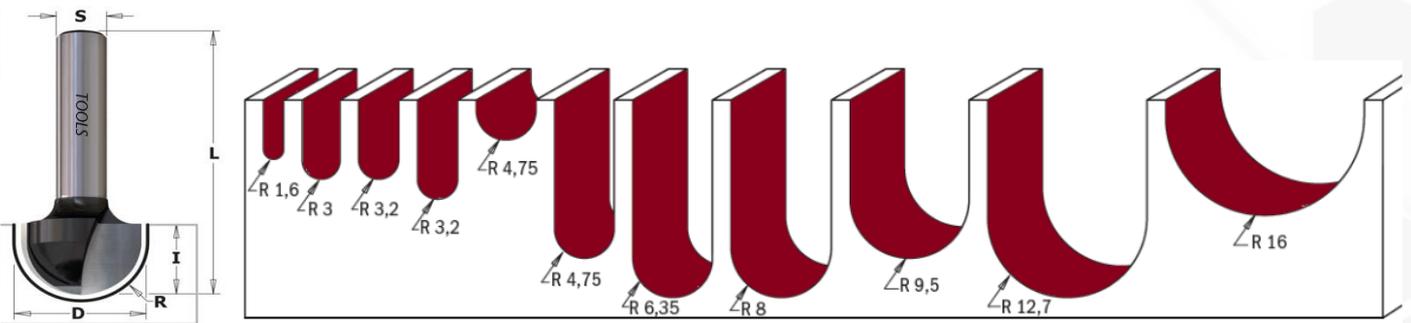


## CONVEX RADIUS CUTTER

art. FR914

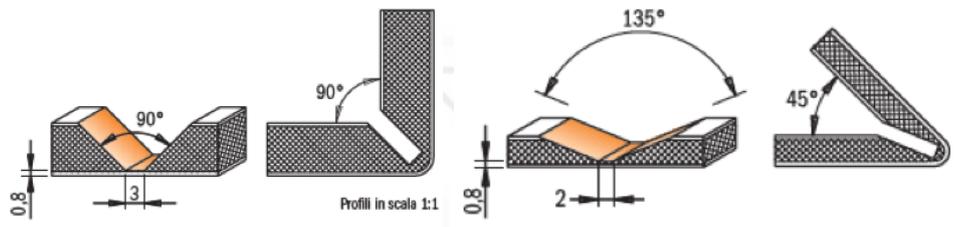
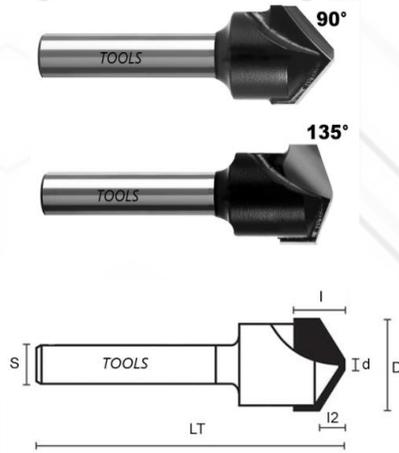


R	D	I	L	S	Article
1,6	3,2	9,5	50,8	6	FR914 01
1,6	3,2	9,5	50,8	8	FR914 02
3	6	12,6	50,8	6	FR914 03
3	6	12,8	50,8	8	FR914 04
3	6	27	70	6	FR914 05
4	8	32	80	8	FR914 06
4,75	9,5	6,4	50,8	6	FR914 07
4,75	9,5	6,4	50,8	8	FR914 08
6	12	35	80	12	FR914 09
6,35	12,7	9,4	50,8	6	FR914 10
6,35	12,7	9,4	50,8	8	FR914 11
6,35	12,7	31,7	73	12	FR914 12

R	D	I	L	S	Article
8	15,8	9,5	50,8	6	FR914 13
8	15,8	9,5	50,8	8	FR914 14
9,5	19	11,3	50,8	6	FR914 15
9,5	19	11,3	50,8	8	FR914 16
9,5	19	25	63,5	8	FR914 17
9,5	19	31,7	73	12	FR914 18
11	22	25,4	63,5	8	FR914 19
12,7	25,4	16	73	8	FR914 20
12,7	25,4	31,7	63,5	12	FR914 21
16	31,7	18,5	58,8	12	FR914 22
19,05	38,1	31,7	69,8	12	FR914 23
25,4	50,8	31,7	69,8	12	FR914 24

