



STELLA GRUPPE

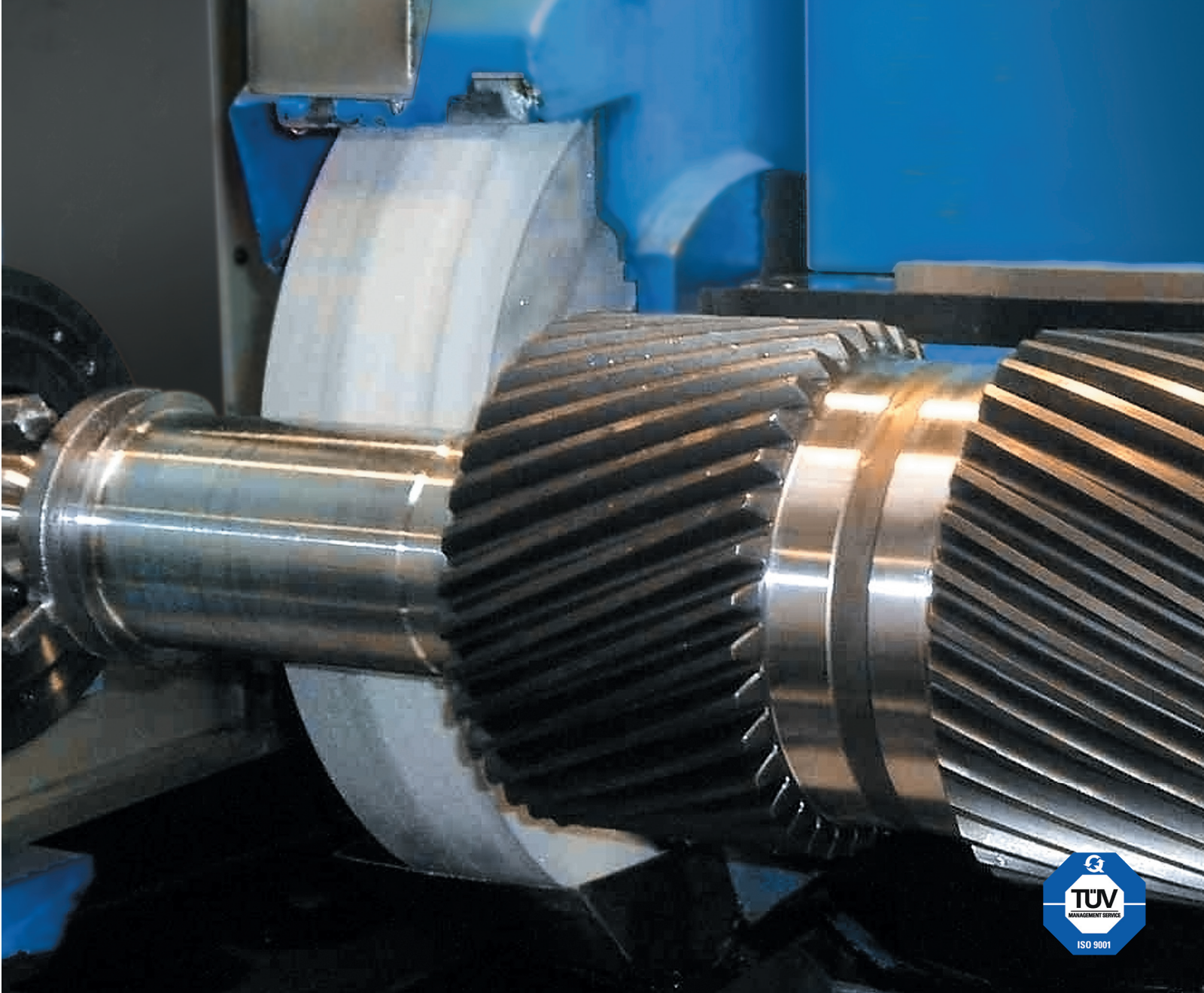
German Precision Grinding Wheels

CYLINDRICAL GRINDING

External grinding between centres

Centerless grinding

Internal grinding



STELLA KERAMIK GmbH
Schwarzenbach/Saale

SCHMIRGELWERK CHEMNITZ GmbH
Chemnitz

CAPILLAR SCHLEIFKÖRPERWERK GmbH
Crosta/Bautzen



STELLA GRUPPE

German Precision Grinding Wheels

CYLINDRICAL GRINDING

STELLA has experience in producing precision grinding wheels for more than 80 years. By means of special combinations of high-quality abrasive grain types, improved vitrified bonds and innovative manufacturing processes a new generation of conventional grinding tools has been designed: **STELLA select (STs)**.

