

hard material matters



Tools for the fastener and nail making industry



CERATIZIT – the parent companies



Headquarters and main site
MAMER / Luxembourg



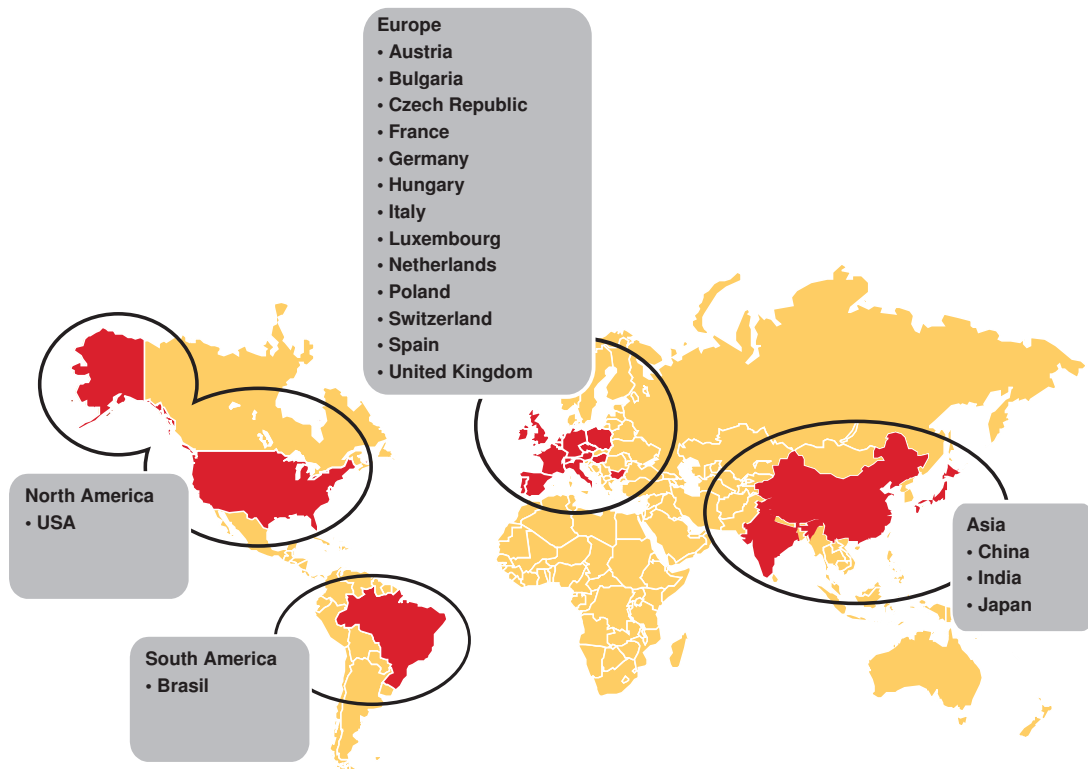
Main site **REUTTE** / Austria

Hard material matters – it is the core of our business. Through in-depth knowledge and highly flexible production facilities we strive to provide our business partners with direct competitive advantages in the field of hard materials for tooling solutions and wear parts. Our dedication to hard material matters creates intelligent solutions for tomorrow and time to come.

Production plants in the three main economic areas and a worldwide sales network of subsidiaries and distribution partners ensure a quick response to customer needs. In-house training courses and seminars guarantee that both business partners and employees share the latest information on our product range.

We promote intensive dialogue with our customers and strive for long-term business relations on a partnership basis.

The CERATIZIT corporate value 'The focus and point of view of our business partners matters' is a guiding principle for all CERATIZIT employees worldwide.



Direct sales and distribution partners

CERATIZIT Alserio



CERATIZIT Alserio specialises in the production of carbide tools for metal forming. In this way we are able to guarantee you application know-how and tool quality of the highest standard. As carbide and tools are produced by the same source, we are able to guarantee you utmost process security and an optimum combination of carbide, tool design and surface machining.

At CERATIZIT we consider the carbide business to be a matter of confidence. Decades of experience in carbide development and production enable us to offer you this confidence. Our quality management systems meet the highest standards. This is documented by the ISO 9001:2000 quality certificate.

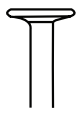


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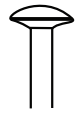
CERATIZIT nail making tools for Wafios machines

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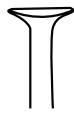
Clamped nail making tools



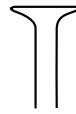
normal head



pan head



cup head



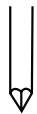
trumpet head



bolt head



diamond point



short diamond point



clinch point



chisel point

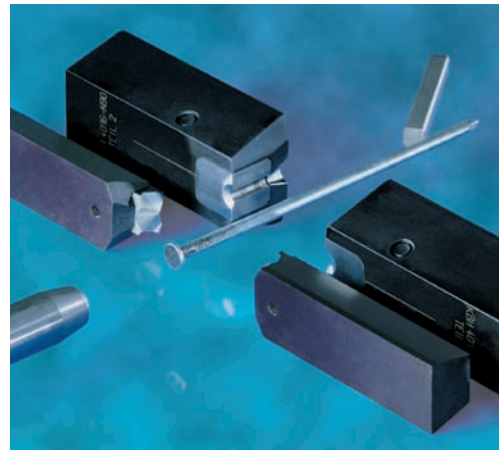


ballistic point



blunt point

- The toolholder can be used for **various nail sizes**.
- There is a considerable improvement in **cost effectiveness**.
- Machines are used more effectively with **shorter changeover** time and less downtimes.
- Toolholders and carbide inserts without profile are available ex stock. Serrated profiles are available at short notice according to customer drawings. Therefore very **short lead times and maximum flexibility** are guaranteed for our customers.

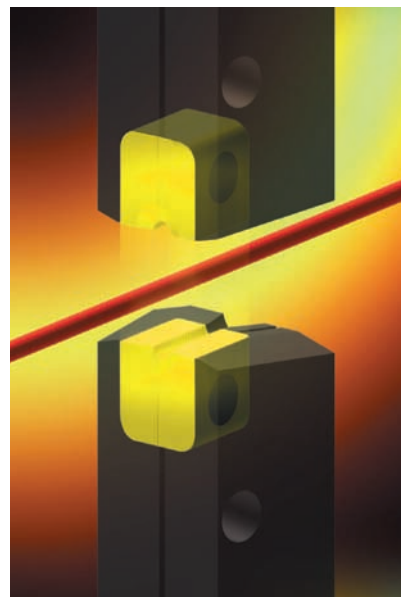


Power – Die – 2000

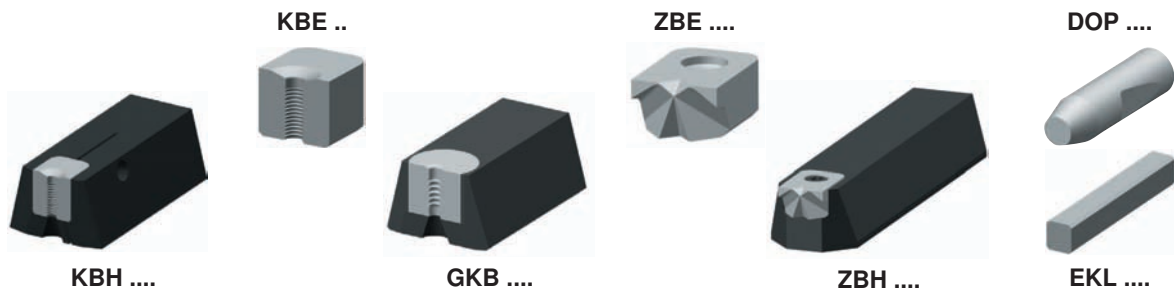
The new clamping insert provides you with:

- **Doubled tool life**
- **Excellent process security**
- **Automatic force compensation**

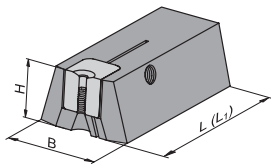
The two-piece design provides unique breakage protection for clamping inserts, thus helping nail producers to double tool life! Renowned machine producers such as Wafios appreciate this. In this way it is possible to minimise machine downtime and at the same time to optimise machine utilisation.



N1, N2, N11, N21

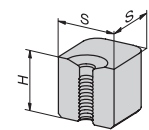


Toolholder



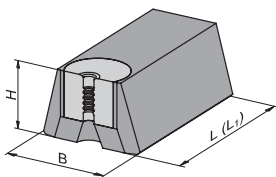
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 2516	N1, N2	25	16	62	70
KBH 2818	N11, N21	28	18	62	70

Insert



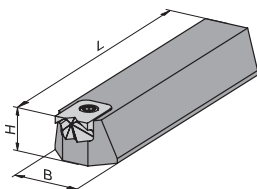
Ordering description	Machine type	Dimensions in mm	
		S	H
KBE 12	N1, N2, N11, N21	12	12

Brazed nail making tool



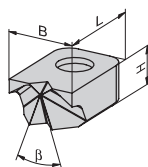
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB 2516	N1, N2	25	16	62	70
GKB 2818	N11, N21	28	18	62	70

Toolholder for knife



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ZBH 2012	N1, N2	20	12	61
ZBH 2014	N11, N21	20	14	60

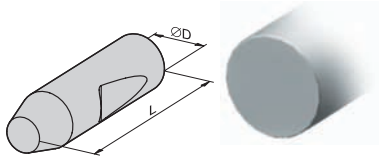
Insert for knife



Ordering description	Machine type	Dimensions in mm			
		B	H	L	β
ZBE 43-S	N1, N2, N11, N21	12	7	20	43°

