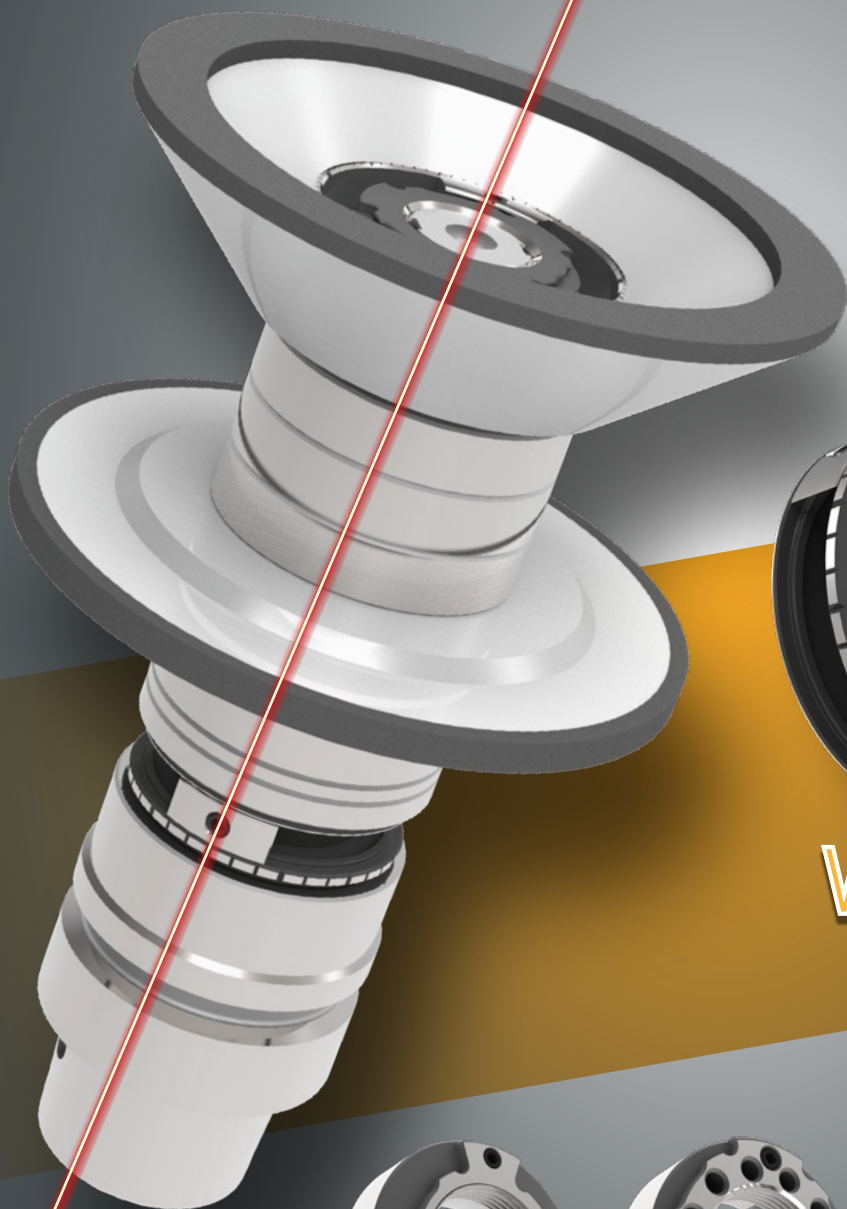
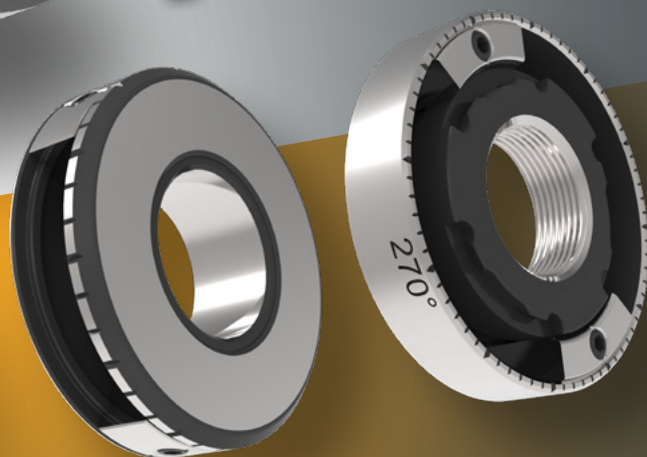




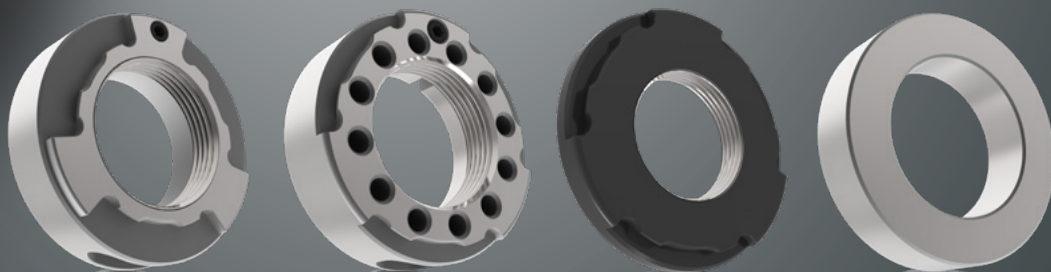
ZUBEHÖR FÜR SCHLEIFDORNE ACCESSORIES FOR GRINDING WHEEL HOLDERS



NEW



WIBROGUARD®



Auswuchtsysteme • ZETA Sicherheitsspannscheiben • Zwischenringe • Bedienelemente • Montagevorrichtungen
Balancing systems • ZETA safety clamping disc • operating tools • spacers • mounting devices



T-Tool USA LLC • 2850 Glades Circle Ste.15 • Weston, FL 33327 USA
Phone: 954-358-6071 • sales@t-toolusa.net • www.t-toolusa.com



”

