

# HIGHLIGHT TECHNOLOGY

PRECISION TOOLING

METROLOGY

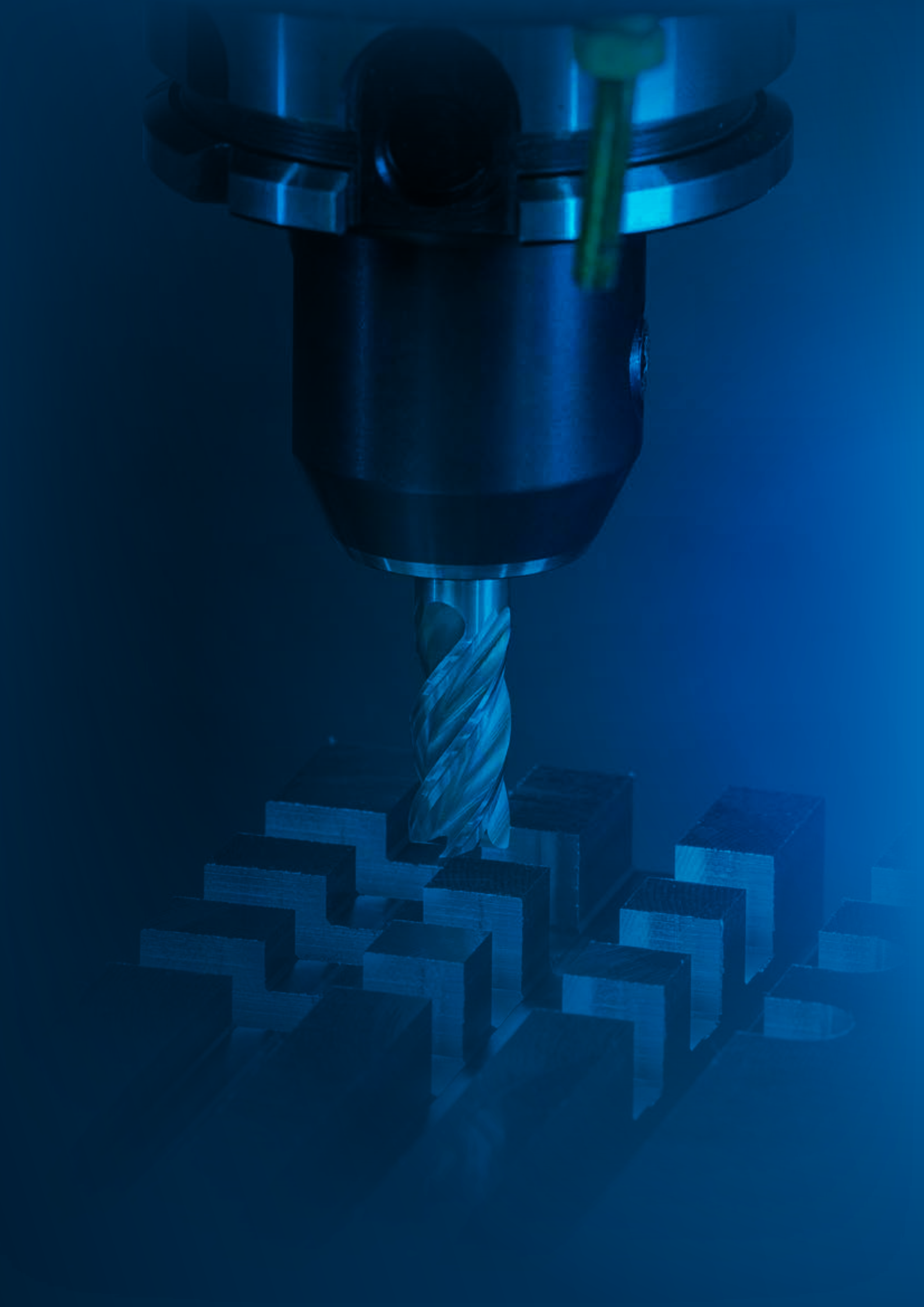
MRO

LUBRICANTS

HANDLING

NET PRICES VALID UNTIL 30.04.24 (VAT EXCLUDED)

EN





The A + B Group is an industrial reality that has 14 companies producing and distributing products around 3 meters from the machine tool.



Worldwide we serve more than 15.000 customers.



We have 5 production sites where we develop highly technological products.

We guarantee high added value consultancy thanks to our strong territorial presence, with 120 technical engineers and product managers.



The technological level of the products we market are designed to reduce processing time, increase the production level and improve efficiency and operations within the mechanical workshop.



Our catalogue contains more than 27.000 items including both private and well known brands (Mitutoyo, Milwaukee,...).

# 32

LUBRICANTS



# 04

PRECISION  
TOOLING



# 40

MRO

*in 3 m*  
*everything*



# 62

HANDLING



# 24

METROLOGY

eters  
you need

# PRECISION TOOLING



## + Innovative coating PLATEX

Specially designed for general purpose machining  
capable of withstanding up to 1,050°C

## + Modified front rake angle

Improved impact resistance  
and increased feedrates

## + Rounded flute design

Improved tool strength  
and simplified chip evacuation

## + Polished flutes and rake angle

Smooth and silent cutting,  
better chip evacuation, longer tool life

## + Special cutting edge design

Greater stability during machining  
and longer tool life

## + Special solid carbide

Improved strength - hardness  
balance

## + HPC

The new HIGH POWER MILLING CUTTERS  
High chip volumes on steels,  
austenitic steels and titanium alloys



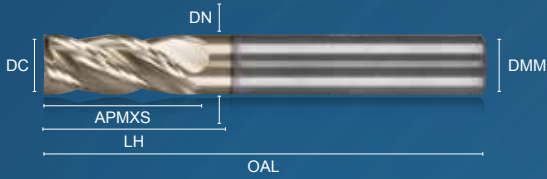
New range

# UNIVERSAL

*Innovative technology*

## HPC AT THE HIGHEST LEVEL!

## END MILLS WITH VARIABLE PITCH Z4



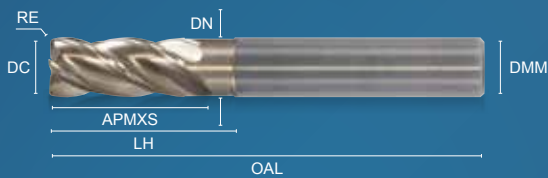
### SHARP EDGE

TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZEFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD
N	HPC	≠	λs= 95°/28° γs= 12°			DIN 6355 RB DIN 6355 BA		PLATEX	
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>			

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	ZEFP
A4U4304	37,62	23,30	4	11	-	-	57	6	4
A4U4305	37,62	23,30	5	13	5	18	57	6	4
A4U4306	37,62	23,30	6	13	6	18	57	6	4
A4U4308	44,96	27,90	8	21	8	25	63	8	4
A4U4310	66,60	41,00	10	22	10	30	72	10	4
A4U4312	94,33	57,00	12	26	11,7	36	83	12	4
A4U4316	174,24	108,00	16	36	16	42	92	16	4

\* The cutters are also available with Weldon shank for the same price

## CORNER RADIUS END MILLS WITH VARIABLE PITCH Z4



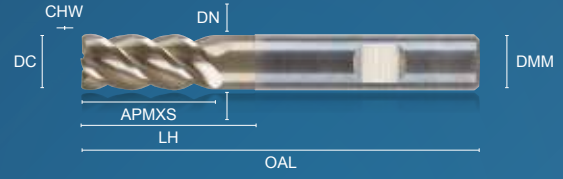
### Head with WIPER insert

TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZEFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD
N	HPC	≠	λs= 95°/28° γs= 12°			DIN 6355 RB DIN 6355 BA		PLATEX	
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>			

CODE	Price List	HT *	DC f8 mm	RE mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	ZEFP
A4U110402	66,50	41,00	4	0,2	11	3,9	13	57	6	4
A4U110405	66,50	41,00	4	0,5	11	3,9	13	57	6	4
A4U110502	68,50	42,00	5	0,2	13	4,9	18	57	6	4
A4U110505	68,50	42,00	5	0,5	13	4,9	18	57	6	4
A4U110602	70,16	43,00	6	0,2	13	5,9	18	57	6	4
A4U110605	70,16	43,00	6	0,5	13	5,9	18	57	6	4
A4U110610	70,16	43,00	6	1,0	13	5,9	18	57	6	4
A4U110805	70,16	43,00	8	0,5	21	7,8	25	63	8	4
A4U110810	79,26	49,00	8	1,0	21	7,8	25	63	8	4
A4U111005	97,89	61,00	10	0,5	22	9,7	30	72	10	4
A4U111010	97,89	61,00	10	1,0	22	9,7	30	72	10	4
A4U111020	97,89	61,00	10	2,0	22	9,7	30	72	10	4
A4U111205	140,22	87,00	12	0,5	26	11,7	36	83	12	4
A4U111210	140,22	87,00	12	1,0	26	11,7	36	83	12	4
A4U111220	140,22	87,00	12	2,0	26	11,7	36	83	12	4
A4U111605	245,24	133,00	16	0,5	36	15,5	42	92	16	4
A4U111610	245,24	133,00	16	1,0	36	15,5	42	92	16	4
A4U111620	245,24	133,00	16	2,0	36	15,5	42	92	16	4

\* The cutters are also available with Weldon shank for the same price

## END MILLS WITH VARIABLE PITCH Z4



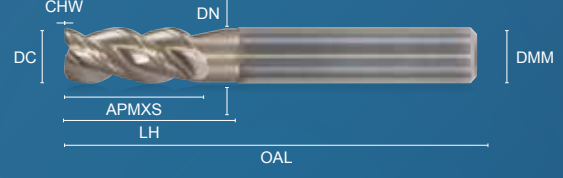
### SOFT CUT

TOOL TYPE	TOOL DESIGN	TOOL DESIGN	INDEX	ANGLES	ZEFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD
N	HPC	MTC	≠	λs= 64°/45° γs= 12°			DIN 6355 RB		PLATEX	
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>				

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	CHW mm	ZEFP
A4U4403W	29,70	18,40	3	8	-	-	57	6	0,10	4
A4U4404W	29,70	18,40	4	11	-	-	57	6	0,10	4
A4U4405W	29,70	18,40	5	13	4,90	18	57	6	0,10	4
A4U4406W	29,70	18,40	6	13	5,90	18	57	6	0,10	4
A4U4408W	44,90	26,00	8	21	7,80	25	64	8	0,20	4
A4U4410W	56,70	35,00	10	22	9,70	30	72	10	0,20	4
A4U4412W	74,30	46,00	12	26	11,70	36	83	12	0,30	4
A4U4414W	102,60	64,00	14	26	13,70	36	83	14	0,30	4
A4U4416W	131,00	81,00	16	36	15,50	42	92	16	0,30	4
A4U4420W	193,10	120,00	20	41	19,50	52	104	20	0,30	4

\* The cutters are also available with Weldon shank for the same price

## END MILLS WITH VARIABLE PITCH Z3



### 3 FLUTES for HPC and MTC

TOOL TYPE	TOOL DESIGN	TOOL DESIGN	INDEX	ANGLES	ZEFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD
N	HPC	MTC	≠	λs= 67°/45° γs= 12°			DIN 6355 RB DIN 6355 BA		PLATEX	
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>				

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	CHW mm	ZEFP
A4U3902	43,53	27,00	2	5	1,92	10	57	6	0,1	3
A4U3903	43,53	27,00	3	8	2,9	15	57	6	0,1	3
A4U3904	43,53	27,00	4	11	3,9	16	57	6	0,1	3
A4U3905	43,53	27,00	5	13	4,9	19	57	6	0,1	3
A4U3906	46,77	28,40	6	13	5,9	19	57	6	0,1	3
A4U3907	52,39	32,50	7	19	6,8	25	63	8	0,2	3
A4U3908	52,39	32,50	8	19	7,8	25	63	8	0,2	3
A4U3910	86,63	54,00	10	22	9,7	30	72	10	0,2	3
A4U3912	120,78	75,00	12	26	11,7	36	83	12	0,2	3
A4U3914	159,50	99,00	14	26	13,7	36	83	14	0,2	3
A4U3916	244,43	150,00	16	32	15,5	42	92	16	0,2	3

\* The cutters are also available with Weldon shank for the same price



# KERFOLG

# NEW

## END MILLS WITH VARIABLE PITCH Z4



### + SHORT

TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZFP	DIRECTIONS	SHANK	CORNER	COATING	SHORT										
N	HPC	≠	λs= 35°/28° γs= 12°	⊕	↺	DIN 6535 HB DIN 6535 HA	PLATEX		□□□□										
<table border="0"> <tr> <td><input checked="" type="checkbox"/> SLOTTING</td> <td><input checked="" type="checkbox"/> SIDE MILLING</td> <td><input checked="" type="checkbox"/> RAMPING</td> <td><input checked="" type="checkbox"/> PLUNGING</td> <td><input checked="" type="checkbox"/> HELICAL INT.</td> <td colspan="5"></td> </tr> </table>										<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.					
<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.															
<table border="0"> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="3"></td> </tr> </table>										<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>			
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>													

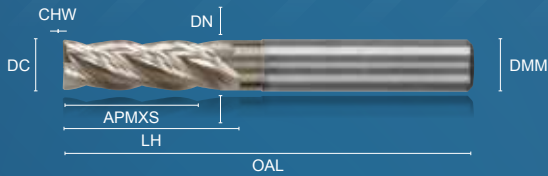
CODE	Price List	HT *	DC f8 mm	APMXS mm	OAL mm	DMM h5 mm	CHW mm	ZFP
A4U4104	36,65	22,72	4	8	54	6	0,1	4
A4U4105	36,65	22,72	5	9	54	6	0,1	4
A4U4106	36,65	22,72	6	10	54	6	0,1	4
A4U4108	43,29	26,84	8	12	58	8	0,2	4
A4U4110	63,00	39,00	10	14	66	10	0,2	4
A4U4112	85,52	53,00	12	16	73	12	0,3	4
A4U4116	151,2	94,00	16	22	82	16	0,2	4
A4U4120	219,60	136,00	20	26	92	20	0,3	4

\* The cutters are also available with Weldon shank for the same price

# KERFOLG

# NEW

## END MILLS WITH VARIABLE PITCH Z4



### + LONG

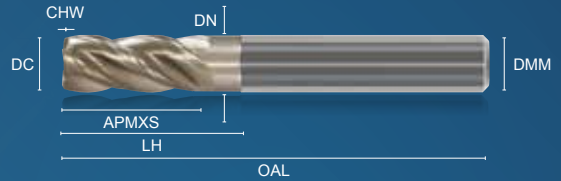
TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZFP	DIRECTIONS	SHANK	CORNER	COATING	LONG										
N	HPC	≠	λs= 35°/28° γs= 12°	⊕	↺	DIN 6535 HB DIN 6535 HA	PLATEX		□□□□										
<table border="0"> <tr> <td><input checked="" type="checkbox"/> SLOTTING</td> <td><input checked="" type="checkbox"/> SIDE MILLING</td> <td><input checked="" type="checkbox"/> RAMPING</td> <td><input checked="" type="checkbox"/> PLUNGING</td> <td><input checked="" type="checkbox"/> HELICAL INT.</td> <td colspan="5"></td> </tr> </table>										<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.					
<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.															
<table border="0"> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="3"></td> </tr> </table>										<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>			
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>													

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	CHW mm	ZFP
A4U4206	48,07	29,80	6	18	5,9	24	62	6	0,1	4
A4U4208	58,27	36,10	8	24	7,8	30	68	8	0,2	4
A4U4210	87,10	54,00	10	30	9,7	39	80	10	0,2	4
A4U4212	149,44	74,00	12	36	11,7	46	93	12	0,3	4
A4U4216	226,77	140,00	16	48	15,5	58	108	16	0,3	4

\* The cutters are also available with Weldon shank for the same price

# KERFOLG

## END MILLS WITH VARIABLE PITCH Z4



### + FLAGSHIP

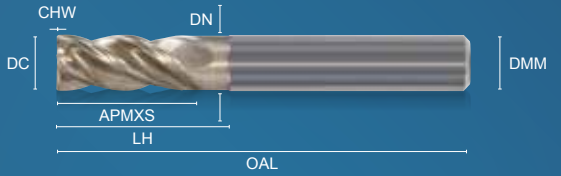
TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD										
N	HPC	MTC	λs= 35°/28° γs= 12°	⊕	↺	DIN 6535 HB DIN 6535 HA	PLATEX		□□□□										
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<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>													

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	CHW mm	ZFP
A4U4003	38,45	23,00	3	8	-	-	57	6	0,1	4
A4U4004	38,45	23,00	4	11	3,9	12	57	6	0,1	4
A4U4005	38,45	23,00	5	13	4,9	18	57	6	0,1	4
A4U4006	38,45	23,00	6	13	5,9	18	57	6	0,1	4
A4U4008	46,62	28,00	8	21	7,8	25	63	8	0,2	4
A4U4009	64,29	40,00	9	22	8,7	30	72	10	0,2	4
A4U4010	69,68	43,00	10	22	9,7	30	72	10	0,2	4
A4U4012	95,31	59,00	12	26	11,7	36	83	12	0,3	4
A4U4014	126,09	77,00	14	26	13,7	36	83	14	0,3	4
A4U4016	181,42	112,00	16	36	15,5	42	92	16	0,3	4
A4U4020	262,57	162,00	20	41	19,5	52	103	20	0,3	4

\* The cutters are also available with Weldon shank for the same price

# KERFOLG

## END MILLS WITH VARIABLE PITCH Z4



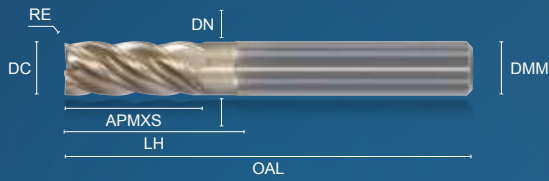
### + Boring for ramping and plunge milling

TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZFP	DIRECTIONS	SHANK	CORNER	COATING	STANDARD										
N	HPC	≠	λs= 37°/29° γs= 12°	⊕	↺	DIN 6535 HB DIN 6535 HA	PLATEX		□□□□										
<table border="0"> <tr> <td><input checked="" type="checkbox"/> SLOTTING</td> <td><input checked="" type="checkbox"/> SIDE MILLING</td> <td><input checked="" type="checkbox"/> RAMPING</td> <td><input checked="" type="checkbox"/> PLUNGING</td> <td><input checked="" type="checkbox"/> HELICAL INT.</td> <td colspan="5"></td> </tr> </table>										<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.					
<input checked="" type="checkbox"/> SLOTTING	<input checked="" type="checkbox"/> SIDE MILLING	<input checked="" type="checkbox"/> RAMPING	<input checked="" type="checkbox"/> PLUNGING	<input checked="" type="checkbox"/> HELICAL INT.															
<table border="0"> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="3"></td> </tr> </table>										<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>			
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>													

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	CHW mm	ZFP
A4U4704	52,86	32,80	4	11	3,9	12	57	6	0,1	4
A4U4705	53,03	32,90	5	13	4,9	18	57	6	0,1	4
A4U4706	55,27	34,30	6	13	5,9	18	57	6	0,1	4
A4U4708	66,72	41,00	8	21	7,8	25	63	8	0,2	4
A4U4710	89,10	55,00	10	22	9,7	30	72	10	0,2	4
A4U4712	144,54	71,00	12	26	11,7	36	83	12	0,3	4
A4U4714	197,14	85,00	14	26	13,7	36	83	14	0,3	4
A4U4716	200,00	124,00	16	36	15,5	42	92	16	0,3	4
A4U4720	316,00	195,00	20	41	19,5	52	103	20	0,3	4

\* The cutters are also available with Weldon shank for the same price

## END MILLS WITH VARIABLE PITCH Z5



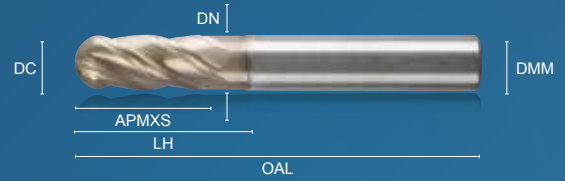
### + 5 FLUTES for HPC and MTC

TOOL TYPE	TOOL DESIGN	TOOL DESIGN	INDEX	ANGLES	ZEPF	DIRECTIONS	SHANK	CORNER	COATING	STANDARD																						
N	HPC	MTC	≠	λs= 35°/28° ψ= 12°			DIN 6535 HB DIN 6535 HA		PLATEX																							
<table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="6"></td> </tr> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="4"></td> </tr> </table>																						<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>				
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>																										

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	RE mm	ZEPF
A4U5706	47,29	29,30	6	13	5,9	18	57	6	0,1	5
A4U5708	64,54	40,00	8	21	7,8	25	64	8	0,2	5
A4U5710	86,57	53,00	10	22	9,7	30	72	10	0,2	5
A4U5712	105,35	65,00	12	26	11,7	36	83	12	0,5	5
A4U5716	233,56	144,00	16	36	15,5	42	92	16	0,5	5
A4U5720	334,87	225,00	20	41	19,5	52	104	20	0,5	5

\* The cutters are also available with Weldon shank for the same price

## BALL NOSE END MILLS WITH VARIABLE PITCH Z4



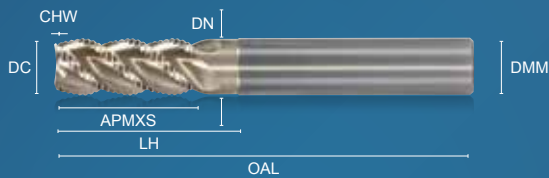
### + BALLNOSE

TOOL TYPE	TOOL DESIGN	INDEX	ANGLES	ZEPF	DIRECTIONS	SHANK	CORNER	COATING	STANDARD																							
N	HPC	≠	λs= 34°/28° ψ= 11°			DIN 6535 HB DIN 6535 HA		PLATEX																								
<table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="6"></td> </tr> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="4"></td> </tr> </table>																						<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>				
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>																										

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h5 mm	ZEPF
A4U6003	66,15	41,00	3	8	-	-	57	6	4
A4U6004	66,15	41,00	4	11	-	-	57	6	4
A4U6005	66,15	41,00	5	13	4,90	18	57	6	4
A4U6006	66,15	41,00	6	13	5,90	18	57	6	4
A4U6008	89,10	55,00	8	21	7,80	25	63	8	4
A4U6010	116,10	72,00	10	22	9,70	30	72	10	4
A4U6012	167,40	104,00	12	26	11,70	36	83	12	4
A4U6016	268,65	167,00	16	36	15,50	42	92	16	4

\* The cutters are also available with Weldon shank for the same price

## ROUGHING END MILLS Z4 VARIABLE HELIX



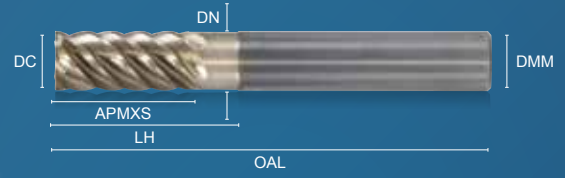
### + ROUGHING

TOOL TYPE	TOOL DESIGN	TOOL DESIGN	INDEX	ANGLES	ZEPF	CHIPBREAKER	DIRECTIONS	SHANK	CORNER	COATING	STANDARD																								
N	HPC	MTC	≠	λs= 44°/45,5° ψ= 8°		NR		DIN 6535 HB DIN 6535 HA		PLATEX																									
<table border="0"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="7"></td> </tr> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="5"></td> </tr> </table>																								<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>					
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>																													