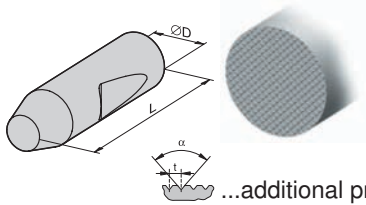
N1, N2, N11, N21

Header punch, plain



Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 11	N1, N2, N11, N21	11	52

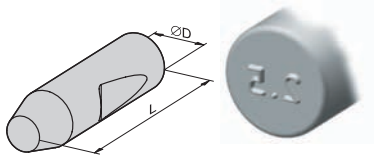
Header punch, serrated



...additional profiles upon request

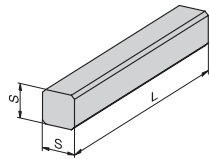
Ordering description	Machine type	Dimensions in mm			
		ØD	L	t	α
DOP 11-R	N1, N2, N11, N21	11	52	1,0	60°

Header punch, with letters



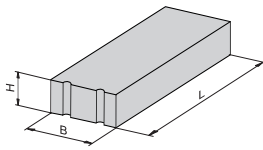
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 11-S	N1, N2, N11, N21	11	52

Feeder

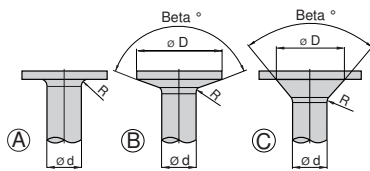


Ordering description	Machine type	Dimensions in mm	
		S	L
EKL 0505-35	N1, N2, N11, N21	5	35

Anvil



Ordering description	Machine type	Dimensions in mm		
		A	B	L
ABO-N1/N2	N1, N2, N11, N21	14	7	27



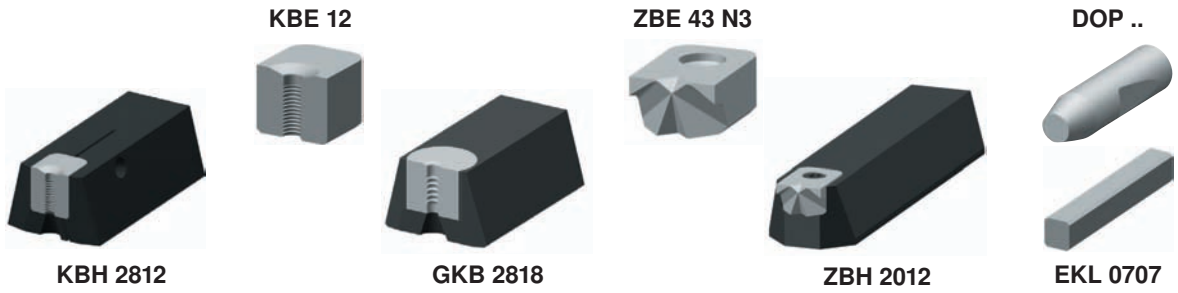
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 2516	1	M6 x 14	—
KBH 2818			
ZBH 2012	10	78 22 114 (M4,5 x 10,5 / T20)	78 18 121 (T20)
ZBH 2014			

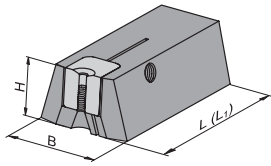
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 10 pairs of KBE 12 $\varnothing d = 2,0^{+0,05}$; $\varnothing D = 4,0$; $R = 0,3$; $\beta = 160^\circ$

N3, N31

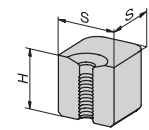


Toolholder



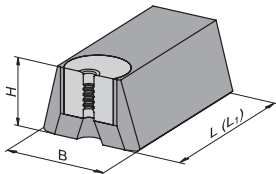
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 2812	N3, N31	28	18	74	74

Insert



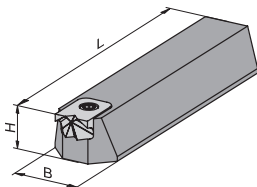
Ordering description	Machine type	Dimensions in mm	
		S	H
KBE12	N3, N31	12	12

Brazed nail making tool



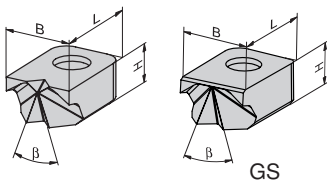
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB 2812	N3, N31	28	18	74	74

Toolholder for knife



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ZBH 2012	N3, N31	20	12	68

Insert for knife

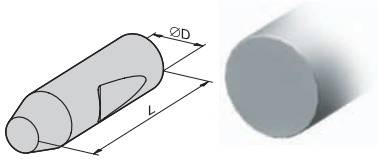


Ordering description	Machine type	Dimensions in mm			
		B	H	L	β
ZBE 43-S	N3, N31	12	7	20	43°

... cutting inserts may be ordered also as GS version

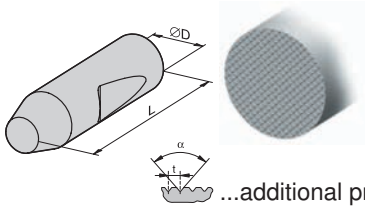
N3, N31

Header punch, plain



Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 13	N3, N31	13	52

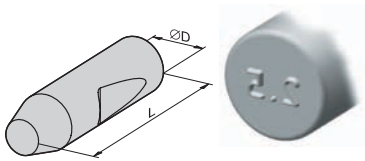
Header punch, serrated



...additional profiles upon request

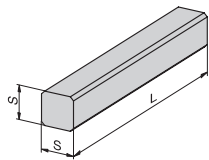
Ordering description	Machine type	Dimensions in mm			
		ØD	L	t	α
DOP 13-R	N3, N31	13	52	1,0	60°

Header punch, with letters



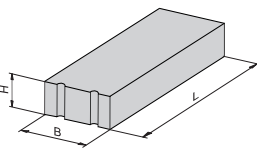
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 13-S	N3, N31	13	52

Feeder

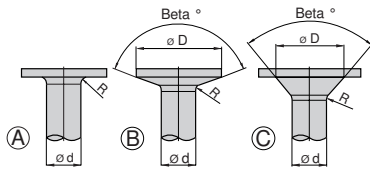


Ordering description	Machine type	Dimensions in mm	
		S	L
EKL 0707-40	N3	7	40
EKL 0707-50	N31	7	50

Anvil



Ordering description	Machine type	Dimensions in mm		
		A	B	L
ABO-N3	N3	16	8	30
ABO-N31	N31	16	8	28



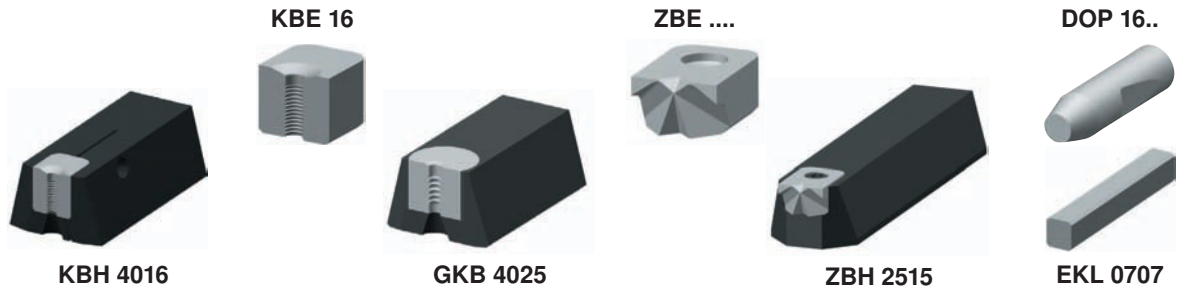
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 2812	1	M6 x 14	—
ZBH 2012	10	78 22 114 (M4,5 x 10,5 / T20)	78 18 121 (T20)

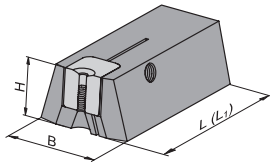
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 10 pairs of KBE 12 Ød = 2,0^{+0,05}; ØD = 4,0; R = 0,3; β = 160°

N4, N41

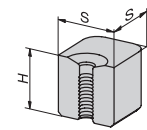


Toolholder



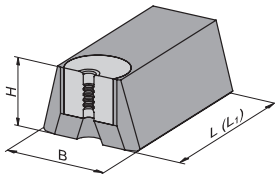
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 4016	N4, N41	40	25	80	95

Insert



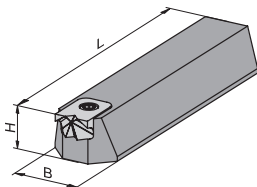
Ordering description	Machine type	Dimensions in mm	
		S	H
KBE 16	N4, N41	16,5	16,5

Brazed nail making tool



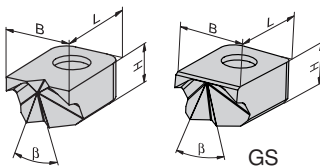
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB 4025	N4, N41	40	25	80	95

Toolholder for knife



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ZBH 2516	N4, N41	25	15	85

Insert for knife

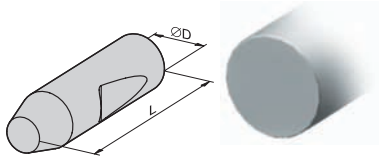


Ordering description	Machine type	Dimensions in mm			
		B	H	L	β
ZBE 35	N4, N41	14	8,5	20	35°
ZBE 40	N4, N41	14	8,5	20	40°
ZBE 50	N4, N41	14	8,5	20	50°
ZBE 60	N4, N41	14	8,5	20	60°

... all cutting inserts may be ordered also as GS version

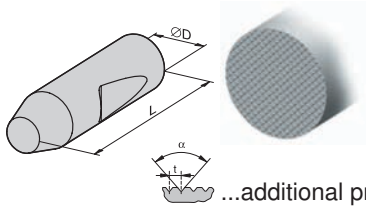
N4, N41

Header punch, plain



Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 16	N4, N41	16	62

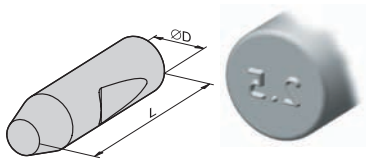
Header punch, serrated



...additional profiles upon request

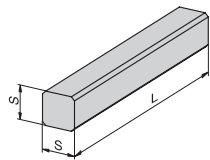
Ordering description	Machine type	Dimensions in mm			
		ØD	L	t	α
DOP 13-R	N4, N41	16	62	1,5	60°