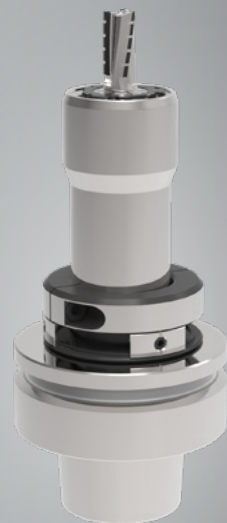
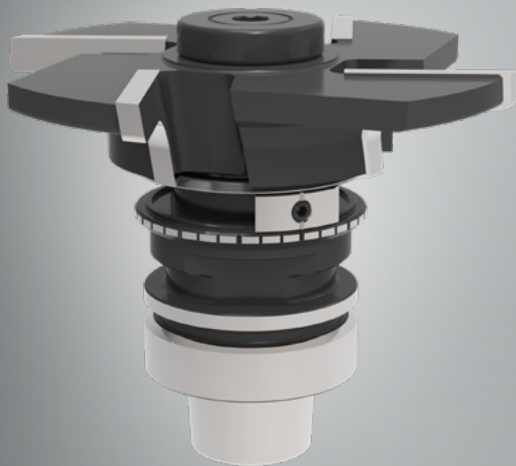
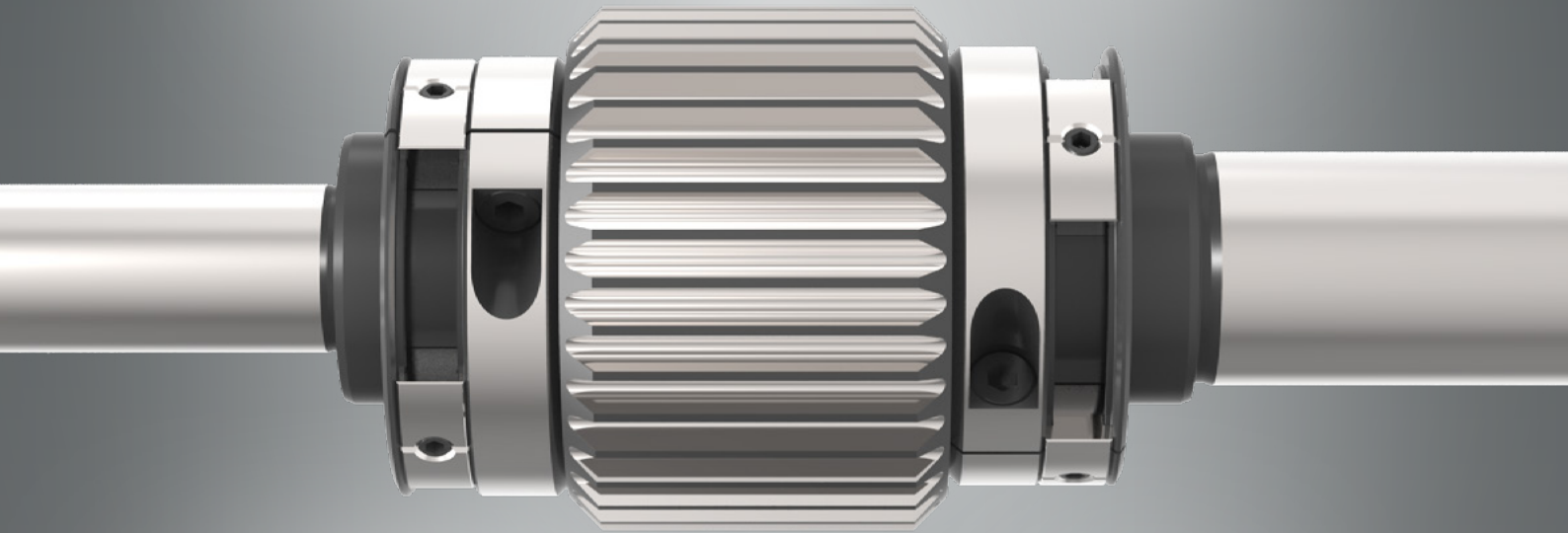
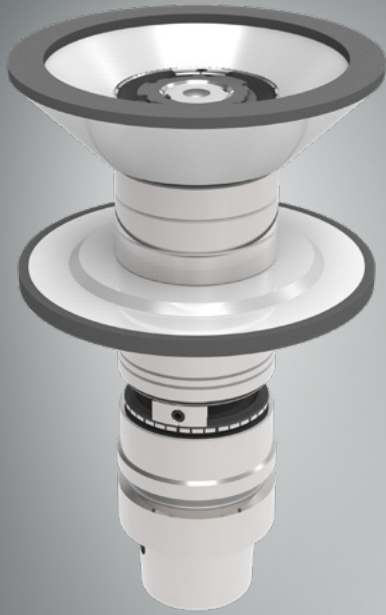
WIBRO**GUARD**: **Feinwuchten neu definiert**
Maximale Laufruhe bei minimalem Aufwand.

WIBRO**GUARD**: **Precision balancing redefined**
Maximum smoothness with minimal effort



ANWENDUNGSBEISPIELE

APPLICATION EXAMPLES



WIBROGUARD®

T-Tool balancing system (dynamic and static)

Precision redefined: The universal balancing system from T-Tool Precision GmbH

In modern high-speed machining, nuances determine quality and cost-effectiveness. Even the smallest imbalances generate enormous centrifugal forces at high speeds, which wear down tools and damage expensive machine spindles. The new balancing system from T-Tool Precision GmbH solves this challenge more easily and reliably than ever before.

Your advantages at a glance:

- Maximum tool life: Reduced vibrations protect the cutting edges from premature wear.
- Superior surface finish: Highest precision directly on the workpiece.
- Spindle protection: Prevention of bearing damage through minimized vibration.
- Enormous time savings: No material removal, no tedious screwing in and out of set screws.

Innovative. Fast. Reliable.

The system enables both dynamic balancing (2 planes) and static balancing (1 plane) for grinding and milling mandrels as well as other rotating tools and shafts.

The major advantage: Everything happens directly on the balancing machine.

Without having to remove the tool holder, the integrated balancing blocks (balancing elements) are moved with millimeter precision according to the software specifications. Everything takes place on the balancing machine without material removal or the tedious insertion and removal of small threaded studs.

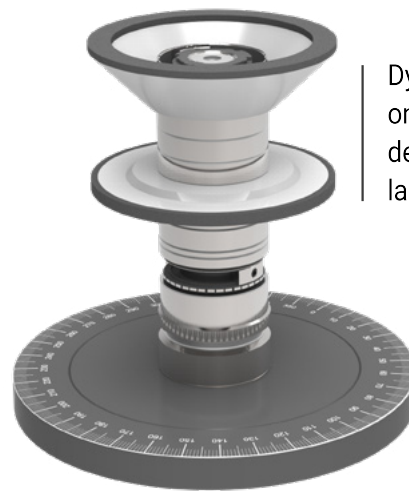
The result is a perfectly balanced tool in record time.

THE WIBROGUARD® OPERATING PRINCIPLE

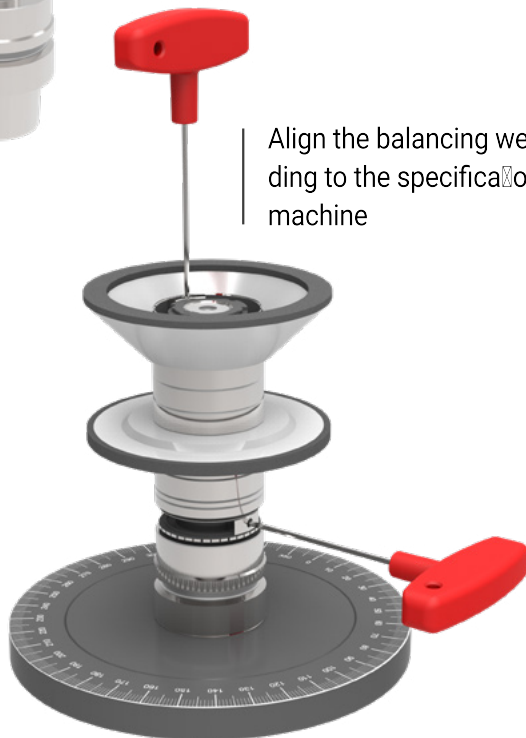
Maximum smoothness with minimal effort: Discover the next generation of dynamic and static balancing.



Assemble the mandrel and clamp it using the proven Zeta safety clamping system



Dynamic balancing on two planes to determine the unbalance

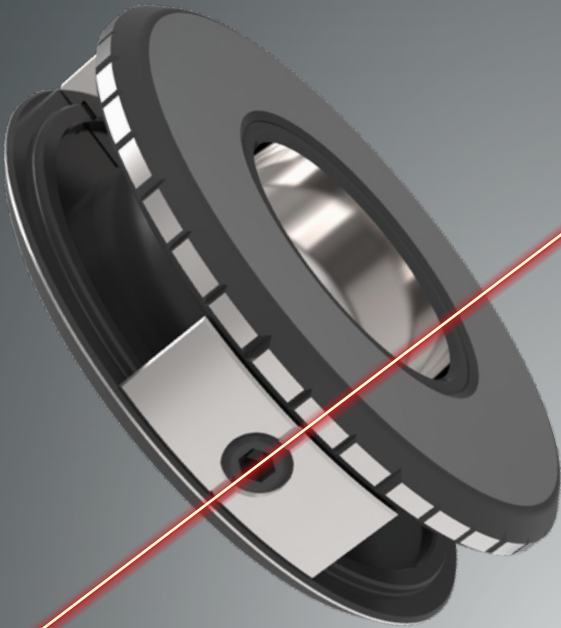


Align the balancing weights exactly according to the specifications of the balancing machine