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	CHW mm	ZEPF
A4U1206	72,49	45,00	6	13	5,9	20	57	6	0,1	4
A4U1208	92,05	57,00	8	21	7,8	26	63	8	0,2	4
A4U1210	113,26	70,00	10	23	9,7	31	72	10	0,2	4
A4U1212	145,00	90,00	12	26	11,7	37	83	12	0,3	4
A4U1216	223,64	139,00	16	32	15,5	42	92	16	0,3	4
A4U1220	364,00	226,00	20	38	19,5	53	104	20	0,3	4

\* The cutters are also available with Weldon shank for the same price

## SUPER FINISHING END MILLS WITH CENTRE CUTTING Z6 WITH VARIABLE PITCH



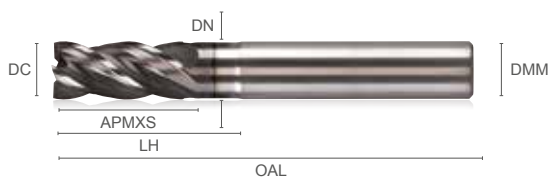
### + FINISHING

TOOL TYPE	TOOL DESIGN	TOOL DESIGN	INDEX	ANGLES	ZEPF	DIRECTIONS	SHANK	CORNER	COATING	STANDARD																						
N	HPC	MTC	≠	λs= 44°/44° ψ= 12°			DIN 6535 HB DIN 6535 HA		PLATEX																							
<table border="0"> <tr> <td></td> <td></td> <td></td> <td colspan="8"></td> </tr> <tr> <td><b>P</b></td> <td><b>M</b></td> <td><b>K</b></td> <td><b>N</b></td> <td><b>S</b></td> <td><b>H</b></td> <td><b>C</b></td> <td colspan="4"></td> </tr> </table>																						<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>				
<b>P</b>	<b>M</b>	<b>K</b>	<b>N</b>	<b>S</b>	<b>H</b>	<b>C</b>																										

CODE	Price List	HT *	DC f8 mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	ZEPF
A4U2506	48,22	30,00	6	13	5,9	19	57	6	6
A4U2508	55,05	34,00	8	19	7,8	25	63	8	6
A4U2510	90,45	56,00	10	22	9,7	30	72	10	6
A4U2512	120,55	75,00	12	26	11,7	36	83	12	6
A4U2516	228,69	142,00	16	32	15,5	42	92	16	6
A4U2520	329,07	204,00	20	38	19,5	52	104	20	6

\* The cutters are also available with Weldon shank for the same price

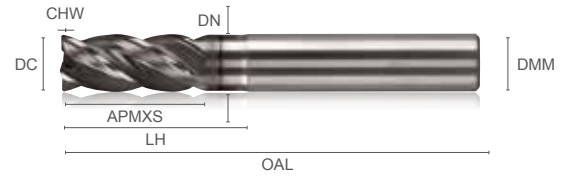
## END MILLS WITH VARIABLE PITCH Z4



CODE	Price List	HT *	DC mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	ZFP
A4S4303	20,90	12,90	3	8	2,8	12	57	6	4
A4S4304	20,90	12,90	4	11	3,8	15	57	6	4
A4S4305	20,90	12,90	5	13	4,8	17	57	6	4
A4S4306	20,90	12,90	6	13	5,8	21	57	6	4
A4S4308	30,90	19,20	8	19	7,7	27	63	8	4
A4S4310	46,78	29,00	10	22	9,7	32	72	10	4
A4S4312	65,22	40,00	12	26	11,6	38	83	12	4
A4S4316	130,44	81,00	16	32	15,5	44	92	16	4
A4S4320	174,29	106,00	20	38	19,5	54	104	20	4

\* The cutters are also available with Weldon shank for the same price

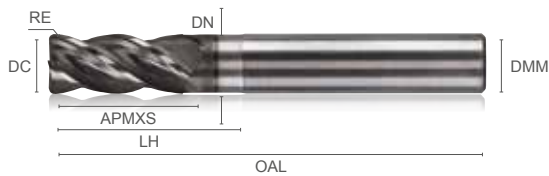
## END MILLS WITH VARIABLE PITCH Z4



CODE	Price List	HT *	DC mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	CHW mm	ZFP
A4S5303	21,12	13,10	3	8	2,8	12	57	6	0,15	4
A4S5304	21,12	13,10	4	11	3,8	15	57	6	0,15	4
A4S5305	21,12	13,10	5	13	4,8	17	57	6	0,15	4
A4S5306	21,12	13,10	6	13	5,8	21	57	6	0,20	4
A4S5308	31,50	19,50	8	19	7,7	27	63	8	0,20	4
A4S5310	48,96	30,40	10	22	9,7	32	72	10	0,30	4
A4S5312	65,60	41,00	12	26	11,6	38	83	12	0,30	4
A4S5316	113,44	70,00	16	32	15,5	44	92	16	0,30	4

\* The cutters are also available with Weldon shank for the same price

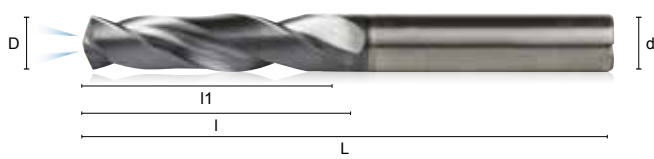
## CORNER RADIUS END MILLS WITH VARIABLE PITCH Z4



CODE	Price List	HT *	DC mm	APMXS mm	DN mm	LH mm	OAL mm	DMM h6 mm	RE mm	ZFP
A4S160403	29,77	18,50	4	11	3,8	15	57	6	0,3	4
A4S160405	28,90	17,90	4	11	3,8	15	57	6	0,5	4
A4S160503	29,77	18,50	5	13	4,8	17	57	6	0,3	4
A4S160505	29,77	18,50	5	13	4,8	17	57	6	0,5	4
A4S160605	28,90	17,90	6	13	5,8	21	57	6	0,5	4
A4S160610	28,90	17,90	6	13	5,8	21	57	6	1	4
A4S160805	38,38	23,80	8	19	7,7	27	63	8	0,5	4
A4S160810	38,78	24,00	8	19	7,7	27	63	8	1	4
A4S161005	55,00	34,10	10	22	9,7	32	72	10	0,5	4
A4S161010	55,00	34,10	10	22	9,7	32	72	10	1	4
A4S161020	57,37	36,00	10	22	9,7	32	72	10	2	4
A4S161205	68,30	42,00	12	26	11,6	38	83	12	0,5	4
A4S161210	68,30	42,00	12	26	11,6	38	83	12	1	4
A4S161220	78,35	44,00	12	26	11,6	38	83	12	2	4

\* The cutters are also available with Weldon shank for the same price

## DRILLS REINFORCED SHANK 3XD - COOLANT HOLES



SPECS



MATERIALS

CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm	CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm	CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm	
A00203	55,70	35,00	3,00	6	20	62	14	A00205,9	60,07	37,00	5,90	6	28	66	20	A00209	89,15	55,00	9,00	10	47	89	35	
A00203,1	55,70	35,00	3,10	6	20	62	14	A00206	56,13	36,00	6,00	6	28	66	20	A00209,2	87,42	54,00	9,20	10	47	89	35	
A00203,2	55,70	35,00	3,20	6	20	62	14	A00206,1	79,07	49,00	6,10	8	34	79	24	A00209,3	89,15	55,00	9,30	10	47	89	35	
A00203,3	55,70	35,00	3,30	6	20	62	14	A00206,2	79,07	49,00	6,20	8	34	79	24	A00209,5	89,15	55,00	9,50	10	47	89	35	
A00203,4	55,70	35,00	3,40	6	20	62	14	A00206,3	79,07	49,00	6,30	8	34	79	24	A00209,7	132,58	82,00	9,70	10	47	89	35	
A00203,5	55,70	35,00	3,50	6	20	62	14	A00206,4	79,07	49,00	6,40	8	34	79	24	A00209,8	89,15	55,00	9,80	10	47	89	35	
A00203,7	55,70	35,00	3,70	6	20	62	14	A00206,5	79,07	49,00	6,50	8	34	79	24	A002010	89,15	55,00	10,00	10	47	89	35	
A00203,8	55,70	35,00	3,80	6	24	66	17	A00206,8	79,07	49,00	6,80	8	34	79	24	A002010,2	127,34	79,00	10,20	12	55	102	40	
A00203,9	55,70	35,00	3,90	6	24	66	17	A00206,9	79,07	49,00	6,90	8	34	79	24	A002010,5	127,34	79,00	10,50	12	55	102	40	
A00204	58,13	36,00	4,00	6	24	66	17	A00207	79,07	49,00	7,00	8	34	79	24	A002010,8	127,34	79,00	10,80	12	55	102	40	
A00204,1	60,07	37,00	4,10	6	24	66	17	A00207,1	79,07	49,00	7,10	8	34	79	29	A002011	127,34	79,00	11,00	12	55	102	40	
A00204,2	58,13	36,00	4,20	6	24	66	17	A00207,2	79,07	49,00	7,20	8	34	79	29	A002011,2	127,34	79,00	11,20	12	55	102	40	
A00204,3	60,07	37,00	4,30	6	24	66	17	A00207,3	117,20	73,00	7,30	8	34	79	29	A002011,5	127,34	79,00	11,50	12	55	102	40	
A00204,4	60,07	37,00	4,40	6	24	66	17	A00207,4	79,07	49,00	7,40	8	41	79	29	A002011,8	127,34	79,00	11,80	12	55	102	40	
A00204,5	58,13	36,00	4,50	6	24	66	17	A00207,5	79,07	49,00	7,50	8	41	79	29	A002012	127,34	79,00	12,00	12	55	102	40	
A00204,6	60,07	37,00	4,60	6	24	66	17	A00207,7	79,07	49,00	7,70	8	41	79	29	A002012,2	265,46	164,00	12,20	14	60	107	43	
A00204,7	60,07	37,00	4,70	6	24	66	17	A00207,8	79,07	49,00	7,80	8	41	79	29	A002012,5	166,47	103,00	12,50	14	60	107	43	
A00204,8	58,13	36,00	4,80	6	24	66	20	A00207,9	79,07	49,00	7,90	8	41	79	29	A002012,8	166,47	103,00	12,80	14	60	107	43	
A00204,9	60,07	37,00	4,90	6	24	66	20	A00208	79,07	49,00	8,00	8	41	79	29	A002013	166,47	103,00	13,00	14	60	107	43	
A00205	58,13	36,00	5,00	6	28	66	20	A00208,1	89,15	55,00	8,10	10	47	89	35	A002013,5	166,47	103,00	13,50	14	60	107	43	
A00205,1	58,13	36,00	5,10	6	28	66	20	A00208,2	89,15	55,00	8,20	10	47	89	35	A002013,8	166,47	103,00	13,80	14	60	107	43	
A00205,2	58,13	36,00	5,20	6	28	66	20	A00208,3	89,15	55,00	8,30	10	47	89	35	A002014	166,47	103,00	14,00	14	60	107	43	
A00205,3	58,13	36,00	5,30	6	28	66	20	A00208,4	89,15	55,00	8,40	10	47	89	35	A002014,5	187,34	128,00	14,50	14	60	107	43	
A00205,5	58,13	36,00	5,50	6	28	66	20	A00208,5	89,15	55,00	8,50	10	47	89	35	A002015	187,34	128,00	15,00	16	65	115	45	
A00205,6	60,07	37,00	5,60	6	28	66	20	A00208,6	89,15	55,00	8,60	10	47	89	35	A002015,5	187,34	128,00	15,50	16	65	115	45	
A00205,7	86,30	54,00	5,70	6	28	66	20	A00208,7	89,15	55,00	8,70	10	47	89	35	A002016	187,34	128,00	16,00	16	65	115	45	
A00205,8	60,07	37,00	5,80	6	28	66	20	A00208,8	89,15	55,00	8,80	10	47	89	35									

## DRILLS REINFORCED SHANK 5XD - COOLANT HOLES



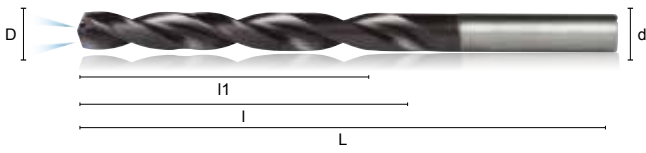
SPECS



MATERIALS

CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm	CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm	CODE	Price List	HT	D mm	d mm	l mm	L mm	I1 mm
A00401	64,70	40,00	1,00	4	7	45	6	A00405,1	89,33	50,00	5,10	6	44	82	35	A00409,3	182,25	63,00	9,30	10	61	103	49
A00401,1	64,70	40,00	1,10	4	7,5	45	6	A00405,2	89,33	50,00	5,20	6	44	82	35	A00409,4	182,25	63,00	9,40	10	61	103	49
A00401,2	64,70	40,00	1,20	4	8,5	45	7	A00405,3	89,33	50,00	5,30	6	44	82	35	A00409,5	182,25	63,00	9,50	10	61	103	49
A00401,3	64,70	40,00	1,30	4	9	45	7	A00405,4	89,33	50,00	5,40	6	44	82	35	A00409,6	182,25	63,00	9,60	10	61	103	49
A00401,4	64,70	40,00	1,40	4	10	45	8	A00405,5	89,33	50,00	5,50	6	44	82	35	A00409,7	182,25	63,00	9,70	10	61	103	49
A00401,5	64,70	40,00	1,50	4	10,5	50	8	A00405,6	89,33	50,00	5,60	6	44	82	35	A00409,8	182,25	63,00	9,80	10	61	103	49
A00401,6	64,70	40,00	1,60	4	11	50	9	A00405,7	89,33	50,00	5,70	6	44	82	35	A00409,9	182,25	63,00	9,90	10	61	103	49
A00401,7	64,70	40,00	1,70	4	12	50	9	A00405,8	89,33	50,00	5,80	6	44	82	35	A004010	182,25	63,00	10,00	10	61	103	49
A00401,8	64,70	40,00	1,80	4	12,5	50	10	A00405,9	89,33	50,00	5,90	6	44	82	35	A004010,2	148,67	92,00	10,20	12	71	118	56
A00401,85	90,70	56,00	1,85	4	12,5	50	10	A00406	89,33	50,00	6,00	6	53	82	35	A004010,3	148,67	92,00	10,30	12	71	118	56
A00401,9	64,70	40,00	1,90	4	13,5	50	10	A00406,1	89,33	55,00	6,10	8	53	82	43	A004010,4	148,67	92,00	10,40	12	71	118	56
A00402	64,70	40,00	2,00	4	14	55	11	A00406,2	89,33	55,00	6,20	8	53	82	43	A004010,5	148,67	92,00	10,50	12	71	118	56
A00402,1	64,70	40,00	2,10	4	14,5	55	12	A00406,3	89,33	55,00	6,30	8	53	82	43	A004011	148,67	92,00	11,00	12	71	118	56
A00402,2	64,70	40,00	2,20	4	15,5	55	12	A00406,4	89,33	55,00	6,40	8	53	82	43	A004011,2	148,67	92,00	11,20	12	71	118	56
A00402,3	64,70	40,00	2,30	4	16	55	13	A00406,5	89,33	55,00	6,50	8	53	91	43	A004011,3	148,67	92,00	11,30	12	71	118	56
A00402,4	64,70	40,00	2,40	4	17	55	13	A00406,6	89,33	55,00	6,60	8	53	91	43	A004011,4	148,67	92,00	11,40	12	71	118	56
A00402,5	64,70	40,00	2,50	4	17,5	55	14	A00406,7	89,33	55,00	6,70	8	53	91	43	A004011,5	148,67	92,00	11,50	12	71	118	56
A00402,6	64,70	40,00	2,60	4	18	55	14	A00406,8	89,33	55,00	6,80	8	53	91	43	A004011,8	148,67	92,00	11,80	12	71	118	56
A00402,7	64,70	40,00	2,70	4	19	55	15	A00406,9	89,33	55,00	6,90	8	53	91	43	A004012	148,67	92,00	12,00	12	71	118	56
A00402,8	64,70	40,00	2,80	4	19,5	55	15	A00407	89,33	55,00	7,00	8	53	91	43	A004012,2	199,97	124,00	12,20	14	77	124	60
A00402,9	64,70	40,00	2,90	4	20,5	55	16	A00407,1	89,33	55,00	7,10	8	53	91	43	A004012,5	199,97	124,00	12,50	14	77	124	60
A00403	74,66	46,00	3,00	6	28	66	23	A00407,2	89,33	55,00	7,20	8	53	91	43	A004012,8	199,97	124,00	12,80	14	77	124	60
A00403,1	74,66	46,00	3,10	6	28	66	23	A00407,3	89,33	55,00	7,30	8	53	91	43	A004012,9	286,59	174,00	12,90	14	77	124	60
A00403,2	74,66	46,00	3,20	6	28	66	23	A00407,4	89,33	55,00	7,40	8	53	91	43	A004013	199,97	124,00	13,00	14	77	124	60
A00403,3	74,66	46,00	3,30	6	28	66	23	A00407,5	89,33	55,00	7,50	8	53	91	43	A004013,1	199,97	124,00	13,10	14	77	124	60
A00403,4	74,66	46,00	3,40	6	28	66	23	A00407,6	89,33	55,00	7,60	8	53	9									

## DRILLS REINFORCED SHANK 7XD - COOLANT HOLES



### SPECS



### MATERIALS



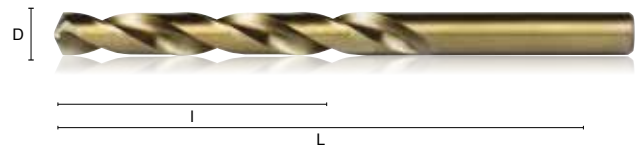
CODE	Price List	HT	D mm	d mm	l mm	L mm	l1 mm
A00504	438,00	86,00	4,00	6	43	81	36
A00504,1	438,00	86,00	4,10	6	43	81	36
A00504,2	438,00	86,00	4,20	6	43	81	36
A00504,3	438,00	86,00	4,30	6	43	81	36
A00504,5	438,00	86,00	4,50	6	43	81	36
A00504,6	438,00	86,00	4,60	6	43	81	36
A00504,7	438,00	86,00	4,70	6	43	81	36
A00504,8	438,00	86,00	4,80	6	57	95	48
A00504,9	438,00	86,00	4,90	6	57	95	48
A00505	438,00	86,00	5,00	6	57	95	48
A00505,1	438,00	86,00	5,10	6	57	95	48
A00505,2	438,00	86,00	5,20	6	57	95	48
A00505,3	438,00	86,00	5,30	6	57	95	48
A00505,5	438,00	86,00	5,50	6	57	95	48
A00505,8	438,00	86,00	5,80	6	57	95	48
A00505,9	438,00	86,00	5,90	6	57	95	48
A00506	438,00	86,00	6,00	6	57	95	48
A00506,1	474,86	107,00	6,10	8	76	114	64
A00506,2	474,86	107,00	6,20	8	76	114	64
A00506,3	474,86	107,00	6,30	8	76	114	64
A00506,5	474,86	107,00	6,50	8	76	114	64
A00506,6	474,86	107,00	6,60	8	76	114	64
A00506,7	474,86	107,00	6,70	8	76	114	64
A00506,8	474,86	107,00	6,80	8	76	114	64
A00507	474,86	107,00	7,00	8	76	114	64
A00507,4	474,86	107,00	7,40	8	76	114	64
A00507,5	474,86	107,00	7,50	8	76	114	64
A00507,7	474,86	107,00	7,70	8	76	114	64
A00507,8	474,86	107,00	7,80	8	76	114	64
A00508	474,86	107,00	8,00	8	76	114	64
A00508,5	240,74	131,00	8,50	10	95	142	80
A00509	240,74	131,00	9,00	10	95	142	80
A00509,1	240,74	131,00	9,10	10	95	142	80
A00509,5	240,74	131,00	9,50	10	95	142	80
A005010	240,74	131,00	10,00	10	95	142	80
A005010,5	289,70	180,00	10,50	12	114	162	96
A005011	289,70	180,00	11,00	12	114	162	96
A005011,5	289,70	180,00	11,50	12	114	162	96
A005012	289,70	180,00	12,00	12	114	162	96
A005012,5	433,76	269,00	12,50	14	133	178	112
A005013	433,76	269,00	13,00	14	133	178	112
A005013,5	433,76	269,00	13,50	14	133	178	112
A005014	433,76	269,00	14,00	14	133	178	112
A005014,5	674,77	354,00	14,50	16	152	203	128
A005015	674,77	354,00	15,00	16	152	203	128
A005015,5	674,77	354,00	15,50	16	152	203	128
A005016	674,77	354,00	16,00	16	152	203	128

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 FOR YOUR MACHINING  
 OPERATION

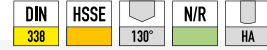
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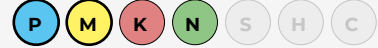
JOBBER DRILLS



SPECS

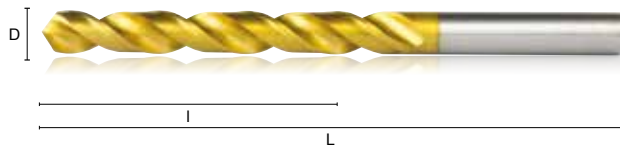


MATERIALS

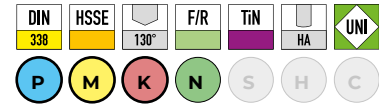


CODE	Price List	HT	D mm	l mm	L mm
A11451	4,89	3,00	1,00	12	34
A11451,1	4,89	3,00	1,10	14	36
A11451,2	4,89	3,00	1,20	16	38
A11451,3	4,76	3,00	1,30	16	38
A11451,4	4,55	2,80	1,40	18	40
A11451,5	4,22	2,60	1,50	18	40
A11451,6	2,74	1,70	1,60	20	43
A11451,7	2,67	1,70	1,70	20	43
A11451,8	2,69	1,60	1,80	22	46
A11451,9	2,69	1,60	1,90	22	46
A11452	2,56	1,60	2,00	24	49
A11452,1	2,67	1,70	2,10	24	49
A11452,2	2,74	1,70	2,20	27	53
A11452,3	2,67	1,70	2,30	27	53
A11452,4	2,83	1,80	2,40	30	57
A11452,5	2,74	1,70	2,50	30	57
A11452,6	2,93	1,80	2,60	30	57
A11452,7	3,00	1,90	2,70	33	61
A11452,8	2,93	1,90	2,80	33	61
A11452,9	3,06	1,90	2,90	33	61
A11453	2,97	1,80	3,00	33	61
A11453,2	3,27	2,00	3,20	36	65
A11453,3	3,27	2,00	3,30	36	65
A11453,4	3,50	2,10	3,40	39	70
A11453,5	3,44	2,10	3,50	39	70
A11453,6	3,75	2,30	3,60	39	70
A11453,7	3,66	2,30	3,70	39	70
A11453,8	3,87	2,40	3,80	43	75
A11453,9	3,87	2,40	3,90	43	75
A11454	3,80	2,40	4,00	43	75
A11454,1	3,98	2,50	4,10	43	75
A11454,2	3,94	2,40	4,20	43	75
A11454,3	4,34	2,70	4,30	47	80
A11454,5	4,16	2,60	4,50	47	80
A11454,6	4,29	2,70	4,60	47	80
A11454,7	4,29	2,70	4,70	47	80
A11454,8	4,54	2,80	4,80	52	86
A11454,9	4,68	2,90	4,90	52	86
A11455	4,60	2,90	5,00	52	86
A11455,1	5,24	3,30	5,10	52	86
A11455,2	6,17	3,20	5,20	52	86
A11455,3	6,09	3,20	5,30	52	86
A11455,5	6,75	3,60	5,50	57	93
A11455,6	6,67	3,50	5,60	57	93
A11455,7	6,24	3,90	5,70	57	93
A11455,8	6,02	3,70	5,80	57	93
A11456	6,12	3,80	6,00	57	93
A11456,1	6,69	4,10	6,10	63	101
A11456,2	6,60	4,00	6,20	63	101
A11456,3	6,24	3,90	6,30	63	101
A11456,4	6,68	4,10	6,40	63	101
A11456,5	6,59	4,10	6,50	63	101
A11456,6	7,16	4,40	6,60	63	101
A11456,7	7,02	4,40	6,70	63	101
A11456,8	7,69	4,80	6,80	69	109
A11457	7,42	4,60	7,00	69	109
A11457,1	7,96	4,90	7,10	69	109
A11457,3	8,52	5,30	7,30	69	109
A11457,5	8,36	5,20	7,50	69	109
A11457,7	9,19	5,70	7,70	75	117
A11457,8	9,16	5,70	7,80	75	117
A11458	8,85	5,50	8,00	75	117
A11458,2	9,64	6,00	8,20	75	117
A11458,3	9,47	5,90	8,30	75	117
A11458,4	9,92	6,20	8,40	75	117
A11458,5	9,76	6,10	8,50	75	117
A11458,6	11,09	6,90	8,60	81	125
A11458,7	10,86	6,70	8,70	81	125
A11458,9	16,09	10,00	8,90	81	125
A11459	14,54	9,00	9,00	81	125
A11459,1	16,08	10,00	9,10	81	125
A11459,2	16,08	10,00	9,20	81	125
A11459,3	16,33	10,10	9,30	81	125
A11459,4	16,33	10,10	9,40	81	125
A11459,5	16,33	10,10	9,50	81	125
A11459,7	17,94	11,10	9,70	87	133
A11459,8	19,26	11,90	9,80	87	133
A114510	17,22	10,70	10,00	87	133
A114510,2	21,85	13,60	10,20	87	133
A114510,5	22,56	14,00	10,50	87	133
A114511	25,60	15,90	11,00	94	142
A114511,5	28,24	17,50	11,50	94	142
A114512	31,37	19,50	12,00	101	151
A114512,5	24,83	15,40	12,50	101	151
A114513	26,27	15,70	13,00	101	151

