



DR. MÜLLER
DIAMANTMETALL®

INDIVIDUAL **PREMIUM**



PRODUCT CATALOGUE
**CLAMPING
SYSTEMS**

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Marcus Kanis

CHAIRPERSON OF
THE SUPERVISORY BOARD:
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COMMERCIAL REGISTER:
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YOUR CUSTOMER NUMBER:

▲ ORDER BY E-MAIL
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+49 (0)881 / 90 11 55 - 108

YOUR PERSONAL CONTACT PARTNER:

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INDIVIDUAL PREMIUM



For **MAXIMUM EFFICIENCY**
in the grinding process


DR. MÜLLER
DIAMANTMETALL®



INDIVIDUAL PREMIUM

Tell us what grinding operation you are currently planning. We will advise you personally and develop the grinding wheel that meets your individual needs exactly. For the highest quality or reliable reproducibility. For productive processes, extended life and calculable investment security. For fascinating grinding performance and continuous optimisation – your requirements are our challenges.

MDT-532 ES D126

X-48167

EN13236 Vmax:80m/s

676368/01



THE COMPANY **MANUFACTURING**

Dr. Müller Diamantmetall AG is located just a stone's throw from Starnberger See. It is a manufacturer like those in the Swiss watch making industry – precision in all respects.



THE COMPANY

Dr. Müller Diamantmetall AG is a company with a remarkable tradition. Its founder, Dr. Wilhelm Müller, invented the metal-bonded diamond grinding wheel in 1935, laying the foundation stone for the company, and to the present day Dr. Müller Diamantmetall AG remains an owner-operated enterprise, with the third generation of the family in charge of its operations.

KNOW-HOW

Thanks to the use of cutting-edge database technology, we are now able to draw on expert knowledge acquired over more than 80 years of diamond tool production. Our own R&D department develops innovative solutions to meet the most complex requirements, while countless innovations and patents highlight our creativity when it comes to developing ingenious technical solutions. This extensive competence in the development of solutions for all application areas guarantees added value from close cooperation with the customer – ensuring the added value that leads to outstanding customer products.

QUALITY

We guarantee ultimate quality and precision for our customers. This professionalism is backed by a database-driven process error management system and DIN ISO 9001:2008 certification since the year 2000.

Thus, you are assured of end-to-end quality control, reproducible product quality and maximum efficiency in your grinding process.





COMPANY HISTORY

INNOVATION FOR

MORE THAN 80 YEARS

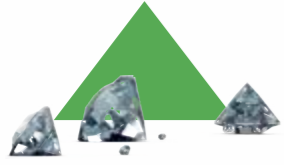


As an experienced solution partner, Dr. Müller Diamantmetall AG with its Individual Premium brand Dr. Müller Diamantmetall has been there for over 5,000 customers worldwide since more than 80 years.

- ▲ 2017
Ferox – the multi-talent for circumference and face machining.
- ▲ 2014
Progress in occupational safety. Drastic reduction of permanent grinding noise in peel grinding with the SilencePro product innovation.
- ▲ 2011
Extension of digital production control and expansion of company management.
- ▲ 2008
Relocation of production and administration to the new facilities of the third plant in Weilheim, Upper Bavaria.
- ▲ 2008
The XT690 bonding concept makes the grinding process even more efficient and expands the portfolio with a new high-performance bond.
- ▲ 2006
Acquisition and continuation of the company in the third generation by Michael Schulze, grandson of the company's founder.

- ▲ 2004
Beginning of a new technical era through the development of the novel high-performance bonding concept PowerOne.
- ▲ 2002
Expansion of production space with the construction of a second plant in Weilheim, Upper Bavaria.
- ▲ 1989
Start of production of ceramic-bonded diamond and CBN grinding wheels.
- ▲ 1970
Start of production and sales of diamond dressing rolls.
- ▲ 1969
Start of production of resin- and metal bonded CBN grinding wheels.
- ▲ 1965
Start of production of resin-bonded diamond grinding wheels.
- ▲ 1963
Start of production of diamond dressing tools.
- ▲ 1962
Continuation of the company by the second generation after the death of its founder.
- ▲ 1955
Relocation to our own production facilities in Feldafing on the Starnberger See.
- ▲ 1947
Resumption of production in the greater Munich area.
- ▲ 1944
Destruction of the company in the war.
- ▲ 1935
Founding of the company by Dr. Wilhelm Müller in Berlin. Patent registration and production of metal-bonded diamond grinding wheels.





MAXIMUM EFFICIENCY

Tell us what technical project you are currently planning. We provide you with personal, competent advice. We develop the best solution for your grinding application – as individual as you wish. That guarantees maximum efficiency in your grinding process.