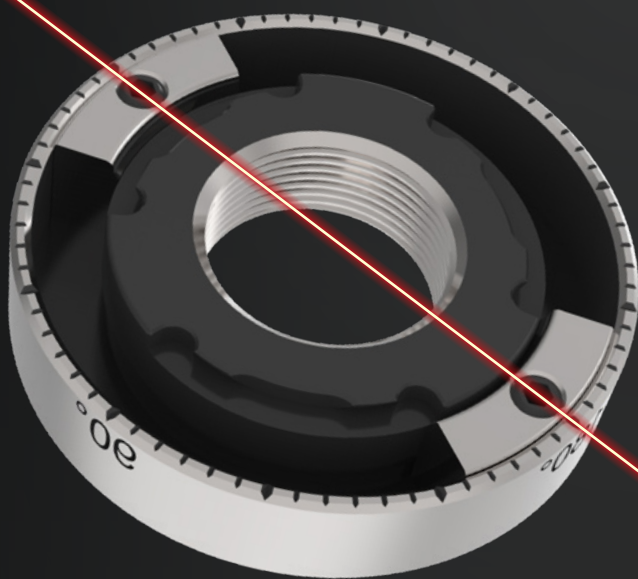
Result: A perfectly balanced grinding mandrel without removing material or the need to subsequently screw in and unscrew small threaded pins

DAS SYSTEM BESTEHT AUS VERSCHIEDENEN ABGESTIMMTEN AUSWUCHT-ELEMENTEN



Der Auswuchtring (Zwischenring / Klemmring)

Mit zwei fest integrierten, von außen verstellbaren Auswuchtsteinen (Wuchtelemente). Diese sind gewichtsmäßig präzise auf den jeweiligen Bohrungsdurchmesser abgestimmt. Erhältlich in verschiedenen Größen für alle marktgängigen Schaftdurchmesser. Diese Ausführung ist auch als Klemmring erhältlich um auch verjüngte Konturen zu erreichen.



Die Spannmutter mit ZETA-Profil

Diese sichert das gesamte Schleifscheiben- oder Fräserpaket inklusive Zwischenringe am Gewindeende der Werkzeugaufnahme. Ausgestattet mit dem bewährten, abrutschsicheren Zeta-Sicherheitsprofil, garantiert sie in Kombination mit Zeta-Stecknuss, Drehmoment Schlüssel und Montageblock einen absolut sicheren Spann- und Lösevorgang – ideal auch für die Montage schwer zugänglicher Topfscheiben. Diese Ausführung ist auch ohne Gewinde und Zeta Profil erhältlich, somit kann das T-Tool WibroGuard System in nahezu allen Bereichen eingesetzt werden.

Sicherheit für den Anwender, Schutz für die Maschine: Durch den klar strukturierten Arbeitsprozess gehören ungewisse Wuchtergebnisse der Vergangenheit an.

Eine echte Win-Win-Situation für Ihre gesamte Fertigung.

THE SYSTEM CONSISTS OF DIFFERENT COORDINATED BALANCING ELEMENTS

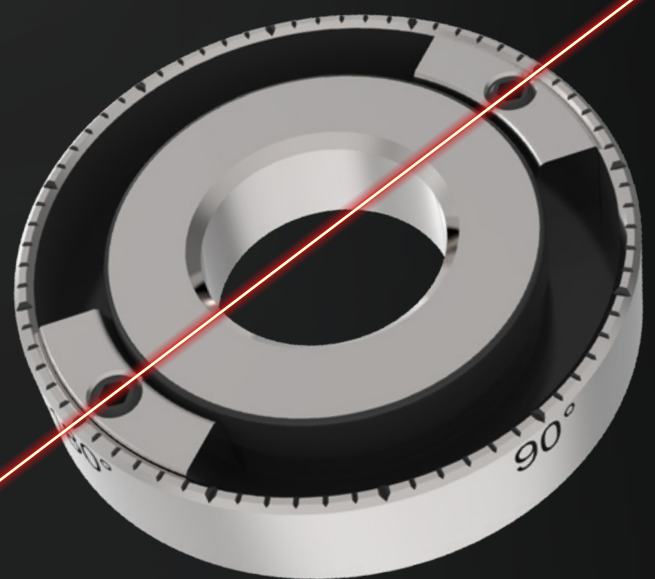


The balancing ring (spacer / clamping ring)

Features two permanently integrated balancing weights (balancing elements) that can be adjusted from the outside. These are precisely matched in weight to the respective bore diameter. Available in various sizes to fit all standard shaft diameters. This design is also available as a clamping ring to accommodate tapered profiles.

The clamping nut with ZETA profile

This secures the entire grinding wheel or milling cutter assembly, including spacer rings, at the threaded end of the tool holder. Equipped with the proven, slip-resistant Zeta safety profile, it guarantees an absolutely secure clamping and release process when used in combination with a Zeta socket, torque wrench, and mounting block – ideal even for installing hard-to-reach cup wheels. This version is also available without a thread and Zeta profile, allowing the T-Tool WibroGuard System to be used in virtually all applications.



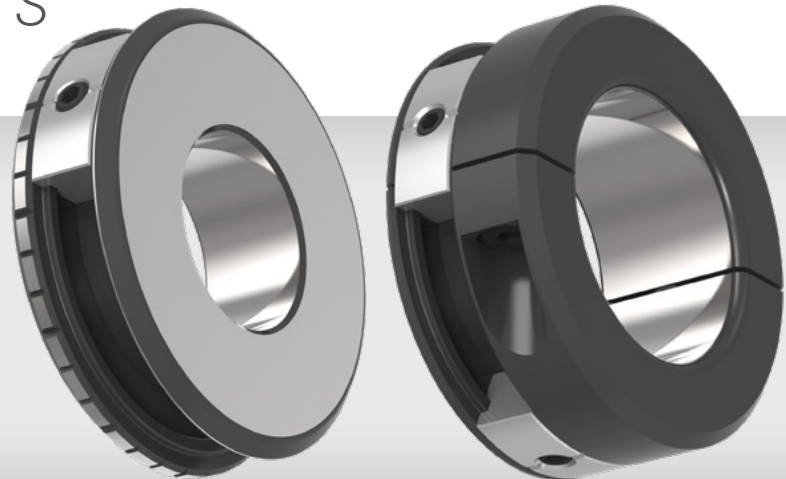
Safety for the user, protection for the machine:
Thanks to the clearly structured work process,
uncertain balancing results are a thing of
the past.

A true win-win situation for your entire production.

WIBROGUARD® WUCHELEMENTE

BALANCE ELEMENTS

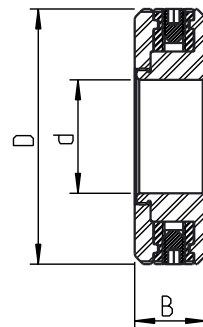
NEW



ZWISCHENRING radial verschiebbar

Spacer ring radially movable

D	d	B	Wuchtstein Größe	Artikelnummer Part number
45	20	12.5	R45	WGRR4520
55	31.75	12.5	R55	WGRR5531.75
55	32	12.5	R55	WGRR5520

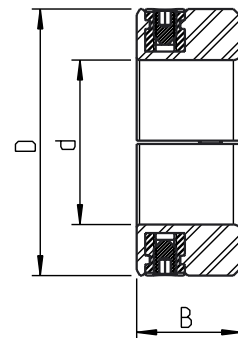


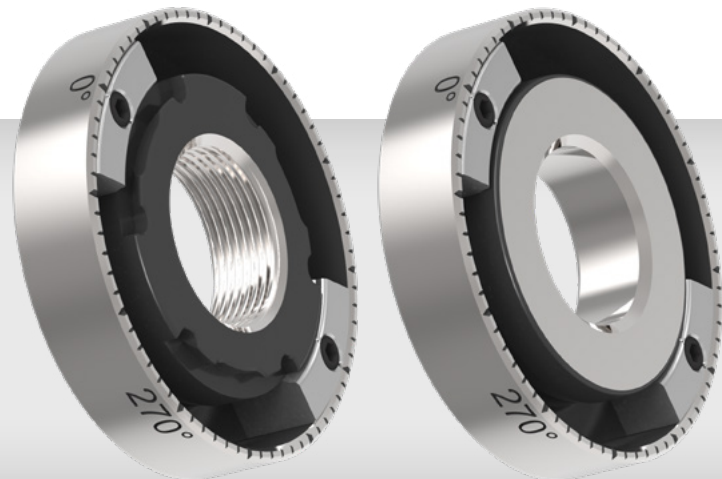
KLEMMRING radial verschiebbar

Clamping ring radially movable

D	d	B	Wuchtstein Größe	Artikelnummer Part number
45	26	22.5	R45	WGRK4526
45	29	22.5	R45	WGRK4529
55	34	22.5	R55	WGRK5534

Gerne fertigen wir die Klemmringe auch nach Ihren individuellen Anforderungen.