## JOBBER DRILLS



### SPECS



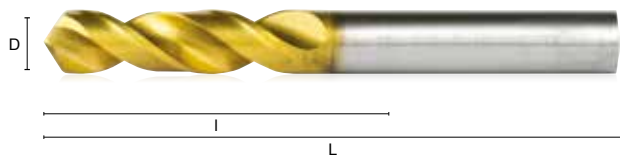
### MATERIALS

CODE	Price List	HT	D mm	I mm	L mm
A12001	7,45	4,60	1,00	12	34
A12001,2	7,94	4,90	1,20	16	38
A12001,4	7,82	4,90	1,40	18	40
A12001,5	7,45	4,60	1,50	18	40
A12002	7,54	4,70	2,00	24	49
A12002,2	8,34	5,20	2,20	27	53
A12002,4	7,67	4,80	2,40	27	53
A12002,5	7,67	4,80	2,50	30	57
A12002,6	8,88	5,00	2,60	30	57
A12002,8	8,44	5,20	2,80	33	61
A12002,9	9,34	5,80	2,90	33	61
A12003	8,18	5,10	3,00	33	61
A12003,1	9,34	5,80	3,10	36	65
A12003,2	9,07	5,70	3,20	36	65
A12003,3	9,20	5,70	3,30	36	65
A12003,4	9,96	6,20	3,40	39	70
A12003,5	9,96	6,20	3,50	39	70
A12003,8	10,59	6,60	3,80	43	75
A12004	10,33	6,40	4,00	43	75
A12004,1	10,59	6,60	4,10	43	75
A12004,2	10,59	6,60	4,20	43	75

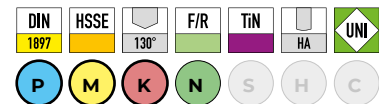
CODE	Price List	HT	D mm	I mm	L mm
A12004,3	11,34	7,00	4,30	47	80
A12004,5	10,96	6,80	4,50	47	80
A12004,6	11,70	7,30	4,60	47	80
A12004,8	11,86	7,40	4,80	52	86
A12005	11,70	7,30	5,00	52	86
A12005,1	11,98	7,40	5,10	52	86
A12005,2	11,98	7,40	5,20	52	86
A12005,3	13,25	8,20	5,30	52	86
A12005,5	13,97	8,70	5,50	57	93
A12005,6	14,74	9,10	5,60	57	93
A12005,8	14,74	9,10	5,80	57	93
A12006	14,23	8,80	6,00	57	93
A12006,2	15,74	9,80	6,20	63	101
A12006,3	15,50	9,70	6,30	63	101
A12006,5	16,76	10,40	6,50	63	101
A12006,7	17,89	11,10	6,70	63	101
A12006,8	19,16	11,90	6,80	69	109
A12006,9	19,79	12,30	6,90	69	109
A12007	19,16	11,90	7,00	69	109
A12007,5	20,15	12,50	7,50	69	109
A12007,7	23,93	14,80	7,70	75	117

CODE	Price List	HT	D mm	I mm	L mm
A12007,8	23,93	14,80	7,80	75	117
A12008	22,80	14,10	8,00	75	117
A12008,2	24,68	15,30	8,20	75	117
A12008,5	23,39	14,50	8,50	75	117
A12008,8	27,39	17,00	8,80	81	125
A12009	26,83	16,00	9,00	81	125
A12009,3	27,08	16,80	9,30	81	125
A12009,5	27,08	16,80	9,50	81	125
A12009,8	31,54	19,60	9,80	87	133
A120010	30,35	18,80	10,00	87	133
A120010,2	35,15	21,80	10,20	87	133
A120010,5	35,55	22,00	10,50	87	133
A120011	36,65	22,70	11,00	94	142
A120011,5	40,57	25,20	11,50	94	142
A120012	43,32	26,90	12,00	101	151
A120012,5	45,40	28,00	12,50	101	151
A120013	47,87	29,70	13,00	101	151
A120013,5	55,54	34,40	13,50	108	160
A120014	68,07	36,00	14,00	108	160

## STUB DRILLS



### SPECS



### MATERIALS

CODE	Price List	HT	D mm	I mm	L mm
A10401	9,48	5,90	1,00	6	26
A10401,2	9,60	6,00	1,20	8	30
A10401,4	8,94	5,60	1,40	9	32
A10401,5	8,94	5,60	1,50	9	32
A10402	7,58	4,70	2,00	12	38
A10402,2	9,24	5,70	2,20	13	40
A10402,4	9,34	5,80	2,40	14	43
A10402,5	8,25	5,10	2,50	14	43
A10402,6	9,60	6,00	2,60	14	43
A10402,8	9,48	5,90	2,80	16	46
A10402,9	9,48	5,90	2,90	16	46
A10403	8,52	5,30	3,00	16	46
A10403,1	8,94	5,50	3,10	18	49
A10403,2	8,94	5,50	3,20	18	49
A10403,3	8,94	5,50	3,30	18	49
A10403,4	8,94	5,50	3,40	20	52
A10403,5	8,94	5,50	3,50	20	52
A10403,8	10,44	6,50	3,80	22	55
A10404	10,04	6,20	4,00	22	55
A10404,1	11,24	7,00	4,10	22	55
A10404,2	10,84	6,20	4,20	22	55

CODE	Price List	HT	D mm	I mm	L mm
A10404,3	11,36	7,00	4,30	24	58
A10404,5	11,24	7,00	4,50	24	58
A10404,6	11,24	7,00	4,60	24	58
A10404,7	12,06	7,50	4,70	24	58
A10404,8	12,34	7,60	4,80	26	62
A10405	10,95	6,80	5,00	26	62
A10405,1	11,64	7,20	5,10	26	62
A10405,2	13,00	8,10	5,20	26	62
A10405,3	13,12	8,10	5,30	26	62
A10405,5	12,18	7,60	5,50	28	66
A10405,6	14,35	8,90	5,60	28	66
A10405,8	14,62	9,10	5,80	28	66
A10406	13,12	8,10	6,00	28	66
A10406,1	15,00	9,30	6,10	31	70
A10406,2	15,00	9,30	6,20	31	70
A10406,3	15,83	9,80	6,30	31	70
A10406,5	15,29	9,50	6,50	31	70
A10406,7	16,92	10,50	6,70	31	70
A10406,8	18,84	11,70	6,80	34	74
A10407	16,65	10,30	7,00	34	74
A10407,5	17,46	10,80	7,50	34	74

CODE	Price List	HT	D mm	I mm	L mm
A10407,7	22,46	13,90	7,70	37	79
A10407,8	22,46	13,90	7,80	37	79
A10408	20,56	12,80	8,00	37	79
A10408,1	27,64	17,10	8,10	37	79
A10408,2	27,64	17,10	8,20	37	79
A10408,5	24,22	15,00	8,50	37	79
A10408,8	30,29	18,80	8,80	40	84
A10409	24,49	15,20	9,00	40	84
A10409,5	27,18	16,90	9,50	40	84
A10409,8	32,34	20,10	9,80	43	89
A104010	26,53	16,50	10,00	43	89
A104010,2	33,57	21,00	10,20	43	89
A104010,5	34,95	20,00	10,50	43	89
A104011	35,47	22,00	11,00	47	95
A104011,5	40,85	25,40	11,50	47	95
A104012	39,66	24,60	12,00	51	102
A104012,3	43,85	27,20	12,30	51	102
A104012,5	43,85	27,20	12,50	51	102
A104013	43,85	27,20	13,00	51	102
A104013,5	46,55	29,00	13,50	54	107
A104014	58,18	36,00	14,00	54	107

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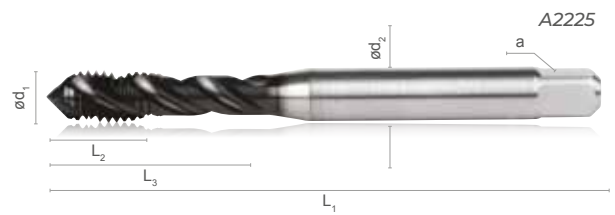
**KERFOLG** 


TAPS  
 POWER - M



DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING
<b>M</b>	6HX	HSSE	DIN 371 DIN 376		KX2
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	DEPTH	ROTATION
Cutting	B 4/5	Straight	Spiral pointed	< 2.5xD	RH

P
M
K
N
S
H
C



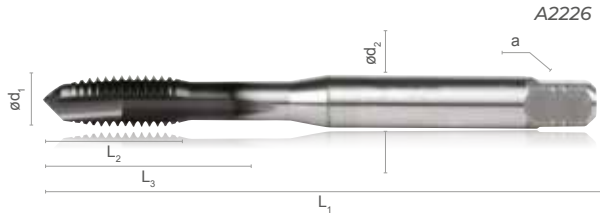
DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING
<b>M</b>	6HX	HSSE	DIN 371 DIN 376		KX2
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	DEPTH	ROTATION
Cutting	C 2/3	Helical 40°	Spiral flutes	< 2.5xD	RH

P
M
K
N
S
H
C

CODE	Price List	HT	d1 mm	P mm	L1 mm	L2 mm	L3 mm	d2 h9 mm	a h12 mm	Z	 mm
A2220M3	34,54	19,60	M3	0,5	56	10	18	3,5	2,7	3	2,5
A2220M4	34,54	19,60	M4	0,7	63	12	21	4,5	3,4	3	3,3
A2220M5	34,54	19,60	M5	0,8	70	14	24,5	6	4,9	3	4,2
A2220M6	34,54	19,60	M6	1	80	16	29	6	4,9	3	5
A2220M8	39,34	24,40	M8	1,25	90	18	33	8	6,2	3	6,8
A2220M10	46,34	28,70	M10	1,5	100	20	36	10	8	3	8,5
A2220M12	57,15	35,00	M12	1,75	110	25	-	9	7	3	10,2
A2220M14	74,10	46,00	M14	2	110	25	-	11	9	3	12
A2220M16	83,46	52,00	M16	2	110	28	-	12	9	3	14
A2220M18	103,40	64,00	M18	2,5	125	32	-	14	11	4	15,5
A2220M20	140,26	87,00	M20	2,5	140	32	-	16	12	4	17,5
A2225M3	33,65	20,90	M3	0,5	56	10	18	3,5	2,7	3	2,5
A2225M4	33,65	20,90	M4	0,7	63	12	21	4,5	3,4	3	3,3
A2225M5	33,65	20,90	M5	0,8	70	14	24,5	6	4,9	3	4,2
A2225M6	33,65	20,90	M6	1	80	16	29	6	4,9	3	5
A2225M8	41,23	25,60	M8	1,25	90	18	33	8	6,2	3	6,8
A2225M10	49,58	30,70	M10	1,5	100	20	36	10	8	3	8,5
A2225M12	64,06	38,00	M12	1,75	110	24	-	9	7	3	10,2
A2225M14	80,00	50,00	M14	2	110	25	-	11	9	4	12
A2225M16	89,92	56,00	M16	2	110	28	-	12	9	4	14
A2225M18	112,32	70,00	M18	2,5	125	32	-	14	11	4	15,5
A2225M20	148,19	92,00	M20	2,5	140	32	-	16	12	4	17,5



## TAPS UNIVERSAL - M



DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING
M	6HX	HSSE	DIN 371 DIN 376		KX2
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	DEPTH	ROTATION
Cutting	B 4/5	Straight	Spiral pointed	<math>< 3\phi d</math>	RH

P
M
K
N
S
H
C

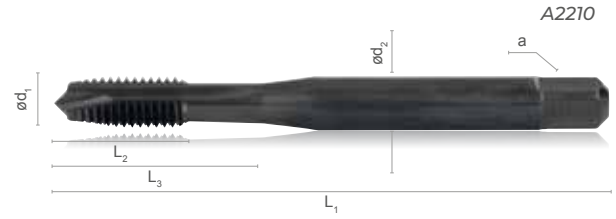


DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING
M	6HX	HSSE	DIN 371 DIN 376		KX2
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	DEPTH	ROTATION
Cutting	C 2/3	Helical 40°	Spiral flutes	<math>< 3.5\phi d</math>	RH

P
M
K
N
S
H
C

CODE	Price List	HT	d1 mm	P mm	L1 mm	L2 mm	L3 mm	d2 h9 mm	a h12 mm	Z	
DIN371											
A2226M3	34,24	21,20	M3	0,5	56	10	18	3,5	2,7	3	2,5
A2226M4	36,90	22,90	M4	0,7	63	13	21	4,5	3,4	3	3,3
A2226M5	36,90	22,90	M5	0,8	70	13	24,5	6	4,9	3	4,2
A2226M6	37,28	23,10	M6	1	80	16	29	6	4,9	3	5
A2226M8	40,33	25,00	M8	1,25	90	18	33	8	6,2	3	6,8
A2226M10	50,67	31,42	M10	1,5	100	20	36	10	8	3	8,5
DIN376											
A2226M12	62,79	39,00	M12	1,75	110	25	-	9	7	4	10,2
A2226M14	85,95	53,00	M14	2	110	28	-	11	9	4	12
A2226M16	406,30	62,00	M16	2	110	28	-	12	9	4	14
DIN371											
A2227M3	35,52	22,00	M3	0,5	56	5	15	3,5	2,7	3	2,5
A2227M4	36,90	22,90	M4	0,7	63	7	21	4,5	3,4	3	3,3
A2227M5	36,90	22,90	M5	0,8	70	8	24,5	6	4,9	3	4,2
A2227M6	37,28	23,10	M6	1	80	10	29	6	4,9	3	5
A2227M8	42,40	26,10	M8	1,25	90	13	33	8	6,2	3	6,8
A2227M10	50,67	31,40	M10	1,5	100	15	38	10	8	3	8,5
DIN376											
A2227M12	62,79	39,00	M12	1,75	110	18	-	9	7	3	10,2
A2227M14	85,95	53,00	M14	2	110	20	-	11	9	3	12
A2227M16	406,30	62,00	M16	2	110	20	-	12	9	4	14

## TAPS STANDARD - M



DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING
M	ISO 2 6H	HSSE	DIN 371 DIN 376		VAP
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	DEPTH	ROTATION
Cutting	B 4/5	Straight	Spiral pointed	<math>< 2.5\phi d</math>	RH

P
M
K
N
S
H
C



DIN13	TOLERANCE	MATERIAL	SHANK	HOLE TYPE	COATING	
M	ISO 2 6H	HSSE	DIN 371 DIN 376		VAP	
TOOL TYPE	CHAMFER	FLUTES	GEOMETRY	REAR	DEPTH	ROTATION
Cutting	C 2/3	Helical 40°	Spiral flutes	Back tapering	<math>< 2.5\phi d</math>	RH

P
M
K
N
S
H
C

CODE	Price List	HT	d1 mm	P mm	L1 mm	L2 mm	L3 mm	d2 h9 mm	a h12 mm	Z	
DIN371											
A2210M2	25,18	15,60	M2	0,4	45	7	11	2,8	2,1	2	1,6
A2210M2,5	21,54	13,30	M2,5	0,45	50	9	15	2,8	2,1	3	2,05
A2210M3	24,30	13,20	M3	0,5	56	10	18	3,5	2,7	3	2,5
A2210M4	21,62	13,40	M4	0,7	63	12	21	4,5	3,4	3	3,3
A2210M5	23,06	14,30	M5	0,8	70	14	24,5	6	4,9	3	4,2
A2210M6	23,40	14,50	M6	1	80	16	29	6	4,9	3	5
A2210M7	36,69	22,80	M7	1	80	16	29	7	5,5	3	6
A2210M8	26,63	16,50	M8	1,25	90	18	33	8	6,2	3	6,8
A2210M10	34,42	19,50	M10	1,5	100	20	36	10	8	3	8,5
A2210M12	43,23	26,80	M12	1,75	110	24	-	9	7	4	10,2
A2210M14	51,48	31,90	M14	2	110	25	-	11	9	4	12
A2210M16	66,49	35,00	M16	2	110	28	-	12	9	4	14
DIN376											
A2210M18	69,07	39,00	M18	2,5	125	32	-	14	11	4	15,5
A2210M20	86,69	55,00	M20	2,5	140	32	-	16	12	4	17,5
A2210M22	403,73	64,00	M22	2,5	140	32	-	18	14,5	4	19,5
A2210M24	420,36	80,00	M24	3	160	36	-	18	14,5	4	21
A2210M27	434,59	82,00	M27	3	160	36	-	20	16	4	24
A2210M30	446,44	91,00	M30	3,5	180	40	-	22	18	4	26,5
DIN371											
A2215M2	25,52	15,80	M2	0,4	45	6	12	2,8	2,1	3	1,6
A2215M2,5	30,53	18,90	M2,5	0,45	50	6,5	15	2,8	2,1	3	2,05
A2215M3	23,40	14,50	M3	0,5	56	7	15	3,5	2,7	3	2,5
A2215M4	23,40	25,60	M4	0,7	63	8,5	21	4,5	3,4	3	3,3
A2215M5	24,40	15,10	M5	0,8	70	10	24,5	6	4,9	3	4,2
A2215M6	24,74	15,30	M6	1	80	12	29	6	4,9	3	5
A2215M7	36,83	24,10	M7	1	80	12	29	7	5,5	3	6
A2215M8	28,63	17,80	M8	1,25	90	15	33	8	6,2	3	6,8
A2215M10	34,99	21,70	M10	1,5	100	17,5	38	10	8	3	8,5
A2215M12	43,23	26,80	M12	1,75	110	18	-	9	7	4	10,2
A2215M14	55,16	34,20	M14	2	110	20,5	-	11	9	4	12
A2215M16	61,47	38,00	M16	2	110	20,5	-	12	9	4	14
DIN376											
A2215M18	93,59	58,00	M18	2,5	125	25,5	-	14	11	4	15,5
A2215M20	404,18	65,00	M20	2,5	140	29,5	-	16	12	4	17,5
A2215M22	441,30	69,00	M22	2,5	140	29,5	-	18	14,5	4	19,5
A2215M24	422,76	76,00	M24	3	160	35,5	-	18	14,5	4	21
A2215M27	434,93	84,00	M27	3	160	37,5	-	20	16	5	24
A2215M30	467,80	104,00	M30	3,5	180	42	-	22	18	5	26,5



**EXCELLENT STABILITY AND PRODUCTIVITY  
IN DEEP GROOVING AND PARTING-OFF OPERATIONS**

**Inserts**  
**QGM, QGS and QTX**  
(Grade AH7025, AH6235)

CW = 2, 3, 4, 5, 6 and 8 mm  
Max. groove depth

CDX = 33 mm  
(for monoblock toolholder)



**ADD<sup>ORCE</sup>FCUT**

**PURCHASE  
20 INSERTS**

**RECEIVE  
1 BLADE OR TOOLHOLDER, OR CARTRIDGE**

**FREE**

**PURCHASE  
20 INSERTS**

**RECEIVE  
1 BLADE OR CHP TOOLHOLDER**

**AT A 70% DISCOUNT**

**PURCHASE  
10 INSERTS  
+ 1 TOOL BLOCK**

**RECEIVE  
1 BLADE OR TOOLHOLDER**

**FREE**

**PURCHASE  
10 INSERTS  
+ 1 TOOL BLOCK**

**RECEIVE  
1 BLADE OR CHP TOOLHOLDER**

**AT A 70% DISCOUNT**





### EXTREMELY VERSATILE FACE MILLS IN A WIDE RANGE OF MATERIALS



**Double sided square insert**  
SN\*U-MJ/MH/W  
(AH120, AH3135, AH3225, T1215, T3225)  
APMX = 6 mm



**Double sided octagonal insert**  
ON\*U-MJ/W  
(AH120, AH3135, AH3225, T1215, T3225)  
APMX = 3.4 mm



**Double sided round insert**  
RNMU-MJ  
(AH120, AH3135, AH3225, T1215, T3225)  
APMX = 6 mm



Shell end mill  
TASN13  
DC =  $\phi 50$  -  $\phi 125$ mm

**PURCHASE  
10 TOOTH INSERTS**  
MAX 50 INSERTS

**RECEIVE  
1 CUTTER**

**AT AN  
80%  
DISCOUNT**

**DOT<sup>TRIPLE</sup>MILL**



### HIGH FEED MILLING LINE FOR MAXIMUM PRODUCTIVITY



**LN\*U0303ZER...**  
Low cutting forces



**LN\*U0303UER...**  
Greater durability and reduced vibration

LN\*U03-MH/MJ/ML/MS  
(AH130, AH3225, AH725, AH120, AH8015, AH8005)  
APMX = 0.9 - 1.0 mm

Shell end mill:  
TXN03R...  
DCX =  $\phi 40$  -  $\phi 50$  mm



Modular version:  
HXN03R...  
DCX =  $\phi 16$  -  $\phi 40$  mm

Shank type:  
EXN03R... (short)  
EXN03R...L/EXN03R...L-C (long)  
DCX =  $\phi 16$  -  $\phi 40$  mm

**PURCHASE  
10 TOOTH INSERTS**  
MAX 50 INSERTS

**RECEIVE  
1 CUTTER**

**AT AN  
80%  
DISCOUNT**

**DOFEED**



### HIGH FEED MILLING CUTTER AND COPY MILLING CUTTER IN A SINGLE TOOL



**LNMX04/05/06-MJ/ML (ball nose)**  
(AH3135, AH120, AH8015, AH3225)  
APMX = 4 - 6 mm



**LNMX04/06-HJ/HL (high feed)**  
(AH3135, AH120, AH8015, AH3225)  
APMX = 1.3 - 2 mm

Shell end mill:  
TXLN04/05/06R...  
DCX =  $\phi 40$  -  $\phi 66$  mm

EXLN04/05/06R... (short)  
EXLN04/05/06R\*\*L... (long)  
DCX =  $\phi 20$  -  $\phi 40$  mm

Modular version:  
HXLN04/05/06R...  
DCX =  $\phi 20$  -  $\phi 42$  mm

**PURCHASE  
10 TOOTH INSERTS**  
MAX 50 INSERTS

**RECEIVE  
1 CUTTER**

**AT AN  
80%  
DISCOUNT**

**DOT<sup>WIST</sup>BALL**

## LIVE CENTRES FOR LIGHT LOAD OPERATIONS

Revolving live centre with integral shaft.



