



Innovative technology also as standard

DRILL RANGE



MAPAL STANDARD

complete – available – powerful

As technology partner MAPAL offers a comprehensive standard programme of solid carbide drills or as replaceable head system for all machining operations. No matter what your machining operation is – whether cast iron materials, non-ferrous metals, steels, modern lightweight construction materials or difficult to machine materials – you are always one step ahead with the MAPAL drill range.

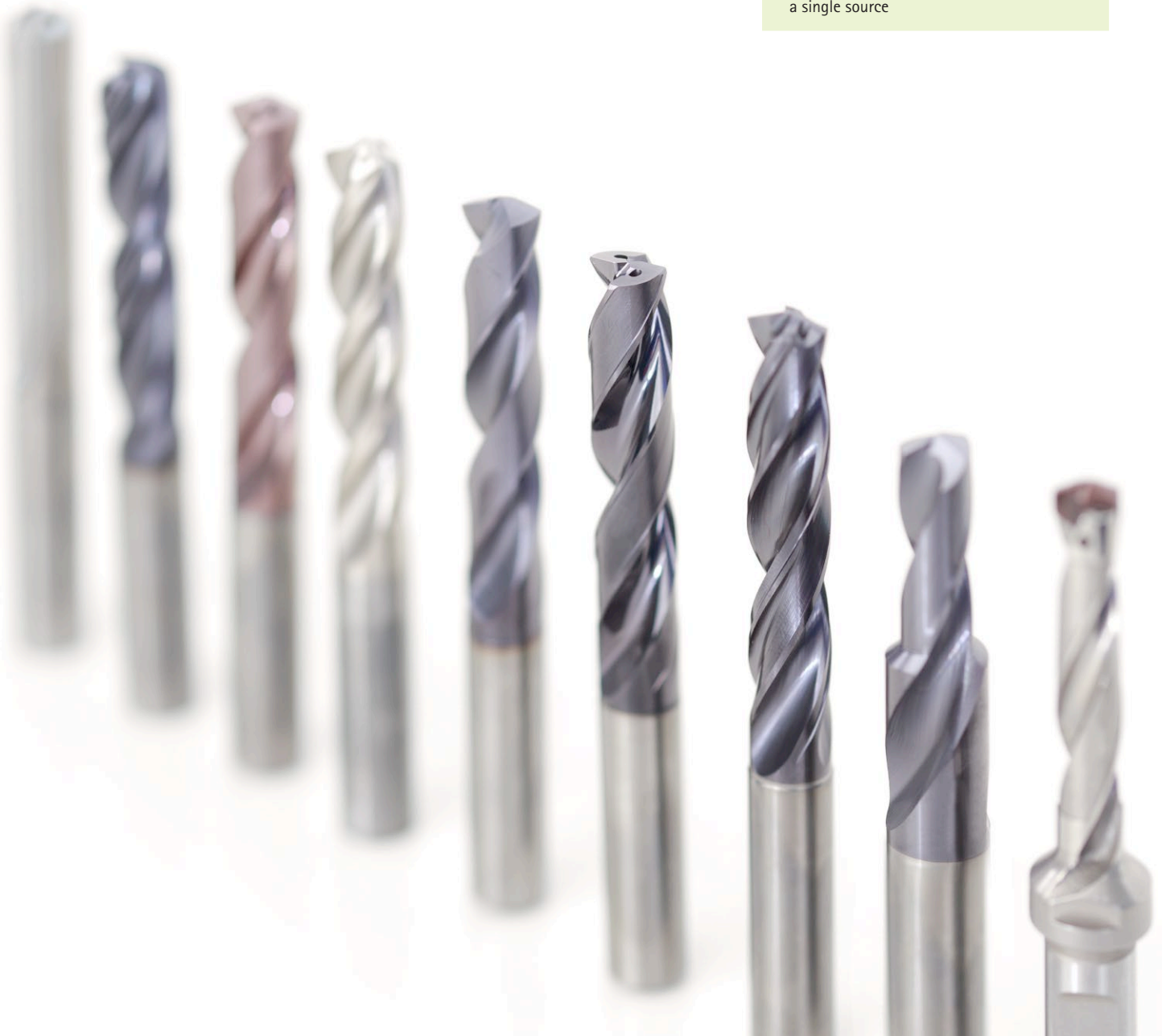
MAPAL has been researching intensively into the various challenges facing drilling operations for decades and has gained extensive experience and competence. The great inno-