INCREDIBLE DIVERSITY

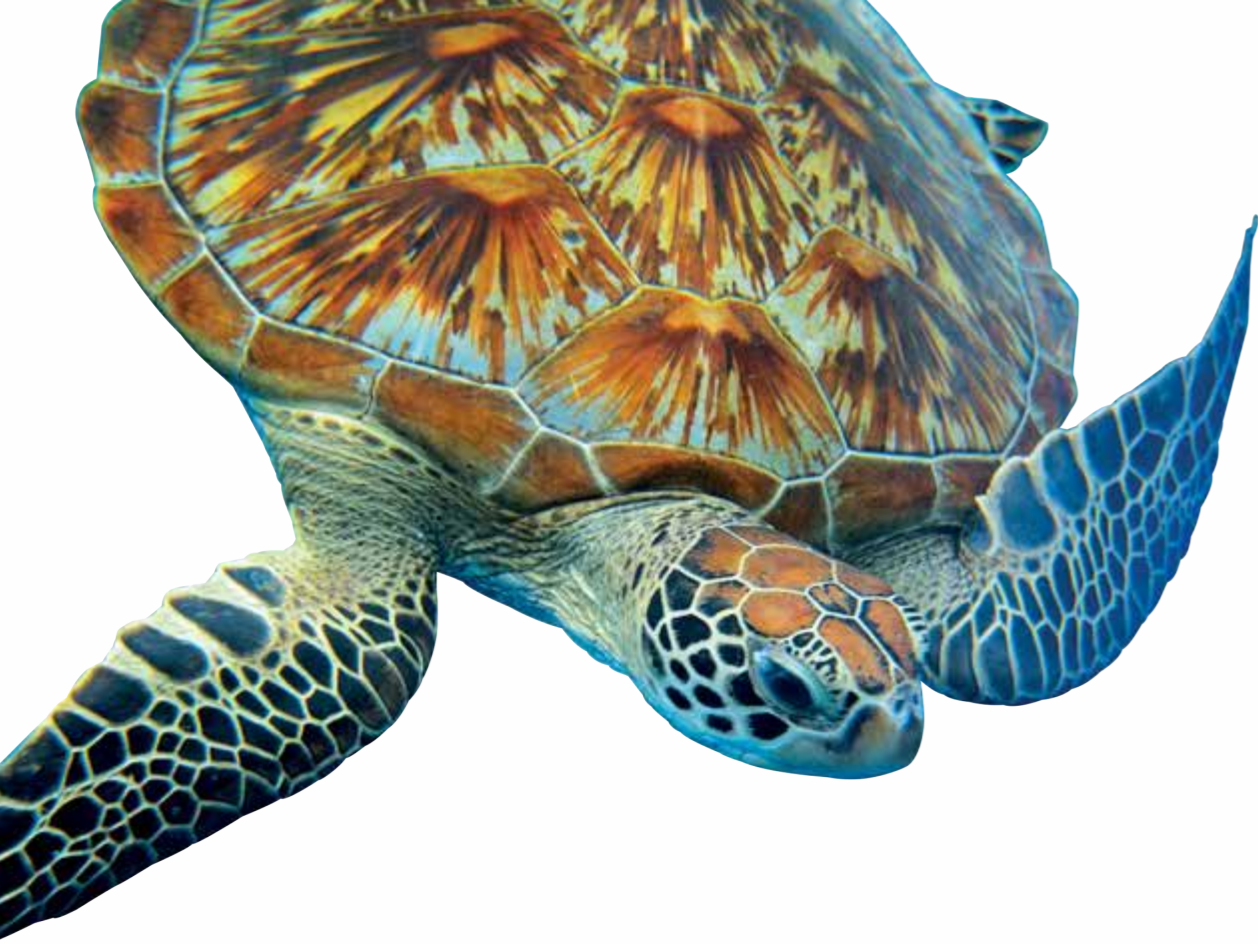


More than 155,000 grinding wheel versions in the precision abrasives segment await you in our product portfolio. Our R&D department develops innovative solutions to meet the most complex requirements. We are your partner for completely new development with outstanding vertical integration, based on our knowledge of an incredible diversity of existing solutions.

EXTREMELY LONG LIFE

Our company is your partner for high-quality products with more than 80 years of experience in the production of CBN and diamond tools.





REASSURING CONSISTENCY

As the inventor of the metal-bonded diamond grinding wheel, we have stood by the side of more than 5,000 customers worldwide since 1935. Reap the benefits of our technical solution creativity and our reliable, reproducible product quality for better performance and enhanced safety in your processes.





PERSONAL CONSULTING INDIVIDUAL SERVICE



We are committed to facing the challenges of the future in close collaboration and at eye level with our customers.

Perhaps you would like to exchange ideas, technician to technician, leading up to new technical challenges. Maybe you want to pursue the continuous improvement of your grinding methods in operational practice as part of dedicated after-sales support, or you need to re-profile and re-sharpen your Dr. Müller Diamantmetall grinding tools. We are available directly on site when needed, getting you ahead with supplementary services.

IMPLEMENTATION AND START-UP PHASE

In order to put your new grinding wheel from Dr. Müller Diamantmetall to use as quickly and easily as possible, one of our experienced application engineers will be happy to assist you in the implementation and start-up phase by request.

AFTER-SALES SUPPORT

New processes require ongoing review. We consider after-sales support an important part of our work in order to guarantee the ongoing improvement of your processes.

REPAIR MANAGEMENT

Trouble-free production without unoccupied time is the main goal of any production manager. We are happy to help you reach this goal with our competent repair service.

EDUCATION AND USER TRAINING

Your employees have extensive knowledge of your existing processes. We design user education and training by customer request for specific, defined technical topics. The objective is to teach your employees about grinding-related topics and therefore enhance their knowledge.





NEW REQUIREMENTS DAILY FOCUS INDUSTRIES

The continuous success of a technical solution provider at our level depends on the ability to consider the specific requirements of our customers in their various industries. We have always risen to this special challenge.



TOOL INDUSTRY

- A grinding wheel optimised to meet your requirements guarantees process stability and high removal rates, even in particularly rough production environments.
- Outstanding results in terms of the material removal rate, ease of cutting and edge stability for all drilling, milling, turning and grinding needs.



MECHANICAL ENGINEERING

- Your number one choice for special tools and standard products with the highest machining performance, dimensional accuracy, edge stability and profile accuracy.
- Comprehensive consulting for the design of individual CBN and diamond tools for process security in outer circular grinding, flat/slideway and ball bearing spindle grinding.



AVIATION AND AEROSPACE

- Our custom-made solutions ensure you consistently get the optimum precision tool: even for materials with very high machining demands, such as Titanium, Hastelloy and Astelloy.
- New development of customer-specific products with a clear focus on maximum edge stability, reproducible quality, ease of cutting and machining accuracy.



OPTICAL INDUSTRY

- Precision from A to Z ensures flawless surface finishes as well as reliability and reproducibility for all cutting, drilling and fine grinding applications.
- Industry-optimised solutions: scooping, complex combination and micro-tools, aspheric fine grinding and sapphire and quartz processing.



AUTOMOTIVE

- Our flexible production, warehousing and shipping system ensures the fast and reliable delivery of your individual abrasives.
- Efficient precision tools with an extended life and long dressing intervals for grinding valves, camshafts and gear shafts, among other applications.



GENERAL APPLICATIONS

- 155,000 grinding wheel versions: including the ideal solution for your increasingly complex grinding operations.
- More than 80 years of proven competency in developing solutions for all fields of application: added value through partnership and cooperation, added value through your outstanding end product.



CONTENTS



AT HOME IN BAVARIA AND ACTIVE AROUND THE WORLD **MADE IN GERMANY**

We are active in the following countries:

- Central, Northern, Eastern, Southern and Western Europe
- Turkey
- Israel
- Russian Federation
- India
- Sri Lanka
- Thailand
- Singapore
- Malaysia
- Hong Kong
- China
- Japan
- South Korea
- Canada
- USA
- Chile
- Mexico
- Brazil
- South Africa

Flexible clamping systems for the optimal grinding process

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CHARACTERISTICS OF GDS CLAMPING AND BALANCING SYSTEMS:



Highest accuracy by using modern measurement techniques.



Perfect fit and optimum radial and axial runout.



Ruggedness due to use of tempered material and best heating treatments.



Optimum surface finish plus long lasting dimensional stability and precision.



Sustainability by excellent durability and repair options.



GRINDING WHEEL AND FLEXIBLE CLAMPING SYSTEMS FOR THE OPTIMAL GRINDING PROCESS

We create the perfect connection between our tools and your tool grinding machine. As a provider of technical solutions at the highest level, we have for over 80 years dedicated ourselves to the challenge of perfecting your grinding process with the highest quality. The optimal grinding process requires ever more extreme

accuracies with optimised, flexible loading systems on the machine. To make your grinding result even more efficient and precise, we supply you with high-quality clamping systems from GDS Präzisionszerspanungs GmbH. Therefore, you get your optimal grinding solution from a single source.