In order to achieve optimal cutting features for cylindrical grinding we use abrasive grain compositions of sintered aluminium oxide and special corundums (e.g. monocrystalline or ruby fused aluminium oxide). Highest porosity that is matched to the grinding task by its size and distribution abets the chip removal.

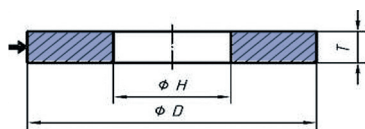
Special vitrified bonding systems which are adjusted to the particular grinding application by their elasticities, consistencies and their flowability ensure that the selected abrasive grains are integrated in an optimal way into the abrasive wheel's matrix.

What are the distinctive features of **STs**-grinding wheels?

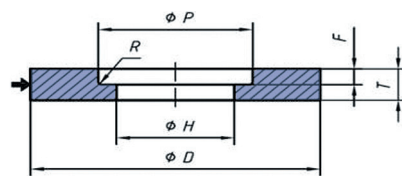
They do not have only a high and constant cutting efficiency but also a very good form retention in connection with an optimal and economic utilization of the abrasive grains. Due to expanded dressing cycles the grinding process times are shortened and the wheel's lifetime is extended. The cool cutting effect is an additional important advantage.

External grinding between centres

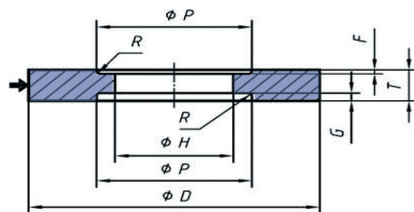
current shapes



Shape 1



Shape 5



Shape 7

Machines of (e.g.):

Bahmüller	Overbeck
Cetos	Schaudt
Danobat	Studer
Fortuna	Tacchella
Junker	Tschudin
Karstens	TOS Hostivar
Kellenberger	WMW
Morara	Ziersch&Baltrusch
Nevall	

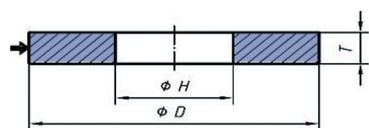
Speeds: 40 m/s, 50 m/s, 63 m/s (grinding with mechanical feed), 80 m/s, 100 m/s (totally enclosed working area)

Field of application	Specification of grinding wheels	
	up to D 500 mm	larger than D 500 mm
Universal use		
Unhardened steel	40A 60 L7 V1	40A 54 L7 V1
Mild steel and low-alloy steel hardened	21A 60 K7 V1 92A 60 K7 V1	20A 60 Jot7 V1 92A 60 Jot7 V1
High-alloy steel hardened	20A 60 Jot7 V1 92A 60 Jot7 V1	20A 60 Jot10P2 V55 253A 60 Jot10P2 V55 92A 60 Jot10P2 V10
Steel, stainless and acid-proof	253A 60 Jot10P2 V55 60C 60 Jot7 V30	253A 60 Jot10P2 V55 92A 54/2 Jot10P2 V10 60C 54 Jot7 V30
Steel, nitrided	60C SNS 606 V31	60C SNS 605 V31
Steel, hard-chrome plated	20A 80 K10P2 V55	20A 60/2 Jot10P2 V55
Iron casting materials, e.g. GS, GG, GGG	20A 60 K8P2 V1 60C 80 Jot9P02 V30	20A 60 Jot8P2 V1 60C 60/2 Jot9P2 V30
Non-ferrous metals (aluminium, copper, bronze)	60C SNS 606 V31	60C SNS 465 V31 60C SNS 605 V31
Plastic materials	60C 60/2 H20P2 V30	60C 60 H20P2 V30
Rubber	38A 16/5 Jot15 V6 20A IIIC15 V2 91A 30 K24P2/03 V10KK2/3	38A 16/5 i15 V6 20A IIIC15 V2 91A 30 K24P2/03 V10KK2/3

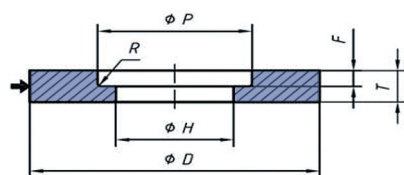
For special applications, e.g. external angle plunge grinding, roll grinding, grinding of crankshafts or camshafts, we customize shape, dimension and specification to your individual operating conditions and requirements.