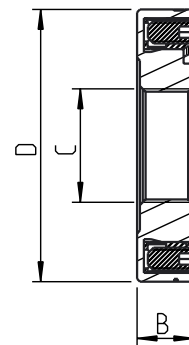


SPANNMUTTER MIT ZETA PROFIL axial verschiebbar

Clamping nut with Zeta profile axially movable

D	C	B	Wuchtstein Größe	Artikelnummer Part number
48	M20x1.0	10	A48	WGAZ482015
48	M20x1.5	10	A48	WGAZ482010
54	M30x1.5	10	A54	WGAZ543015
54	M32x1.5	10	A54	WGAZ543215

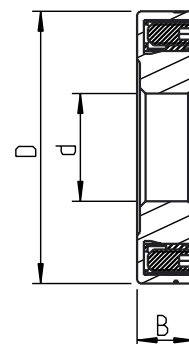
Mit unserem patentierten  zeta Sicherheitssystem



AUSWUCHTRING axial verschiebbar

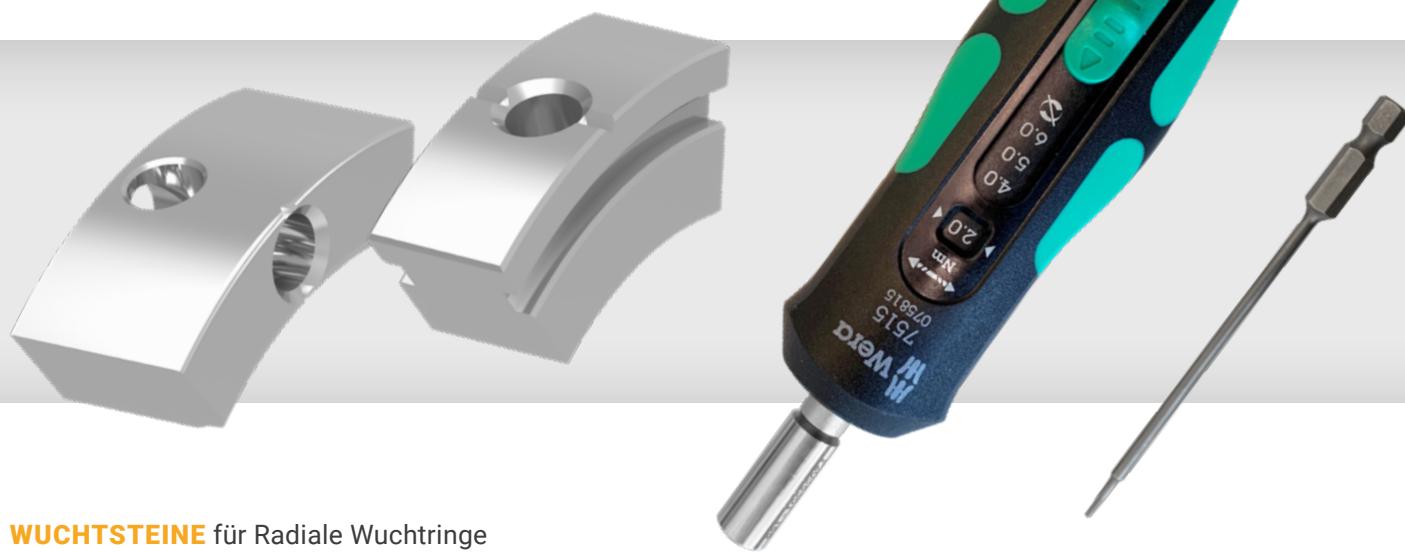
Balance ring axially movable

D	d	B	Wuchtstein Größe	Artikelnummer Part number
48	20	10	A48	WGAR4820
54	31.75	10	A54	WGAR5431.75
54	32	10	A54	WGAR5432



WIBROGUARD® ZUBEHÖR

BILDTEXT UNTERTITEL



WUCHTSTEINE für Radiale Wuchtringe

Balancing weights for radial balancing rings

Wuchtstein Größe	Artikelnummer Part number
R45	WGWS-R45
R55	WGWS-R55



WUCHTSTEINE für Axiale Wuchtringe

Balancing weights for axial balancing rings

Wuchtstein Größe	Artikelnummer Part number
A48	WGWS-A48
A54	WGWS-A54



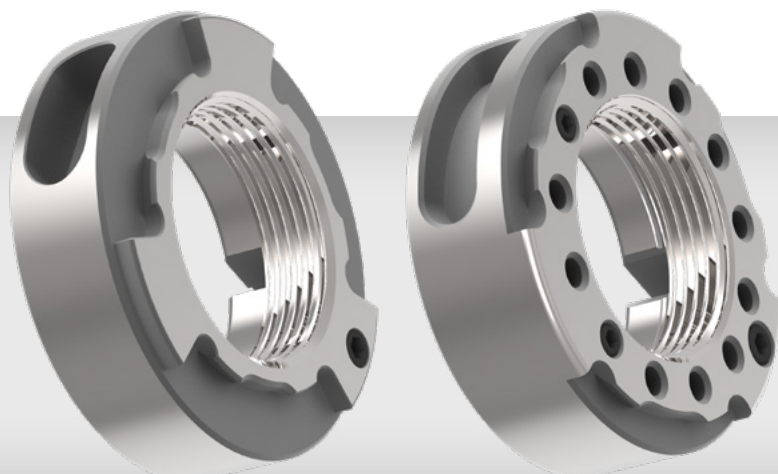
DREHMOMENTSCHLÜSSEL für Wibro Guard Auswuchtringe

Torque wrench for Wibro Guard balancing rings

Größe	Artikelnummer Part number
2-6Nm	6TH

SPANNSCHEIBEN

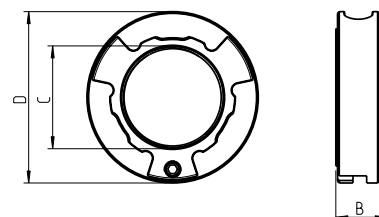
CLAMPING NUTS



ZETA-KLEMM-SPANNSCHEIBE für Schleifdorne

ZETA-clamping nut for grinding wheel holders

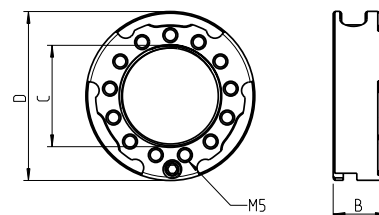
D	B	C	Profil Profile	Artikelnummer Part number
35	15	M20x1.0	K	SPSK020103515Zeta
42	15	M20x1.0	I	SPSK020104215Zeta
42	15	M20x1.5	I	SPSK020154215Zeta
50	15	M30x1.5	I	SPSK030155015Zeta