## GROOVING AND BENDING CUTTER

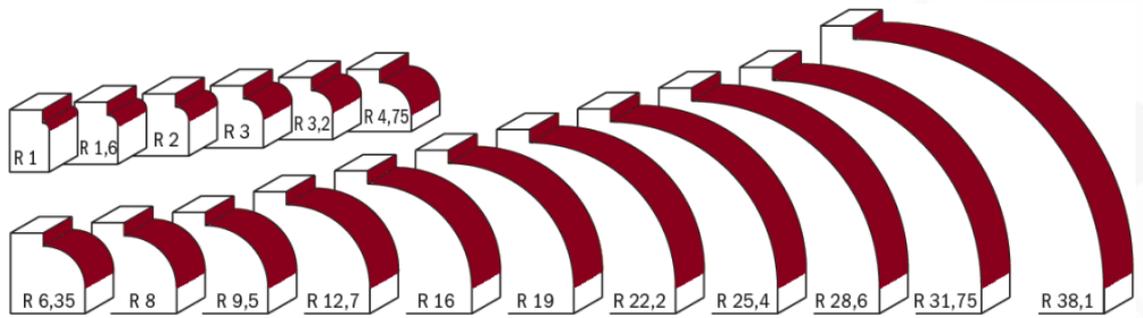
art. FR915



D	I	Angle	LT	S	Article
18	7,4	90°	60	6	FR915 01
18	7,4	90°	60	8	FR915 02
18	3,3	135°	60	6	FR915 03
18	3,3	135°	60	8	FR915 04

## CONCAVE RADIUS CUTTER

art. FR938

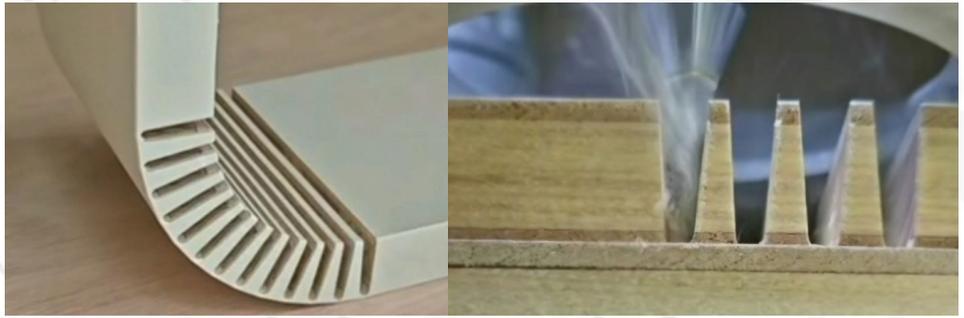
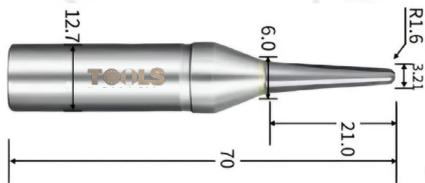


R	D	I	S	Article
1	14,7	10	8	FR938 01
1,6	15,9	12,7	6	FR938 02
1,6	15,9	12,7	8	FR938 03
2	16,7	12,7	6	FR938 04
3	18,7	12,7	6	FR938 05
3	18,7	12,7	8	FR938 06
3,2	19,1	12,7	6	FR938 07
3,2	19,1	12,7	8	FR938 08
4,75	22,2	12,7	6	FR938 09
4,75	22,2	12,7	8	FR938 10
6,35	25,4	12,7	6	FR938 11
6,35	25,4	12,7	8	FR938 12
6,35	25,4	12,7	12	FR938 13
8	28,6	12,7	6	FR938 14

R	D	I	S	Article
8	28,6	12,7	8	FR938 15
9,5	31,7	16	6	FR938 16
9,5	31,7	16	8	FR938 17
9,5	31,7	16	12	FR938 18
12,7	38,1	19	8	FR938 19
12,7	38,1	19	12	FR938 20
16	44,5	22	8	FR938 21
16	44,5	22	12	FR938 22
19	50,8	25,4	12	FR938 23
22,2	57,1	28,5	12	FR938 24
25,4	63,5	33,3	12	FR938 25
28,6	76,2	38,1	12	FR938 26
31,75	82,5	44,4	12	FR938 27
38,1	88,9	44,4	12	FR938 28