	C6251CM2	C6251CM3	C6251CM4	C6251CM5
Price List	227,00	247,00	318,00	405,00
HT	187,00	203,00	262,00	334,00
CM	2	3	4	5
Concentricity error	0,005	0,005	0,005	0,005
Capacity kg	110	280	460	780
Rpm/min	6000	5000	4000	3000

## LIVE CENTRES FOR MEDIUM LOAD

Revolving live centre with integral shaft.



	C6253CM3	C6253CM4	C6253CM5
Price List	303,00	376,00	466,00
HT	249,00	310,00	376,00
CM	3	4	5
Concentricity error	0,005	0,005	0,005
Capacity kg	640	700	1000
Rpm/min	7000	5500	4500

## LIVE CENTRES FOR LIGHT LOAD OPERATIONS

Revolving live centre for interchangeable cusp.  
Standard cusp: C6255



	C6252CM2	C6252CM3	C6252CM4	C6252CM5
Price List	278,00	348,00	378,00	462,00
HT	229,00	263,00	311,00	381,00
CM	2	3	4	5
Concentricity error	0,01	0,01	0,01	0,01
Capacity kg	110	280	460	780
Rpm/min	6000	5000	4000	3000

## LIVE CENTRES FOR MEDIUM LOAD

Revolving live centre with interchangeable cusp.  
Standard cusp: C6255.



	C6254CM3	C6254CM4	C6254CM5
Price List	383,00	463,00	544,00
HT	315,00	373,00	448,00
CM	3	4	5
Concentricity error	0,01	0,01	0,01
Capacity kg	640	700	1000
Rpm/min	7000	5500	4500

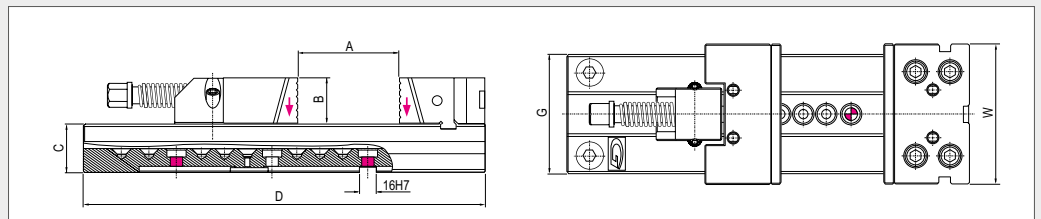


### CLAMPING VICES STANDARD FLEX

Vice with quick manual jaw plate changeover without the need for tools (Comb system). Increased and improved pull-down action during clamping

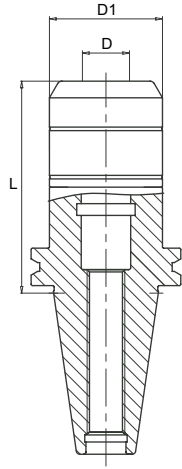
#### Supplied with:

- Two positioning dowels (standard for 16 mm slot, other dimensions on request at no additional cost)
- Box wrench
- T-wrench
- Ground and calibrated holes with an F7 tolerance F7



CODE	Price List	HT	Mod mm	A mm	B mm	C mm	D mm	W mm	G mm	Kg
C6302150121	898,00	785,00	150 x 121	150	38	40	345	121	95	12,9
C6302200146	1.079,00	830,00	200 x 146	200	48	50	420	146	125	25,5
C6302300146	1.245,00	900,00	300 x 146	300	48	50	520	146	125	29
C6302400171	1.646,00	1.100,00	400 x 171	400	58	58	655	171	145	47

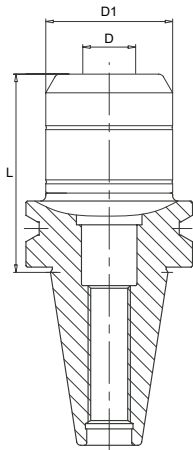
DIN 69871 SK AD+B



- SK**  
40
- SK**  
50
- G 2.5**  
25.000  
rpm
- AT3**  
TAPER

CODE	Price List	HT	SK	D mm	L mm	D1 mm
C002642090	222,50	190,00	40	20	90	48
C0026432100	233,50	199,00	40	32	100	68
C002652070	344,00	268,00	50	20	70	48
C002653295	332,00	283,00	50	32	95	68

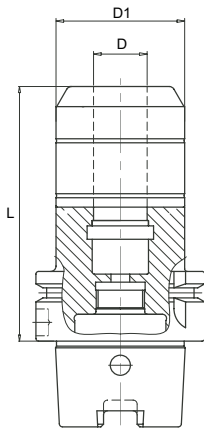
MAS 403 BT AD+B



- BT**  
40
- BT**  
50
- G 2.5**  
25.000  
rpm
- AT3**  
TAPER

CODE	Price List	HT	BT	D mm	L mm	D1 mm
C102642075	222,50	190,00	40	20	75	48
C102643290	233,50	199,00	40	32	90	68
C102652090	344,00	268,00	50	20	90	48
C102653295	332,00	283,00	50	32	95	68

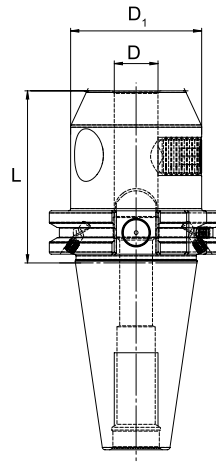
DIN 69893 HSK A



- HSK**  
63
- HSK**  
100
- G 2.5**  
25.000  
rpm

CODE	Price List	HT	HSK	D mm	L mm	D1 mm
C2026620095	334,00	285,00	63	20	95	48
C2026632105	369,50	306,00	63	32	105	68
C2026120105	402,50	343,00	100	20	105	48
C2026132105	425,50	363,00	100	32	105	68

CODE	Price List	HT	SK	D mm	L mm	D1 mm
C0046406050	44,50	35,00	40	6	50	25
C0046406100	49,50	42,00	40	6	100	25
C0046406160	100,50	86,00	40	6	160	25
C0046408050	39,50	34,00	40	8	50	28
C0046408100	46,00	39,00	40	8	100	28
C0046408160	94,00	80,00	40	8	160	28
C0046410050	39,50	34,00	40	10	50	35
C0046410100	46,00	39,00	40	10	100	35
C0046410160	94,00	80,00	40	10	160	35
C0046412050	39,50	34,00	40	12	50	42
C0046412100	46,00	39,00	40	12	100	42
C0046412160	94,00	80,00	40	12	160	42
C0046416063	39,50	34,00	40	16	63	48
C0046416100	46,00	39,00	40	16	100	48
C0046416160	94,00	80,00	40	16	160	48
C0046420063	39,50	34,00	40	20	63	52
C0046420100	46,00	39,00	40	20	100	52
C0046420160	94,00	80,00	40	20	160	52
C0046425100	46,00	39,00	40	25	100	63
C0046425160	102,50	87,00	40	25	160	63
C0046432100	48,00	41,00	40	32	100	72
C0046432160	106,00	90,00	40	32	160	72
C0046512063	58,50	50,00	50	12	63	42
C0046516063	68,50	50,00	50	16	63	48
C0046520063	68,50	50,00	50	20	63	52
C0046525080	65,00	55,00	50	25	80	63
C0046532100	72,00	61,00	50	32	100	72
C0046540100	76,50	65,00	50	40	100	80



SK  
40

SK  
50

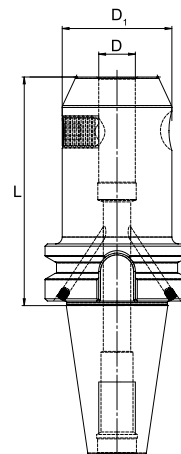
G 2.5  
25.000  
rpm

AT3  
TAPER



DIN 69871 SK AD+B

CODE	Price List	HT	BT	D mm	L mm	D1 mm
C1046406050	42,00	36,00	40	6	50	25
C1046406100	49,50	42,00	40	6	100	25
C1046408050	40,00	34,00	40	8	50	28
C1046408100	46,50	40,00	40	8	100	28
C1046410063	40,00	34,00	40	10	63	35
C1046410100	46,50	40,00	40	10	100	35
C1046412063	40,00	34,00	40	12	63	42
C1046412100	46,50	40,00	40	12	100	42
C1046416063	40,00	34,00	40	16	63	48
C1046416100	46,50	40,00	40	16	100	48
C1046420063	40,00	34,00	40	20	63	52
C1046420100	46,50	40,00	40	20	100	52
C1046425090	45,00	38,00	40	25	90	63
C1046432100	49,00	42,00	40	32	100	72
C1046512080	68,50	58,00	50	12	80	42
C1046516080	68,50	58,00	50	16	80	48
C1046520080	68,50	58,00	50	20	80	52
C1046525100	78,50	67,00	50	25	100	63
C1046532105	80,50	69,00	50	32	105	72
C1046540110	89,00	76,00	50	40	110	80



BT  
40

BT  
50

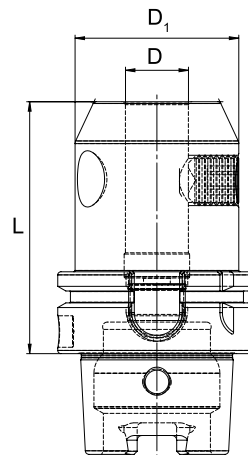
G 2.5  
25.000  
rpm

AT3  
TAPER



MAS 403 BT AD+B

CODE	Price List	HT	HSK	D mm	L mm	D1 mm
C2046606065	93,50	80,00	63	6	65	25
C2046608065	93,50	80,00	63	8	65	28
C2046610065	93,50	80,00	63	10	65	35
C2046612080	93,50	80,00	63	12	80	42
C2046616080	93,50	80,00	63	16	80	48
C2046620080	93,50	80,00	63	20	80	52
C2046625110	103,00	88,00	63	25	110	63
C2046632110	108,50	92,00	63	32	110	72
C2046106080	130,50	111,00	100	6	80	25
C2046108080	130,50	111,00	100	8	80	28
C2046110080	130,50	111,00	100	10	80	35
C2046112080	130,50	111,00	100	12	80	42
C2046116100	130,50	111,00	100	16	100	48
C2046120100	130,50	111,00	100	20	100	52
C2046125100	162,00	130,00	100	25	100	63
C2046132100	158,00	135,00	100	32	100	72
C2046140105	172,00	147,00	100	40	105	80



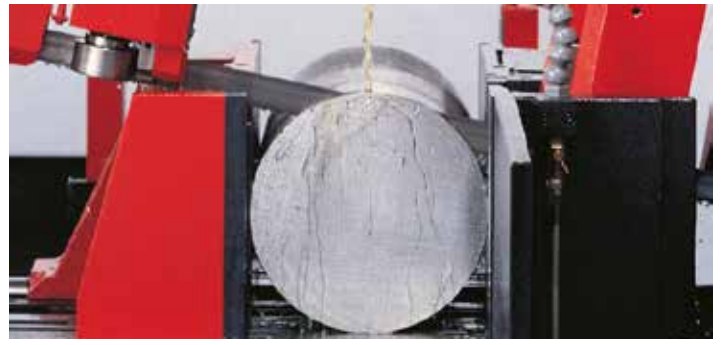
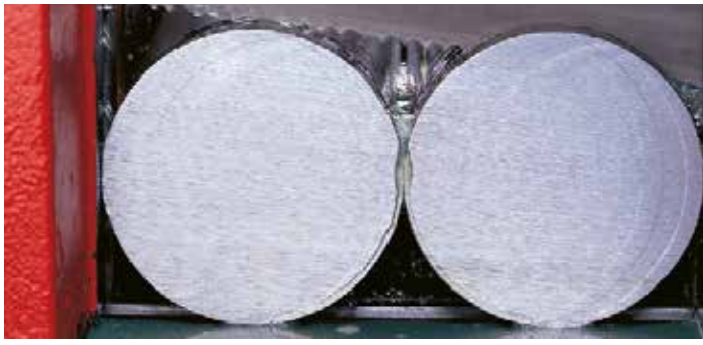
HSK  
63

HSK  
100

G 2.5  
25.000  
rpm



DIN 69893 HSK A



**BIMETAL BLADE  
M42**

**SUPER 8**

**BIMETAL BLADE  
HIGH SPEED STEEL M71**

**MAGNUM HLG**

Geometria con rompi-trucioli

Geometria standard

Tooth hardness  
67/68 HRC

**Universal blade  
with excellent  
performance**

Coating  
AMADA M71

High-Low  
tooth tip  
shape

Tooth hardness  
69/70 HRC

**Cutting of tough materials  
without friction**



P	M	K	N	S	H	C
●	○	●	○	○	-	-

P	M	K	N	S	H	C
●	●	-	-	●	-	-

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
○	●	●	●	-

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
-	-	○	●	-

Length mm	3/4	HT	4/6	HT	5/7	HT
2450	SU8272450Z34	28,00	SU8272450Z46	28,00	SU8272450Z57	28,00
2750	SU8272750Z34	31,00	SU8272750Z46	31,00	SU8272750Z57	31,00
2765	SU8272765Z34	31,00	SU8272765Z46	31,00	SU8272765Z57	31,00
2825	SU8272825Z34	32,00	SU8272825Z46	32,00	SU8272825Z57	32,00
2950	SU8272950Z34	33,00	SU8272950Z46	33,00	SU8272950Z57	33,00
3010	SU8273010Z34	34,00	SU8273010Z46	34,00	SU8273010Z57	34,00
3120	SU8273120Z34	35,00	SU8273120Z46	35,00	SU8273120Z57	35,00
3150	SU8273150Z34	35,00	SU8273150Z46	35,00	SU8273150Z57	35,00
3180	SU8273180Z34	35,00	SU8273180Z46	35,00	SU8273180Z57	35,00
3270	SU8273270Z34	36,00	SU8273270Z46	36,00	SU8273270Z57	36,00
3320	SU8273320Z34	37,00	SU8273320Z46	37,00	SU8273320Z57	37,00
3660	SU8273660Z34	40,00	SU8273660Z46	40,00	SU8273660Z57	40,00

Length mm	2/3	HT	3/4	HT	4/6	HT
2450	-	-	HLG272450Z34	37,00	HLG272450Z46	37,00
2750	-	-	HLG272750Z34	41,00	HLG272750Z46	41,00
2765	-	-	HLG272765Z34	41,00	HLG272765Z46	41,00
2825	-	-	HLG272825Z34	42,00	HLG272825Z46	42,00
2950	-	-	HLG272950Z34	44,00	HLG272950Z46	44,00
3010	-	-	HLG273010Z34	44,00	HLG273010Z46	44,00
3120	-	-	HLG273120Z34	46,00	HLG273120Z46	46,00
3150	-	-	HLG273150Z34	46,00	HLG273150Z46	46,00
3180	-	-	HLG273180Z34	47,00	HLG273180Z46	47,00
3270	-	-	HLG273270Z34	48,00	HLG273270Z46	48,00
3320	-	-	HLG273320Z34	48,00	HLG273320Z46	48,00
3660	-	-	HLG273660Z34	53,00	HLG273660Z46	53,00

Length mm	2/3	HT	3/4	HT	4/6	HT
3505	SU8343505Z23	51,00	SU8343505Z34	51,00	SU8343505Z46	51,00
3660	SU8343660Z23	53,00	SU8343660Z34	53,00	SU8343660Z46	53,00
4100	SU8344100Z23	58,00	SU8344100Z34	58,00	SU8344100Z46	58,00
4115	SU8344115Z23	58,00	SU8344115Z34	58,00	SU8344115Z46	58,00
4120	SU8344120Z23	58,00	SU8344120Z34	58,00	SU8344120Z46	58,00
4500	SU8344500Z23	63,00	SU8344500Z34	63,00	SU8344500Z46	63,00
4540	SU8344540Z23	64,00	SU8344540Z34	64,00	SU8344540Z46	64,00
4570	SU8344570Z23	64,00	SU8344570Z34	64,00	SU8344570Z46	64,00
4640	SU8344640Z23	65,00	SU8344640Z34	65,00	SU8344640Z46	65,00
4870	SU8344870Z23	68,00	SU8344870Z34	68,00	SU8344870Z46	68,00
5100	SU8345100Z23	71,00	SU8345100Z34	71,00	SU8345100Z46	71,00
5300	SU8345300Z23	73,00	SU8345300Z34	73,00	SU8345300Z46	73,00

Length mm	2/3	HT	3/4	HT	4/6	HT
3505	HLG343505Z23	62,00	HLG343505Z34	62,00	-	-
3660	HLG343660Z23	64,00	HLG343660Z34	64,00	-	-
4100	HLG344100Z23	68,00	HLG344100Z34	68,00	-	-
4115	HLG344115Z23	68,00	HLG344115Z34	68,00	-	-
4120	HLG344120Z23	72,00	HLG344120Z34	72,00	-	-
4500	HLG344500Z23	74,00	HLG344500Z34	74,00	-	-
4540	HLG344540Z23	74,00	HLG344540Z34	74,00	-	-
4570	HLG344570Z23	75,00	HLG344570Z34	75,00	-	-
4640	HLG344640Z23	80,00	HLG344640Z34	76,00	-	-
4870	HLG344870Z23	79,00	HLG344870Z34	79,00	-	-
5100	HLG345100Z23	83,00	HLG345100Z34	83,00	-	-
5300	HLG345300Z23	86,00	HLG345300Z34	86,00	-	-





**GUABO**

**NEW**  
**SPEED CUT**

UNIVERSAL BLADES WITH HM TOOTH

*Exceptional vibration resistance thanks to the special tooth geometry*



P	M	K	N	S	H	C
●	○	○	○	○	-	-

MANUAL ARCH SHAPE	SEMI AUTOMATIC ARCH SHAPE	AUTOMATIC ARCH SHAPE	AUTOMATIC DOUBLE COLUMN	AUTOMATIC HM HIGH SPEED
	○	●	●	○
Length mm	HT	3/4	HT	4/6
2450	74,00	A7056245034	97,00	A7056245046
2500	76,00	A7056250034	98,00	A7056250046
2590	78,00	A7056259034	103,00	A7056259046
2600	79,00	A7056260034	102,00	A7056260046
2650	80,00	A7056265034	104,00	A7056265046
2700	82,00	A7056270034	106,00	A7056270046
2750	83,00	A7056275034	108,00	A7056275046
2765	83,00	A7056276534	109,00	A7056276546
2825	85,00	A7056282534	111,00	A7056282546
2845	86,00	A7056284534	112,00	A7056284546
2950	88,00	A7056295034	116,00	A7056295046
3010	91,00	A7056301034	118,00	A7056301046
3100	93,00	A7056310034	121,00	A7056310046
3120	94,00	A7056312034	122,00	A7056312046
3150	95,00	A7056315034	124,00	A7056315046
3180	95,00	A7056318034	124,00	A7056318046
3200	96,00	A7056320034	125,00	A7056320046
3225	97,00	A7056322534	97,00	A7056322546
3320	100,00	A7056332034	130,00	A7056332046
3370	101,00	A7056337034	132,00	A7056337046
3505	105,00	A7056350534	137,00	A7056350546
3660	109,00	A7056366034	143,00	A7056366046
3900	116,00	A7056390034	152,00	A7056390046
4600	137,00	A7056460034	179,00	A7056460046

**BIANCO**

**MANUAL BAND SAW MACHINES 280 M**

Small and robust band saw. Particularly suitable for use in carpentry and workshops which need to cut in small series.

- Vice support group, adapted to the cutting capacities, studied to contain the costs of the machine while maintaining its reliability
- Low voltage electrical system according to CE regulations
- Available only with high control panel
- Worm screw reducer
- Possibility of cutting up to 60° right
- Two-speed three-phase motor
- Worktop height 965 mm
- Hardened and ground gears
- Product Made in Italy

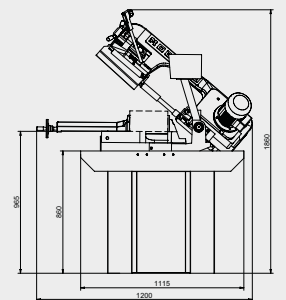
**STANDARD ACCESSORIES**

- Millimetre scale 0-500 mm with stop block
- Infeed roller
- Workpiece discharge chute

**€ 3.500,00**  
N2327280M



Band dimension mm	2450 x 27 x 0,9
Tension V	400
Power Kw	0,5 - 0,7
Cutting speed m/min	35 - 70
Weight Kg	240
<b>Cutting capacity mm</b>	
○ 0° / 45° / 60°	220 / 160 / 95
□ 0° / 45° / 60°	220 / 155 / 95
▢ 0° / 45° / 60°	260 x 140 / 160 x 140 / 95 x 95



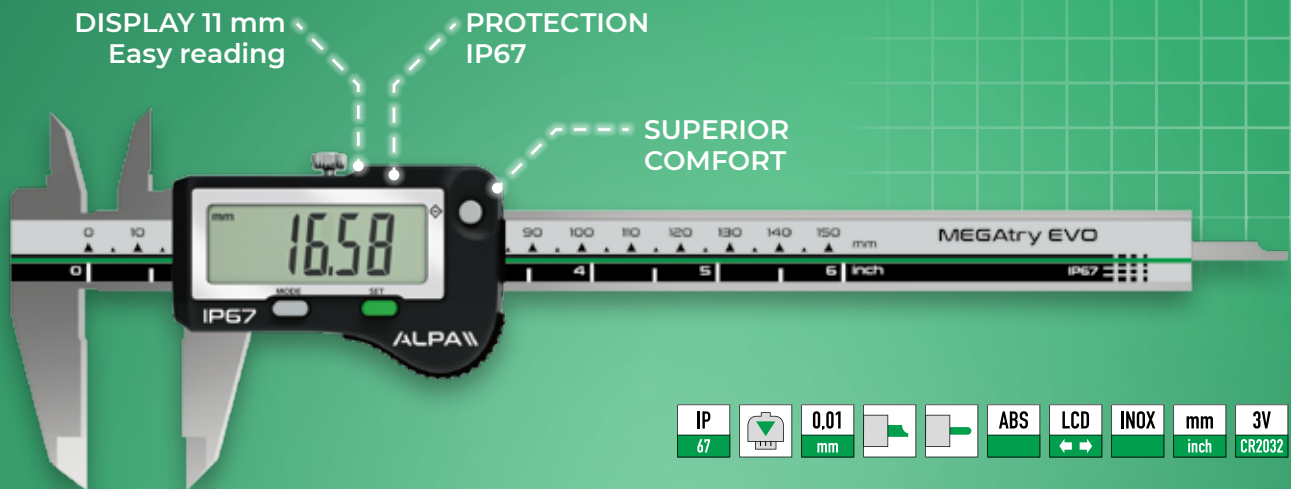
Standard colours: Red upper part RAL 3002 - Black lower part RAL 7022. BLUE RAL 5015 on request at an additional cost.

# METROLOGY



# ALPA MEGAty EVO

DIGITAL CALIPERS IP67 WITH PRESET



Digital calipers IP67 with preset.  
Accuracy  $\pm 0,02$  mm.  
Resolution 0,01 mm.  
Digital caliper Swiss made IP67 electronics.  
High protection against dust and liquids.  
Clamping screw, hardened stainless steel frame.