Header punch, with letters



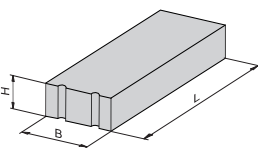
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 16-S	N4, N41	16	62

Feeder

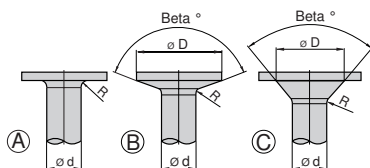


Ordering description	Machine type	Dimensions in mm	
		S	L
EKL 0707-50	N4, N41	7	50

Anvil



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ABO-N4	N4, N41	18	10	35



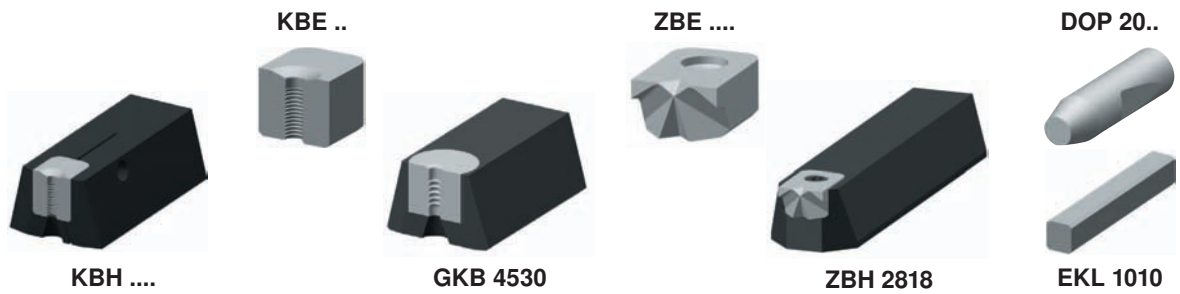
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 4016	1	M8 x 25	—
ZBH 2515	10	78 83 2164 (M4,5 x 13 / T20)	78 18 121 (T20)

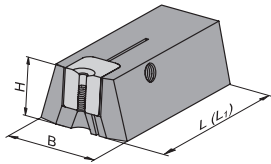
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 5 pairs of GKB 4025 $\varnothing d = 2,8^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

N5, N51

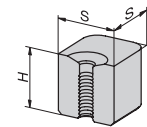


Toolholder



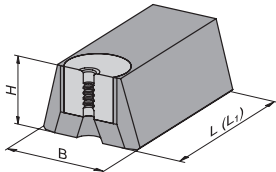
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 4516	N5, N51	45	30	105	120
KBH 4520	N5, N51	45	30	105	120

Insert



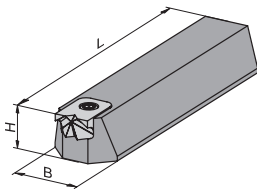
Ordering description	Machine type	Dimensions in mm	
		S	H
KBE 16	N5, N51	16,5	16,5
KBE 20	N5, N51	20,0	16,5

Brazed nail making tool



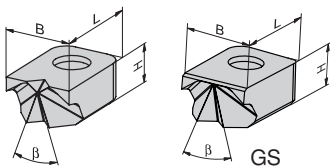
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB 4530	N5, N51	45	30	105	120

Toolholder for knife



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ZBH 2818	N5, N51	28	18	110

Insert for knife

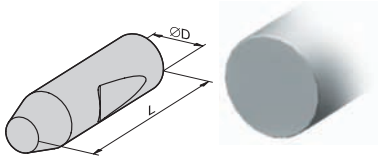


Ordering description	Machine type	Dimensions in mm			
		B	H	L	β
ZBE 35	N5, N51	14	8,5	20	35°
ZBE 40	N5, N51	14	8,5	20	40°
ZBE 50	N5, N51	14	8,5	20	50°
ZBE 60	N5, N51	14	8,5	20	60°

... all cutting inserts may be ordered also as GS version

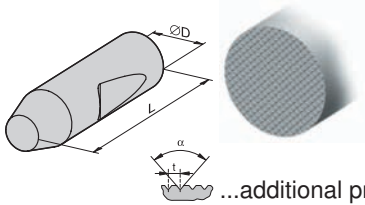
N5, N51

Header punch, plain



Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 20	N5, N51	20	75

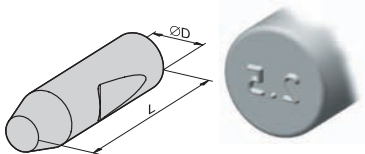
Header punch, serrated



Ordering description	Machine type	Dimensions in mm			
		ØD	L	t	α
DOP 20-R	N5, N51	20	75	1,5	60°

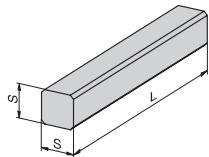
...additional profiles upon request

Header punch, with letters



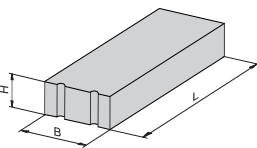
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 20-S	N5, N51	20	75

Feeder

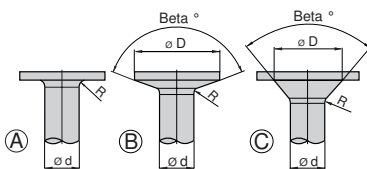


Ordering description	Machine type	Dimensions in mm	
		S	L
EKL 1010-60	N5, N51	10	60

Anvil



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ABO N5	N5, N51	22	12	45



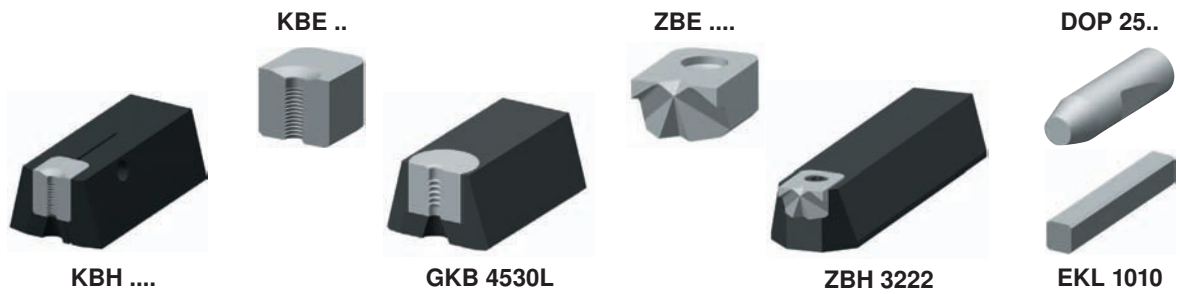
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 4516	1	M8 x 30	—
KBH 4520			
ZBH 2818	10	78 83 216 (M4,5 x 13 / T20)	78 18 121 (T20)

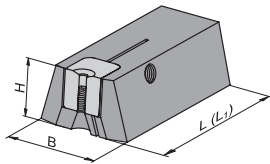
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 5 pairs of KBE 16 $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

N6, N61

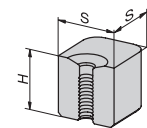


Toolholder



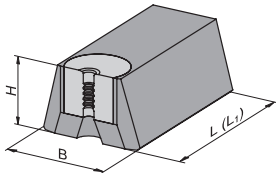
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 4516L	N6, N61	45	30	115	134
KBH 4520L	N6, N61	45	30	115	134

Insert



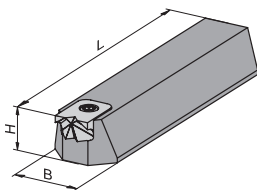
Ordering description	Machine type	Dimensions in mm	
		S	H
KBE 16	N6, N61	16	16,5
KBE 20	N6, N61	20	16,5

Brazed nail making tool



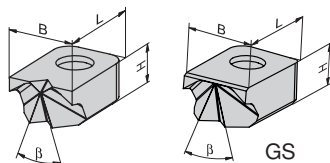
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB 4530L	N6, N61	45	30	115	134

Toolholder for knife



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ZBH 3222	N6, N61	32	22	130
ZBH 3222 H	N6, N61	32	22	130

Insert for knife

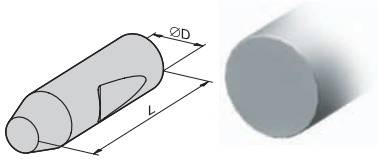


Ordering description	Machine type	Dimensions in mm			
		B	H	L	β
ZBE 35	N6, N61	14	8,5	20	35°
ZBE 40	N6, N61	14	8,5	20	40°
ZBE 40-H	N6, N61	14	11,0	20	40°
ZBE 50	N6, N61	14	8,5	20	50°
ZBE 50-H	N6, N61	14	11,0	20	50°
ZBE 60	N6, N61	14	8,5	20	60°

... all cutting inserts may be ordered also as GS version

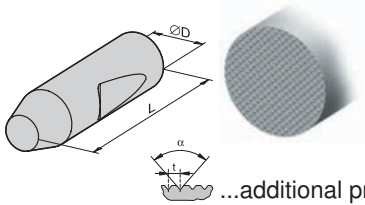
N6, N61

Header punch, plain



Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 25	N6, N61	25	90

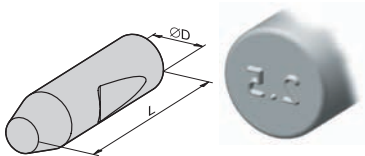
Header punch, serrated



...additional profiles upon request

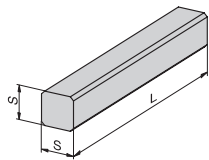
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 25-R	N6, N61	25	90

Header punch, with letters



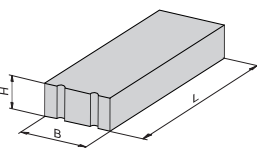
Ordering description	Machine type	Dimensions in mm	
		ØD	L
DOP 25-S	N6, N61	25	90

