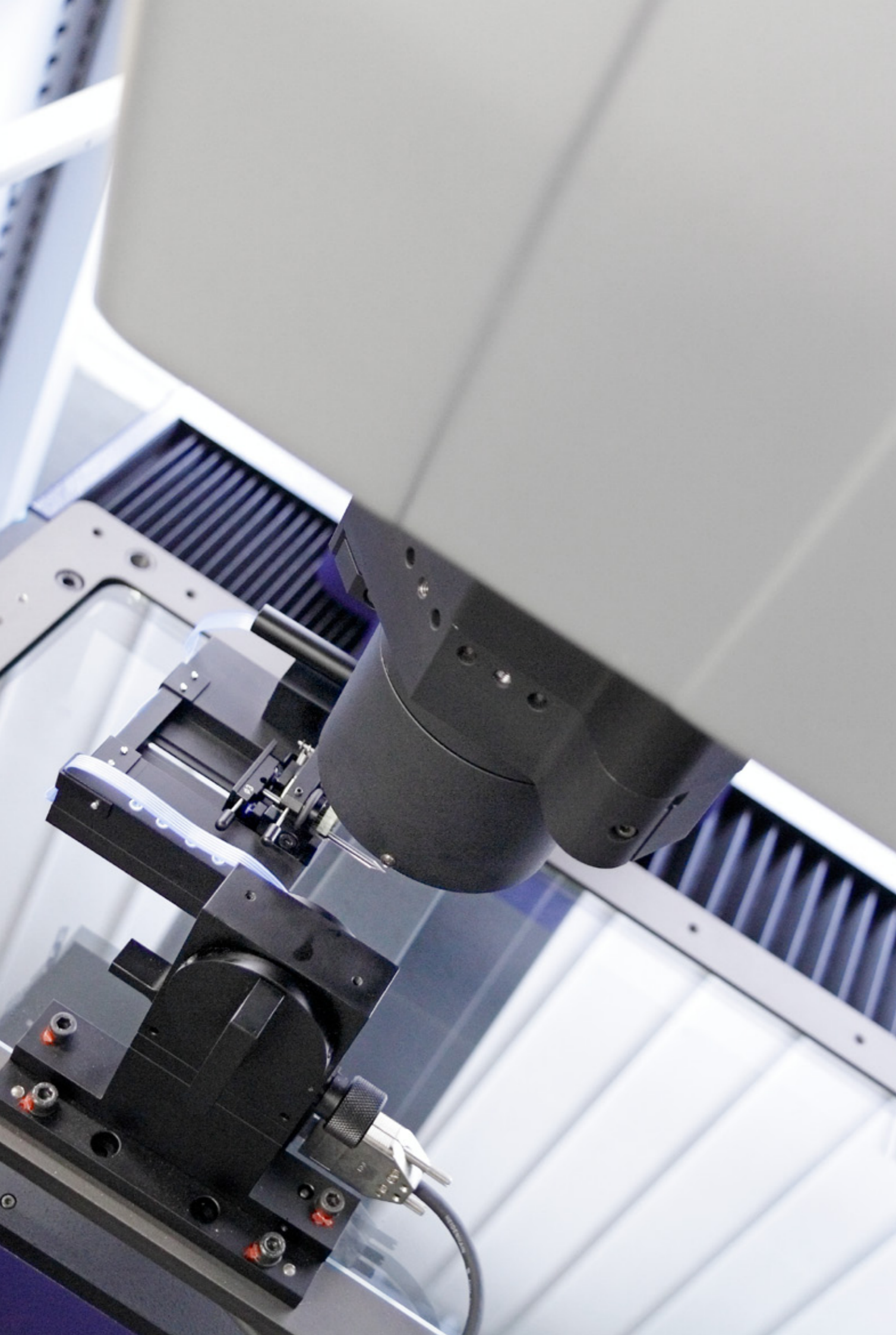




WORKOUT

- REFURBISHING
- REMANUFACTURING
- MODIFICATION
- RECOATING



OUR WORKOUT

QUALITY IS IRREPLACEABLE!

The use of superior technology and the associated high quality of materials has many benefits. One of the most significant advantages, however, is the possibility of reconditioning at a later time. Saving you precious time and making your production: sustainably inexpensive.

The voha-tosec workout team offers the entire service range for existing, used and worn solid carbide tools and restores used materials to an "as good as new" condition.

REGRINDING? REPRODUCTION!