VIPER series

The VIPER clamping system has been specially developed for use in modern high-performance grinding centres. Currently only suitable for Walter machines. Highest holding forces enable a stable grinding process. Flexible handling with high repetitive precision are the prerequisites for the economically optimised production and re-sharpening of rotationally sym-

metrical tools. The VIPER clamping system can be installed on your tool grinding machine very quickly and is ready for use. This enables you to reduce set-up times to a minimum. With our screw-in aid CoFix, you can easily change your collets in just a few moments, flexibly and highly precisely - the basis for economical production.

ADVANTAGES OF THE VIPER SERIES

- Precisely adjustable concentricity
- Minimal set-up times
- Extremely high holding forces
- Very stable chuck
- High concentricity and repeatability
- Low interference contours for optimal grinding wheel run
- Flexible clamping range through the use of Nann collets
- Very low wear due to the use of high-quality materials
- Faster and safer diameter changes thanks to the CoFix screw-in aid

VIPER XL



xGrind series

The innovative xGrind series developed by GDS for use in the area of precision clamping devices for tool grinding machines. Due to the excellent damping properties of the xGrind HPS20, vibrations generated during machining are dampened by the clamping system. The surface quality

on the workpiece is absolutely constant and ensures low manufacturing tolerances. The removal and wear on the grinding wheel are reduced. Consistent holding force and concentricity with a very small clamping depth. For us, these are prerequisites for a reliable grinding operation.

xGrind HPS20



ADVANTAGES OF THE XGRIND SERIES

- Excellent damping properties minimise machining vibrations
- Consistently high holding force
- High concentricity and repetitive accuracy
- High cost-effectiveness thanks to a long service life
- Increased cost-effectiveness of the grinding wheel due to reduced removal and wear
- Low interference contours for optimal grinding wheel run
- Effective thanks to flexible clamping range
- Flexible clamping range through the use of Nann collets
- Time-saving due to simple handling, 45% fewer screw turns than with conventional chucks
- Secure clamping with a wrench thanks to the optimal inclination of the clamping screw
- High work safety during transport through the SAFETY GRIP area
- Sustainable thanks to very little wear and tear and inexpensive general overhaul and repair options
- Optimally constant surface quality on the workpiece ensures low manufacturing tolerances

COBRA the two-part clamping system

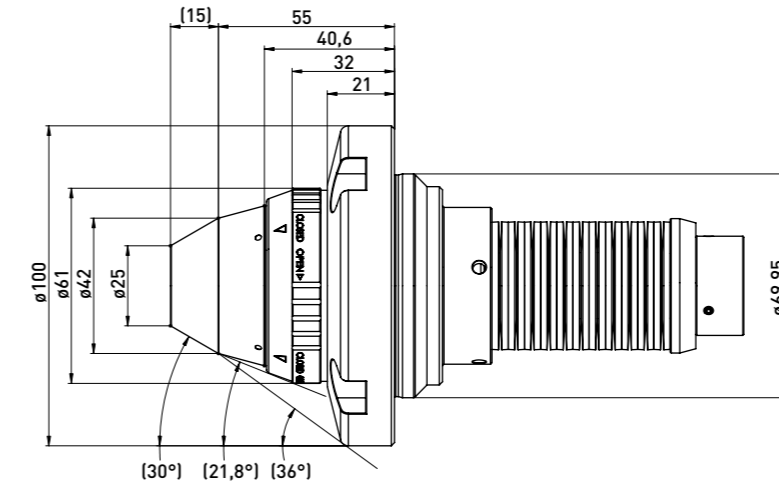
This clamping system is available for Nann and Schaublin collets and only suitable for Walter machines.



VIPER S Nann 3148E **NANN**  Collet - maximum bore $\varnothing 10$



VIPER S Nann 3148E **NANN**  Collet - maximum bore $\varnothing 10$



Delivery includes:

USB flash drive with instructions, actuating pushrod

Item No.	Name	D	L
400004014	VIPER S Nann 3148E	69,95	70

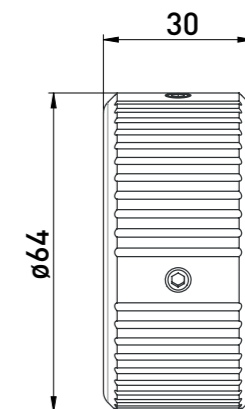
Available for following machine(s):



- Helitronic Mini Power
(excluding Helitronic Mini Automation)
- Helitronic Power
- Helitronic Vision
- Helitronic Essential
- Essential Automation

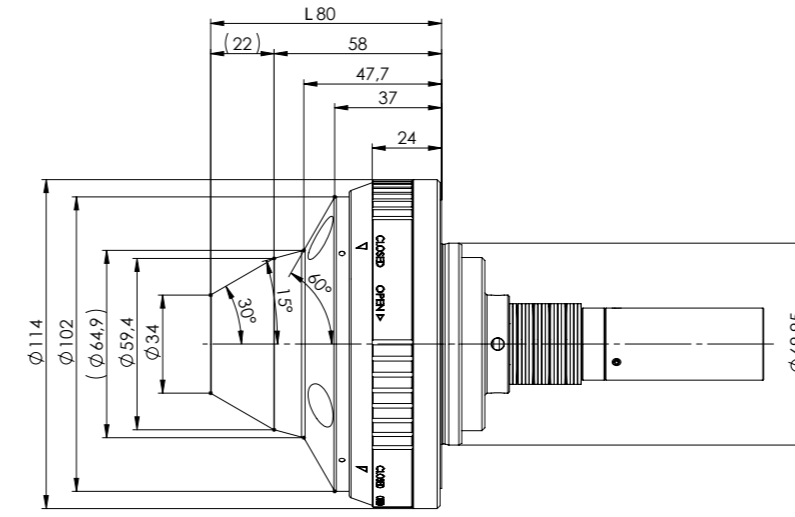
Accessories:

Item No.	Name
350060013	Cofix 12 (for W15 and Nann 3148E) Screw-in tool for clamping sleeves



VIPER M Nann 3409E Collet - maximum bore $\varnothing 16$

VIPER M Nann 3409E Collet - maximum bore $\varnothing 16$



Delivery includes:
USB flash drive with instructions, actuating pushrod

Available for following machine(s):

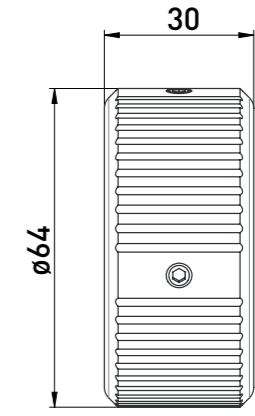


- Helitronic Mini Power
(excluding Helitronic Mini Automation)
- Helitronic Power
- Helitronic Vision
- Helitronic Essential
- Essential Automation

Item No.	Name	D	L
400004017	VIPER M 3409E	69,95	80

Accessories:

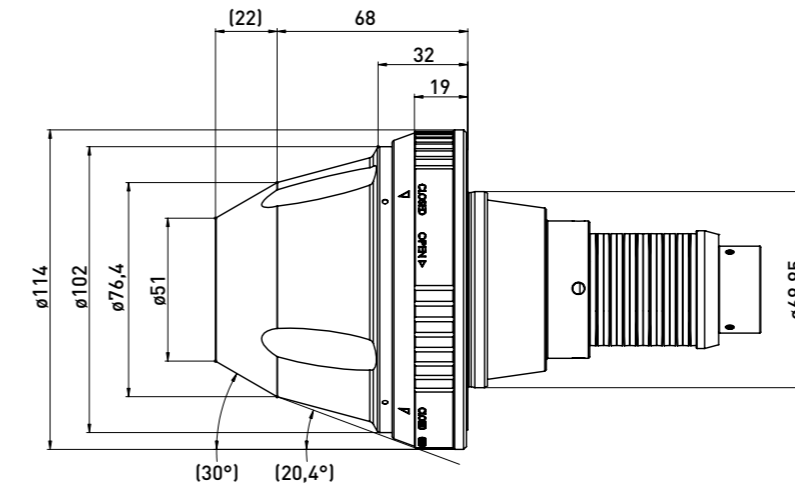
Item No.	Name
350060012	Cofix 20 (For W20 and Nann 3409E) Screw-in tool for clamping sleeves



VIPER L Nann 3718E **NANN** Collet - maximum bore $\varnothing 27$



VIPER L Nann 3718E **NANN** Collet - maximum bore $\varnothing 27$



Delivery includes:

USB flash drive with instructions, actuating pushrod

Available for following machine(s):

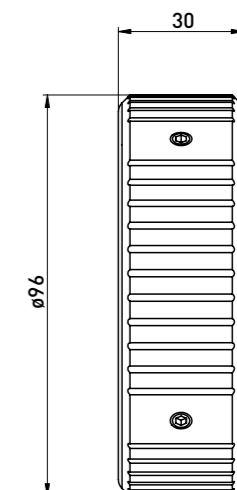


- Helitronic Mini Power
(excluding Helitronic Mini Automation)
- Helitronic Power
- Helitronic Vision
- Helitronic Essential

Item No.	Name	D	L
400004012	VIPER L Nann 3718E	69,95	90

Accessories:

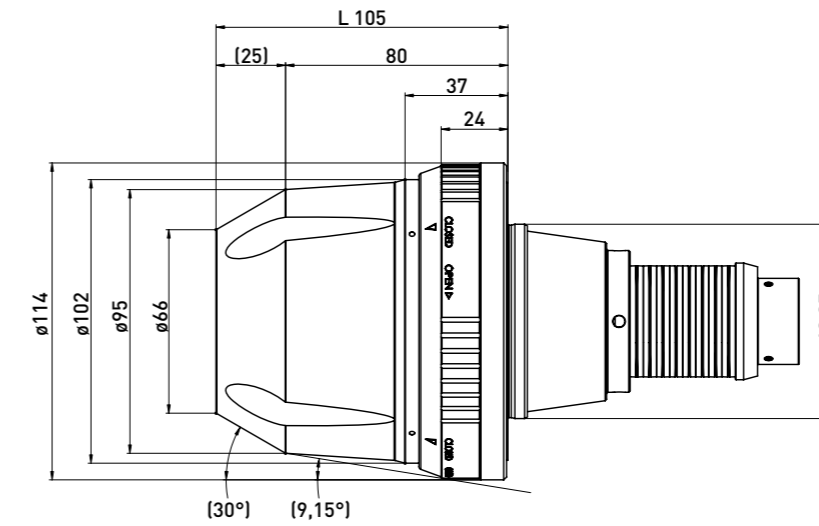
Item No.	Name
350060014	Cofix 32 (for Nann 3718E) Screw-in tool for clamping sleeves



VIPER XL Nann 3851E **NANN** Collet - maximum bore $\varnothing 36$



VIPER XL Nann 3851E **NANN** Collet - maximum bore $\varnothing 36$



Delivery includes:

USB flash drive with instructions, actuating pushrod

Available for following machine(s):

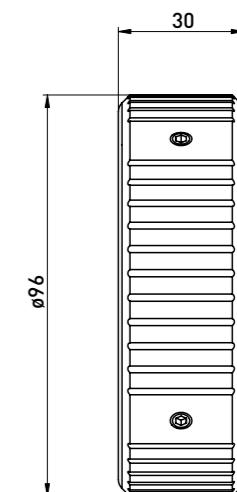


- Helitronic Mini Power
(excluding Helitronic Mini Automation)
- Helitronic Power
- Helitronic Vision
- Helitronic Essential

Item No.	Name	D	L
400004013	VIPER XL Nann 3851E	69,95	105

Accessories:

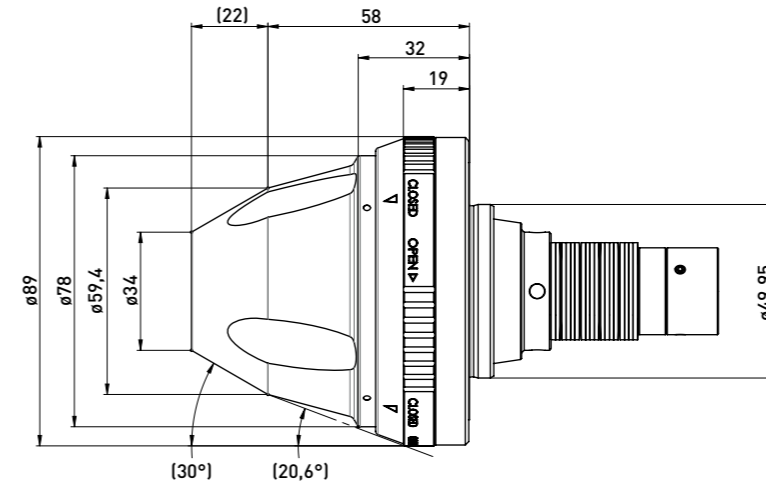
Item No.	Name
350060015	Cofix 45 (for Nann 3851E) Screw-in tool for clamping sleeves



VIPER Nann 3409E Micro **NANN** Collet - maximum bore $\varnothing 16$



VIPER Nann 3409E Micro **NANN** Collet - maximum bore $\varnothing 16$



Delivery includes:

USB flash drive with instructions, actuating pushrod

Available for following machine(s):

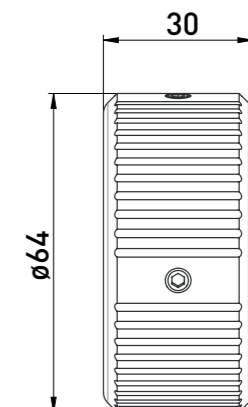


Helitronic Micro

Item No.	Name	D	L
400004002	VIPER Nann 3409E Micro	49,95	80

Accessories:

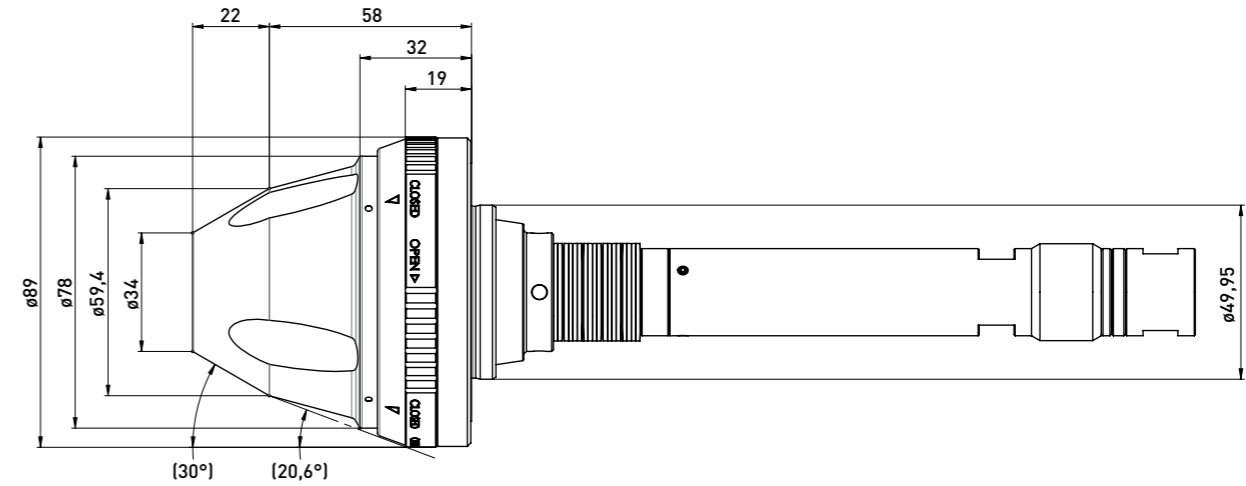
Item No.	Name
350060012	CoFix 20 (for W20 and Nann 3409E) Screw-in tool for clamping sleeves



VIPER Nann 3409E Mini **NANN**  Collet - maximum bore $\varnothing 16$



VIPER Nann 3409E Mini **NANN**  Collet - maximum bore $\varnothing 16$



Delivery includes:

USB flash drive with instructions, actuating pushrod

Available for following machine(s):

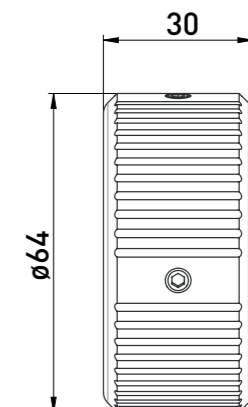


Helitronic Mini Automation

Item No.	Name	D	L
400004003	VIPER Nann 3409E Mini	49,95	80

Accessories:

Item No.	Name
350060012	CoFix 20 (for W20 and Nann 3409E) Screw-in tool for clamping sleeves



COBRA: The two-part clamping system in high-precision GDS quality!



Modern grinding processes become more and more complex, forcing you to achieve extreme precision and perfect quality while minimizing setup and tool-changing times, due to pricing pressure.

COBRA, the two-part clamping system, has been especially developed for high-performance grinding centers.

Excellent repeatability when changing blanks or collets is a key factor for optimal grinding results. Collets can be changed quickly and in just a few simple steps. You can also adjust radial concentricity in just a few minutes.

COBRA - the economical clamping system from GDS.

GDS - precision is our passion

An excellent solution at an affordable price.



Tapered profile for optimal wheel clearance.

Good concentricity and repeatability.

Adjustable radial concentricity.

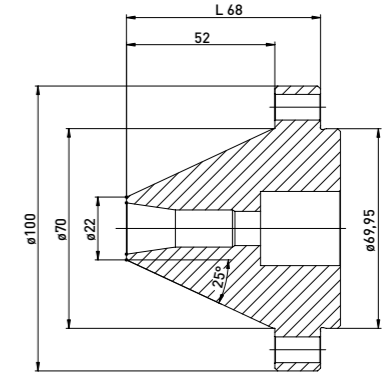
Handles a range of diameters using widely available Nann and Schaublin collets.

Very durable.

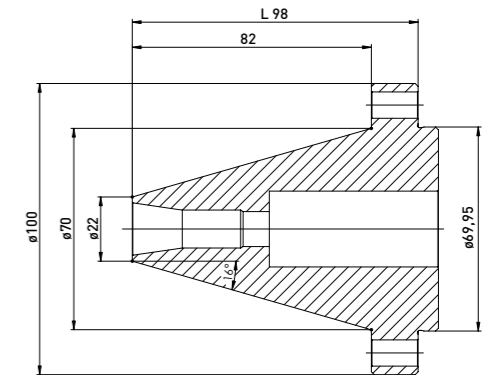
For **NANN** collets



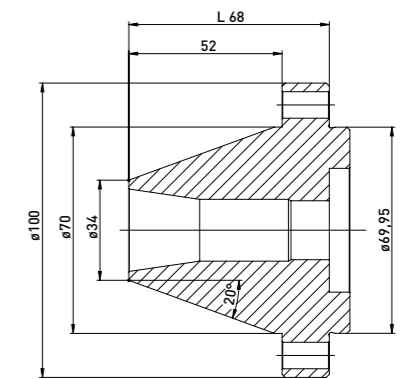
Item No.	Name
400007010	Collet chuck SK50 3148E L68
350300010	Pull rod for Collet chuck



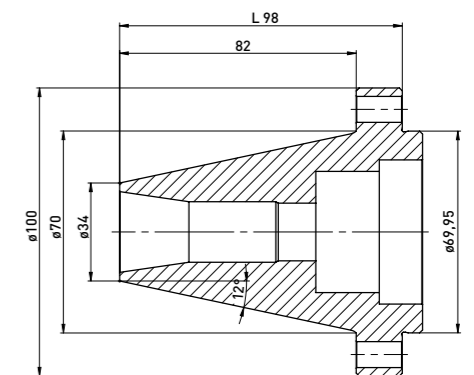
Item No.	Name
400007020	Collet chuck SK50 3148E L98
350300020	Pull rod for Collet chuck



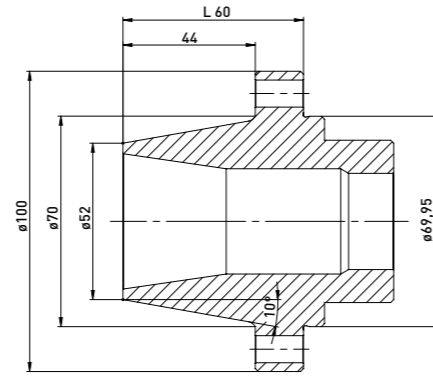
Item No.	Name
400007030	Collet chuck SK50 3409E L68
350300030	Pull rod for Collet chuck



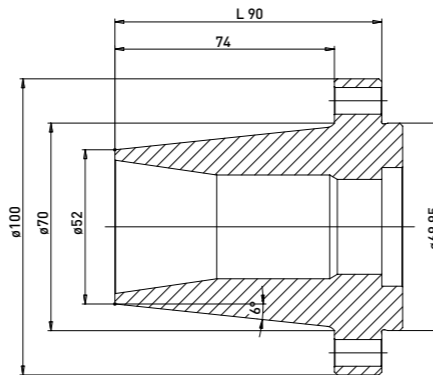
Item No.	Name
400007040	Collet chuck SK50 3409E L98
350300040	Pull rod for Collet chuck