Feeder

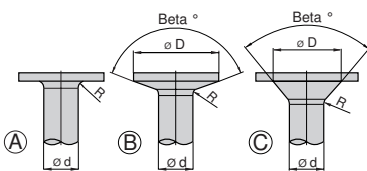


Ordering description	Machine type	Dimensions in mm	
		S	L
EKL 1010-60	N6, N61	10	60

Anvil



Ordering description	Machine type	Dimensions in mm		
		B	H	L
ABO-N6	N6, N61	22	12	45



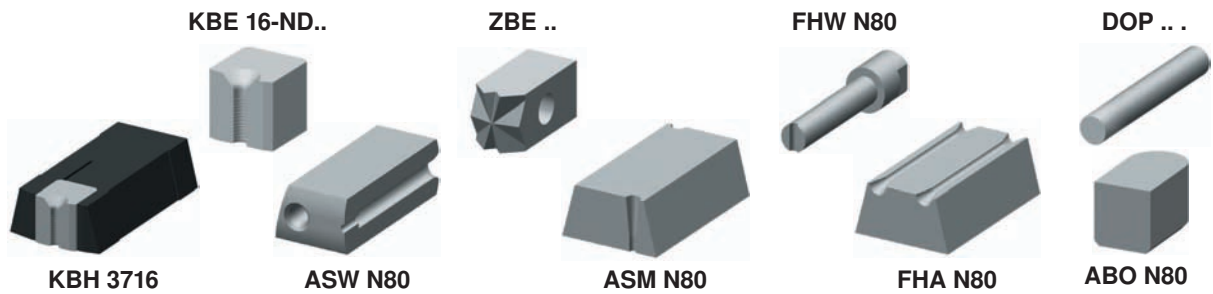
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 4516L	1	M8 x 30	—
KBH 4520L			
ZBH 3222	10	78 83 216 (M4,5 x 13 / T20)	78 18 121 (T20)
ZBH 3222-H			

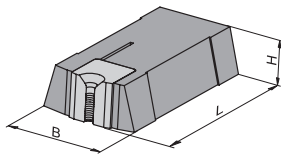
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 10 pairs of KBE 20 $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

N80

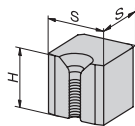


Toolholder



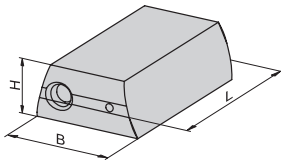
Ordering description	Dimensions in mm		
	B	H	L
KBH 3716	37	16,4	68,5

Insert



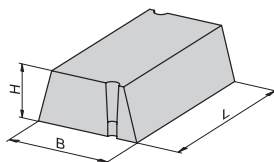
Ordering description	Dimensions in mm	
	S	H
KBH 16-ND	16,5	16,5
KBH 16-ND-G	16,5	16,5

Cutting tool



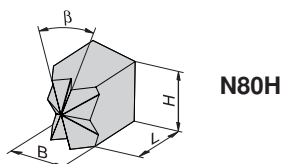
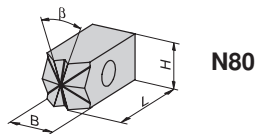
Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASW-N80	4221.5.1305...	30	15	50

Cutting knife



Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASW-N80	4221.5.1301...	30	15	50

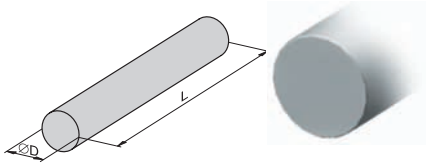
Insert for knife



Ordering description	Wafios no.	Dimensions in mm			
		B	H	L	β
ZBE 25.0-N80-H	4222.5.1346.01	20	16,5	25	25°
ZBE 30.0-N80-H	4222.5.1346.03	20	16,5	25	30°
ZBE 40.0-N80-H	4222.5.1346.00	20	16,5	25	40°
ZBE 60.0-N80-H	4222.5.1346.04	20	16,5	25	60°
ZBE 35.0-N80	4222.5.1345.03	12	12	25	35°
ZBE 40.0-N80	4222.5.1345.00	12	12	25	40°
ZBE 47.0-N80	4222.5.1345.02	12	12	25	47°
ZBE 60.0-N80	4222.5.1345.04	12	12	25	60°
ZBE 35.0-N80-ES	CLINCH POINT	20	16,5	25	35°

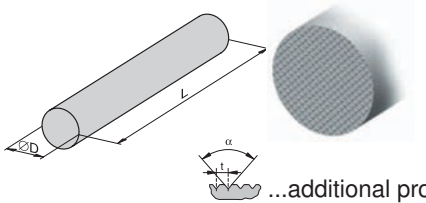
N80

Header punch, plain



Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP 16-N80	4222.5.1370.00	16	138
DOP 20-N80	4222.5.1377.00	20	138

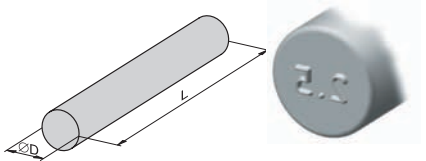
Header punch, serrated



Ordering description	Wafios no.	Dimensions in mm			
		ØD	L	t	α
DOP 16-N80-R	4222.5.1371.00	16	138	1,0	60°
DOP 20-N80-R	4222.5.1376.00	20	138	1,0	60°

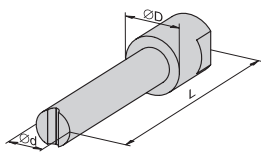
...additional profiles upon request

Header punch, with letters



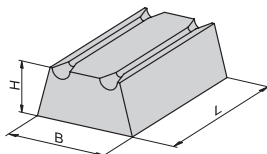
Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP 16-N80-S	—	16	138
DOP 20-N80-S	—	20	138

Holding tool



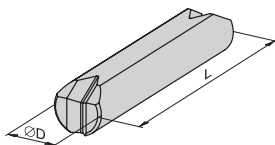
Ordering description	Wafios no.	Dimensions in mm		
		ØD	Ød	L
FHW-N80	4222.1.1310...	16	10	67,5
FHW-N80	4222.7.1312...	18	12	78

Holding anvil



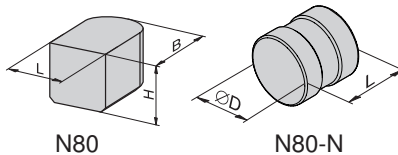
Ordering description	Wafios no.	Dimensions in mm		
		ØD	H	L
FHA-N80	4222.5.1315...	30	15	50

Feeder

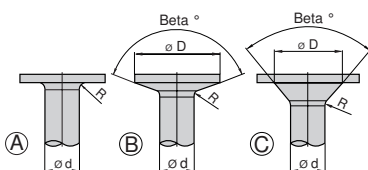


Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
EKL 1045	4226.5.1308.01	10	45

Anvil



Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ABO-N80	4221.5.1320...	21	12	12
ABO-N80-N	4227.5.1304.00	Ø 20 x 19,5		

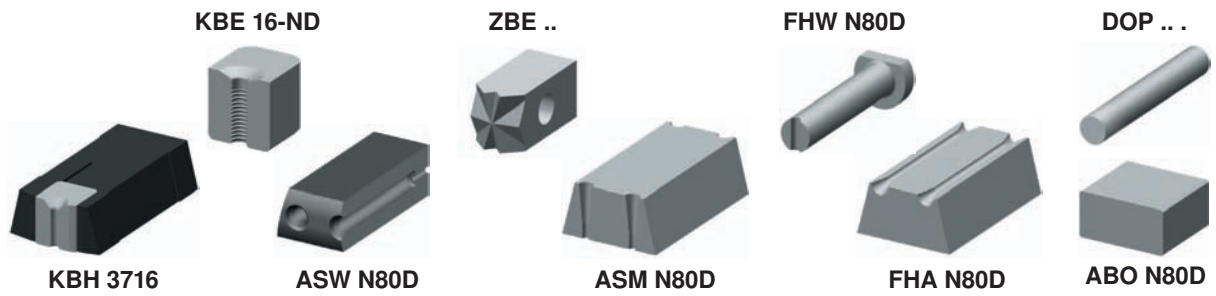


When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

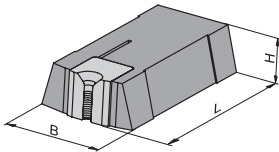
Supply details: toolholder without insert

Ordering example: 10 pairs of KBE 16-ND $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

N80D, N80R

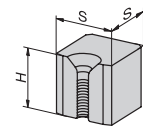


Toolholder



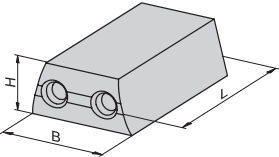
Ordering description	Dimensions in mm		
	B	H	L
KBH 3716	37	16,4	68,5

Insert



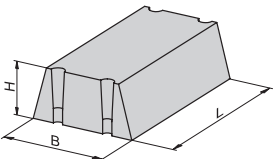
Ordering description	Dimensions in mm	
	S	H
KBH 16-ND	16,5	16,5
KBH 16-ND-G	16,5	16,5

Cutting tool



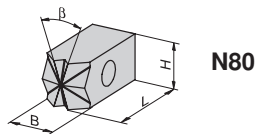
Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASW-N80D	4221.5.1305...	30	15	50

Cutting knife

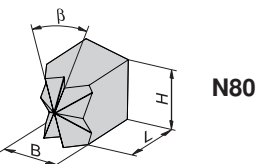


Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASW-N80D	4221.5.1301...	30	15	50