ZETA-WUCHT-SPANNSCHEIBE mit 12 Löchern

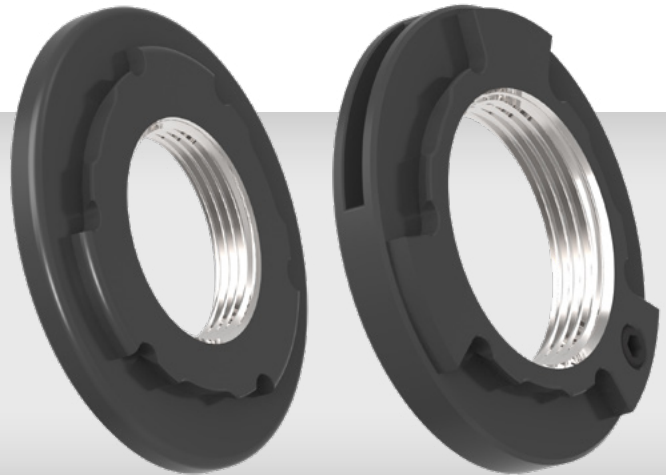
ZETA-balance clamping nut with 12 holes

D	B	C	Profil Profile	Artikelnummer Part number
42	15	M20x1.0	I	SPSKW020104215Zeta
42	15	M20x1.5	I	SPSKW020154215Zeta
50	15	M30x1.5	M	SPSKW030155015Zeta



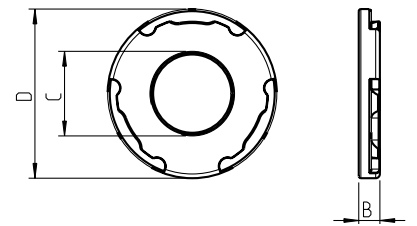
SPANNSCHEIBEN

CLAMPING NUTS



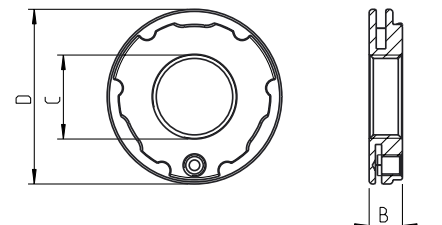
ZETA-SPANNSCHEIBEN für Schleifdorne
ZETA-clamping nut for grinding wheel holders

D	B	C	Profil Profile	Artikelnummer Part number
35	5	M20x1.0	K	SPS20103505Zeta
40	5	M20x1.0	K	SPS20104005Zeta
42	5	M20x1.0	K	SPS20104205Zeta
50	5	M20x1.0	M	SPS20105006Zeta



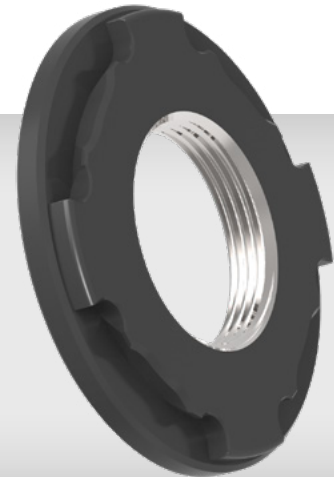
ZETA-KLEMMSPANNSCHEIBE
ZETA-Clamping washer

D	B	C	Profil Profile	Artikelnummer Part number
42	8	M20x1.0	I	KSPS20104208Zeta
42	8	M20x1.5	I	KSPS20154208Zeta
50	8	M30x1.5	I	KSPS30155008Zeta
50	8	M32x1.5	I	KSPS30155008Zeta



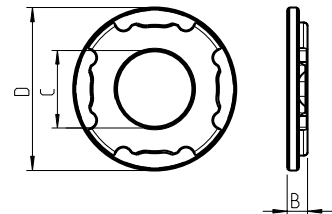
SPANNSCHEIBE MIT 4 NUTEN

CLAMPING NUT WITH 4 GROOVES



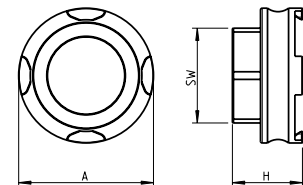
ZETA-SPANNSCHEIBE mit 4 Nuten (Hawema / Häberle)
ZETA-clamping nut with 4 grooves (Hawema / Häberle)

D	B	C	Artikelnummer Part number
40	5	M20x1	SPSHAW2010Zeta



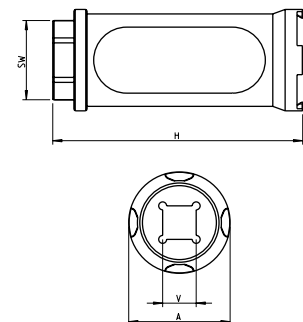
ZETA-EINDREHHILFE mit 4 Nuten
ZETA-torque nut

Typ Type	A	H	SW	V	Artikelnummer Part number
ED 32 Zeta-4	Ø38	21	30	-	SCHED32Zeta-4



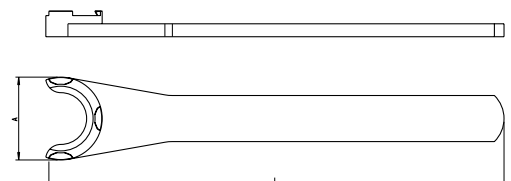
ZETA-DREHMOMENTSTECKNUSS mit 4 Nuten
ZETA-Screw-on-adapter

Typ Type	A	H	SW	V	Artikelnummer Part number
EC 32 Zeta-4	Ø38	97	27	1/2"	STEC32Zeta-4



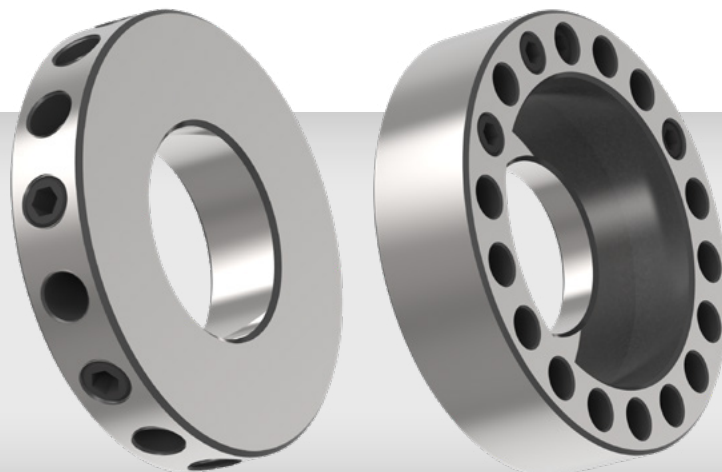
ZETA-SPANNSCHLÜSSEL mit 4 Nuten
ZETA-Standard spanner wrench

Typ Type	A	L	Artikelnummer Part number
E 32 Zeta-4	Ø38	220	SCHE32Zeta-4



WUCHTRINGE

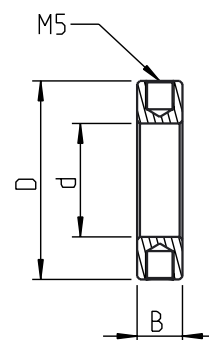
BALANCE RINGS



STANDARD WUCHTRING radial

Standard balance ring radial

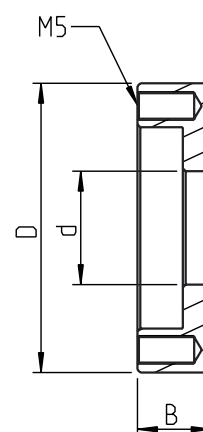
D	d	B	BA*	Artikelnummer Part number
42	20	8	15	WUHRH04220
42	31.75	8	15	WUHRH04231.75
50	20	8	15	WUHRH05020