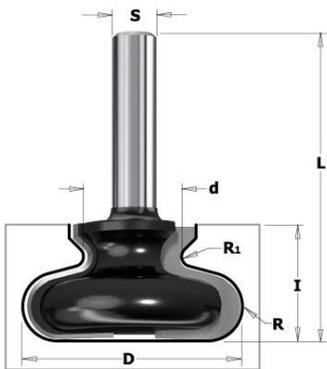
# TCT TAPPERRED SLOT BIT

art. TCT01



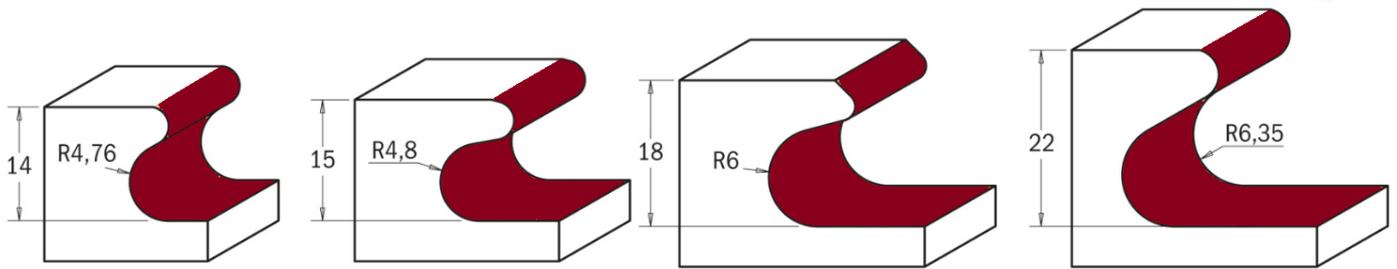
# HANDLE CUTTERS

art. HAN 01



**Use:** Create drawers and doors with lightweight wooden handles! These cutters allow you to create them in two styles: with a contoured profile on the door or a Continental style in hardwood.

D	d	T1	I	R	R1	L	S	Article
19,05	9,5	14	19,05	4,76	2,4	57,2	8	HAN 01 01
29	11	15	20	4,8	2,3	60	8	HAN 01 02
29	11	15	20	4,8	2,3	60	12	HAN 01 03
38,1	17	18	20,7	6	1,8	55,5	8	HAN 01 04
47,6	24	22	28,5	6,35	3,2	66,6	8	HAN 01 05