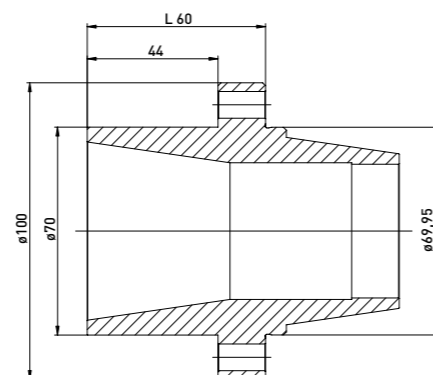
For **NANN** collets



Item No.	Name
400007050	Collet chuck SK50 3718E L60
350300050	Pull rod for Collet chuck

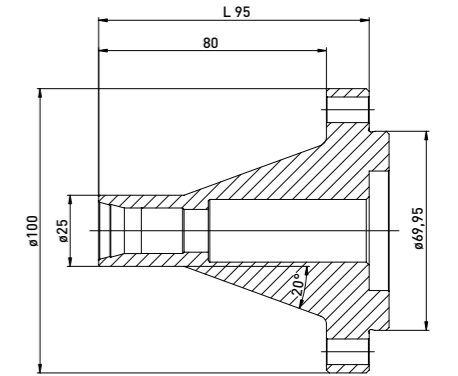


Item No.	Name
400007060	Collet chuck SK50 3718E L90
350300060	Pull rod for Collet chuck

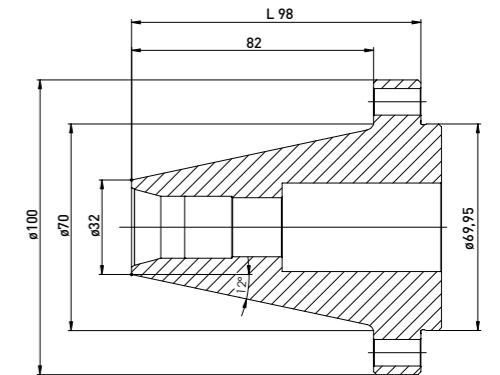


Item No.	Name
400007070	Collet chuck SK50 3851E L60
350300070	Pull rod for Collet chuck

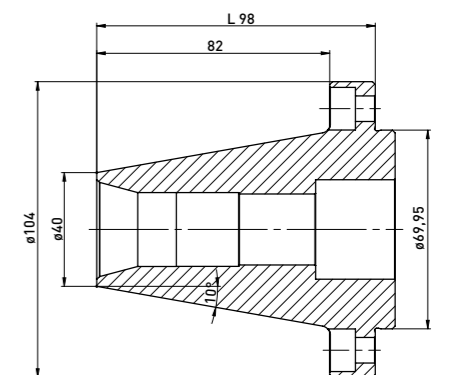
For Schaublin collets



Item No.	Name
400007110	Collet chuck SK50 W15 L95
350300110	Pull rod for Collet chuck



Item No.	Name
400007120	Collet chuck SK50 W20 L98
350300120	Pull rod for Collet chuck



Item No.	Name
400007130	Collet chuck SK50 W25 L98
350300130	Pull rod for Collet chuck

The xGrind HPS 20 manual chuck is the **high-precision chuck** of our xGrind series.



GDS developed the innovative xGrind series for precision clamping on tool grinding machines.

Due to the excellent dampening properties of our xGrind HPS 20, vibrations during the grind are attenuated.

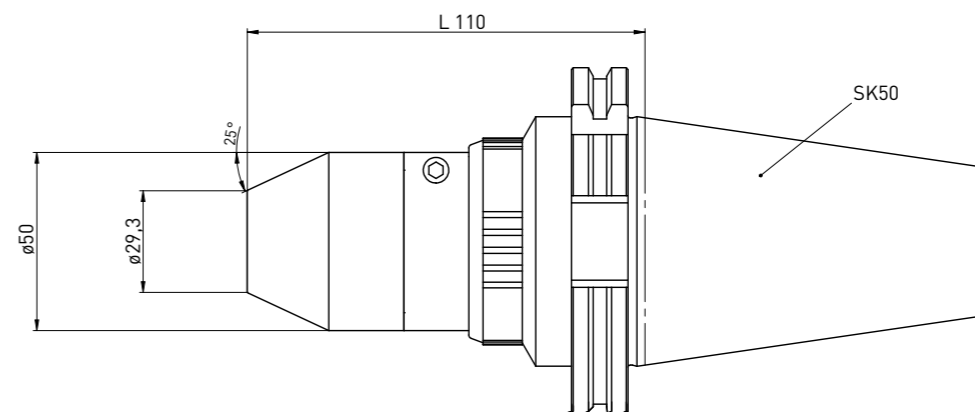
Workpiece surface quality is absolutely consistent and ensures that you can meet tight manufacturing tolerances. Abrasion and wear of your grinding wheel is reduced.

The xGrind HPS also provides consistent clamping force and accurate concentricity even with a relatively short clamping length of 2.5 x D.

The xGrind HPS 20 creates perfect conditions for a predictable and stable grinding operation.

GDS - The Precision Makers

xGrind **HPS 20 SK50**



Delivery includes:

wrench

Item No.	Name	d	L
400005000	xGrind HPS SK50	29,3	110
400005100	xGrind HPS SK50 complete set (incl. collets ø3-20mm)	29,3	110



High concentricity and repeatability.

Very economical due to excellent durability.

Slim profile for optimal wheel clearance.

Wide clamping range for outstanding versatility.

Easy handling saves time – 45% less than conventional clamping techniques.

Our collet wrench ensures safe operation.

Very low long-term operating cost due to excellent durability and affordable overhaul and repair options.

The xGrind Hydro is our **hydraulic chuck with SK taper**.



The xGrind series was developed by GDS especially for use in all high-performance grinding centers with the SK50 interface.

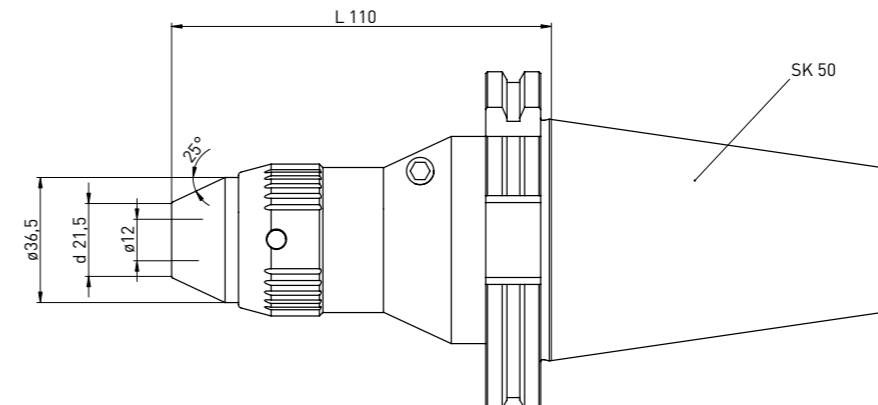
GDS' xGrind Hydro is a new manual hydraulic chuck available in three diameter variations (12, 20 & 32 mm). Our goal was to develop a chuck that yields the highest speed, accuracy, and flexibility.