STANDARD WUCHTRING axial

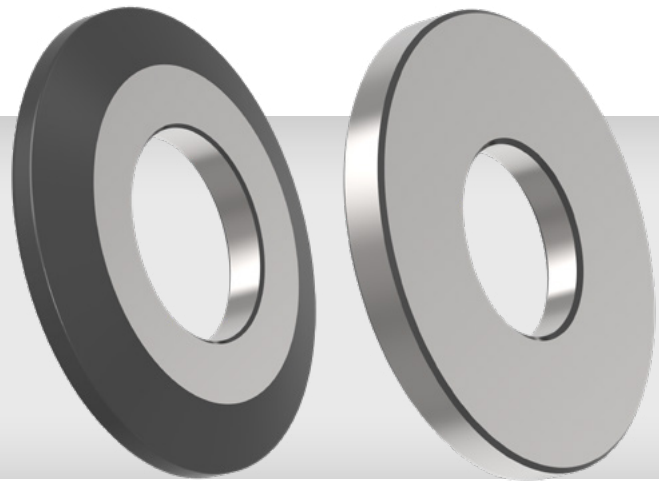
Standard balance ring axial

D	d	B	BA*	Artikelnummer Part number
58	20	13	18	WUHRV05820
58	31.75	13	18	WUHRV05831.75
66	20	13	18	WUHRV06620



SAACKE ZWISCHENRINGE

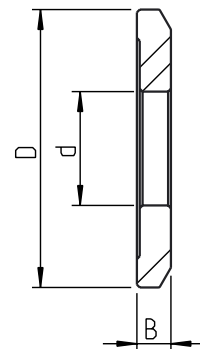
SAACKE SPACER RINGS



SAACKE FLANSCHRINGE

Flange spacer rings

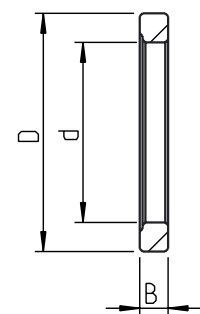
D	d	B	Artikelnummer Part number
49	20	6	ZWR064920
69	31.75	7	ZWR076931.75



SAACKE ZWISCHENRINGE

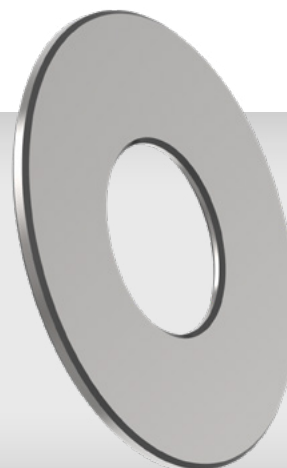
Balance ring vertical

D	d	B	Artikelnummer Part number
42	31.75	2	ZWR024231.75
42	31.75	3	ZWR034231.75
42	31.75	5	ZWR054231.75
42	31.75	7	ZWR074231.75
42	31.75	10	ZWR104231.75
42	31.75	25	ZWR254231.75



ZWISCHENRINGE

SPACERS



Ø35 x 20

D	B	d	Artikelnummer Part number
35	2	20	ZWR023520
35	3	20	ZWR033520
35	5	20	ZWR053520
35	8	20	ZWR083520
35	10	20	ZWR103520
35	12	20	ZWR123520
35	15	20	ZWR153520
35	20	20	ZWR203520

Ø42 x 20

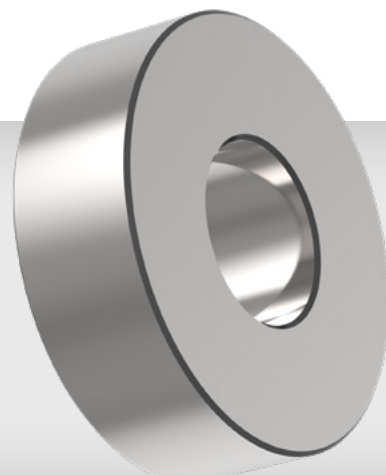
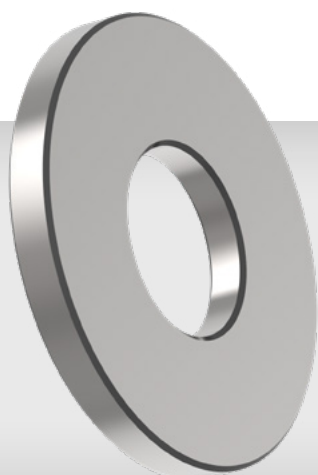
D	B	d	Artikelnummer Part number
42	2	20	ZWR024220
42	3	20	ZWR034220
42	5	20	ZWR054220
42	8	20	ZWR084220
42	10	20	ZWR104220
42	12	20	ZWR124220
42	15	20	ZWR154220
42	20	20	ZWR204220

Ø40 x 20

D	B	d	Artikelnummer Part number
40	2	20	ZWR024020
40	3	20	ZWR034020
40	5	20	ZWR054020
40	8	20	ZWR084020
40	10	20	ZWR104020
40	12	20	ZWR124020
40	15	20	ZWR154020
40	20	20	ZWR204020

Ø50 x 20

D	B	d	Artikelnummer Part number
50	2	20	ZWR025020
50	3	20	ZWR035020
50	5	20	ZWR055020
50	8	20	ZWR085020
50	10	20	ZWR105020
50	12	20	ZWR125020
50	15	20	ZWR155020
50	20	20	ZWR205020



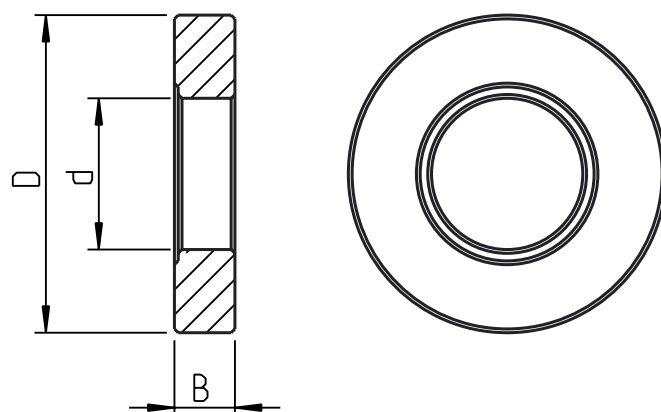
Ø50 x 31.75

D	B	d	Artikelnummer Part number
50	2	31.75	ZWR025031.75
50	3	31.75	ZWR035031.75
50	5	31.75	ZWR055031.75
50	8	31.75	ZWR085031.75
50	10	31.75	ZWR105031.75
50	12	31.75	ZWR125031.75
50	15	31.75	ZWR155031.75
50	20	31.75	ZWR205031.75

Ø50 x 32

D	B	d	Artikelnummer Part number
50	2	32	ZWR025032
50	3	32	ZWR035032
50	5	32	ZWR055032
50	8	32	ZWR085032
50	10	32	ZWR105032
50	12	32	ZWR125032
50	15	32	ZWR155032
50	20	32	ZWR205032

Auf Anfrage sind alle Größen auch in gehärteter Ausführung erhältlich



BEDIENELEMENTE

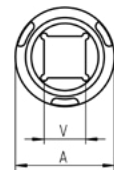
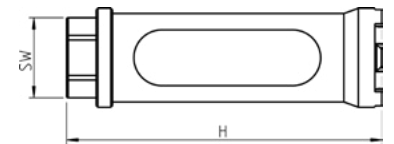
OPERATING TOOLS



ZETA-DREHMOMENTSTECKNUSS

ZETA-torque nut

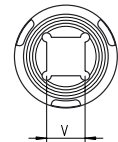
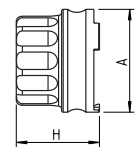
Typ Type	A	H	SW	V	Profil Profile	Artikelnummer Part number
EC 16 Zeta	Ø22	85	17	3/8"	C	STEC16ZETA
ECS 20 Zeta	Ø34	102	27	1/2"	K	STECS20ZETA
EC 32 Zeta	Ø38	96	27	1/2"	M	STEC32ZETA
OC 25 Zeta	Ø41	105	27	1/2	I	STOC23ZETA