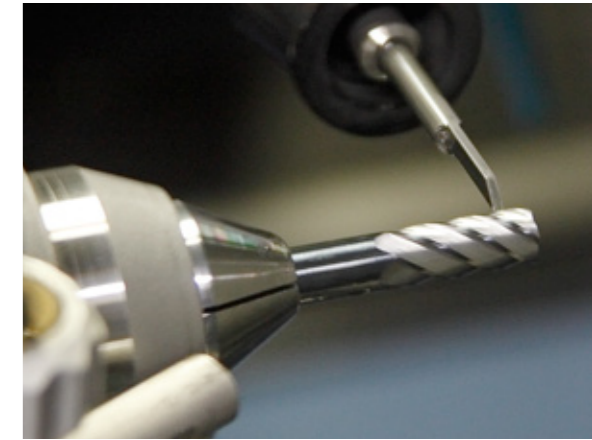
In the process all tools are checked, sorted, and marked separately before the original cut is reproduced. On the same machinery, under exactly the same conditions and with the same precision used for the production of new tools.

PAYS OFF

- Original geometry
- Multiple coatings
- Ecologically worthwhile
- Economically sensible

PRECISION. PIECE BY PIECE.

We offer the workout service for all original tools in the voha-tosec range but also for many third-party products. Please send tools intended for reproduction to voha-tosec GmbH using the reference "Workout".



01 | Precision testing the limits: CNC-grinding



02 | Ultra-precise measuring technology

ball nose, corner radius, toric end mills

refurbishing front teeth and recoating



ø mm	price in euro
2	14,20
3	14,20
4	14,20
5	14,20
6	14,20
7	16,10
8	17,50
10	22,40
12	27,90
14	33,50
16	63,80
20	69,90

ball nose and toric end mills for hardened milling

refurbishing front teeth and recoating



ø mm	price in euro
2	19,95
3	19,95
4	19,95
5	19,95
6	19,95
8	21,35
10	26,95
12	32,60

refurbishing front teeth and recoating

high feed end mills

ø mm	price in euro
3	16,10
4	16,10
5	16,10
6	16,10
8	18,20
10	20,30
12	23,10



refurbishing front teeth and peripheral cutting edges, recoating

end mills 2 and 4 flutes

ø mm	price in euro
2	13,35
3	13,35
4	13,35
5	13,35
6	13,35
8	17,35
10	18,55
12	21,60
16	25,80
20	34,20



HPC end mills		price without radius in euro		price with radius in euro		
ø mm		standard series	long series	standard series	long series	
refurbishing front teeth, peripheral cutting edges, and radius, recoating						
	4	16,40	18,00			
	5	16,40	18,00			
	6	16,40	18,00	25,00	27,50	
	8	19,80	21,80	25,00	27,50	
	10	26,60	29,20	32,20	35,50	
	12	33,80	37,20	40,50	44,50	
	16	59,30	63,30	71,60	78,40	
	20	86,50	92,50	101,00	112,00	

multiple fluted end mills		price without radius in euro		price with radius in euro	
ø mm		standard series	long series	standard series	long series
refurbishing front teeth and peripheral cutting edges, recoating					
	3	16,40	18,00		
	4	16,40	18,00		
	5	16,40	18,00		
	6	16,40	18,00	25,00	27,50
	8	19,80	21,80	25,00	27,50
	10	26,60	29,20	32,20	35,50
	12	33,80	37,20	40,50	44,50
	16	59,30	63,30	71,60	78,40
	20	86,50	92,50	101,00	112,00

extras	price in euro	price in euro	price in euro	price in euro
	1-9 pcs.	10-19 pcs.	20-49 pcs.	ab 50 pcs.
modifying ø	15,00	9,00	7,00	5,00
cutting length	10,00	5,00	3,00	3,00
modifying shank ø	15,00	10,00	9,00	9,00
modifying reaches	15,00	10,00	9,00	9,00
individual tolerances	15,00	10,00	7,00	5,00

individual labeling	price in euro	price in euro
	1-4 pcs.	ab 5 pcs.
individual labeling	6,00	4,00



SPECIAL PRODUCTS



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PRECISION TOUCHING THE LIMITS

IT'S IN THE NAME

voha-tosec is a result of the merger of two individually successful companies: voha, Vollhartmetallwerkzeug GmbH and Tosec, Tools, Service und Consulting GmbH.

The production at voha-tosec is amongst the most precise in the world.

Just one of the reasons why, day by day, voha-tosec tools deliver peak performance in our customers' machinery and process chains.

EXTREME.

The accuracy of a tool is directly proportional to its maximum profitability.

We grind our tools within 3μ radius accuracy. With run-out-tolerances of just 1μ we reach the highest level of precision in effective diameter.

This means pushing the boundaries of the physically possible because even specially developed measuring instruments reach their limit – sooner or later.

When our customers demand peak performance we love to push the boundaries – within the realm of possibility.

CONTACT
COMPANY