Insert for knife



N80

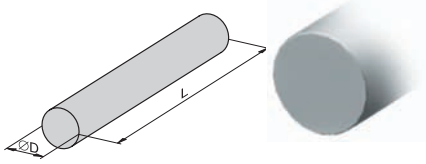


N80H

Ordering description	Wafios no.	Dimensions in mm			
		B	H	L	β
ZBE 25.0-N80-H	4222.5.1346.01	20	16,5	25	25°
ZBE 30.0-N80-H	4222.5.1346.03	20	16,5	25	30°
ZBE 40.0-N80-H	4222.5.1346.00	20	16,5	25	40°
ZBE 60.0-N80-H	4222.5.1346.04	20	16,5	25	60°
ZBE 35.0-N80	4222.5.1345.03	12	12	25	35°
ZBE 40.0-N80	4222.5.1345.00	12	12	25	40°
ZBE 47.0-N80	4222.5.1345.02	12	12	25	47°
ZBE 60.0-N80	4222.5.1345.04	12	12	25	60°
ZBE 35.0-N80-ES	CLINCH POINT	20	16,5	25	35°

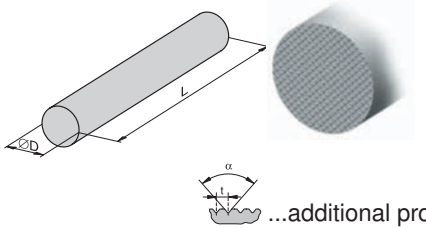
N80D, N80R

Header punch, plain



Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP 16-N80	4222.5.1370.00	16	138
DOP 20-N80	4222.5.1377.00	20	138
DOP 25-N80R	4223.5.1370.00	25	131

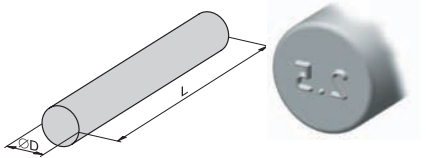
Header punch, serrated



...additional profiles upon request

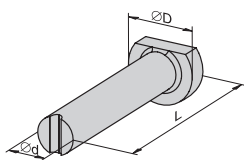
Ordering description	Wafios no.	Dimensions in mm			
		ØD	L	t	α
DOP 16-N80-R	4222.5.1371.00	16	138	1,0	60°
DOP 20-N80-R	4222.5.1376.00	20	138	1,0	60°
DOP 25-N80R-R	4223.5.1371.00	25	131	1,0	60°

Header punch, with letters



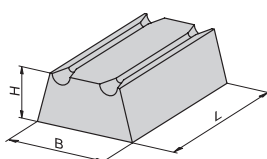
Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP 16-N80-S	—	16	138
DOP 20-N80-S	—	20	138
DOP 25-N80R-S	—	25	131

Holding tool



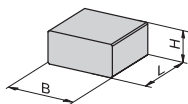
Ordering description	Wafios no.	Dimensions in mm		
		ØD	Ød	L
FHW-N80D	4222.5.1310...	18	10	54,5
FHW-N80	4221.5.1310...	16	10	67,5

Holding anvil

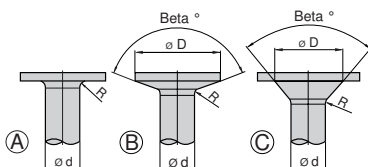


Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
FHA-N80	4222.5.1315...	30	15	50

Anvil



Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ABO-N80D	4221.5.1320...	25	12	23,8

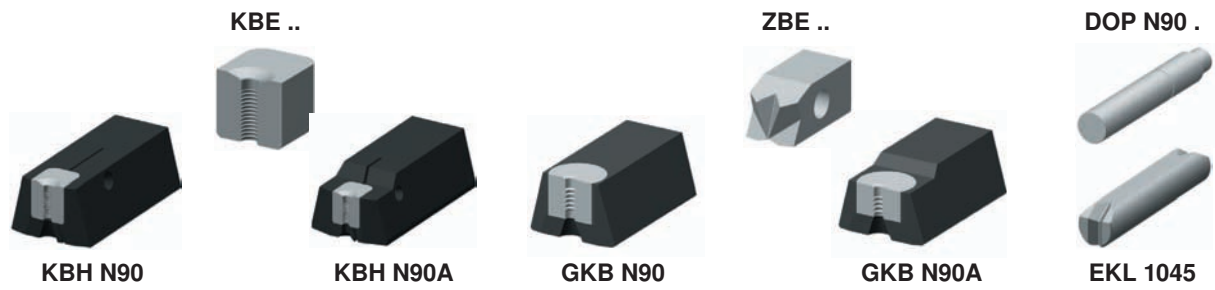


When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

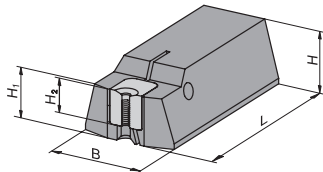
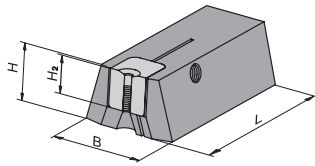
Supply details: toolholder without insert

Ordering example: 5 pairs of KBE 16-ND $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

N90, N90A



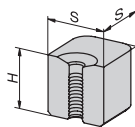
Toolholder



Ordering description	Machine type	Dimensions in mm			
		B	H	H ₂	L
KBH 4016-N90	N90	40	25	16,5	80
KBH 4016-N90-35	N90	40	35	20,0	80

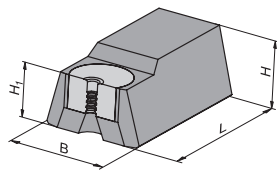
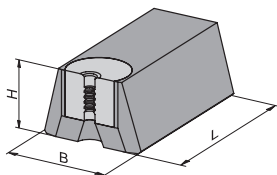
Ordering description	Machine type	Dimensions in mm				
		B	H	H ₁	H ₂	L
KBH 4016-N90A-20	N90A	40	25	20	14	80
KBH 4016-N90A-16	N90A	40	25	16	11	80

Insert



Ordering description	Machine type	Dimensions in mm	
		S	H
KBE16A-11	N90A	16,5	11,0
KBE 16	N90	16,5	16,5
KBE 16A-14	N90A	16,5	14,0
KBE 16-20	N90	16,5	20,0

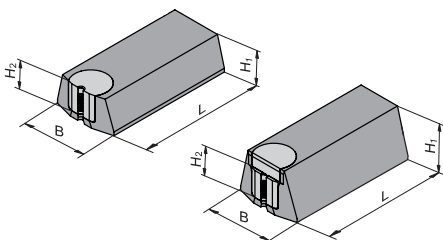
Brazed nail making tool



Ordering description	Machine type	Dimensions in mm		
		B	H	L
GKB 4025-N90	N90	40	25	80
GKB 4025-N90-35	N90	40	35	80

Ordering description	Machine type	Dimensions in mm			
		B	H	H ₁	L
GKB 4025-N90A-16	N90A	40	25	16	80
GKB 4025-N90A-20	N90A	40	25	20	80

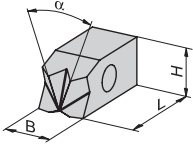
Brazed nail making tool for D-head



Ordering description	Machine type	Dimensions in mm			
		B	H ₁	H ₂	L
GKB 4025-N90-D1	N90	40	28	16	80
GKB 4025-N90-D2	N90	40	28	20	80
GKB 4025-N90-D3	N90	40	28	22	80

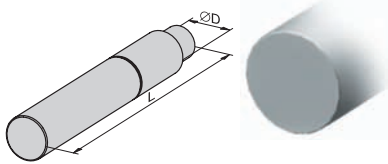
N90, N90A

Insert for knife



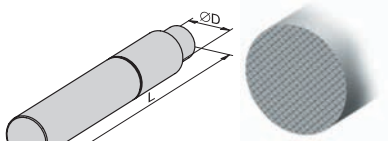
Ordering description	Wafios no.	Dimensions in mm			
		B	H	L	β
ZBE 30.0-N90	4226.5.1267.00	12	12	25	30°
ZBE 35.0-N90	4226.5.1227.00	12	12	25	35°
ZBE 40.1-N90	4226.5.1202.00	12	12	25	40°
ZBE 40.2-N90	4226.5.1202.03	12	12	25	40°
ZBE 47.0-N90	4226.5.1203.00	12	12	25	47°
ZBE 60.0-N90	4226.5.1241.02	12	12	25	60°
ZBE 35.0-N90-ES	CLINCH POINT	12	12	–	35°

Header punch, plain



Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP N90-122	4226.5.1170.00	20	122
DOP N90-126	4226.5.1370.00	20	126
DOP N90-130	4226.5.1351.00	20	130
DOP N90-137	4226.5.1395.01	20	137
DOP N90-144	4226.5.1379.00	20	144

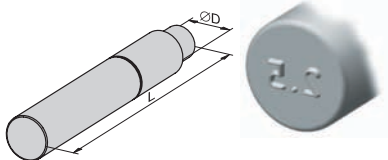
Header punch, serrated



...additional profiles upon request

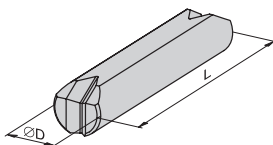
Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP N90-122-R	–	20	122
DOP N90-126-R	4226.5.1384...	20	126
DOP N90-130-R	4226.5.1354...	20	130
DOP N90-137-R	4226.5.1388...	20	137
DOP N90-144-R	4226.5.1387...	20	144

Header punch, with letters



Ordering description	Wafios no.	Dimensions in mm	
		ØD	L
DOP N90-122-S	–	20	122
DOP N90-126-S	–	20	126
DOP N90-130-S	–	20	130
DOP N90-137-S	–	20	137
DOP N90-144-S	–	20	144

Feeder



Ordering description	Wafios no.	Dimensions in mm	
		ØD ^{h6}	L
EKL 1045	4226.5.1308.01	10	45