vative strength results in products that are technological leaders. For you as customer, that opens up vast new opportunities for cost-effective production. The performance of the tools is being continuously improved and extended. The focus of the research and development activities is always on achieving tangible benefits for the customer, such as longer tool life, reduced costs or increased productivity.




























































































































In addition, the worldwide regrinding service ensures cost-effective and reliable production.

ADVANTAGES









- High availability from stock
- Intermediate sizes and special solutions available at short notice
- For all materials
- Imperial dimensions from stock
- Worldwide regrinding service
- The latest production technologies
- Also for minimum quantity lubrication
- Complete programme for modern lightweight materials
- Replaceable head systems
- Made in Germany
- Standard and special programme from a single source



Innovative standard programme of drilling

																																																																																																																																																																																																																																																																																																																																																																		
Series		MEGA-Drill-180°				MEGA-Drill				MEGA-Drill-Speed				MEGA-Drill-Quadro				MEGA-Drill-Reamer				GIGA-Drill				Tritan-Drill				MEGA-Drill-Deep				MEGA-Drill-Step				SMART-Drill				TTD replaceable head drill				QTD indexable insert drill																																																																																																																																																																																																																																																																																																																				
Application / feature		Drilling from solid producing a flat bottom bore and drilling on inclined surfaces				Solid carbide twist drill with two cutting edges – perfectly geared to the material to be machined				Three guiding chamfers for high performance and process reliability				Four guiding chamfers for maximum bore quality, concentricity and positional accuracy				Twin function – drilling and reaming – combined in one tool				Four cutting edges and four guiding chamfers for reliable cutting and optimum guidance				The problem solver with three cutting edges – drilling with up to twice the feed rate where other drills fail.				Efficient production of deep bores up to 40xD				Outstanding performance for core holes chamfers for metric threads				The smart solution for the smallest bores with internal cooling				Minimised usage of carbide with highest stability and precision				Sturdy connection and simple clamping system – additively manufactured from 8 mm diameter																																																																																																																																																																																																																																																																																																																				
P	General structural steel, non-alloy to high-alloy steels, cast steel																																																																																																																																																																																																																																																																																																																																																																	
M	Stainless and acid-resistant steels																																																																																																																																																																																																																																																																																																																																																																	
K	Grey cast iron, alloyed grey cast iron, spheroidal graphite cast iron, vermicular graphite cast iron, malleable cast iron																																																																																																																																																																																																																																																																																																																																																																	
N	Non-ferrous metals																																																																																																																																																																																																																																																																																																																																																																	
S	Heat-resistant steels, titanium and nickel alloys																																																																																																																																																																																																																																																																																																																																																																	
H	Hardened steel, chilled cast iron																																																																																																																																																																																																																																																																																																																																																																	
Drilling depth		3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	15xD	20xD	25xD	30xD	40xD	3xD	5xD	8xD	12xD	3xD	5xD	8xD	12xD	1xD	3xD	5xD	8xD	12xD	1,5xD	3xD	5xD	8xD	12xD																																																																																																																																																																																																																																																																																																																		
																																																																																																																																																																																																																																																																																																																																																																		

Explanation of the pictograms:

	Highly suitable						
	Suitable in some situations	Cylindrical shank Form HA	Cylindrical shank similar to DIN9766	Internal coolant supply	QTD connection	TTD connection	Achievable bore tolerance

The complete programme can be found at:
www.mapal.com/downloads

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available at short notice worldwide



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Conventionally and additively manufactured
drills for optimum results





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Turning
Clamping
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Setting | Measuring | Dispensing
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