Centerless grinding

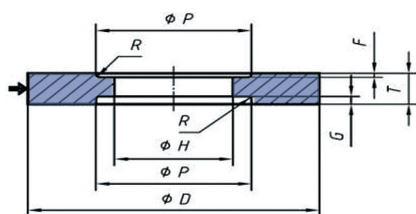
current shapes



Shape 1



Shape 5



Shape 7

Machines of (e.g.):

Agathon	König & Bauer
Cincinnati	Lidköping
Danobat	Microrex
Estarta	Monzese
Ghiringhelli	Nomoco
Herminghausen	Microsa
Junker	Tschudin

For special applications, e.g. plunge grinding with ganged wheels, we customize shape, dimension and specification to your individual operating conditions and requirements.

Speeds: 40 m/s, 50 m/s, 63 m/s

Field of application	Specification of grinding wheels
Unhardened steel	40A 54/2 M5 V1
Mild steel and low-alloy steel hardened	21A 60 M6 V1 92A 60 M7 V10
High-alloy steel hardened	90/283A 60 M7 V10 60C 60 M7 V30
Steel, stainless and acid-proof	90/283A 60 K8P1 V10 60C 60 L7 V30 60C 60 O5 B
Steel, hard-chrome plated	90/283A 80 M5 V10
Iron casting materials, e.g. GS, GG, GGG	20A 60 Jot5 V1 60C 60 L7 V30
Non-ferrous metals (aluminium, copper, bronze)	60C 60 Jot15P2 V30
Plastic materials, rubber	20A 80 H25P2 V10 38A 36/2 F15 V6 60C 80 H20P2 V30



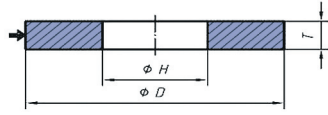


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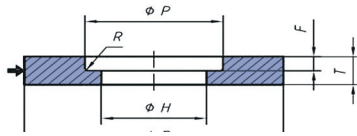
German Precision Grinding Wheels

Internal grinding

current shapes



Shape 1



Shape 5

Machines of (e.g.):

Bahmüller
Junker
Karstens
Kellenberger
Overbeck
Reinecker
Schaudt

Studer
Tacchella
Tripet
Voumard
Ziersch&Baltrusch
WMW

Speeds: 40 m/s, 50 m/s, 63 m/s (grinding with mechanical feed),
80 m/s (totally enclosed working area)

Field of application	Specification of grinding wheels	
Universal use	up to D 50 mm	larger than D 50 mm
Unhardened steel	20A 60 K7 V55	20A 54 Jot7 V55
Mild steel and low-alloy steel hardened	20A 60 Jot7 V55 20A 80 Jot7 V55 92A 60 Jot10P2 V8	20A 54 i10P2 V55 20A 60 i10P2 V55 92A 60 i12P2 V8
High-alloy steel hardened	253A 60 i12P2 V6 92A 60 i12P2 V6 60C 60 i10P2 V30	253A 60 H14P2 V6 92A 60 H14P2 V6 60C 46 i12P03 V30
Steel, stainless and acid-proof	20A 60 H14P2 V6	20A 60 H16P2 V6
Steel, hard-chrome plated	20A 80 i10P02 V55	20A 60 i12P02 V55
Iron casting materials, e.g. GS, GG, GGG	60C 60 Jot12P2 V31	60C 60 Jot14P2 V31
Non-ferrous metals (aluminium, copper, bronze)	60C 60 H14P2 V30	60C 46 G18P03 V30
Plastic materials, rubber	38A 16/5 i15 V6 20A IIIC15 V2	38A 16/5 i15 V6 20A IIIC15 V2

For special applications, e.g. internal grinding of gears or of roller bearing rings, 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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