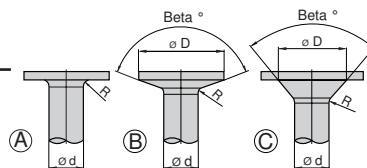
Spare parts

KBH N90

KBH N90A

1 clamping screw

M8 x 25

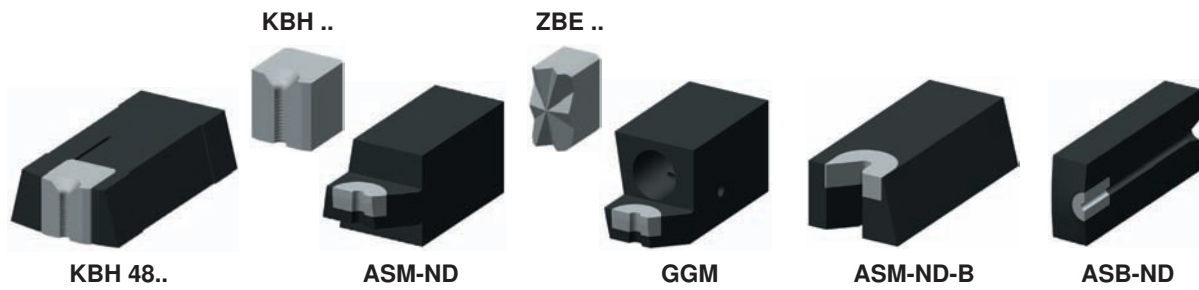


When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

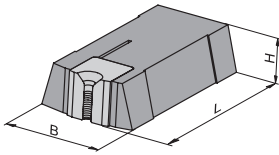
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: 10 pairs of KBE 16 $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

ND90, ND91, ND92-S

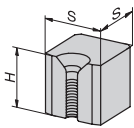


Toolholder



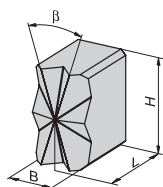
Ordering description	Machine type	Dimensions in mm		
		B	H	L
KBH 4816-ND	4233.5.1302.00+1303.00	48,2	16,4	78,5
KBH 4820-ND	4236.5.1302.00+1303.00	48,2	16,4	78,5
KBH 5020-ND-H	4236.5.1306.00+1307.00	50,2	20	78,5

Insert



Ordering description	Machine type	Dimensions in mm	
		S	H
KBE16-ND	ND90, ND91, ND92-S	16,5	16,5
KBE 20-ND	ND90, ND91, ND92-S	20,0	16,5
KBE 20-ND-H	ND90, ND91, ND92-S	20,0	20,0

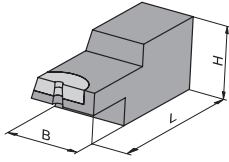
Insert for knife



Ordering description	Wafios no.	Dimensions in mm			
		B	H	L	β
ZBE 30.0-ND	4233.5.3920.00	16,5	28	28	30°
ZBE 40.1-ND	4233.5.3919.00	16,5	28	28	40°
ZBE 45.0-ND	4233.5.3921.00	16,5	28	28	45°

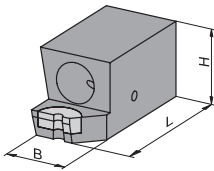
ND90, ND91, ND92-S

Cutting knife



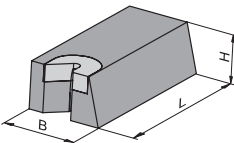
Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASM-ND-G	4233.5.1809...	27	26	61
ASM-ND-M	4233.5.3907...	23	22	48

Counter knife



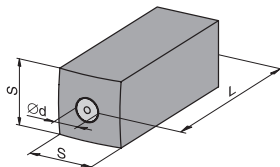
Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
GGM-G	4233.5.1808...	27	26	61
GGM-M	4233.5.3908...	24	24	48

Cutting knife

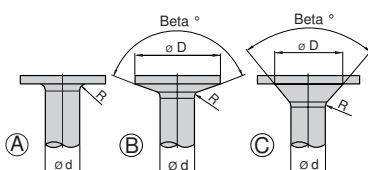


Ordering description	Wafios no.	Dimensions in mm		
		B	H	L
ASM-ND-B	4233.5.1213...	22	14	50

Cutting bush



Ordering description	Wafios no.	Dimensions in mm		
		S	L	Ød
ASB-ND	4233.5.1210...	20	55	8
ASB-ND	4233.5.1216...	20	55	12
ASB-ND	4236.5.1216...	20	55	12



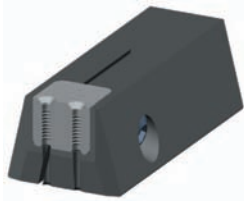
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Supply details: toolholder without insert

Ordering example: 10 pairs of KBE 16-ND $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

Two-wire machines

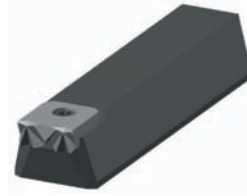
N11-DS, N21-DS, N31-DS, N41-DS, N51-DS, N61-DS



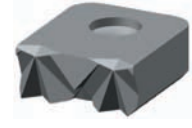
KBH ...



KBE ...

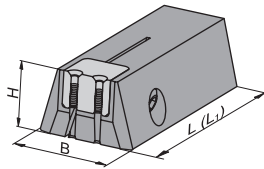


ZBH ...



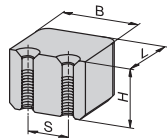
ZBE ...

Toolholder



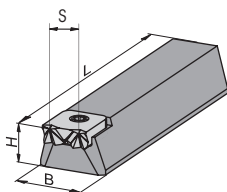
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
KBH 2812-DS-N11/N21	N11, N21	28	18	62	70
KBH 2812-DS-N31	N31	28	18	74	74
KBH 4022-DS-N41	N41	40	25	80	95
KBH 4522-DS-N51	N51	45	30	105	120
KBH 4522-DS-N61	N61	45	30	115	134

Insert



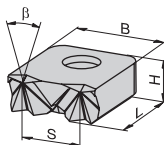
Ordering description	Machine type	Dimensions in mm			
		B	H	L	S
KBE 16-DS-N11/N21	N11, N21	16	14	16	–
KBE 22-DS-N41	N41	22	16,5	20	12
KBE 22-DS-N51	N51	22	16,5	20	10
KBE 22-DS-N61	N61	22	16,5	20	12

Toolholder for knife



Ordering description	Machine type	Dimensions in mm			
		B	H	L	S
ZBH 2014-DS-N11/N21	N11, N21	20	14	60	–
ZBH 2514-DS-N31	N31	25	14	68	10
ZBH 3215-DS-N41	N41	32	15	85	12
ZBH 3518-DS-N51	N51	35	18	110	12
ZBH 4022-DS-N61	N61	40	22	130	12

Insert for knife

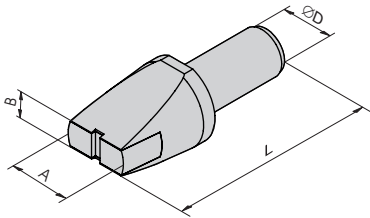


Ordering description	Machine type	Dimensions in mm				
		B	H	L	L ₁	β
ZBE 40-DS-N41	N41	16	7	20	10	40°
ZBE 40-DS-N51	N51	18	7	20	12	40°

Two-wire machines

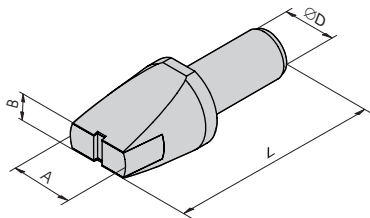
N11-DS, N21-DS, N31-DS, N41-DS, N51-DS, N61-DS

Header punch, plain



Ordering description	Machine type	Dimensions in mm			
		D	L	A	B
DOP N11-DS	N11-DS, N21-DS	11	50	—	—
DOP N31-DS	N31-DS	13	50	16	8
DOP N41-DS	N41-DS	16	60	20	10
DOP N51-DS	N51-DS	20	72	23	14
DOP N61-DS	N61-DS	25	85	26	15

Header punch, serrated

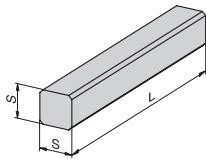


Ordering description	Machine type	Dimensions in mm			
		D	L	A	B
DOP N11-DS-R	N11-DS, N21-DS	11	50	—	—
DOP N31-DS-R	N31-DS	13	50	16	8
DOP N41-DS-R	N41-DS	16	60	20	10
DOP N51-DS-R	N51-DS	20	72	23	14
DOP N61-DS-R	N61-DS	25	85	26	15

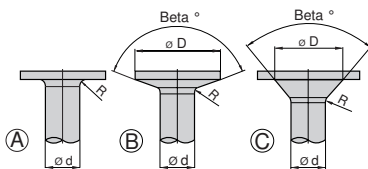


...additional profiles upon request

Feeder



Ordering description	Machine type	Dimensions in mm	
		H	L
EKL 0505-35	N11, N21	5	35
EKL 0707-50	N31	7	50
EKL 0808-55	N41	8	55
EKL 1010-60	N51, N61	10	60



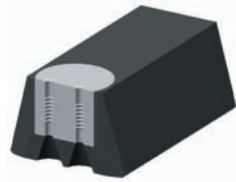
When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Spare parts	Pieces	Clamping screw	1 screwdriver
KBH 4022....	1	M8 x 25	—
KBH 4522....	1	M8 x 30	—
ZBH	10	78 22 114 (M4,5 x 10,5 / T20)	78 18 121 (T20)

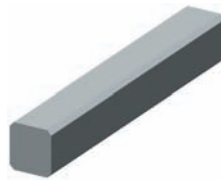
Supply details: toolholders are supplied with clamping screw but without insert

Ordering example: KBE 4022-DS-N41 $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

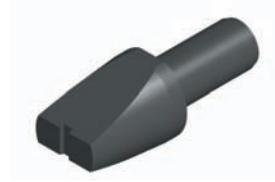
DS50, DS80



GKB ...

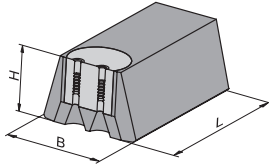


EKL ...