Outstanding repeatability combined with excellent damping properties of hydraulic clamping technology offers you best surfaces for optimum concentricity.

With the SK50 interface, the xGrind is nearly universally applicable.

GDS - The Precision Makers

xGrind **Hydro SK50 ϕ 12**



Delivery includes:

wrench

Item No.	Name	d	L
400005001	xGrind Hydro SK50 ϕ 12	21,5	110



NEW: SafeGrip

Easy and safe removal of the chuck from your machine. SafeGrip prevents injuries and slipping off in daily handling.

Slim profile for optimal grinding wheel clearance

Excellent concentricity and repeatability.

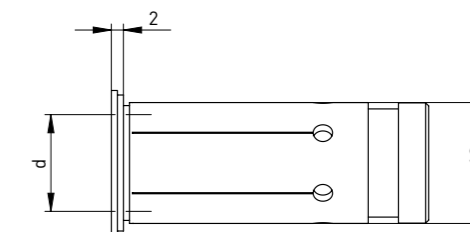
Wide clamping range by the use of GDS intermediate sleeves.

Reduced risk of injury by optimized angle of tensioning screw.

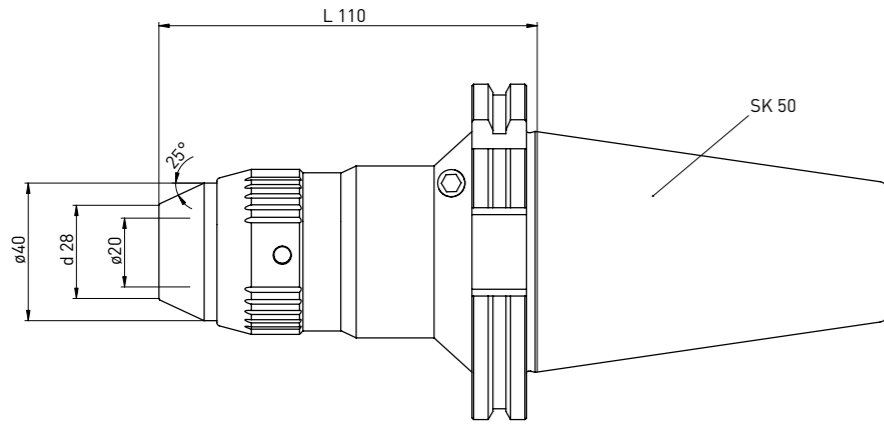
Economical repair and overhaul options.

Accessories:

Item No.	Name	d
350110601	GDS intermediate sleeve ϕ 12	3
350110602	GDS intermediate sleeve ϕ 12	4
350110603	GDS intermediate sleeve ϕ 12	5
350110604	GDS intermediate sleeve ϕ 12	6
350110605	GDS intermediate sleeve ϕ 12	8



xGrind Hydro SK50 ϕ 20



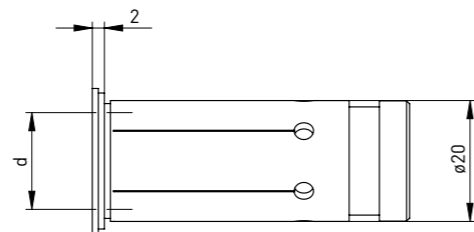
Delivery includes:

wrench

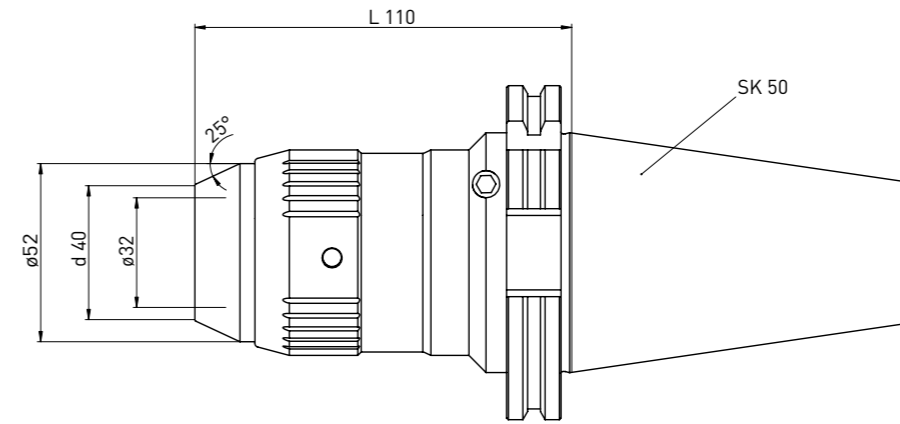
Item No.	Name	d	L
400005002	xGrind Hydro SK50 ϕ 20	28	110

Accessories:

Item No.	Name	d
350110606	GDS intermediate sleeve ϕ 20	3
350110607	GDS intermediate sleeve ϕ 20	4
350110608	GDS intermediate sleeve ϕ 20	5
350110609	GDS intermediate sleeve ϕ 20	6
350110610	GDS intermediate sleeve ϕ 20	7
350110611	GDS intermediate sleeve ϕ 20	8
350110612	GDS intermediate sleeve ϕ 20	9
350110613	GDS intermediate sleeve ϕ 20	10
350110614	GDS intermediate sleeve ϕ 20	11
350110615	GDS intermediate sleeve ϕ 20	12
350110616	GDS intermediate sleeve ϕ 20	13
350110617	GDS intermediate sleeve ϕ 20	14
350110618	GDS intermediate sleeve ϕ 20	15
350110619	GDS intermediate sleeve ϕ 20	16



xGrind Hydro SK50 ϕ 32



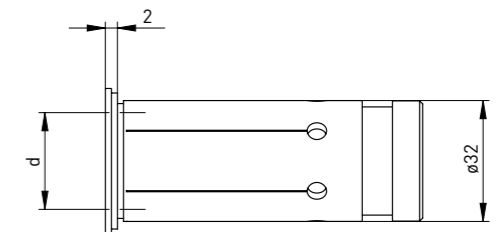
Delivery includes:

wrench

Item No.	Name	d	L
400005003	xGrind Hydro SK50 ϕ 32	40	110

Accessories:

Item No.	Name	d
350110707	GDS intermediate sleeve ϕ 32	6
350110708	GDS intermediate sleeve ϕ 32	8
350110709	GDS intermediate sleeve ϕ 32	10
350110710	GDS intermediate sleeve ϕ 32	12
350110711	GDS intermediate sleeve ϕ 32	14
350110712	GDS intermediate sleeve ϕ 32	16
350110713	GDS intermediate sleeve ϕ 32	18
350110714	GDS intermediate sleeve ϕ 32	20
350110715	GDS intermediate sleeve ϕ 32	25