ZETA-EINDREHHILFE

ZETA-Screw-on-adapter

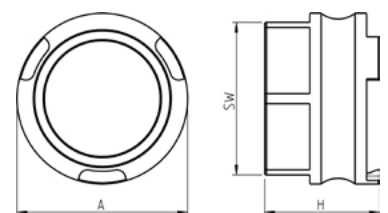
Typ Type	A	H	SW	V	Profil Profile	Artikelnummer Part number
EDSS 20 Zeta	Ø34	27	-	1/2"	K	SCHESS20Zeta
EDSD 32 Zeta	Ø22	27	-	1/2"	M	SCHEDSD32Zeta
ODSS 25 Zeta	Ø41	27	-	1/2"	I	SCHODSS25Zeta



ZETA-EINDREHHILFE

ZETA-Screw-on-adapter

Typ Type	A	H	SW	V	Profil Profile	Artikelnummer Part number
ED 16 Zeta	Ø22	18	19	-	C	SCHE16ZETA
EDS 20 Zeta	Ø34	21	27	-	K	SCHEDS20ZETA
ED 32 Zeta	Ø38	21	30	-	M	SCHE32ZETA
OD 25 Zeta	Ø41	21	30	-	I	SCHOD25ZETA



BEDIENELEMENTE

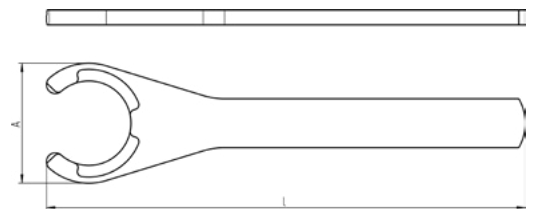
OPERATING TOOLS



ZETA-STANDARDSPANNSCHLÜSSEL

ZETA-Standard spanner wrench

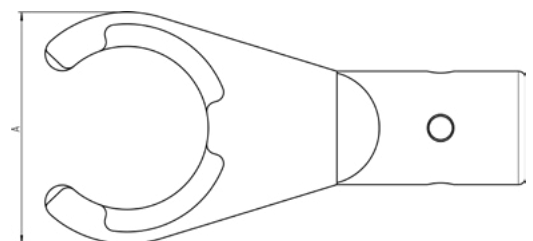
Typ Type	A	L	Profil Profile	Artikelnummer Part number
E 16 Zeta	Ø22	146	C	SCHE16ZETA
E-SP 20 Zeta	Ø44	175	K	SCHESP20ZETA
E 32 Zeta	Ø38	220	M	SCHE32ZETA
O 25 Zeta	Ø41	225	I	SCHO25ZETA



ZETA-DREHMOMENTADAPTER

ZETA-torque wrench adapter

Typ Type	A	L	Profil Profile	Artikelnummer Part number
ET 16 Zeta	Ø22	-	C	THET16
ETET 20 Zeta	Ø44	-	K	THETET20
E 32 Zeta	Ø38	-	M	THET32
OT 25 Zeta	Ø41	-	I	THOT25



MONTAGE- UND MESSVORRICHTUNG

MOUNTING- AND MEASURING DEVICE

Unsere modulare Montage- und Messvorrichtung bietet Ihnen die Möglichkeit verschiedenste Werkzeugaufnahmen **einfach, sicher und schnell** zu montieren und zu messen. Somit haben Sie eine **Komplettlösung** für alle Werkzeugtypen an nur einer Station. Über weitere Daten und Vorteile informieren wir sie gerne!

Our modular mounting- and measuring device provides you easy, safe, and fast mounting and measuring of your tools. It functions as an „all in one“ solution for all types of tools. Please contact us for more information.

MONTAGE- UND LÄNGENMESSVORRICHTUNG

für HSK Werkzeugaufnahmen, mit digitalem Messsystem

MOUNTING- AND MEASURING DEVICE

for HSK tooling, with digital gauge

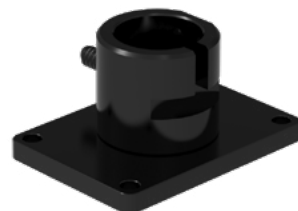
Nenngröße nominal size	D	Artikelnummer Part number
HSK 40 F ANCA	40	DMOHSK-40ANCA
HSK 50 F ANCA	50	DMOHSK-50ANCA
HSK 50 A/E/F	50	DMOHSK-50SD



MONTAGEVORRICHTUNGEN für Schleifdorne

Mounting-devices for grinding wheel holders

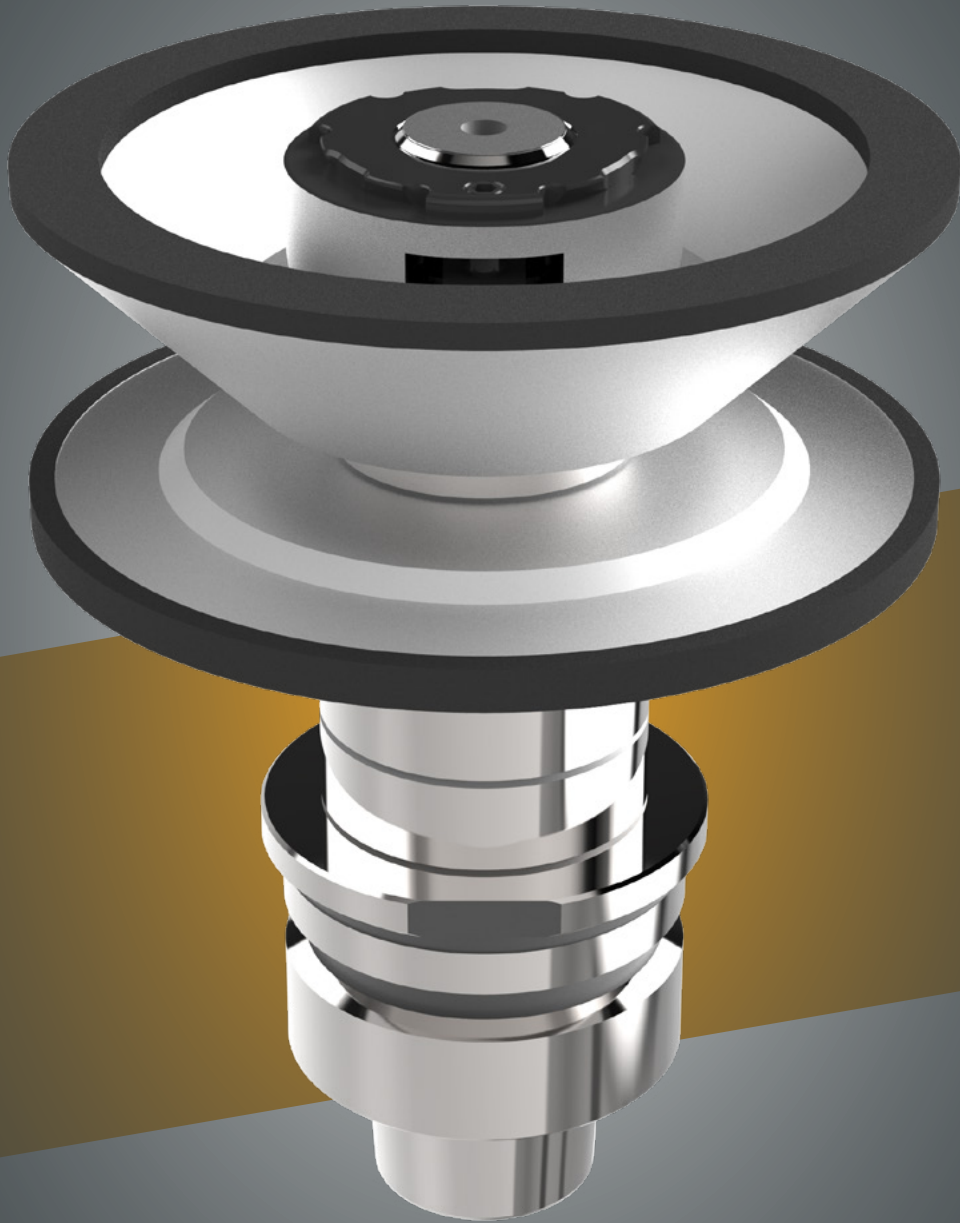
Nenngröße nominal size	D	Artikelnummer Part number
HSK 40 F ANCA	40	MOHSK-40ANCA
HSK 50 F ANCA	50	MOHSK-50ANCA
HSK 50 A/E/F	50	MOHSK-50SD