## ARC-SHAPED INTEGRATED MILLING CUTTER

art. FRR10

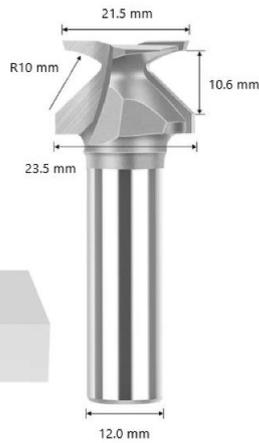
R10



Seamless

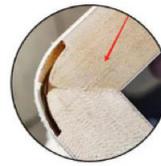


Suitable for thicknesses of 9-12mm



art. FRR18

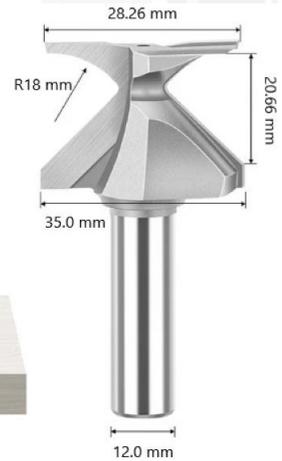
R18



Seamless



Suitable for thicknesses of 14-22mm



art. FRR30

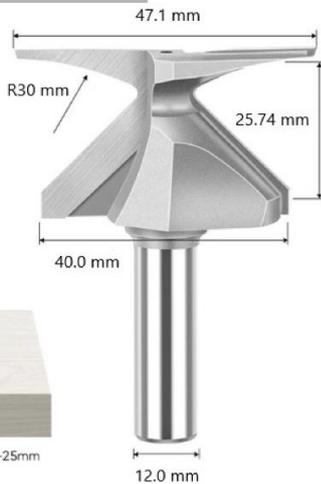
R30



Seamless



Suitable for thicknesses of 16-25mm



art. FRR50

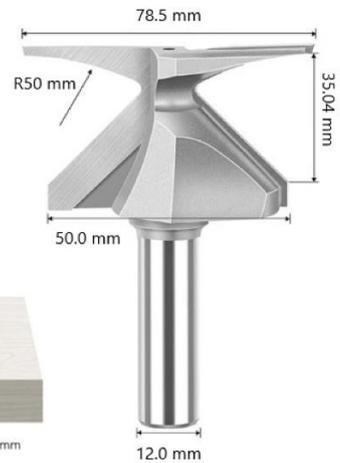
R50



Seamed



Suitable for thicknesses of 18-28mm

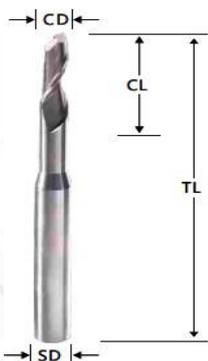


## HELICAL CUTTERS FOR ALUMINIUM Z1 HMI

art. PALL

SOLID CARBIDE

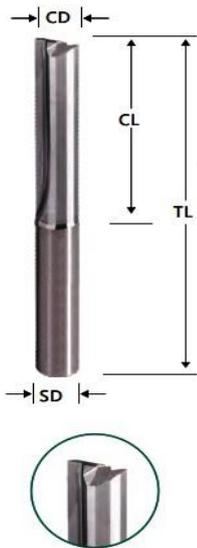
**Use:** Ideal for outlining sectioning and copying on aluminum profiles and plastic material, wood and derivatives with surprising effectiveness



Diameter	Length Cut	Tot Length	Shank	Tooth	Article
5	14	60	8	1	PALL514608
5	16/35	80	8	1	PALL51635808
6	14/35	80	8	1	PALL61435808
6	30/55	100	8	1	PALL630551008
8	14	80	8	1	PALL814808
8	30	100	8	1	PALL8301008
10	30	80	10	1	PALL10308010
10	30	100	10	1	PALL103010010

## HELICAL CUTTERS Z2 HMI

art. FPEP 2



**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines

Diameter	Length Cut	Tot Length	Shank	Tooth	Article
2	10	30	3	2	FPEP2210303
3	25	50	6	2	FPEP2325506
4	25	50	6	2	FPEP2425506
5	30	60	6	2	FPEP2530606
6	35	80	6	2	FPEP2635806
8	32	80	8	2	FPEP2832808
8	42	100	8	2	FPEP28421008
10	32	80	10	2	FPEP210328010
10	42	100	10	2	FPEP2104210010
12	32	80	12	2	FPEP212328012
12	42	80	12	2	FPEP212428012

## HELICAL CUTTERS Z1 HMI

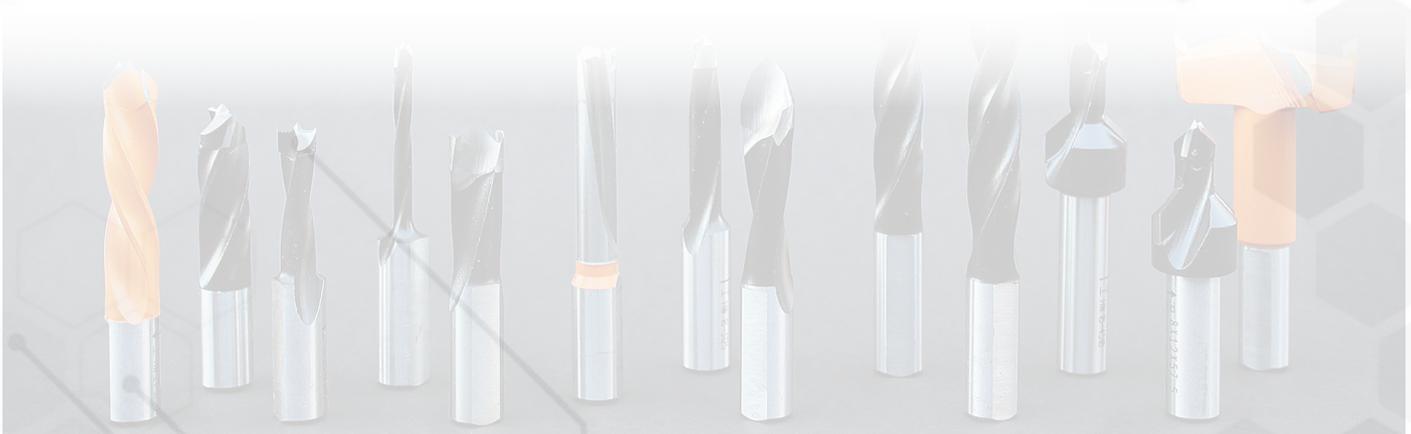
art. FPEP1

NB. POSITIVE HELIX

**Use:** Ideal for outlining sectioning and copyng on aluminum profiles and plastic material, wood and derivatives whith surprising effectivennes



Diameter	Length Cut	Tot Length	Shank	Tooth	Article
3	17	50	6	1	FPEP1317506
3	25	50	6	1	FPEP1325506
4	17	50	6	1	FPEP1417506
4	25	50	6	1	FPEP1425506
5	22	50	6	1	FPEP1522506
5	30	50	6	1	FPEP1530506
6	22	60	6	1	FPEP1622606
6	35	70	6	1	FPEP1635706
6	42	80	6	1	FPEP1642806



