grinding of the railhead with tapered cup wheels	1A 16/20 R-S5 B-50-W	11-110/J90x55x22,23 W20xE10xK55
Grinding of running edges at grooved rails	61A 16/20 R4 B 61A 20/24 R-S5 B	6-100x110x22 W20xE20
Grinding of the railhead (of tram tracks), Reprofiling of the railhead profile	1A 16/00 P7 B 1A 16/20 Qu5 B 1A 16/20 S5 B 1A 20/00 R7 B 61A 16/20 R4 B 61A 20/24 R-S5 B 69A 20/00 S4 B	6-80x100xM20 W19xE23 6-100x85x20 W25xE20 6-100x110x22 W20xE20 6-100x110xM20 W25xE23 6-125x65xM20 W35xE23 6-150x75xM5/8" W50xE19 6-156x80xM20 W53xE23

current shapes



Shape 9

Machines

Cemafer, Möser

Field of application

Grinding of the running edge with side grinding operation

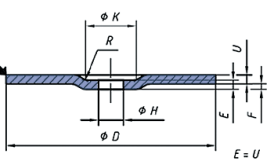
Specification of grinding wheels (reliable qualities)

61A 20/6 S4 BFS3

current shapes, dimensions in mm

9Sp-230x23x22(25,4) W65xE19

As these grinding wheels are exposed to very high mechanical stress they are delivered with fabric and steel reinforcement.



Shape 27

Machines

Bosch, Cemafer

Field of application

Grinding of the complete rail profile, cleanup of the rail web (before setting up the insulated rail joint, weldings, screw connections)

Specification of grinding wheels (reliable qualities)

20A 30 P8 BF-80-W
20A 24 N BF-80-W

current shapes, dimensions in mm

27-230x8x22,23

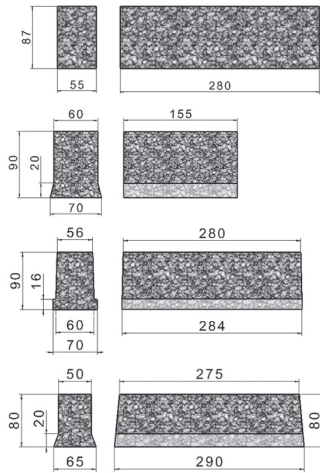


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Grinding blocks

current shapes (e.g.)



Shapes 9010, 90Sp
deviating dimensions
possible

Machines

Plasser, Schalker Eisenhütte, Schweerbau, Windhoff

Field of application

Grinding of the
railhead profile

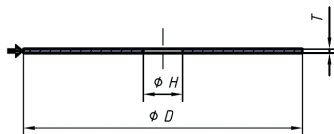
Specification of grinding wheels (reliable qualities)

21A 14/16 L-M6 B
21A 14/2 M15 BKK4
21A 14/16 P5 B
21A 24/30 O5 B
61/41A 16 S4 B

current shapes, dimensions in mm

9010-55x87x280
90Sp-65/50x80/20x290/275
90Sp-70/60x90/20x155
90Sp-70/60/56x90/16x284/280

Cut-off wheels



Shape 41

Field of application

Preparation of the
welding gap,
cutting-off of the rail,
insulated rail joint cut

Specification of grinding wheels (reliable qualities)

AS 24 R BF-100-S
AZ 24 T BF-100-S

current shapes, dimensions in mm

41-300x4x22,23(25,4)
41-350x4x22,23(25,4)

Speeds: up to 100 m/s

Machines

Cemafer, Partner, Robel,
Sachsdolmar, Stihl

Please observe the FEPA safety re-
commendations for the correct use of
grinding tools.
www.fepa-abrasives.org

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