T-Tool®

Schleifdorne- und Zubehör-Kataloge

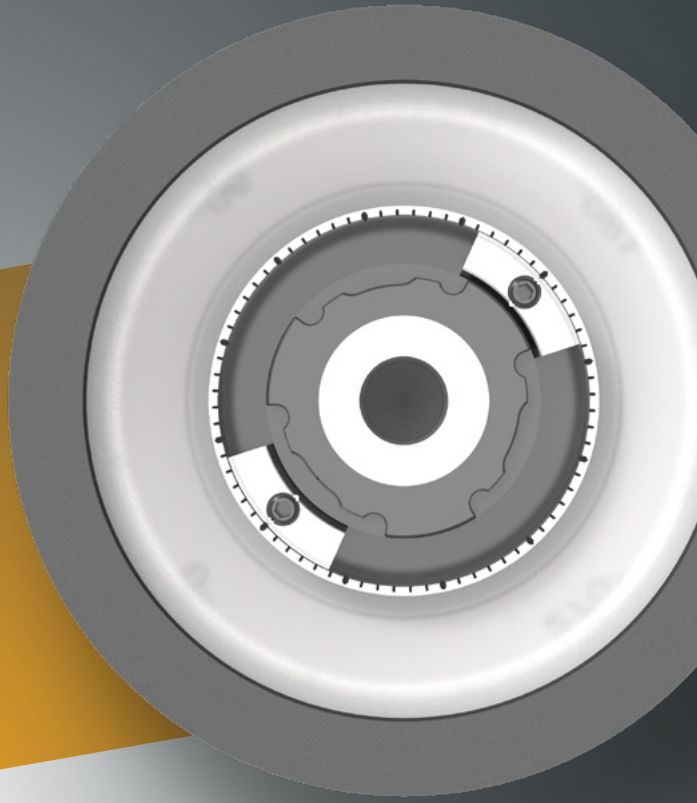
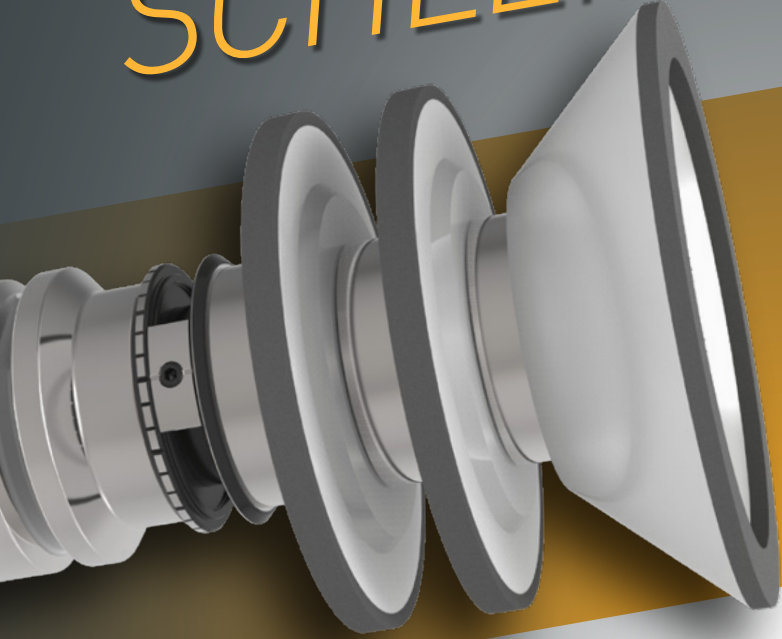
Schleifdorne und mehr • *Grinding wheel holders and more*



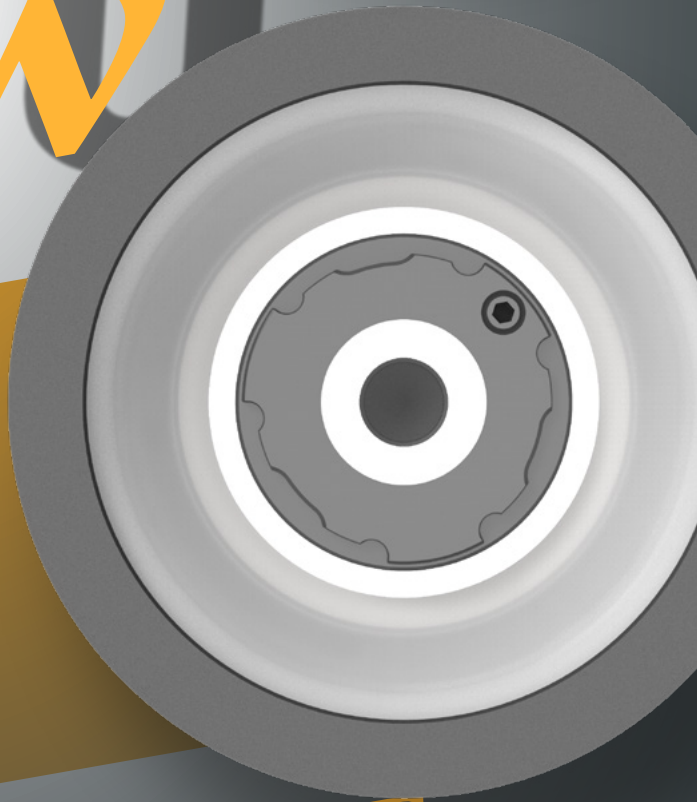
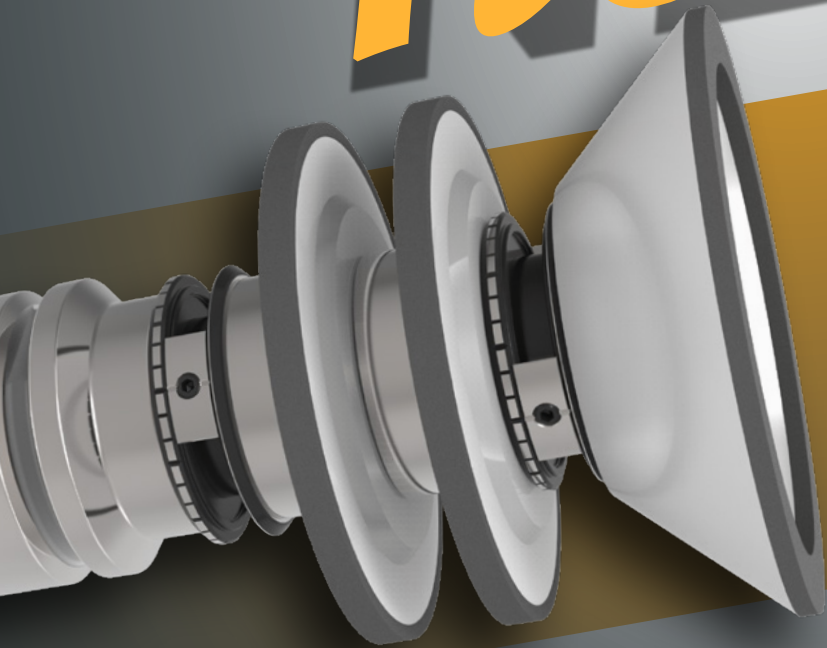
SCHLEIFAUFNAHMEN SIND FÜR FOLGENDE HERSTELLER VERFÜGBAR:
GRINDING WHEEL HOLDER ARE AVAILABLE FOR FOLLOWING BRANDS:

Anca • Haas • Hawema • Saacke • Deckel/Isog
Schneeberger • Rollomatic • Schütte • Reinecker • Walter

SCHLEIFEN



new



EXPERIENCE



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