Max error	0-100/20   100-300/30   (DIN 862) mm/ $\mu$ m
Repeatability	0.01 mm
Measuring speed	max 2.5 m/s
Display refresh rate	8 mis/s
Measuring system	Sylvac Inductive System (patented)
Power consumption	Working: 50 $\mu$ A - Standby mode: 8 $\mu$ A
Battery life	12 000 h
Working temperature	from + 5° to + 40°C / from + 41° to + 104°F



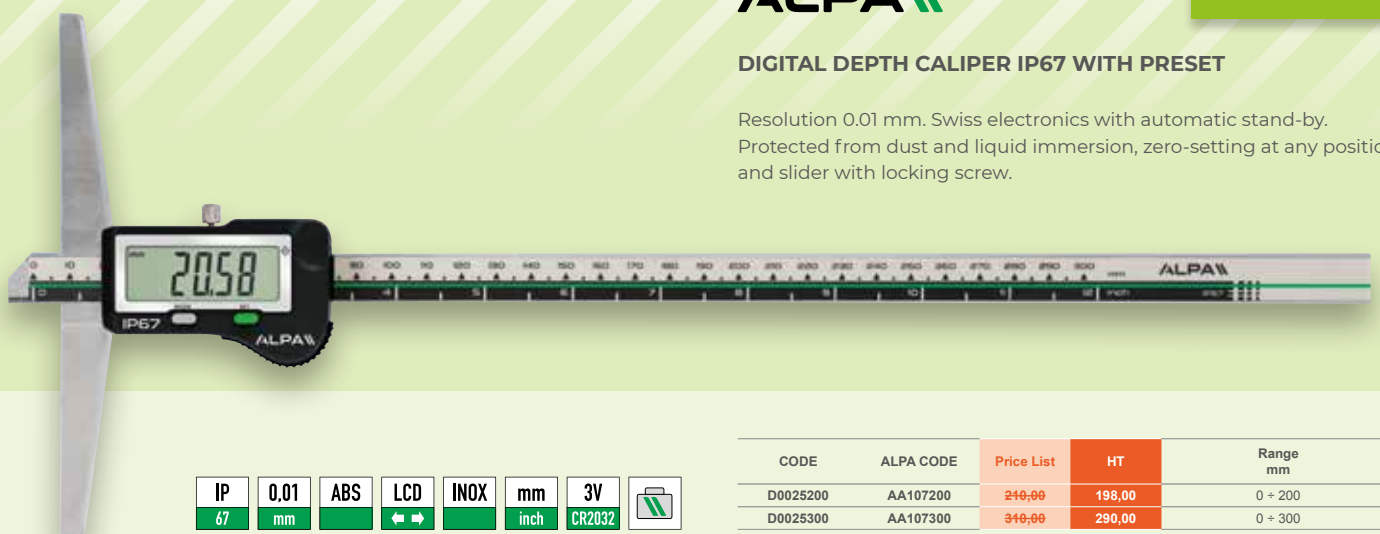
CODE	ALPA CODE	1 Pcs	3 Pcs	5 Pcs	Range mm	Rod
D0010150NDP	AA014150NDP	129,00	365,00	590,00	0 + 150	■
D0010150NDT	AA014150NDT	129,00	365,00	590,00	0 + 150	●
D0010200	AA014200	232,00	660,00	1.065,00	0 + 200	■
D0010300	AA014300	282,00	800,00	1.295,00	0 + 300	-

## ALPA

**NEW**

### DIGITAL DEPTH CALIPER IP67 WITH PRESET

Resolution 0.01 mm. Swiss electronics with automatic stand-by.  
Protected from dust and liquid immersion, zero-setting at any position and slider with locking screw.



CODE	ALPA CODE	Price List	HT	Range mm
D0025200	AA107200	240,00	198,00	0 + 200
D0025300	AA107300	340,00	290,00	0 + 300

# ALPA MEGAWHIZ

DIGITAL MICROMETERS IP67

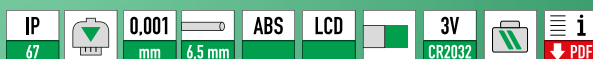
Non-rotating spindle  
Ø 6,5 mm

Fast movement  
10 mm / rotation

Proximity  
USB or RS connection



Automatic wake-up by moving the thimble, sleeping mode after 20 min. when not in use.  
Position memorized in sleeping mode (S.I.S. system), absolute system.  
Water protected for heavy work with coolants and lubricants, protection rating IP67 according to IEC 60529, even when connected.



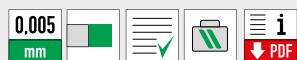
Repeatability	0,001 mm
Measuring force	0-25/30 mm Adjustable 5N/10N
Measuring force	Long ranges 10N standard
Measuring system	S.I.S. (patented)
Power consumption	60 µA
Battery life	10'000 H
Working temperature	from + 5° to + 40°C / from + 41 to + 104°F

CODE	ALPA CODE	Price List	HT	Range mm
D1111000030	BA01030	557,00	444,00	0 + 30
D1111030060	BA01066	832,00	663,00	30 + 66
D1111066102	BA010102	995,00	710,00	66 + 102

## BOWERS

### BOREHOLE MICROMETERS WITH ANALOGUE READOUT IN SET

Bowers SXTA analogue bore gauges in set.  
An economical solution considering the possibility of calibrating two gauges with only one ring. Every set is supplied with micrometers, rings and UKAS certificates.  
Supplied in a wooden case.



CODE	ALPA CODE	Price List	HT	Range mm	Measuring heads pieces	Setting ring pieces
D1295006010SET	BB31010SET	790,00	609,00	6 + 10	2	1
D1295010020SET	BB31020SET	4.223,00	971,00	10 + 20	3	2
D1295020050SET	BB31050SET	4.932,00	1.542,00	20 + 50	3	2
D1295050100SET	BB310100SET	2.605,00	2.077,00	50 + 100	3	2
D1295100150SET	BB310150SET	2.067,00	1.647,00	100 + 150	2	1

## DIAL GAUGE HOLDER STAND WITH GRANITE BASE

Flatness and precision according to DIN 876/00. Column with fully articulated rods with centralised locking and micrometric adjustment. Dove tail connection for 8mm (symbol) diameter dial gauge.



CODE	ALPA CODE	Price List	HT	Base mm	Arm mm
D2536MEC	CD024ME	340,00	290,00	300 x 200	340

## ALPA 5 Functions

### DIGITAL DIAL INDICATORS

Digital dial gauge with large display, zero setting at any position, conversion mm/inch, Ø 8 mm stem, ON/OFF button.



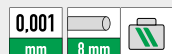
CODE	ALPA CODE	Price List	HT	Range mm	Resolution mm
D222912,5	CA02010	420,00	96,00	0 ÷ 12,5	0,01
D222912,50,001	CA02025	445,00	116,00	0 ÷ 12,5	0,001
D222925	CA02050	469,00	134,00	0 ÷ 25	0,01
D222950	CA02110	295,00	235,00	0 ÷ 50	0,01



## ALPA

### DIAL INDICATOR Ø 58

Analogue dial indicator Ø 58 mm. Range 1 mm. Stainless steel stem and hardened steel tip, Ø 8 mm stem.



CODE	ALPA CODE	Price List	HT	Range mm	Resolution mm
D23611	CB0261	402,00	81,00	1	0,001



# ALPA MEGAtower

## HEIGHT GAUGES IP67



### FUNCTIONALITY:

Measuring ranges 700 mm  
Resolution 0.001 mm  
Repeatability 2 (Ø : 4)  
Measuring force N 0.75 ÷ 1.5 mm  
Extremely easy to use  
Electronically adjustable measuring force  
Autonomy: 40 h (lithium-ion batteries)  
RS232 et USB interfaces

### SUPPLIED WITH:

Insert with ruby ball Ø4 mm L90 mm (D4206RB490)  
Calibration report on master  
Calibration report on measuring rule  
Calibration report on orthogonality  
Protection cover

Insert with  
ruby ball  
Ø 4mm



### AIR CUSHION

easy displacement on measuring table

CODE	ALPA	Description
D4200700	GA050700	Height gauge
D4203MD280	GA052W280	Probes with hm sphere

**ROBUST  
PRECISE  
RELIABLE**



**IP67**



**BUY TOGETHER**

**1 HEIGHT GAUGE + 1 PROBE**

**FOR ONLY € 5.500,00**

**COATING THICKNESS METERS WITH EXTERNAL PROBE**

Portable meter with a high-contrast self-rotating colour display and an external probe. Accuracy from +/-1%, measuring range 0-1500 µm, high degree of protection against dust and liquids and USB data output. Allows you to measure the thickness of the coatings on ferrous metals (version F) or on non-ferrous metals (version NF) and to keep the last 5 measurements in memory. Basic statistical functions, calibration films, probe and certificate of conformity provided as standard.



CODE	ALPA CODE	Price List	HT	Description
D9305FEES	LA525FBKIT	4-110,00	1050,00	Ferrous based coating thickness meter with external probe
D9305NFES	LA525NFBKIT	4-280,00	1200,00	Non-ferrous based coating thickness meter with external probe
D9305FENFES	LA525FNFBKIT	4-662,00	1620,00	Ferrous and non-ferrous coating thickness meter with external probe

**COATING THICKNESS METER WITH BUILT-IN PROBE**

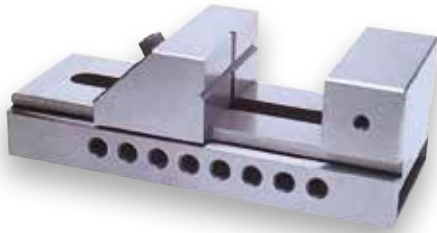
Portable meter with high-contrast self-rotating colour display and built-in probe. Accuracy from +/-1%, measuring range 0-1500 µm, high degree of protection against dust and liquids and USB data output. Allows you to measure the thickness of the coatings on ferrous metals (version F) or on non-ferrous metals (version NF) and to keep the last 5 measurements in memory. Basic statistical functions, calibration films and certificate of conformity provided as standard.



CODE	ALPA CODE	Price List	HT	Description
D9307FEIN	LA510FB	929,00	738,00	Ferrous based coating thickness meter
D9307NFIN	LA510NFB	4-150,00	944,00	Non-ferrous based coating thickness meter
D9307FENFIN	LA510FNFB	4-490,00	1.190,00	Ferrous and non-ferrous coating thickness meter

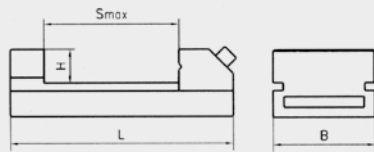
## PRECISION VICE

Quick-lock precision vice, tempered and ground steel. Clamping through hexagonal wrench. Ideal for grinding, milling, measuring and electro discharge machines. V-jaws for a reliable grip.



Parallel error:  
± 0,005 mm / 100 mm

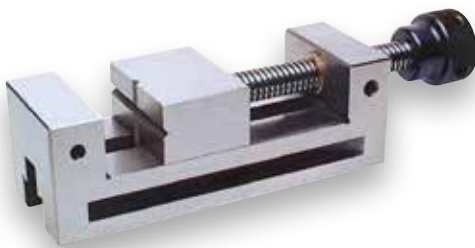
Orthogonality error:  
± 0,005 mm



CODE	ALPA CODE	Price List	HT	L mm	S max mm	B mm	H mm	kg
C6396025X025	EB10565	<del>94,00</del>	75,00	65	25	25	10	0,3
C6396036X040	EB105100	<del>106,00</del>	84,00	100	40	36	20	1
C6396050X065	EB105140	<del>118,00</del>	94,00	140	65	50	25	2
C6396063X085	EB105175	<del>129,00</del>	103,00	175	85	63	32	4,1
C6396100X125	EB105245	<del>302,00</del>	238,00	245	125	100	45	10
C6396125X160	EB105285	<del>396,00</del>	312,00	285	160	125	50	21
C6396150X200	EB105330	<del>604,00</del>	483,00	330	200	150	50	20

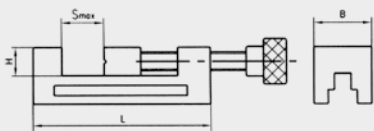
## PRECISION VICE

Tempered and ground steel, screw clamping, V-jaws for a reliable grip. For workpiece machining of grinding, milling, measuring and electro discharge machines.



Parallel error:  
± 0,005 mm / 100 mm

Orthogonality error:  
± 0,005 mm



CODE	ALPA CODE	Price List	HT	L mm	S max mm	B mm	H mm	kg
C6397050X065	EB110155	<del>157,00</del>	124,00	155	65	50	25	2,3
C6397063X085	EB110190	<del>173,00</del>	136,00	190	85	63	32	4
C6397073X100	EB110210	<del>240,00</del>	192,00	210	100	73	35	5,8
C6397088X125	EB110250A	<del>275,00</del>	220,00	250	125	88	40	9,5
C6397100X125	EB110250B	<del>384,00</del>	300,00	250	125	100	45	12

## KERFOLG

### ANALOG 3D DIAL TASTERS IP67

€ 285,00

D30061



Indication accuracy mm 0,01

Shank Ø mm 20



Highly accurate and versatile instrument for workstations, milling machines and electrical discharge machines. Engineered to make it easy to position the axes of the mandrel precisely and to quickly determine the "zero" point of the workpiece. Works on all axes (x - y - z). The indicator always moves in the same direction, displaying the distance from the workpiece without having to make any calculations. Easy to read dial, sturdy structure; it can be stored next to the machine along with other tools.

## ALPA

### ZERO SETTERS

€ 160,00

D31351 - HA20050



Excursion mm 5

Excursion mm 50

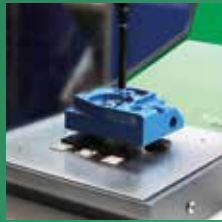


Fast and accurate gauge to zero-set tools on traditional and CNC machines. Put the gauge on machine plane, approach with the tool and push the plate until dial gauge goes to the preset value. Hardened aluminium construction, with hardened stainless steel plate, reading 0,01 mm, magnetic base for horizontal use, ± 0.005 mm tolerance on zero-set height.



## THE REVOLUTIONARY MANUAL MEASURING MACHINE FOR THE WORKSHOP

**€ 19.500 ,00**  
D7705280 - LA145280



### COMPACT AND PORTABLE DESIGN

Its 3 rotating axes enables it to have a compact and portable design in order to be used wherever needed, in the production department next to the machine tools, in the quality control department or at the premises of third parties.



### MAGNETIC HOTKEYS

Fulcrum is designed to optimise inspection times and prevent production slowdowns. Hotkeys allow you to quickly switch between functions without using the mouse.



### SIMPLE USE

Its compact and portable design allows it to be used single handed, placing the parts anywhere on the measuring surface.



### PC WITH SOFTWARE INCLUDED

The software has been made even simpler, while maintaining the full functionality of traditional measuring machines. The ease of use allows even less experienced operators to quickly inspect the components to be measured.



### FEATURES

- Compact and portable design
- Easy single-handed use
- Shortcut keys to switch between functions
- Onboard machine use
- No air pressure required
- Free software updates

Volumetric accuracy $\mu\text{m}^*$	5.0
Row resolution	0.04 $\mu\text{m}$
Operational temperature range	5 - 45 °C
Optimum Temperature range	18 - 22 °C
Compressed air	No

# LUBRICANTS



## WATER-MISCIBLE LUBRICATING COOLANT

Futura Std is an ester based water-miscible cooling lubricant derived from renewable raw materials, with a new generation surfactant system. It is free of chlorine, bactericides and nitrosatable amines. Futura Std is a coolant designed for light to medium duty machining on all types of materials. When added to water, it forms a translucent emulsion that is very stable, and highly resistant to bacterial attack. When added to water, it forms a translucent emulsion that is very stable, and highly resistant to bacterial attack. Its characteristics make it suitable for use with all types of water, both hard and soft.



CODE	Price List	HT	Quantity l	Packaging
H02110025	499,44	154,00	25	Can
H02110200	4.322,00	1.055,00	200	Drum

### ADVANTAGES

- Product for light or medium machining
- Ester bases
- New generation amine surfactant
- Biocide-free

### PHYSICAL PROPERTIES

Appearance concentrated	Amber
Density at 20°C	kg/l 1,01
Appearance emulsion	Translucent
pH (5%)	9,2 - 9,3
Refractometric factor	2,5
Water compatibility	%f 5 - 50

## HOW TO USE

- Fill the TOS with an already mixed emulsion
- Place the dynamic float in the tank
- Connect suction hose (quick coupling) to the machine
- Press start
- The machine works by cycles of 1H (Aspiration) 2H (Standby the timing is WANTED. The machine must work this way to be efficient)
- The float in the tank is dynamic: it follows the emulsion level in the tank, aspiring the extraneous oils from the surface
- The aspired fluid (250lt / h) through a special vane pump \* transports the liquid into the machine that already undergoes a first filtering - bag filter - to remove the chip
- Inside the TOS the fluid (mix of emulsion and extraneous oils) rises in the tank of the machine from the bottom so as to avoid the production of foams.
- At this point, you will see the extraneous oil and sludge rising to the surface of the tub of our TOS, while the clean emulsion is re-introduced into the tank
- Once a month (it depends on how the tank in the machine has been dirty and contaminated) just download with a simple operation the contaminated oil accumulated on the surface of the TOS



## GUARANTEED SAVINGS

**- 50%  
LOWER EMULSION  
CONSUMPTION**



*Dirty Emulsion  
bad smell*

	WITHOUT TOS	WITH TOS
nr. machines	10	10
Machine's volume	500	500
draining per year	2	1
% emulsion	6,00 %	6,00 %
mwf price	€ 5,00	€ 5,00
mwf refract. factor	1,2	1,2
draining costs	€ 800,00	€ 400,00
drained emulsion cost	€ 3.600,00	€ 1.800,00
disposal cost	€ 3.000,00	€ 1.500,00
<b>TOTAL</b>	<b>€ 7.400,00</b>	<b>€ 3.700,00</b>

**TRAMP OIL SEPARATORS**

*... Machine contamination, Pieces contamination,  
No cleaning power of the emulsion, Frequent emulsion changes ...*

*With TOS you can avoid  
these problems quickly*




**TOTALLY AUTOMATIC**

**NO SUPERVISION NEEDED**

**PLUG - PLAY - SET - GO**

**€ 2.990 ,00**  
H400TOS

 **250 L/h**  
nominal  
flow rate  
aspirated

 **105 L**  
capacity

 **MAX 60°**  
suction fluid  
temperature

*Clean Emulsion  
no smell*

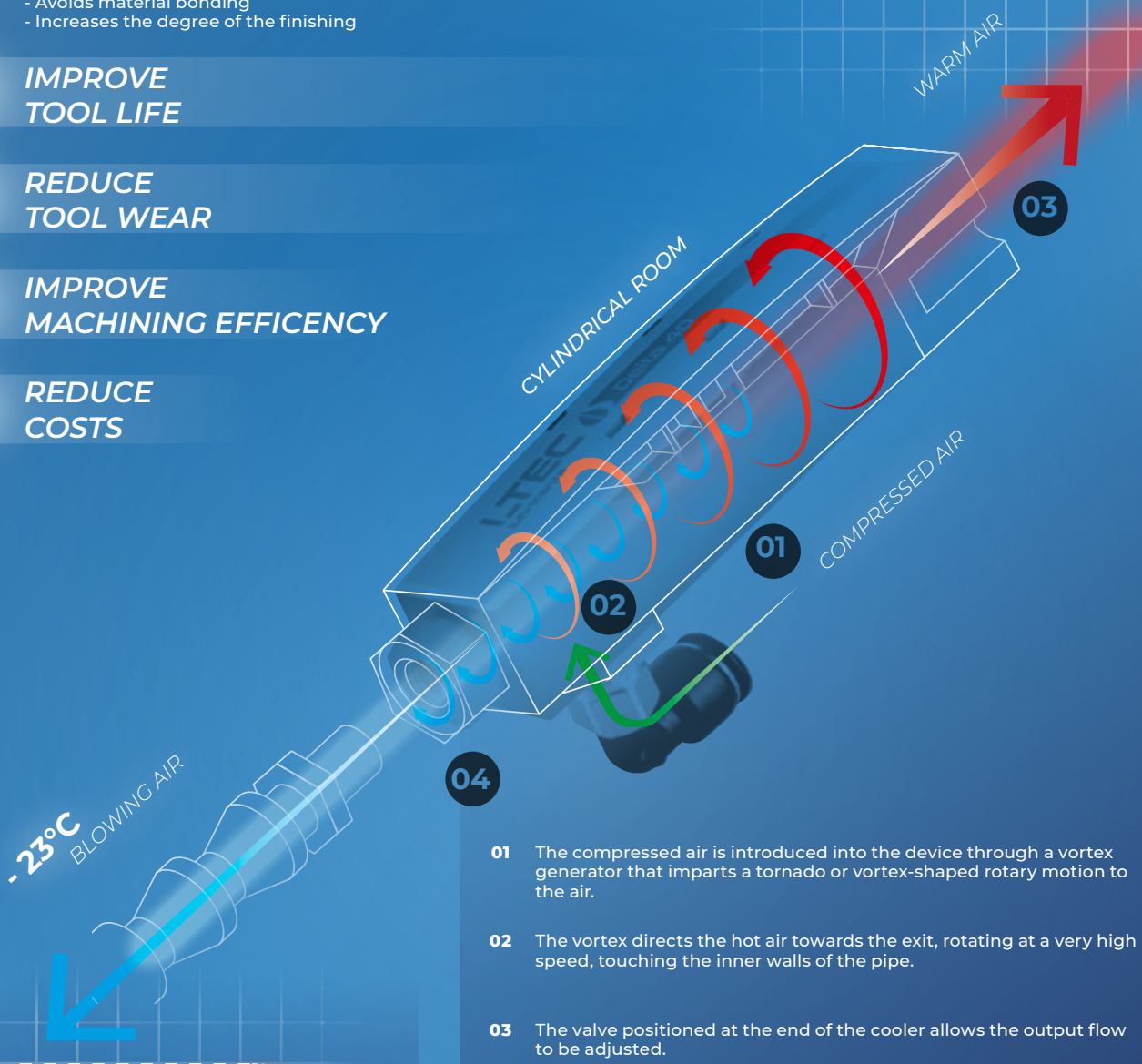


## AIR COOLERS

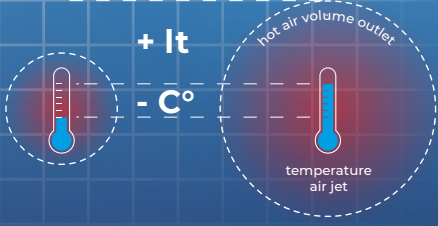
During dry processing  
Parting/Cutting/CNC

- Cools the piece
- Cools the tool
- Evacuates the chip
- Avoids material bonding
- Increases the degree of the finishing

- +** IMPROVE TOOL LIFE
- +** REDUCE TOOL WEAR
- +** IMPROVE MACHINING EFFICIENCY
- +** REDUCE COSTS



- 01** The compressed air is introduced into the device through a vortex generator that imparts a tornado or vortex-shaped rotary motion to the air.
- 02** The vortex directs the hot air towards the exit, rotating at a very high speed, touching the inner walls of the pipe.
- 03** The valve positioned at the end of the cooler allows the output flow to be adjusted.
- 04** The part of the hot air that is not expelled comes back, positioning itself in axis with the tube, this creating a low-pressure vortex which, by giving off heat to the first, cools down.



### FLOW ADJUSTMENT



## AIR COOLERS

DELTA 40 is a patented compressed air cooling device that converts the air into two flows: one of hot air and one of very cold air.

The jets and the hot or cold air temperatures are adjustable by means of a valve that allows control. It is light, compact and economical and operates easily. It is made of corrosion resistant materials.

The support is made of plastic material (nylon 6.6) which allows it to be installed using a dedicated, adaptable bracket. It does not use electricity or chemicals, it does not generate sparks or interference.

Reduces pollution and increases tool processing speed by extending its service life.

Equipment: DELTA 40 is provided with a 160mm - 1/4" articulated tube.

€ 139 , 00

H362210

H362210



Pressure bar	5	6	7
Outlet temperature* °C	-24,5	-26,5	-28,0
Air consumption NL/min	115	135	154
Weight g		150	

\*Temperature detected on exit nozzle with an inlet air temperature of 20°C.