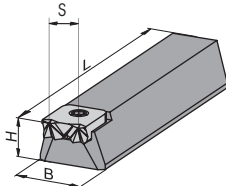
DOP ...

Braze nail making tool



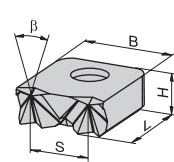
Ordering description	Machine type	Dimensions in mm			
		B	H	L	L ₁
GKB-DS50	DS50	40	25	92	90
GKB-DS80	DS80	56	36	120	120

Toolholder for knife



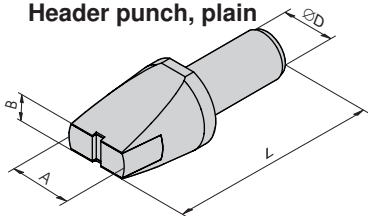
Ordering description	Machine type	Dimensions in mm		
		A	B	L
ZBH 2014-DS50	DS50	20	14	85
ZBH 2516-DS80	DS80	25	16	110

Insert for knife



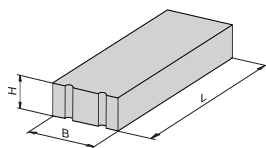
Ordering description	Machine type	Dimensions in mm			
		B	H	R	S
ZBH 2014-DS	DS50	20	14	60	–
ZBH 2516-DS	DS80	25	16	68	10

Header punch, plain



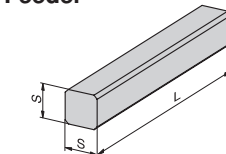
Ordering description	Machine type	Dimensions in mm			
		D	L	A	B
DOP-DS50	DS50	25	90	34	14
DOP-DS80	DS80	28	120	39	16

Anvil

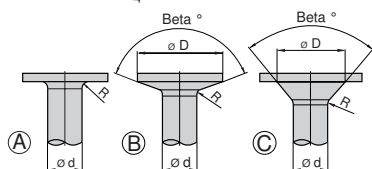


Ordering description	Machine type	Dimensions in mm		
		A	B	L
ABO-DS50	DS50	10	10	40
ABO-DS80	DS80	12	12	45

Feeder



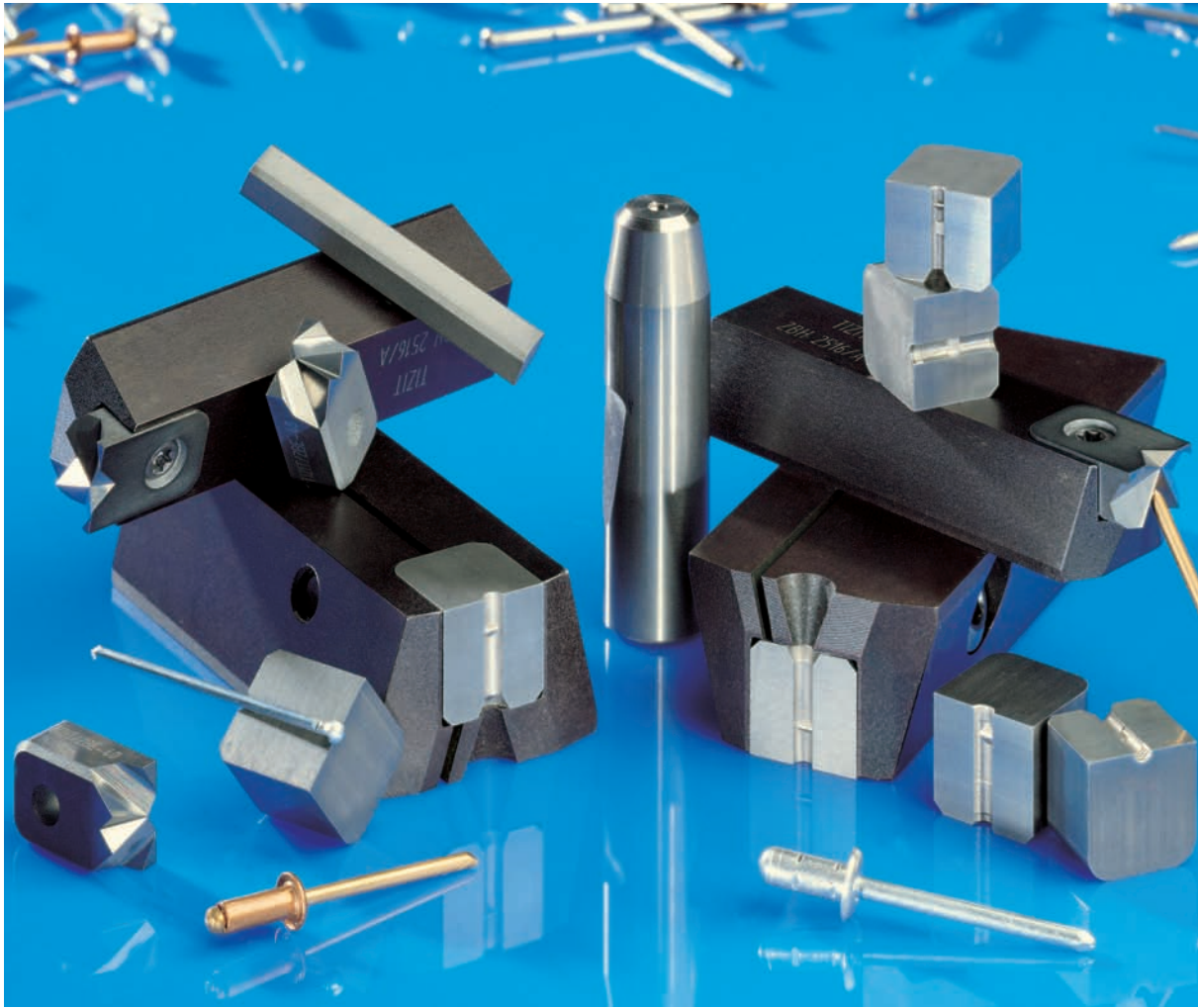
Ordering description	Machine type	Dimensions in mm	
		A	L
EKL 0707-50	DS50	7	50
EKL 1010-60	DS80	10	60



When ordering please state the ordering description and add the respective **wire diameter plus tolerance**, machine type and form of head.

Ordering example: GKB-DS50 $\varnothing d = 3,1^{+0,05}$; $\varnothing D = 7,0$; $R = 0,3$; $\beta = 160^\circ$

Special tools and accessories



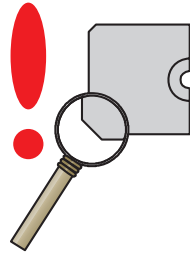
We also produce clamping inserts for rivets, special screws and nails upon request and to your specifications.

Our range of nail making tools includes CERATIZIT indenting rolls which are produced according to customer drawings for their specific applications.

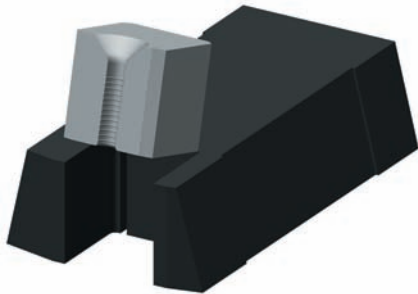


Mounting

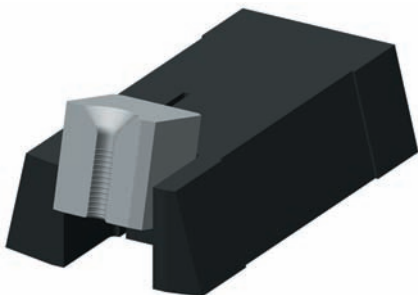
N80, N80D, N80R, ND90, ND91, ND92



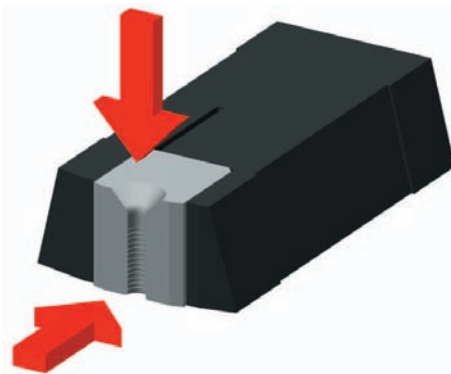
Do only use KBE 16ND and KBE 20 ND inserts with chamfered rear side



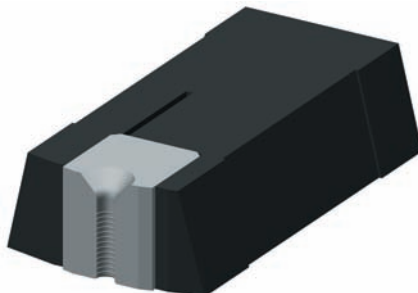
Carefully position tungsten carbide insert as shown in the picture



Press in manually as shown in picture



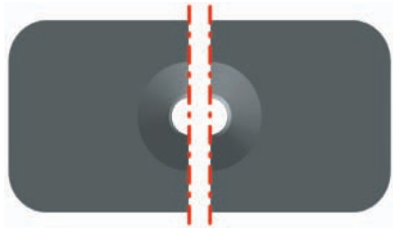
Position with soft hammer (plastic, copper) in seat



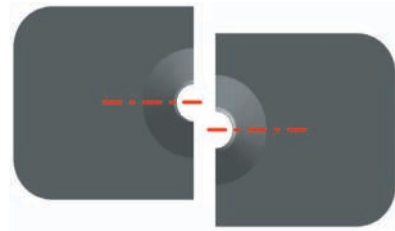
Tool ready for application

Installation of tools

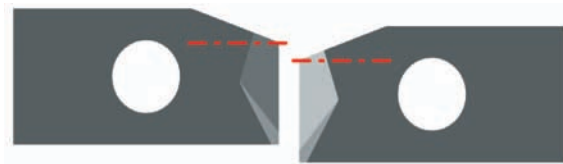
Correct mounting



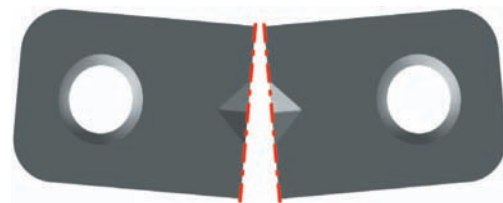
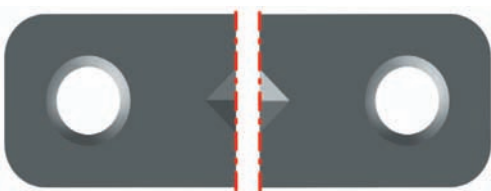
Incorrect mounting