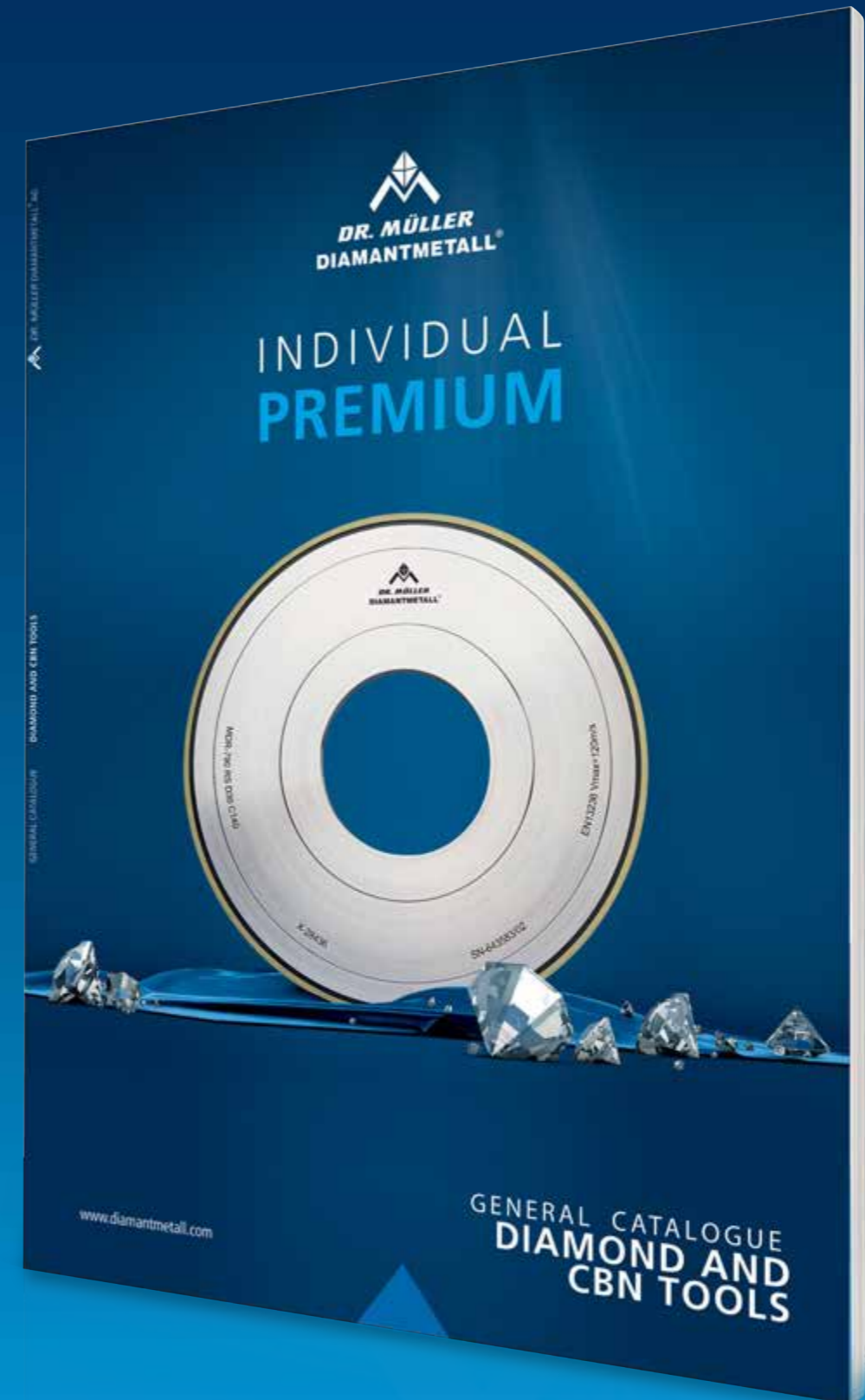
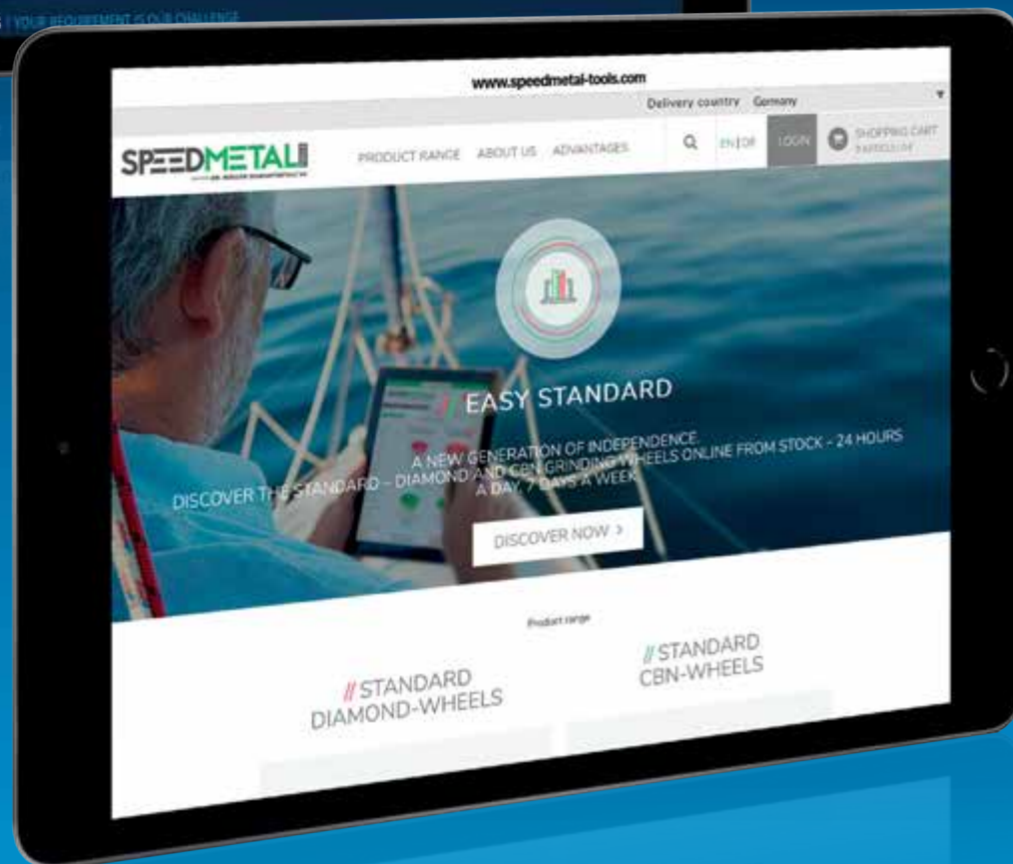
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