While stocks last

## AIR COOLERS

DELTA 40 TURBO is a patented compressed air cooling device. DELTA 40 TURBO divides the air into two flows: one of hot air and one of very cold air.

The jets and the hot and cold air temperatures can be adjusted and controlled by means of valve. It is lightweight, compact, economical and easy to operate. It is made of corrosion resistant material.

The support is made of aluminium and the DELTA 40 TURBO can be installed using two magnets.

It does not use electricity or chemicals and it does not generate sparks or interference. Reduces pollution and increases the speed of the machining tool, increasing its service life.

Equipment: DELTA 40 is provided with a 320mm - 1/2" articulated tube.

€ 329 , 00

H3629TURBOK

H3629TURBOK



Pressure bar	5	6	7
Input temperature °C	20	20	20
Outlet temperature* °C	-16	-17	-19
Air consumption NL/min	525	650	750
Weight g		225	

\* Outlet temperature partly of cold air regulated about 50%.

While stocks last

## AIR COOLERS - BAND SAW KIT

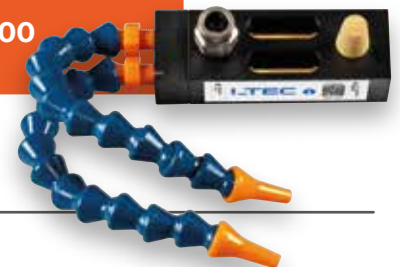
DELTA 40 SAW KOMPACT is a specific air cooling device for band saw machines. It is applied on saws to cool the blade and allow dry cutting on both metals and various types of plastic.

This cooler also finds a valid application on vertical band sawing machines for metals, wood, plastic, on disc sawing machines for cutting the sprue of aluminum molded parts and in all material cutting applications where it is not recommended or impossible to use coolants.

€ 250 , 00

H36232K

H36232K



Pressure bar	5	6	7
Outlet temperature* °C	-26	-28	-31
Air consumption NL/min	230	270	308
Weight g		238	

\*Temperature detected on exit nozzle with an inlet air temperature of 20°C.

While stocks last

**SLIDEWAY OILS**
**ADVANTAGES AND USES:**

- Correct adhesion of the lubricating film
- Excellent demulsivity
- Suitable for the lubrication of conventional or hydrostatic slideways
- It can also be used as a hydraulic oil
- Withstands high loads
- Excellent for slow and heavily loaded rolling bearings



CODE	Price List	HT	L	Appearance	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 Kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H201532B1	<del>470,00</del>	136,00	20	Yellow	32	100	0,870	>220	-20	10 - 40
H201568T	<del>48,00</del>	38,00	5	Yellow	68	101	0,880	>220	-21	10 - 40
H201568B1	<del>468,00</del>	134,00	20	Yellow	68	101	0,880	>220	-21	10 - 40
H201568F	<del>4.390,00</del>	1.112,00	200	Yellow	68	101	0,880	>220	-21	10 - 40
H2015220B1	<del>479,00</del>	143,00	20	Yellow	220	101	0,895	>230	-10	10 - 40
H2015220F	<del>4.550,00</del>	1.240,00	200	Yellow	220	101	0,895	>230	-10	10 - 40

**HYDRAULIC OILS**
**ADVANTAGES AND USES:**

- Multi-purpose use
- Used in machine tool hydraulic controls
- Zinc-free to prevent reactions with moisture
- Formulated with Group II bases for increased durability



CODE	Price List	HT	L	Appearance	Viscosity at 40°C ASTM D445 cSt	Viscosity index	Density DIN 52757 Kg/L	Flash point ASTM D92 °C	Pour point °C	Storage temperature °C
H202032B1	<del>450,00</del>	127,00	20	Yellow	32	100	0,867	>220	-30	10 - 40
H202032F	<del>4.490,00</del>	1.192,00	200	Yellow	32	100	0,867	>220	-30	10 - 40
H202046B1	<del>46,00</del>	36,00	5	Yellow	46	101	0,867	>220	-30	10 - 40
H202046B3	<del>464,00</del>	131,00	20	Yellow	46	101	0,867	>220	-30	10 - 40
H202046F	<del>4.500,00</del>	1.200,00	200	Yellow	46	101	0,867	>220	-30	10 - 40
H202068B1	<del>405,00</del>	148,00	20	Yellow	68	99	0,870	>230	-30	10 - 40
H202068F	<del>4.620,00</del>	1.296,00	200	Yellow	68	99	0,870	>230	-30	10 - 40





**NEW**

### PNEUMATIC OIL DISTRIBUTION KIT

Pneumatic kit for transferring or distributing oil, for 180 - 220 kg drums. NBR seals. The 5:1 compression ratio ensures operation even in the presence of high density oils. Equipped with a gun with digital counter and 16 mm nozzle and a pressure reducer on the connecting pipe to the air system.



**€ 639,00**

J422018

Ratio	5:1
Flow rate L/min	18
Dispensing hose m	4 (M 1/2" x F 1/2" - 150 bar)
Connecting hose m	1 (M 1/4" x F 1/4" - 20 bar)
Weight Kg	13,5

## LTEC

### VCI PACKAGING

They are made of low density polyethylene with the addition of volatile corrosion inhibitors and designed to effectively protect ferrous metals and alloys from oxidation.



#### PROTECTION

36 months indoor  
24 months outdoor

CODE	Price List	HT	pz	Dimensions mm	Thickness microns
H217010020X30	220,00	175,00	1600	200 x 300	100
H217010033X22	244,00	165,00	320	330 x 220 h 550	100
H217010044X33	205,00	160,00	150	440 x 330 h 820	100



### ANTI-OXIDANT PROTECTIVES PROTEX NS 80H

PROTEX NS 80H is a protective agent for metal components which are stored in conditions of high humidity and high salinity. Thanks to a careful formulation and an excellent balance of detergents and solvents, PROTEX NS 80H has excellent degreasing properties and a "dewatering" effect. The product passes the ASTM B117 test (test for the determination of resistance to saline fog) with 90 hours of resistance. PROTEX NS 80H maintains its protection capacity for 15 months in case of detachment indoors while outdoors, by allocating the material indoors, it manages to maintain its protective capacities for 9 months.



CODE	Price List	HT	Packaging	L
H2116020	262,49	210,00	Can	20



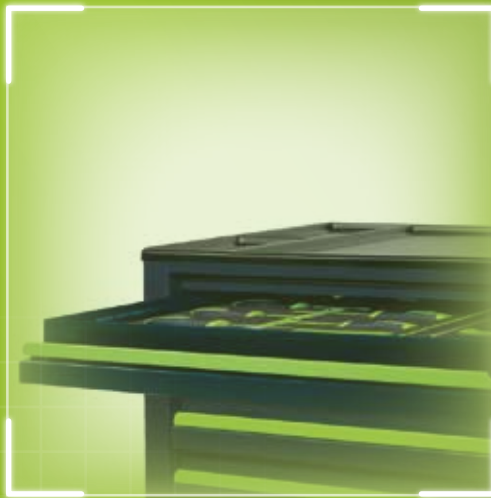
### ANTI-OXIDANT PROTECTIVES PROTEX DW EXTRA

PROTEX DW EXTRA is a product for the protection of metals against atmospheric humidity or oxidizing agents present in the mechanical workshops. PROTEX DW EXTRA protective is ideal for defending the surfaces of measuring instruments, gauge blocks, tools and firearms. This product thanks to the presence of highly refined and high quality components, is able to prevent corrosion also caused by digital fingerprints.



CODE	Price List	HT	Packaging	L
H2103400	44,24	8,00	Spray can	0,400
H2103020	498,75	159,00	Can	20

# MRO



# WODEX

## TOOL CABINETS WITH MRO ASSORTMENTS



WX9410/B7  
+ 169 TOOLS

€ 1.350,00

E8578169

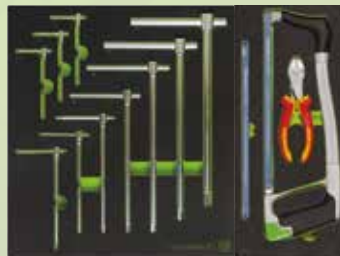
### 169 TOOLS



WX1060/SE16 Combination wrenches

WX9520/SE17 Hexagonal I keys and stubby screwdriver

WX2085/SE55 Socket wrenches 1/4 set of 55 tools



WX2700/SE10 Sliding t-handle hexagonal wrenches

WX9512/SE12 Hacksaw and cutting nippers



WX2180/SE39 Socket wrenches 3/8" set of 39 tools

WX3750/SE4 Pliers and cutting nippers

WX9690/SE7 Measuring and cutting tool set



WX6620 Led torches

WX6621 LI-ION battery

WX4210/SE6 Screwdrivers premium quality

WX9503/SE2 Hammers and mallets non-rebound

# WODEX

## SOCKET DRIVERS 3/8"

40-TOOL KIT IN CASE PE-HD - WX2190/SE40-PC



€ 142,00

E491440

COMPLIMENTARY  
WITH CARRYING CASE

# WODEX

## SOCKET DRIVERS 1/2"

40-TOOL KIT IN CASE PE-HD - WX2290/SE40-PC



€ 182,00

E492340

COMPLIMENTARY  
WITH CARRYING CASE

# WODEX

## INSERT BITS AND INSERT HOLDERS

INDUSTRIAL SET 31 PIECES - WX4590/31



€ 19,00

E752931

# NEW



Composition

WX2140	Reversible ratchets 3/8"
WX2105	Hexagonal socket wrenches 3/8" 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 mm
WX2110	Socket drivers 3/8" for hexagonal socket head screws HEX 3 - 4 - 5 - 6 - 7 - 8 - 10 mm
WX2120	Socket drivers 3/8" Torx® T10 - T15 - T20 - T25 - T27 - T30 - T40
WX2152	Angular extensions for sockets 3/8"x75 - 3/8"x150 - 3/8"x250 mm
WX2154	Cardan joints 3/8"
WX2148	T-handle levers with sliding square drive 3/8"
WX2158	Reducer joints for socket wrenches Female 3/8" - Male 1/4"
WX2160	Adapter joints for socket wrenches Female 3/8" - Male 1/2"



Composition

WX2240	Reversible ratchets 1/2"
WX2205	Hexagonal socket wrenches 1/2" 8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 24 - 27 - 30 - 32 mm
WX2210	Socket drivers 1/2" for hexagonal socket head screws HEX 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 - 17 - 19 mm
WX2220	Socket drivers 1/2" Torx® T30 - T40 - T45 - T50 - T55 - T60
WX2252	Angular extensions for sockets 1/2"x125 - 1/2"x250 mm
WX2254	Cardan joints 1/2"
WX2161	Adapter joints for socket wrenches 3/8" F-1/2" M with hole for extension



Composition

⊕ WX4400	1 x PH0-25 - 2 x PH1-25 2 x PH2-25 - 1 x PH3-25 mm
⊙ WX4415	1 x PZ1-25 - PZ2-25 - PZ3-25 mm
⊖ WX4430	1 x Slotted 3,0x25 - 4,5x25 - 6,5x25 mm
○ WX4445	1 x HEX 2-25 - 1 x 2,5-25 - 2 x 3-25 2 x 4-25 - 2 x 5-25 - 1 x 6-25 - 1 x 8-25 mm
⊙ WX4475	1 x Torx T9-25 - T10-25 - T15-25 - T20-25 T25-25 - T27-25 - T30-25 - T40-25 mm
⊙ WX4625	1 x Magnetic bit holder with hexagonal drive 1/4" 60 mm



Minimum quantity 2 pieces

## COMBINATION WRENCHES WITH REVERSIBLE RATCHET IN SET

WX1350/S5 - WX1350/S9

Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.  
Standard ISO 691



CODE		Price List	HT	Pieces	Composition
E020105	WX1350/S5	<del>404,76</del>	71,00	5	8 - 10 - 13 - 17 - 19 mm
E020109	WX1350/S9	<del>499,98</del>	135,00	9	8 - 10 - 11 - 13 - 14 - 16 - 17 - 18 - 19 mm



**COMPLIMENTARY**  
WITH KEYS

## COMBINATION RATCHET WRENCHES WITH SWIVEL HEAD IN SET

WX1400/S5

Set of wrenches complete with a practical fabric roll-up tool holder with Velcro closure.  
Standard ISO 691



CODE		Price List	HT	Pezzi	Composition
E020805	WX1400/S5	<del>448,72</del>	83,00	5	8 - 10 - 13 - 17 - 19 mm



**COMPLIMENTARY**  
WITH KEYS

## SLIDING T-HANDLE HEXAGONAL WRENCHES IN SET



CODE		Price List	HT	Pieces	Composition
E265207	WX2700/S7	<del>407,06</del>	64,00	7	2 - 2,5 - 3 - 4 - 5 - 6 - 8 mm
E265208	WX2700/S8	<del>432,06</del>	79,00	8	2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm
E265210	WX2700/S10	<del>499,28</del>	119,00	10	2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 - 12 - 14 mm
E265212	WX2700/S12	<del>239,20</del>	139,00	12	2 - 2,5 - 3 - 3,5 - 4 - 5 - 6 - 7 - 8 - 10 - 12 - 14 mm



## LONG HEXAGONAL L KEYS WITH MAGNET IN SET WX2602/S9

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.



# fast ID

Thanks to a rapid tool identification system through a unique colour code, taking the correct choice is very quick and easy, maximizing the productivity of the operator's time.

Fast ID can save you manual time on low value operations.



**Minimum quantity 2 pieces**

CODE	Price List	HT	Pieces	Composition
E231109 WX2602/S9	39,50	18,00	9	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

## LONG HEXAGONAL L KEYS WITH BALL END AND MAGNET WX2600/S9



**Minimum quantity 3 pieces**

Complete set of keys in a practical **PREMIUM QUALITY** two-component case.

CODE	Price List	HT	Pieces	Composition
E230109 WX2600/S9	37,00	15,00	9	1,5 - 2 - 2,5 - 3 - 4 - 5 - 6 - 8 - 10 mm

## NON-REBOUND POLYURETHANE MALLETS WX5600-RED - WX5600



Mallets with replaceable polyurethane heads, head partially filled with metal pellets to absorb rebound, painted steel body and handle, anti-slip rubber grip.

**Minimum quantity 2 pieces**

Red	Price List	HT	Blue	Price List	HT	Ø head mm	g
F539735	38,00	23,00	F539335	38,00	23,00	35	740
F539740	47,19	28,00	F539340	44,00	26,00	40	875
F539750	53,22	32,00	F539350	51,50	31,00	50	1250
F539760	55,89	34,00	F539360	52,34	32,00	60	1710

## ADJUSTABLE SELF-LOCKING GRIP PLIERS WX3350

Adjustable self-locking pliers **PREMIUM QUALITY** with adjustable deep drawn chrome-vanadium steel jaws, chrome-satin finish.

- Forged chrome-vanadium steel toothed jaws
- Articulated lever for high clamping forces
- Adjustable pressure closure with rear screw

Specification:

Concave jaws for clamping round and flat pieces



**Minimum quantity 3 pieces**

CODE	Price List	HT	L mm	Max opening mm
F0625180	<del>21,09</del>	12,00	180	38
F0625240	<del>23,14</del>	13,00	240	48
F0625300	<del>39,75</del>	24,00	300	65

## SHEARS FOR SHEET METAL AMERICAN MODEL WX3950

Shears for sheet metal **PREMIUM QUALITY** American model in hot forged steel. Induction hardened straight blades (R = 600 N/mm<sup>2</sup>) suitable for through cuts. Comfortable and resistant PVC coated handles.



**Minimum quantity 3 pieces**

CODE	Price List	HT	L mm	Blade mm	Cutting value 400 N/mm <sup>2</sup> max mm	Cutting value 600 N/mm <sup>2</sup> max mm
F2495200	<del>49,00</del>	12,00	200	48	1	0,7
F2495250	<del>29,00</del>	14,00	250	58	1,2	0,8
F2495300	<del>29,50</del>	18,00	300	75	1,5	1
F2495350	<del>49,00</del>	26,00	350	95	1,5	1

## SET OF PLIERS FOR INTERNAL AND EXTERNAL CIRCLIPS WX3422/S8 - WX3422/S12 - WX3422/S16

Straight nose pliers **PREMIUM QUALITY** in chrome-vanadium steel for internal and external circlips. The angle of the non-slip tip allows the circlip to be held securely by the tips during compression. Comfortable and resistant handles in Soft-tex vinyl.

Standard DIN ISO 5256 - DIN ISO 5254



CODE		Price List	HT	Pieces	Composition
F046108	WX3422/S8	<del>153,79</del>	92,00	8	<b>WX3402</b> Pliers for internal circlips - straight nose Ø 12-25 - Ø 19-60 mm <b>WX3407</b> Pliers for internal circlips - noses 90° Ø 12-25 - Ø 19-60 mm <b>WX3412</b> Pliers for external circlips - straight nose Ø 10-25 - Ø 19-60 mm <b>WX3417</b> Pliers for external circlips - noses 90° Ø 10-25 - Ø 19-60 mm
F046112	WX3422/S12	<del>234,26</del>	140,00	12	<b>WX3402</b> Pliers for internal circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 mm <b>WX3407</b> Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 mm <b>WX3412</b> Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 mm <b>WX3417</b> Pliers for external circlips - noses 90° Ø 3-10 - Ø 10-25 - Ø 19-60 mm
F046116	WX3422/S16	<del>391,79</del>	200,00	16	<b>WX3402</b> Pliers for internal circlips - straight nose Ø 8-13 - Ø 12-25 - Ø 19-60 - Ø 40-100 mm <b>WX3407</b> Pliers for internal circlips - noses 90° Ø 8-13 - Ø 12-25 - Ø 19-60 - Ø 40-100 mm <b>WX3412</b> Pliers for external circlips - straight nose Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm <b>WX3417</b> Pliers for external circlips - straight nose 90° Ø 3-10 - Ø 10-25 - Ø 19-60 - Ø 40-100 mm

## POCKET TAPE MEASURES WX6100

Pocket tape measures **TOP-LINE** with ergonomic non-slip case in bi-component ABS-TPR resistant to falls from 3 meters, tape with wear-resistant coating up to 100 hours in salt spray, graduation on both sides, extra-large **magnetic tip** with double grip, clip belt attachment.



**Minimum quantity 3 pieces**

CODE	Price List	HT	Tape length m	Tape length mm	Dimensions mm
F912305	42,64	7,00	5	19	73 x 71 x 43

## NEW

## CONICAL EXTRACTORS FOR SCREWS AND STUDS IN SET WX5881/S5-MC

Set 5 of extractors in a practical metal box.



### Composition

Extractors N.1 - 2 - 3 - 4 - 5

CODE	Price List	HT	Pieces
F827805	444,00	68,00	5

## AUTOMATIC PUNCHES WX4965

Automatic punches **PREMIUM QUALITY** with spring-loaded, pressure-activated striking mechanism. Adjustable percussion force via knurled ring, replaceable hardened steel tip and ergonomic bi-component plastic handle.



**Minimum quantity 2 pieces**

CODE	Price List	HT	Impact force N	Impact force Ø mm	L mm
F4535050	37,42	22,00	20 - 50	3,5	95
F4535130	42,42	25,00	60 - 130	4	125
F4535250	47,06	28,00	180 - 250	6	130

## NEW

## PIN PUNCHES WITH HANDLE WX4948/H/S5-PS

Set 5 of pin punches in a practical plastic box.

Standard DIN 6450 - DIN 7255



### Composition

2x150 - 3x150 - 4x150 - 5x150 - 6x150 mm

CODE	Price List	HT	Pieces
F452705	79,50	48,00	5

## PIN PUNCHES IN SET WX4948/S6-PS

Set of 6 pin punches with white plastic stand.

Standard DIN 6450 - DIN 7255



### Composition

2x150 - 3x150 - 4x150 - 5x150 - 6x150 - 8x150 mm

CODE	Price List	HT	Pieces
F452206	36,64	21,00	6

**Minimum quantity 2 pieces**



## ADJUSTABLE HOOK WRENCHES WX1982 - WX1987



Minimum quantity 2 pieces

CODE	Price List	HT	For external Ø locking rings mm	Nose mm	L mm
E1210015	22,06	13,00	15 - 35	3,5	170
E1210035	25,58	15,00	35 - 50	4,0	210
E1210050	32,76	20,00	50 - 80	5,0	280
E1210080	45,92	27,00	80 - 120	5,5	345
E1210120	68,24	35,00	120 - 180	9,5	492
E1220015	22,37	13,00	15 - 35	3	170
E1220035	26,98	16,00	35 - 50	4	210
E1220050	34,56	21,00	50 - 80	5	280
E1220080	48,48	29,00	80 - 120	6	345
E1220120	59,89	36,00	120 - 180	8	475

Adjustable hook wrenches **PREMIUM QUALITY** with square nose for locking rings with radial notches. Chrome molybdenum steel, chrome-satin finish.

## SET OF UNIVERSAL AND ADJUSTABLE PLIERS WX3745/S3

€ 43,00

F008703



Set of **PREMIUM QUALITY** pliers containing a pair of universal combination pliers in chrome molybdenum steel, a pair of adjustable pliers with fine adjustment in chrome-vanadium steel and a pair of self-locking pliers in chrome-vanadium steel with concave jaws for clamping flat and round materials. **Boxed assortment.**

## PLIERS AND CUTTING NIPPERS IN SET WX3735/S3

€ 42,00

F008003



Set of **PREMIUM QUALITY** pliers and cutting nippers in chrome-molybdenum steel with extremely precise high strength induction-hardened cutting edges. Hardness: handles 43-48 HRC, cutting edges 58-60 HRC. Hypoallergenic, anti-slip, soft and comfortable **ERGOFORM** handles in **SANTOPRENE**® that guarantee maximum grip for fast and precise work. Compliant with RoHS and REACH directives. **Boxed assortment.**

## PLIERS AND CUTTING NIPPERS VDE INSULATED 1000 VOLTS IN SET WX3752/S3

€ 42,00

F010203



Set of **PREMIUM QUALITY** pliers and cutting nippers, insulated up to 1000V according to DIN EN 60900 / VDE 0682--201. **ERGOFORM** hypoallergenic, anti-slip, soft and comfortable grip handles. Compliant with RoHS and REACH directives. **Boxed assortment.**

**HOLE CUTTERS TCT FOR STEEL AND STAINLESS STEEL**  
WX7510



CODE	Price List	HT	Ø mm	d mm	D mm	h mm
N5286016	16,20	8,10	16	6	10	29
N5286017	17,30	8,65	17	6	10	29
N5286018	18,20	9,10	18	6	10	29
N5286019	19,30	9,65	19	6	10	29
N5286020	20,20	10,10	20	6	10	29
N5286021	21,20	10,60	21	6	10	29
N5286022	22,30	11,15	22	6	10	29
N5286024	24,30	12,15	24	6	10	29
N5286025	26,30	12,65	25	6	10	29
N5286026	26,30	13,15	26	6	10	29
N5286027	27,40	13,70	27	6	10	29
N5286028	28,40	14,20	28	6	10	29
N5286030	30,30	15,15	30	6	10	29
N5286031	32,30	16,15	31	6	10	29
N5286032	32,30	16,15	32	6	10	29
N5286033	34,40	17,20	33	6	10	29
N5286034	34,40	17,20	34	6	10	29

CODE	Price List	HT	Ø mm	d mm	D mm	h mm
N5286035	35,40	17,70	35	6	10	29
N5286036	37,40	18,70	36	6	10	29
N5286037	38,40	19,20	37	6	10	29
N5286038	38,40	19,20	38	6	10	29
N5286040	40,40	20,20	40	6	10	29
N5286042	42,40	21,20	42	6	10	29
N5286045	45,50	22,75	45	6	10	29
N5286047	48,60	24,30	47	6	10	29
N5286048	48,60	24,30	48	6	10	29
N5286050	50,60	25,25	50	6	10	29
N5286051	52,60	26,25	51	6	10	29
N5286052	54,60	27,25	52	6	10	29
N5286054	56,60	28,25	54	6	10	29
N5286055	56,60	28,25	55	6	10	29
N5286057	58,60	29,25	57	6	10	29
N5286060	60,70	30,35	60	6	10	29

**BENCH VICES - STEEL**  
WX7840



Bench vices **PREMIUM QUALITY** in high quality forged steel, front opening, non-removable induction hardened and ground jaws. All sliding parts are hardened and adjustable. Fixing more than 2 points. Grey painted with hammered finish.