Axial displacement
e.g.: KBE 12



Height displacement
e.g.: ZB 40.1 N90



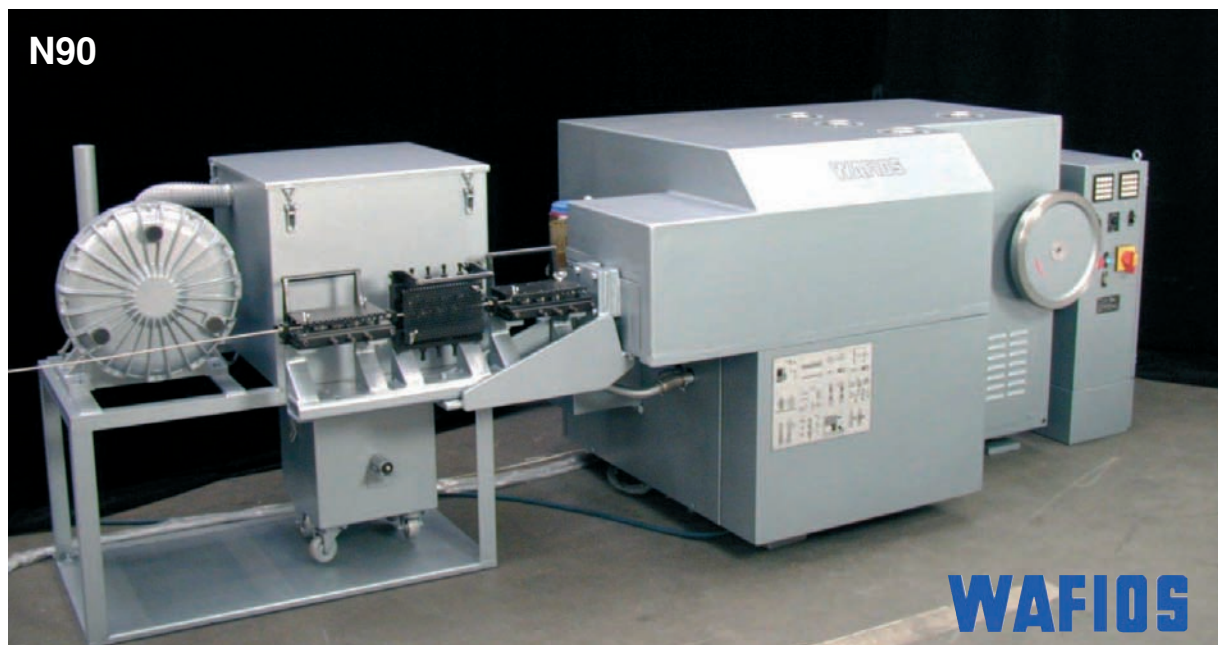
Angle displacement
e.g.: ZBE 40

CERATIZIT tooling in operation

Good profitability and quality guaranteed

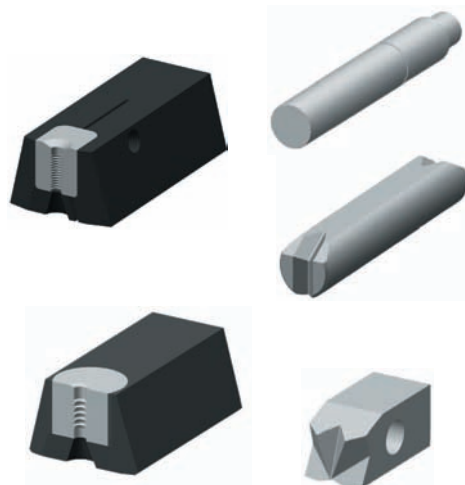
Well-known machine manufacturers such as Wafios count on high profitability combined with reliable quality, ergonomic design and flexible logistics. On the high-performance wire nail machine N90, for example, up to 800 wire nails can be produced per minute with consistent quality and without the need to rework. This is possible thanks to the machine's technical conception, namely the separate cutting and head forming units.

Furthermore, the application of high-quality CERATIZIT tools clearly optimises machine utilisation.



Flexibility is all

The quality of the tools contributes to success: CERATIZIT tools are characterised by high flexibility. The variable toolholders can be applied for various nail dimensions and make a quick tool change possible. In this way changeover time is reduced and the process is optimised. CERATIZIT carbide tools and inserts guarantee maximum precision and reduced wear. In this way they ensure better machine utilisation, guarantee long tool life with consistent quality and help to reduce direct and indirect production costs.

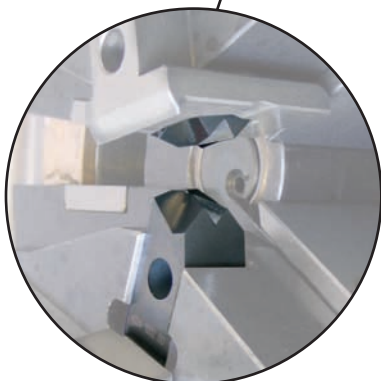
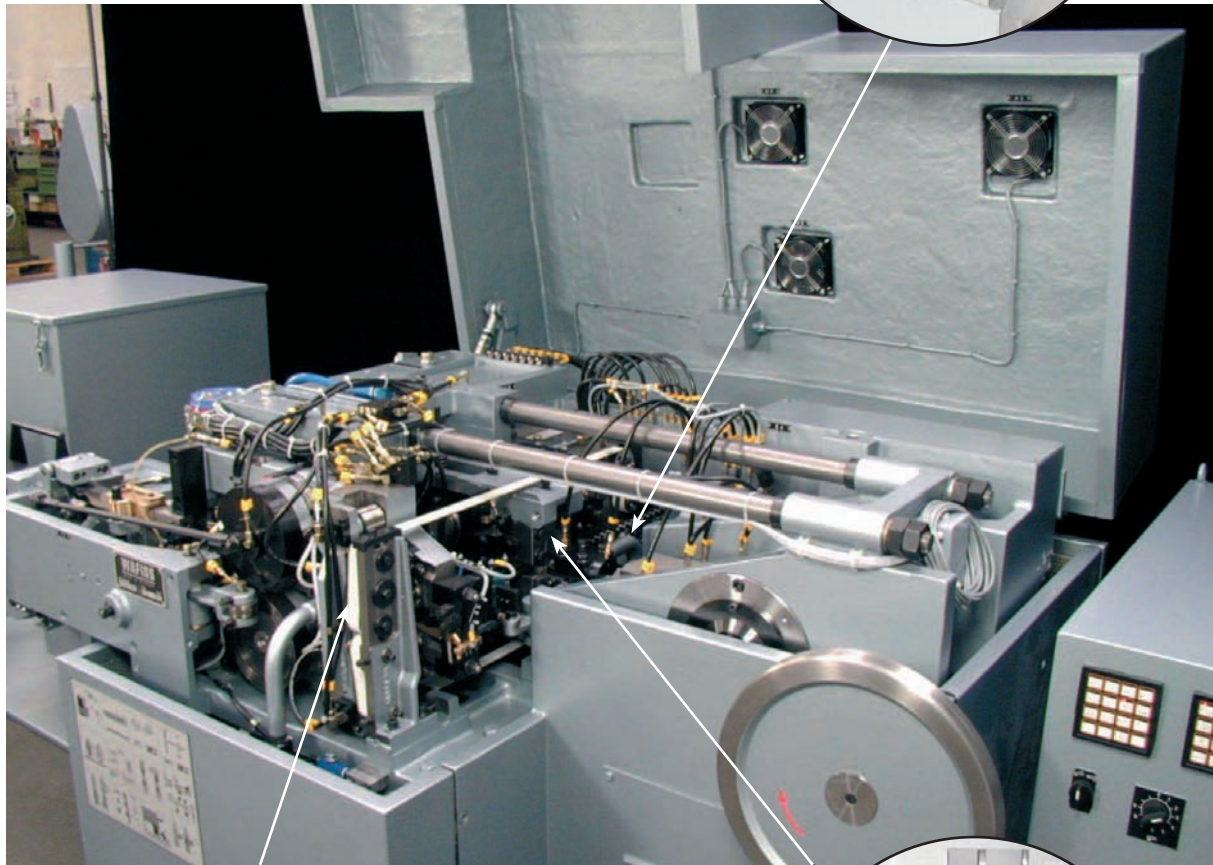
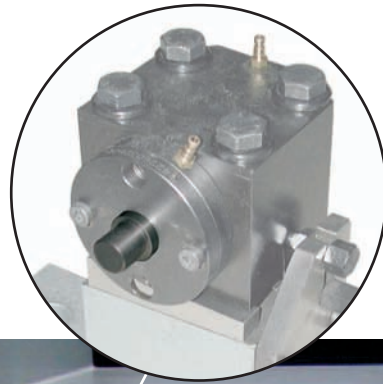


Short distances when heading – long tool life

Independent of the length of the wire nails, heading on the N90 machine is carried out only for the wire part that is needed to form the head. This results in several advantages: shorter guide rolls, reduced wear and improved centring.

In combination with a precisely guided CERATIZIT header punch (plain, serrated or with letters) of high-quality and a short stroke roll, heads can be formed precisely.

CERATIZIT header punch



CERATIZIT clamping holder with clamping insert



CERATIZIT die holder with cutting die insert

Blank lined writing area for notes.

[Redacted content]

Blank lined writing area with horizontal grey lines on a white background.

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