**Optional accessories:**  
Removable pipe wrench jaws WX7841.

CODE	Price List	HT	Width mm	Opening mm	kg
N6860100	204,14	120,00	100	125	7
N6860125	220,00	132,00	125	150	11
N6860150	302,74	181,00	150	200	17
N6860175	430,00	258,00	175	220	26

**BENCH VICES - CAST IRON**  
WX7810



Bench vices **PREMIUM QUALITY** made of high quality cast iron with replaceable induction hardened and ground jaws. Play-free movement of the upper and lower parts thanks to the precision dovetail guides. Fixing 3-point, 2 front and one upper. Grey painted with hammered finish.

CODE	Price List	HT	Width mm	Opening mm	kg
N6810080	438,04	83,00	80	110	6
N6810100	497,00	118,00	100	140	11
N6810120	240,00	144,00	120	185	18
N6810150	355,00	213,00	150	220	25

**1250W ANGLE GRINDER WITH AVS  
AGV 13-125 XE**

- Powerful 1250 W PROTECTOR motor - Epoxy resin coated motor for maximum durability and resistance to abrasive dust
- Compact design for ease of handling
- 6 speed settings from 2,800 to 11,500 rpm for processing different materials
- Constant power to deliver constant speed under load
- Accidental restart protection (LLO)
- Overload protection to prevent overheating
- Safety clutch to protect the user from kickback injuries
- New integrated Milwaukee FIXTEC™ fast tool-free disc change system
- Durable and tool-free safety guard
- Anti-Vibration handle for less user fatigue
- 90° Rotatable selector
- 4 metre cable

No-load speed rpm	2,800 / 11,500
Disc diameter mm	125
Weight kg	2,4
Switch type	Slide lock-on switch



€ 139 , 00

N421413125

AGV13-125 XE

**ANGLE GRINDER 800W  
AG 800-125 E**

- Extremely light angle grinder with powerful 800 W motor
- Compact design and slim body (only 194 mm long)
- Accidental restart protection (LLO)
- Soft start
- Steel gears for maximum durability
- Protected air inlets for improved cooling
- Compact head for working in restricted spaces

No-load speed rpm	11,500
Disc diameter mm	125
Weight kg	2,0
Switch type	Slide lock-on switch



€ 59 , 00

N4712800

AG 800-125 E

**BRUSHLESS DRILL DRIVER WITH IMPACT FUNCTION  
M18 CBLPD-203C**

- 165 mm long
- Heavy-duty 13mm metal chuck
- The REDLINK™ electronics protect the tool and the battery against overload
- REDLITHIUM™ battery
- Full metal belt hook
- LED light to illuminate the work area
- Works with all MILWAUKEE® M18™ batteries

No-load speed rpm	0 - 500/ 0 - 1800
Max. Drilling Cap. wood/metal/masonry (mm)	52/ 13/ 16
Max Torque (Nm)	60
Impact rate (bpm)	0 - 27,000
Weight with battery pack (EPTA) kg	1.5 (M18 B2)



€ 249 , 00

N416818

**FREE**  
SHOCKWAVE BIT SET

N4169SET

While stocks last

M18 CBLPD-203C



ANGLE GRINDERS



DRILL



### PNEUMATIC DIE GRINDERS

Pneumatic grinders MAX series are economical, durable, compact, lightweight and easy to handle. Fitted with ball bearings for greater reliability. Designed to function without lubricants so as not to contaminate the work area. Improved handle design with a low profile control lever for prolonged operation without fatigue.

Power supply: Not lubricated compressed air  
Recommended pressure 6.3 Bar



€ 149,00

L130106



### PNEUMATIC DIE GRINDERS

Versatile and economic Smart Line pneumatic die grinders, suitable for deburring welds, grinding and polishing. Front air discharge, safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air  
Recommended pressure 6.3 Bar



€ 68,00

L129506



Collet Ø	mm	6
Power	Kw	0,3
Max speed	Rpm	25.000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	708
air inlet tube Ø int.	mm	10
Noise level	dBA	83,3
Vibration*	m/s <sup>2</sup> /K	1,8 / 0,8
Length	mm	167
Weight	Kg	0,46

\* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.  
Spare collet Ø 6 mm code 1194977

Collet Ø	mm	6
Power	Kw	0,19
Max speed	Rpm	28000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	680
air inlet tube Ø int.	mm	10
Noise level	dBA	90
Vibration*	m/s <sup>2</sup> /K	4,5 / 1,1
Length	mm	132
Weight	Kg	0,33

\* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.  
Spare collet Ø 6 mm code 1194977

# ANGLE GRINDERS

## COMPACT

## VERSATILE

## EASY TO HANDLE

## RELIABLE



### PNEUMATIC DIE GRINDERS

Versatile and economic Smart Line pneumatic angle grinders, suitable for deburring welds, grinding and polishing. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air  
Recommended pressure 6.3 Bar



€ 90,00

L134006

Collet Ø	mm	6
Power	Kw	0,19
Max speed	Rpm	21000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	680
air inlet tube Ø int.	mm	10
Noise level	dBA	91,8
Vibration*	m/s <sup>2</sup> /K	5,9 / 1
Length	mm	134
Weight	Kg	0,46

\* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.  
Spare collet Ø 6 mm code 1194977



### PNEUMATIC DIE GRINDERS

The compact and easy to handle Series 300 pneumatic angle grinders are suitable for deburring, grinding and polishing moulds. Safety lever actuated, compliant with EN 792.

Power supply: Lubricated compressed air  
Recommended pressure 6.3 Bar



€ 152,00

L134206

Collet Ø	mm	6
Power	Kw	0,25
Max speed	Rpm	20000
Air inlet connector	NPT	1/4" F
Air consumption	L/min	651
air inlet tube Ø int.	mm	10
Noise level	dBA	90
Vibration*	m/s <sup>2</sup> /K	5,5 / 1,5
Length	mm	176
Weight	Kg	0,58

\* ISO28927 - 3-axis measurement: vibration level/measurement uncertainty.  
Spare collet Ø 6 mm code 1327718



### HYBRID CUTTING AND GRINDING DISCS CUBITRON II



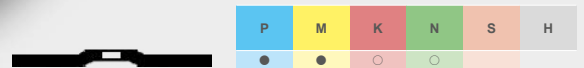
for cutting and deburring steel and stainless steel plates and bars

Precise and fast cutting

Good service life

Use with medium to high power angle grinders

### CUT & GRINDING CUBITRON II



Code	Price List	HT	Ø mm
G033512542	44,29	5,55	125 x 4,2 x 22,2



### HIGH PERFORMANCE FLAP DISCS



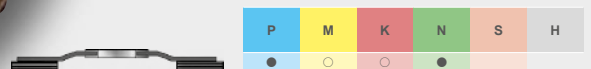
Suitable for all materials

Reinforced plastic backing and thread M14 with ventilation holes

Zirconium and corundum abrasive cloth admixture Bi-Lamellar

It does not overheat the material being used

### RED DRAGON PLASTICA

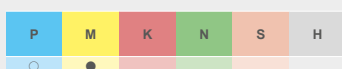


Code	Price List	HT	Ø mm	Grain
G1205115040	4,44	2,44	115 x 22,2	40
G1205115060	4,44	2,44	115 x 22,2	60
G1205125040	4,85	2,67	125 x 22,2	40
G1205125060	4,85	2,67	125 x 22,2	60



## VELCRO DISCS FOR SUPERFINISHING

Velcro discs with pyramid-shaped abrasive. Homogeneous finish. Reinforced stand ensures long life. Exceptional in the preparation of mirror polishing on stainless steel.



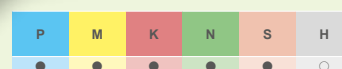
CODE	Price List	HT	Ø mm	Grain
G2335115065	2,60	1,69	115	A65
G2335115045	2,60	1,69	115	A45
G2335115030	2,60	1,69	115	A30
G2335115016	2,60	1,69	115	A16
G2335115006	2,60	1,69	115	A6

**WRK**

**NEW**

## NON-WOVEN ABRASIVE PADS

Abrasive cloth pads suitable for manual masking and cleaning of ferrous and non-ferrous metals, stainless steel, synthetic materials, plaster and paint. They can be used either wet or dry, giving surfaces an opaque and satin finish.  
A/O Aluminium Oxide  
S/C Silicon Carbide



CODE	Price List	HT	Dimension mm	Grain
G37102AM	4,62	1,05	120 x 280	A/O Medium
G37103AF	4,25	0,81	120 x 280	A/O Fine
G37104AVF	4,25	0,81	120 x 280	A/O Very Fine
G37107SVF	4,30	0,85	120 x 280	S/C Very Fine
G37108SUF	4,25	0,81	120 x 280	S/C Ultra Fine

## SHANK-MOUNTED DIAMOND GRINDERS

EC-electroplated diamond for internal grinding. High speed removal, consistent profiling.



CODE	Price List	HT	D x T mm	Shank mm	Specification
G5610010040	47,70	12,39	1 x 4	3 x 40	D 107
G5610015040	46,45	11,52	1,5 x 4	3 x 40	D 107
G5610020050	46,45	11,52	2 x 5	3 x 40	D 107
G5610025060	46,45	11,52	2,5 x 6	3 x 40	D 107
G5610030060	47,36	12,15	3 x 6	3 x 40	D 107
G5610040060	48,76	13,13	4 x 6	3 x 40	D 107
G5610050060	20,40	14,07	5 x 6	3 x 40	D 107
G5610060070	22,42	15,48	6 x 7	6 x 70	D 107
G5610080090	28,86	20,20	8 x 9	6 x 70	D 107
G5610100100	33,65	23,56	10 x 10	6 x 70	D 107
G5610120100	38,89	27,22	12 x 10	6 x 70	D 107

## SHANK-MOUNTED DIAMOND GRINDERS

Spherical head electroplated diamond for internal grinding. High speed removal, consistent profiling.



CODE	Price List	HT	D mm	Shank mm	Specification
G56130203	8,89	5,78	2	3 x 46	D126
G56130303	8,89	5,78	3	3 x 46	D126
G56130403	41,42	7,23	4	3 x 46	D126
G56130503	43,46	8,55	5	3 x 46	D126
G56130603	43,46	8,55	6	3 x 46	D126
G56130803	46,40	10,66	8	3 x 46	D126
G56131003	48,45	11,99	10	3 x 46	D126

## Storm

Reliable and maximum power of category



## TwistOil

Separating liquids and mixed solids without blocks



### SINGLE PHASE INDUSTRIAL ASPIRATOR, MOBILE, VERSATILE AND COMPACT

#### Features

- 3 By-pass independent motors
- Cyclone and tangential inlet of the material
- Manual mechanical filter shaker
- Voltage indicator
- Filter clogging indicator
- Vacuum gauge
- Compensation valve
- Magnetohermic switch
- Suction mouth  $\varnothing$  80 mm with reduction terminals for  $\varnothing$  50 mm hose
- Accessory compartment
- Container for quick-dislodged aspirated material

#### Standard equipment

- 1 Polyester filter class M code N004520
- 1 Reduction terminal hose  $\varnothing$  80/50 mm code N00267050
- 1 Flexible hose PUR  $\varnothing$  50 x 3 m code N00285003
- 2 Antistatic rubber sleeve/nozzle  $\varnothing$  50mm code N002750
- 1 Conical lance anti-oil code N003550

### SINGLE-PHASE INDUSTRIAL ASPIRATOR/SEPARATOR SUITABLE FOR SEPARATING LIQUIDS AND MIXED SOLIDS

#### Features

- Turbine with single-phase motor
- Liquid suction time L/sec 130/30
- Liquid dis-charge L/130/50
- Container made of galvanized steel
- Level probe with automatic locking system
- Suction mouth 50 mm  $\varnothing$
- Immediate recovery of lubricated fluids with re-immersion directly into the tank through the drainage hose with a sphere valve

#### Standard equipment

- 1 Nylon washable filter code N004810
- 1 Flexible tube PUR  $\varnothing$  50mm x 3 m code N00285003
- 1 Anti-static rubber sleeve 50mm  $\varnothing$  code N002750
- 1 Exhaust hose 35mm x 3 m  $\varnothing$  code N00285003
- 1 Sphere valve 1" - 1/4 code N003210
- 1 Flat nozzle L 400 mm in metal code N003350
- 1 Conical nozzle in rubber anti-oil code N003550

While stocks last

Code	Price List	HT	Tank capacity L	Solids container L	Power supply V - Hz	Power Kw - HP	Max. depression mBar	Air capacity max L/min	Medium filter IFA/BGIA	Sound level dB(A)	Dimension mm	Weight Kg
N6015100	2.347,00	1.875,00	100	-	230 - 50/60	3,6 - 4,5	250	9000	M	72	820 x 650 x 1640	71
N6005131	3.796,00	3.075,00	130	40	230 - 50/60	2,4 - 3	230	5500	-	70	700 x 1180 x 1320 h	95





## SILANE MODIFIED POLYMER SEALANTS

High performance sealing adhesive. **Medium/low modulus.** Ideal for bonding and sealing various materials. Permanently elastic, excellent resistance to UV and atmospheric agents. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free. Suitable for bonding metals, galvanized and stainless steels, aluminium, painted surfaces, plastics and fibreglass.

Multi-purpose for the building sector. Door and window frames, horizontal and vertical joints, cladding, sheet metal and light metalwork in general. ECI Plus certified due to very low VOC (volatile organic compound) emissions.



€ 5,78

J111125B

CODE	Colour	Package	Quantity ml
J111125B	White	Cartridge	290



## HYBRID ADHESIVES

Hybrid adhesive Bi-component with extremely fast fixing time. It has ability to fill any gaps. Suitable for metal, plastic, rubber, wood, paper and leather. Formulation in gel does not drip. Good resistance to humidity, heat, UV rays and chemicals. Suitable for all maintenance and repair operations.

- Ready-to-use package with syringe, plunger and 4 mixing needles
- Fixing time: 1 minute
- Operating temperature: up to +120 °C
- Gel
- Light yellow
- Game filling: up to 5 mm



€ 21,00

J000511

CODE	Package	Quantity g
J000511	Double cartridge	11



## SILANE MODIFIED POLYMER SEALANTS

High performance sealing adhesive. **Medium/high modulus.** Ideal for the elastic bonding and sealing of various materials. Excellent resistance to UV and atmospheric agents. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free.

Suitable for bonding metals, galvanized and stainless steels, aluminium, painted surfaces, plastics and fibreglass, used in the furniture manufacturing, nautical and transport sectors. Rapid bonding. ISEGA Certification for food contact materials. IMO certification for marine use. ECI Plus certified due to very low VOC (volatile organic compound) emissions.



€ 6,00

J111455B - J111455N

CODE	Colour	Package	Quantity ml
J111455B	White	Cartridge	290
J111455N	Black	Cartridge	290



## SILANE MODIFIED POLYMER SEALANTS

High performance sealing adhesive for elastic bonding where high transparency is required. **Medium/high modulus.** Ideal for bonding various materials. Can be over-painted even when wet. Does not swell or shrink. Solvent and isocyanate free. Suitable for gluing glass, metals, aluminium, plastics, fibreglass and general assembly work. Rapid curing. Low resistance to UV light. ISEGA Certification for food contact materials.



€ 7,70

J111755T

CODE	Colour	Package	Quantity ml
J111755T	Transparent	Cartridge	290

**NEW AGILITY LINE**



Full grain Nappa leather upper

Solidbreath® lining

Extremely high grip compact  
PUBMBcert™ sole

Reinforced Recyclable Aluforce®  
Toecap

Hightsafe-Tex® special high density  
anti-puncture insole



**AGILITY  
AWAKE**

**€ 70,00**  
K1717



**METEOR  
MASTER H**

**€ 52,90**  
K1718



**METEOR  
MASTER**

**€ 49,90**  
K1719



**FOOTWEAR  
ICONS LEGEND**

- Safety requirements S3L
- Safety requirements S3
- Non-slip tread
- Steel midsole
- Antistatic footwear
- Oil resistant sole
- 200 joule toe cap
- Energy absorbing heel
- Dynamic impermeability of the uppers

K1717	K1718	K1719	EU	US
K171738	K171838	K171938	38	5
K171739	K171839	K171939	39	6
K171740	K171840	K171940	40	7
K171741	K171841	K171941	41	8
K171742	K171842	K171942	42	8,5
K171743	K171843	K171943	43	9
K171744	K171844	K171944	44	10
K171745	K171845	K171945	45	11
K171746	K171846	K171946	46	11,5
K171747	K171847	K171947	47	12



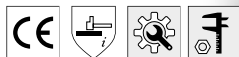
### GLOVES IN POLYESTER COATED IN POLYURETHANE

#### PURCHASING

12 pairs € 1,00 a pair

120 pairs € 0,60 a pair

360 pairs € 0,45 a pair



2121X

CODE		EU	
K23106	S	6	12
K23107	M	7	12
K23108	L	8	12
K23109	XL	9	12
K231010	XXL	10	12



### CUT RESISTANCE GLOVES COATED IN POLYURETHAN

#### PURCHASING

12 pairs € 3,80 a pair

120 pairs € 2,45 a pair



4442C

CODE		EU	
K234607	7	M	12
K234608	8	L	12
K234609	9	XL	12
K234610	10	XXL	12



### DISPOSABLE NITRILE GLOVES



EN 374-1

CODE	Price List	HT		EU	
K251607	9,50	5,50	S	7	100
K251608	9,50	5,50	M	8	100
K251609	9,50	5,50	L	9	100
K251610	9,50	5,50	XL	10	100



### COWHIDE GRAIN LEATHER GLOVES

#### PURCHASING

12 pairs € 2,35 a pair

120 pairs € 2,00 a pair

360 pairs € 1,75 a pair



2143X

CODE		EU	
K21007	M	7	12
K210010	XXL	10	12
K210011	XXXL	11	12

### CONTINUOUS WIRE GLOVES TOTAL GRIP NBR

#### PURCHASING

12 pairs € 3,10 a pair

120 pairs € 2,80 a pair



4122X

CODE		EU	
K221308	M	8	12
K221309	L	9	12
K221310	XL	10	12



### GLOVES COATED IN NBR ACTIVARMR® HYCRON®

#### PURCHASING

12 pairs € 3,50 a pair

120 pairs € 2,65 a pair



4121B

CODE		EU	
K221709	XL	9	12
K221710	XXL	10	12

**TROLLEYS WITH 3 SHELVES**  
WX9402

3-shelf trolleys with ribbed mat positioned only on the shelf above, the two central shelves do not have a mat. Equipped with anti-fall edges on all shelves to prevent objects from falling during transport. Load distributed evenly between floors.

Handle with black technopolymer terminal, reinforced with glass fibres. Metallic gray aluminum tube, 2 mm thick. Consisting of two fixed rubber wheels (Ø 125 mm), one with brake. Supplied disassembled. RAL 5004 blue epoxy paint.



**€ 220,00**  
P543501

Dimension	mm	1028 x 615 x 846
Load capacity	Kg	300
Weight	Kg	35

**SELF-TILTING SCRAP HOLDERS**  
WX9900

Fork mounted structure with fork lift; simple and safe automatic emptying of the container through the tilting lever without getting off the forklift truck; watertight collection tank with sheet metal filter for the separation of liquids and solids and ball drain cock. Compliant with European standards, blue RAL 5004.



Watertight collection tank with sheet metal filter for the separation of liquids and solids and ball drain cock.



CODE	Price List	HT	Model	Load capacity kg	Weight Kg	A x B x C mm	D mm	E mm	Inclination °
P4511280	4.300,00	745,00	lt - 280	600	80	970 x 750 x 890	700	790	25,1
P4511300	4.450,00	795,00	lt - 300	600	102	1350 x 820 x 650	490	520	63,5
P4511500	4.600,00	825,00	lt - 500	1000	130	1350 x 920 x 910	700	740	57,6
P4511750	4.700,00	905,00	lt - 750	1350	152	1350 x 1070 x 1040	825	800	49,6
P4511000	4.900,00	1.000,00	lt - 1000	1700	181	1550 x 1070 x 1210	970	920	54

## CABINETS WITH SHEET METAL DOORS

The doors close flush with the structure of the cabinet with an opening of about 115 degrees. Maximum stability and high capacity of shelves. Equipped with key lock.



4 Shelves 60kg

CODE		P3053B01	P3053B02
Price List		760,50	760,50
HT		485,00	485,00
Dimension	mm	1000 x 500 x 1950h	1000 x 500 x 1950h
Shelves	n°	4 x 60kg	4 x 60kg
Colour		RAL 5012	RAL 7035
Load capacity	kg	500	500

## DRAWERS 36 X 27 E

Drawers with body that resists up to 4 t, full use of the drawers. Unique in the world of Lista thanks to the total extraction of the drawers, limit stop to prevent the drawers from falling, excellent protection characteristics against dirt, liquids and mechanical stress. Corrosion protection, thanks to electrophoresis painting. Including List Script labeling. Drawer internal dimension 612 x 459mm.



7 DRAWERS

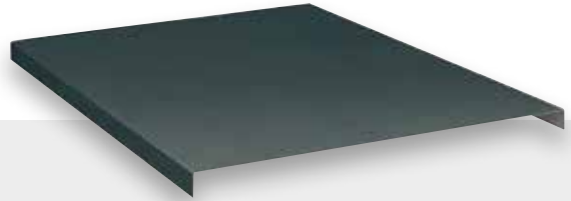
CODE		P2124A01
Price List		4.397,00
HT		800,00
Dimension	mm	717 x 572 x 850
Drawers	n°	7
Drawer dim.	mm	2 x 75 / 2 x 100 / 2 x 125 / 1 x 150
Colour		RAL 5012
Load capacity	kg	75



# Professional industrial and workshop furniture

## STEEL COVER COATED WITH OIL-RESISTANT RUBBER

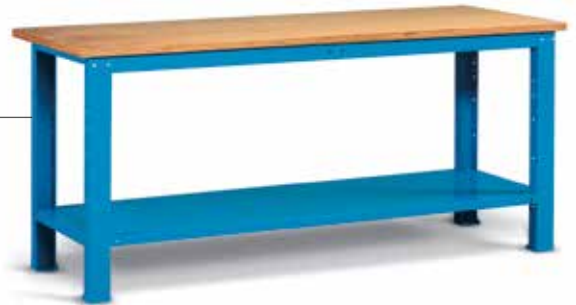
Steel cover coated with oil-resistant rubber, suitable for workbenches with steel worktop.



CODE		P0021A1000	P0021A1500	P0021A2000
Price List		434,00	485,50	237,00
HT		80,00	110,00	142,00
For workbenches	mm	1024 x 750	1500 x 750	2000 x 750
Weight	kg	6,17	9,31	12,31

## WOODEN TOP WORKBENCHES

CODE		P00251000	P00251500	P00252000
Price List		360,50	454,00	525,00
HT		200,00	260,00	300,00
Dimension	mm	1024 x 750 x 880h	1500 x 750 x 880h	2000 x 750 x 880h
Capacity	kg	1000	1000	1000
Weight	kg	45	65	115
Colour		RAL 5012	RAL 5012	RAL 5012



Multiplex wood top 30mm thick. Designed to accommodate drawers and cabinets). Bolted structure. Blue Ral 5012, supplied disassembled.

CODE		P00251000G	P00251500G	P00252000G
Price List		360,50	454,00	525,00
HT		200,00	260,00	300,00
Dimension	mm	1024 x 750 x 880h	1500 x 750 x 880h	2000 x 750 x 880h
Capacity	kg	1000	1000	1000
Weight	kg	45	65	115
Colour		RAL 7035	RAL 7035	RAL 7035



## CLOTHES LOCKERS DIRTY/CLEAN

Clothes lockers dirty/clean, top shelf at h. 247 mm from the top with hanger rod equipped with towel "S" hooks in galvanized steel.

Divider between shelf and bottom. Umbrella/towel holder in chromed steel rod mounted on the door.

Drip tray in plastic material. Yale type cylinder lock with double key supplied.



CODE	Price List	HT	Places	Dimension mm
P33112	325,00	255,00	2	810 x 500 x 1800
P33113	440,00	340,00	3	1200 x 500 x 1800

## WORK TROLLEYS WITH 2 TRAYS

Monobloc work trolleys with 2 shelves Ø 125mm wheels, 2 of which are swivel and 2 are fixed. Max capacity trolley 300 Kg. Blue colour Ral 5015

€ 165,00  
P533201



Dimension mm	920 x 600 x 840
Tray capacity kg	100

## PLASTIC BOXES - NEXIT

Extremely robust stackable plastic boxes with smooth bottom. The smooth bottom makes them light and easy to handle. Size suitable for euro standard, ideal for logistics. The internal radius of curvature of the handles provides a high level of comfort and a safe grip during manual handling.



CODE	P4315120	P4315170	P4315220
HT	6,50	7,85	8,50
Dimension	mm 400 x 300 x 120	400 x 300 x 170	400 x 300 x 220
Weight	kg/m <sup>2</sup> 0,76	0,89	1,14
Volume	l 11,3	16,1	20,9
Colour	Grey	Grey	Grey

## Justrite.

### ANTI-FATIGUE MATS PVC

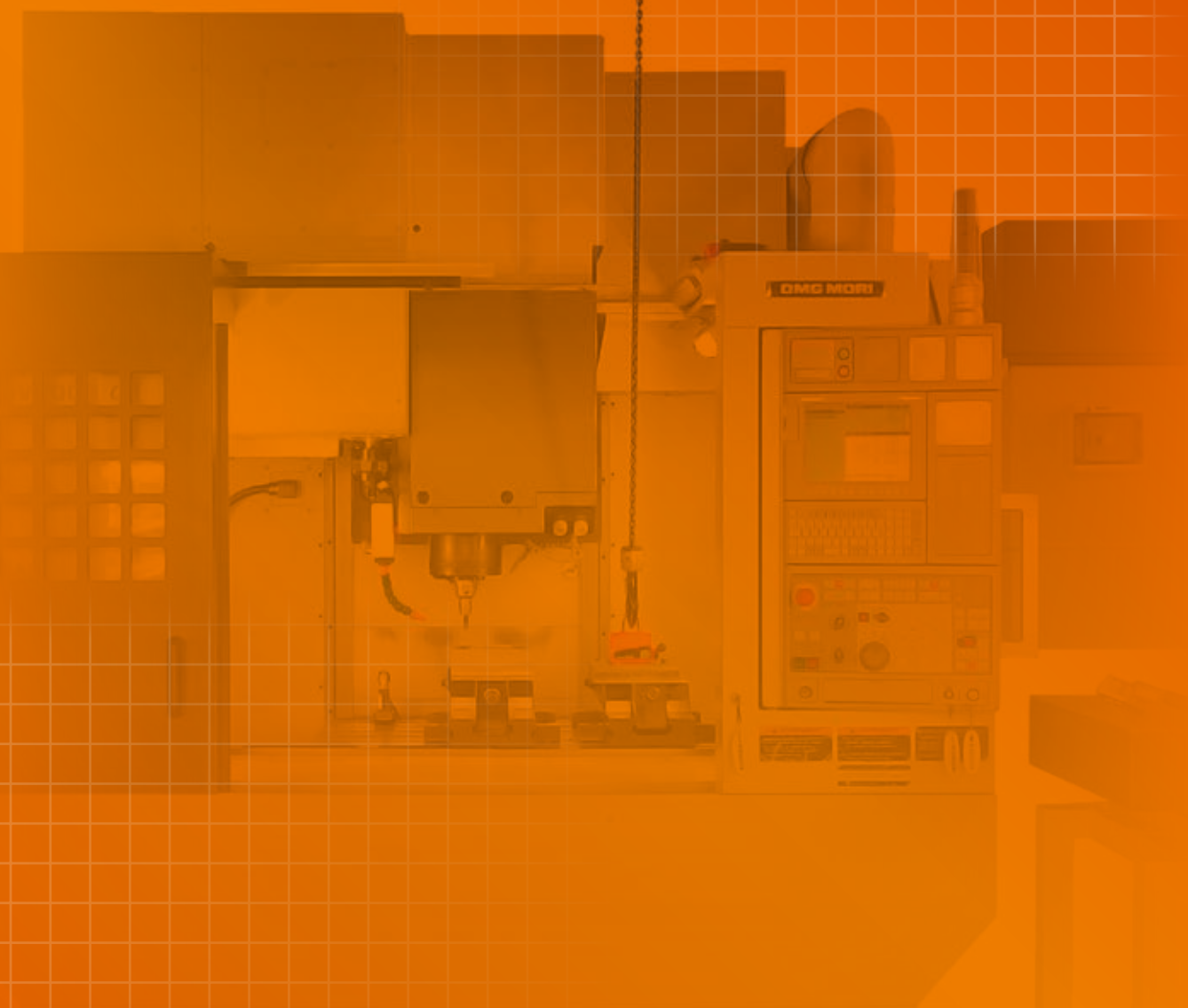
The anti-fatigue mat has a hard-wearing 14 mm thick base consisting of a wear-resistant surface bonded to an elastic microcellular vinyl backing to ensure maximum durability, comfort, cushioning and the absence of vibration. The rhombus structure provides traction and allows it to bend more easily. The design and the composition of the materials make it the most versatile solution for fatigue relief in both static and dynamic working positions.



R10 slip rating

CODE	P7630NG10	P7630NG20
Price List	72,00	247,00
HT	48,00	146,00
Dimension	mm 60 x 91	91 x 150
Thickness	mm 14	14
Weight	kg/m <sup>2</sup> 5,5	5,5
Classification	Bfl-S1	Bfl-S1
Material	PVC	PVC
Colour	Black-yellow	Black-yellow

# HANDLING







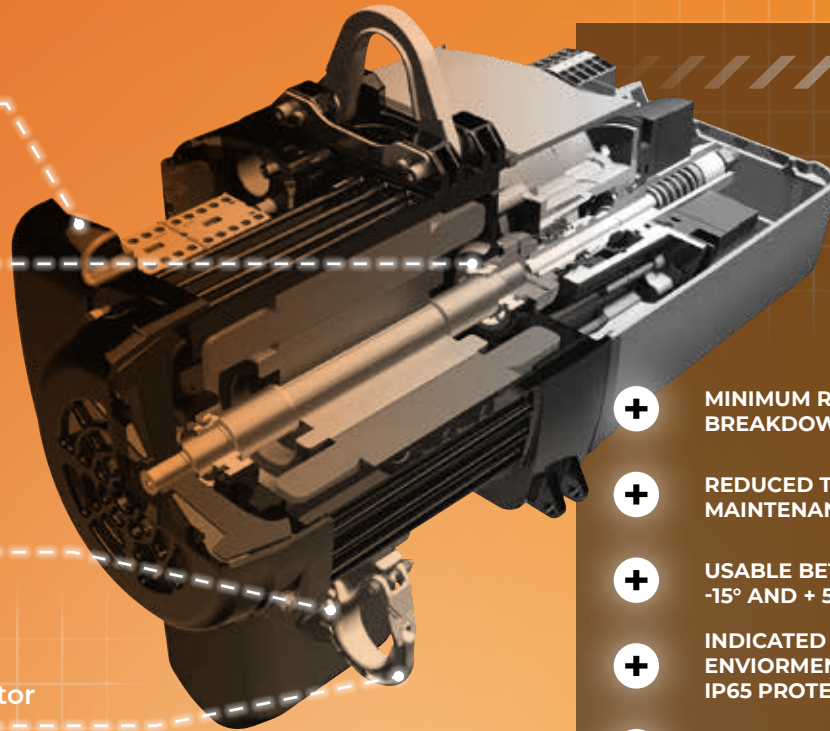
## ELECTRIC CHAIN HOISTS

No sensitive electronics

Polygonal shaft-hub couplings

Wear-resistant DC spring brake

Chain with excellent safety factor



- +** MINIMUM RISK OF BREAKDOWNS
- +** REDUCED TIME AND MAINTENANCE COSTS
- +** USABLE BETWEEN -15° AND + 50°
- +** INDICATED FOR EXTERNAL ENVIRONMENT IP65 PROTECTION
- +** HIGH OPERATIONAL SAFETY



## ELECTRIC CHAIN HOISTS GP

CODE	Price List	HT	Load capacity kg	Model	Class FEM (ISO)	Speed m/min	Nr. chain falls	Excursion m	Power kW	Intensity A	Weight kg
M00051251NF2	2.150,00	1.650,00	125	GP250/1NF	4m (M7)	8/2	1	3	0,72 / 0,18	2,8 / 1,7	24
M00052001NF2	2.150,00	1.650,00	200	GP250/1NF	3m (M6)	8/2	1	3	0,72 / 0,18	2,8 / 1,7	24
M00052501NF2	2.150,00	1.650,00	250	GP250/1NF	2m (M5)	8/2	1	3	0,72 / 0,18	2,8 / 1,7	24
M00055002NF	2.250,00	1.750,00	500	GP250/2NF	2m (M5)	4/1	2	3	0,72 / 0,18	2,8 / 1,7	25
M000510002NF	2.525,00	1.950,00	1000	GP500/2NF	2m (M5)	4/1	2	3	0,72 / 0,18	2,8 / 1,7	28
M000516002NF	3.600,00	2.700,00	1600	GP1000/2NF	3m (M6)	4/1	2	3	2,3 / 0,68	5,7 / 4,1	66
M000520002NF	3.600,00	2.700,00	2000	GP1000/2NF	2m (M5)	4/1	2	3	2,3 / 0,68	5,7 / 4,1	66



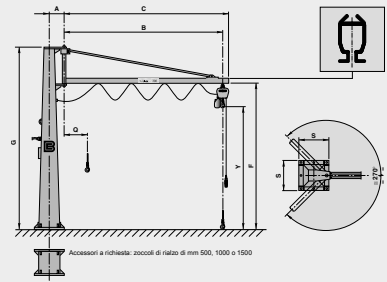
**FREE**

M0990DT  
CYCLE COUNTERS FOR HOISTS



**FREE**

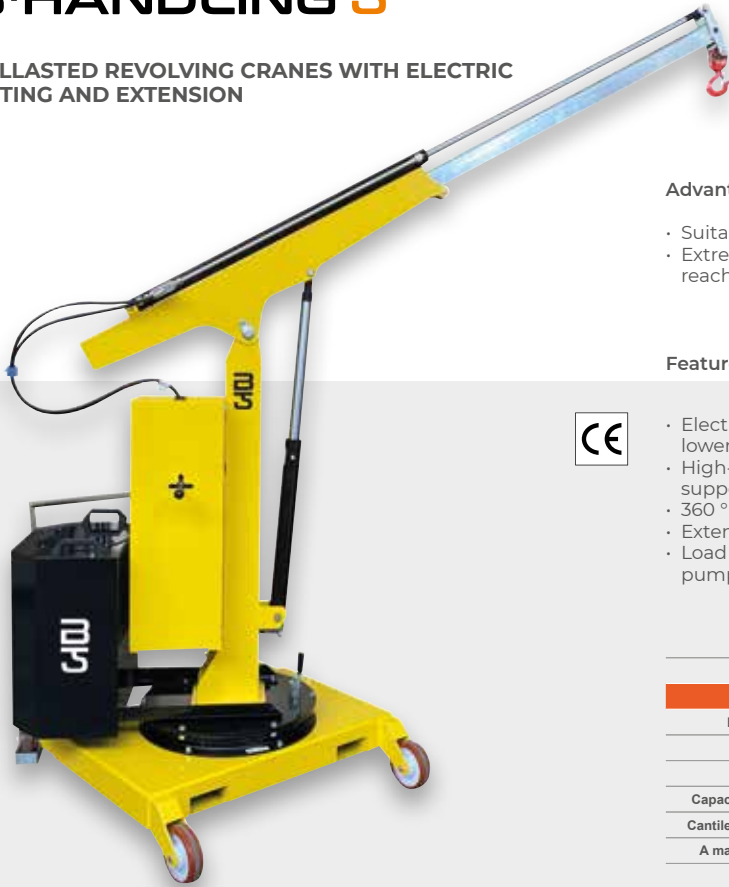
1270078  
CRANE CAPACITY SIGN 300X200



CODE	Price List	HT	LOAD CAPACITY kg	MODEL	ARM LENGTH C mm	EXTERNAL HOOK POSITION B mm	A mm	F mm	G* mm	Q mm	S mm	MAX HOOK HEIGHT FROM GROUND Y mm	FOUNDATION TYPE**	EXTENSION TYPE	PRESSURE BETWEEN COLUMN BASE AND FOUNDATION kg/cm <sup>2</sup>	ANCHORING TIE ROD TRACTION kg	Weight kg
M10102004000	<del>2.245,00</del>	1.650,00	200	SC 200/4000	4030	3865	305	3430	4025	570	560	2875	7	1A	5	1100	285
M10102005000	<del>2.458,00</del>	1.850,00	200	SC 200/5000	5030	4850	305	3425	4025	670	560	2865	8	1A	6	1360	320
M10102006000	<del>2.820,00</del>	2.000,00	200	SC 200/6000	6030	5850	305	3425	4025	680	560	2865	8	1A	7	1620	330
M10105004000	<del>4.200,00</del>	3.250,00	500	SC 500/4000	4035	3855	320	3495	4320	600	620	2910	12	2	10	1550	380
M10105005000	<del>4.998,00</del>	3.900,00	500	SC 500/5000	5045	4840	320	3445	4320	730	620	2845	13	2	12	1910	530
M10105006000	<del>5.203,00</del>	4.100,00	500	SC 500/6000	6045	5840	320	3445	4320	730	620	2845	14	2	14	2290	550
M101010004000	<del>6.133,00</del>	4.850,00	1000	SC1000/4000	4045	3720	320	3445	4320	765	620	2845	17	2	19	3100	500
M101010005000	<del>6.290,00</del>	4.950,00	1000	SC1000/5000	5045	4720	320	3445	4320	850	620	2845	18	2	24	3850	630
M101010006000	<del>6.628,00</del>	5.000,00	1000	SC1000/6000	6045	5720	320	3445	4320	950	620	2845	19	2	28	4600	680

# B·HANDLING 3

## BALLASTED REVOLVING CRANES WITH ELECTRIC LIFTING AND EXTENSION



### Advantages:

- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

### Features:

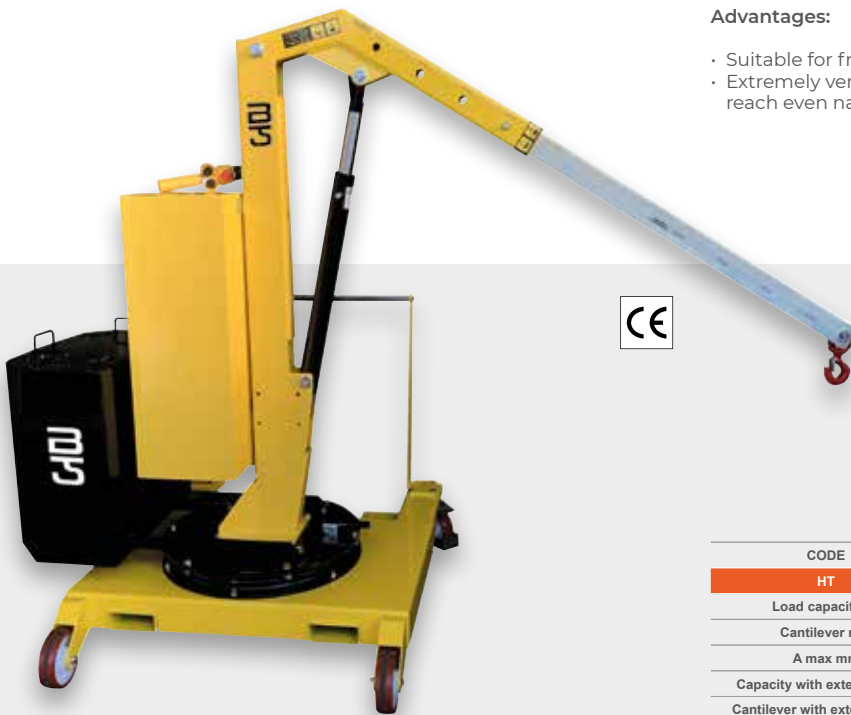


- Electric lifting by proportional joystick that maneuvers the lifting and lowering of the arm
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360 ° rotatable
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

CODE	M9425200	M9425500
HT	6.499,00	6.649,00
Load capacity kg	200 - 80	500 - 200
Cantilever mm	410 - 1410	410 - 1410
A max mm	2258	2258
Capacity with extension mm	40	100
Cantilever with extension mm	1930	1930
A max with extension mm	2600	2600
Weight kg	480	680

# B·HANDLING 3

## BALLASTED REVOLVING CRANES 360° WITH MANUAL EXTENSION



### Advantages:

- Suitable for front loading directly into the mouth of work center load
- Extremely versatile thanks to the small size that the allow you to reach even narrow spaces

### Features:

- Electric lifting by means of a push-button panel that maneuvers the up and down of the arm
- High-capacity pivoting wheels with high smoothness with bumper supports and parking brakes
- 360 ° rotatable
- Extendable lifting arm in 4 different positions
- Load descent adjusted by means of a handwheel incorporated in the pump

CODE	M9415200	M9415500
HT	4.349,00	4.489,00
Load capacity kg	200 - 170 - 150 - 130	500 - 420 - 370 - 320
Cantilever mm	365 - 500 - 635 - 770	365 - 500 - 635 - 770
A max mm	2500	2500
Capacity with extension mm	92 - 85 - 78 - 71	220 - 200 - 180 - 160
Cantilever with extension mm	865 - 1000 - 1135 - 1270	865 - 1000 - 1135 - 1270
A max with extension mm	2850	2850
Weight kg	440	640

## MOBILE ELEVATING PLATFORMS

### Features:

- Solid steel painted structure
- Foot pump with pump cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control



### Supplied with:

- Instruction manual of use and maintenance



CODE		M9210500	M9210500L	M92101000	M92101000L
Price List		<del>824,00</del>	<del>4.298,00</del>	<del>4.384,00</del>	<del>2.625,00</del>
HT		550,00	959,00	999,00	1.679,00
Load capacity	kg	500	500	1000	1000
Platform	mm	815 x 500	1600 x 810	1016 x 510	2035 x 750
Min- Max height	mm	290 - 870	286 - 915	380 - 990	350 - 1360
Weight	kg	84	154	122	198

## MOBILE ELEVATING PLATFORMS

### Features:

- Solid steel painted structure
- Foot pump with pump and cylinder and piston rod of hard chrome
- 2 fixed wheels - 2 swivel wheels with brake
- Manual lowering lever control



### Supplied with:

- Instruction manual of use and maintenance



CODE		M9220350	M9225700
Price List		<del>914,00</del>	<del>4.774,00</del>
HT		599,00	1.159,00
Load capacity	kg	350	700
Platform	mm	905 x 512	1220 x 610
Min- Max height	mm	370 - 1300	445 - 1500
Weight	kg	113	195



# B·HANDLING 3

## ELECTRIC ELEVATING PLATFORMS

### Features:

- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads



### Supplied with:

- Instruction manual of use and maintenance
- Perimeter protection placed under the lifting platform, if during descent there are impediments the table is stopped



CODE		M92300500	M92301000	M92302000	M92303000
Price List		2.916,00	3.297,00	3.747,00	4.360,00
HT		1.899,00	2.149,00	2.399,00	2.849,00
Load capacity	kg	500	1000	2000	3000
Lifting time	sec.	15	25	40	26
Load upward speed	mm/s	55	40	22	30
Load downward speed	mm/s	40	35	33	40
Electric motor	kW	0,75 three - phase	0,75 three - phase	0,75 three - phase	0,75 three - phase
Dimension	mm	800 x 1300	800 x 1300	800 x 1300	800 x 1300
Min- Max height	mm	190 - 1010	190 - 1010	190 - 1010	220 - 1020
Weight	kg	160	220	280	320

# B·HANDLING 3

## MOBILE ELECTRIC ELEVATING PLATFORMS

### Features:

- Solid steel painted structure
- Operations of up and down are activated through the relevant buttons
- An excess flow valve controls the speed of descent of different loads



### Supplied with:

- Instruction manual of use and maintenance
- Battery charger

CODE		M92400500
Price List		3.611,00
HT		2.249,00
Load capacity	kg	500
Platform	mm	1010 x 520
Min- Max height	mm	440 - 1025
Weight	kg	157



# B·HANDLING 3

## MANUAL LIFT PALLET TRUCKS

### Features:

- Solid steel painted structure
- Switch lever 3 position control up- neutral - down for easy operations
- Equipped with a 2 speed pump, fast mode 20 cycles lifts 800 mm, slow mode in 55 cycles lifts 800 mm
- Designed to increase the productivity thanks to the possibility of moving the weight up to a height of 400 mm
- Suitable for upload presses, cutters, conveyor assembly lines etc.

### Supplied with:

- Instruction manual of use and maintenance



CODE		M91251000
Price List		4.226,00
HT		849,00
Load capacity	kg	1000
Fork Dimension	mm	1140 x 520
Lift H	mm	800
Min clearance from ground	mm	80 - 400*
Total length	mm	1540
Rolls dimensions	mm	78 x 60
Weight	kg	127



# B·HANDLING 3

## ELECTRIC LIFT PALLET TRUCKS

### Features:

- Solid steel painted structure
- Switch lever 3 position control up- neutral - down for easy operations
- Designed to increase the productivity thanks to the possibility of moving the weight up to a height of 250 mm
- Suitable for upload presses, cutters, conveyor assembly lines etc.

### Supplied with:

- Instruction manual of use and maintenance
- 12 V battery and standard battery charger

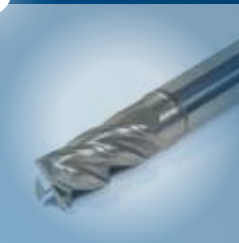


CODE		M91351000
Price List		9.576,00
HT		2.399,00
Load capacity	kg	1000
Fork Dimension	mm	1170 x 570
Lift h	mm	800
Min clearance from ground	mm	85 - 400*
Total length	mm	1570
Motor		0,58KW - 12V
Battery		12V - 52Ah
Rolls dimensions	mm	78 x 60
Weight	kg	127



# TOP TIPS

+



**A4U40**  
p 7



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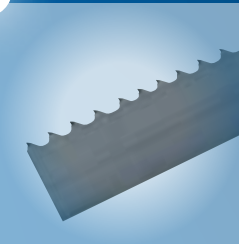


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**D7705**  
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**SUPER 8**  
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**N2327**  
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**K2346**  
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**N6015**  
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**N4214**  
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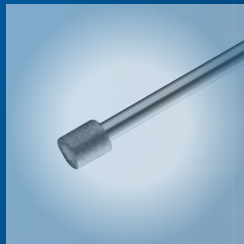


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**G5613**  
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**A+B**

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