## HELICAL CUTTERS Z1 HMI

art. FPEN1

NB. NEGATIVE HELIX

**Use:** Ideal for outlining sectioning and copyng on aluminum profiles and plastic material, wood and derivatives whith surprising effectivennes



Diameter	Length Cut	Tot Length	Shank	Tooth	Article
3	17	50	6	1	FPEN1317506
3	25	50	6	1	FPEN1325506
4	17	50	6	1	FPEN1417506
4	25	50	6	1	FPEN1425506
5	22	50	6	1	FPEN1522506
5	30	50	6	1	FPEN1530506
6	22	60	6	1	FPEN1622606
6	35	70	6	1	FPEN1635706
6	42	80	6	1	FPEN1642806

## HELICAL CUTTERS Z2 HMI

art. FPEP2

NB. POSITIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines.



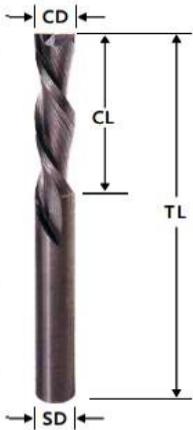
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
3	17	50	6	2	FPEP2317506
3	25	50	6	2	FPEP2325506
4	17	50	6	2	FPEP2417506
4	25	50	6	2	FPEP2425506
5	17	50	6	2	FPEP2517506
5	22	55	6	2	FPEP2522556
5	30	60	6	2	FPEP2530606
6	22	60	6	2	FPEP2622606
6	35	70	6	2	FPEP2635706
6	42	80	6	2	FPEP2642808
8	32	80	8	2	FPEP2832808
8	42	90	8	2	FPEP2842908
10	32	80	10	2	FPEP210328010
10	42	100	10	2	FPEP2104210010
10	52	100	10	2	FPEP2105210010
12	32	80	12	2	FPEP212328012
12	42	100	12	2	FPEP2124210012
12	52	100	12	2	FPEP2125210012
14	42	100	14	2	FPEP2144210014
14	55	110	14	2	FPEP2145511014
16	42	100	16	2	FPEP2164210016
16	55	110	16	2	FPEP2165511020
20	55	110	20	2	FPEP2205511020
20	72	120	20	2	FPEP2207212020
20	180	230	20	2	FPEP22018023020
25	180	230	25	2	FPEP22518023025

## HELICAL CUTTERS Z2 HMI

art. FPEN2

NB. NEGATIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines

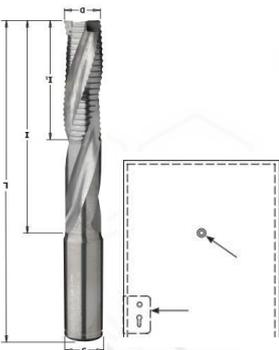


Diameter	Length Cut	Tot Length	Shank	Tooth	Article
3	17	50	6	2	FPEN2317506
3	25	50	6	2	FPEN2325506
4	17	50	6	2	FPEN2417506
4	25	50	6	2	FPEN2425506
5	17	50	6	2	FPEN2517506
5	22	55	6	2	FPEN2522556
5	30	60	6	2	FPEN2530606
6	22	60	6	2	FPEN2622606
6	35	70	6	2	FPEN2635706
6	42	80	6	2	FPEN2642808
8	32	80	8	2	FPEN2832808
8	42	90	8	2	FPEN2842908
10	32	80	10	2	FPEN210328010
10	42	100	10	2	FPEN2104210010
10	52	100	10	2	FPEN2105210010
12	32	80	12	2	FPEN212328012
12	42	100	12	2	FPEN2124210012
12	52	100	12	2	FPEN2125210012
14	42	100	14	2	FPEN2144210014
14	55	110	14	2	FPEN2145511014
16	42	100	16	2	FPEN2164210016
16	55	110	16	2	FPEN2165511020
20	55	110	20	2	FPEN2205511020
20	72	120	20	2	FPEN2207212020
20	180	230	20	2	FPEN22018023020
25	180	230	25	2	FPEN22518023025

## HELICAL CUTTERS Z3 HMI FOR LOCKS

art. FPEPR3

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



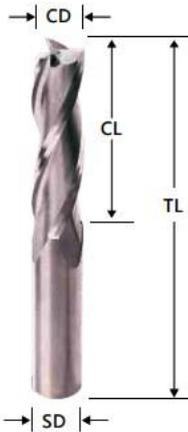
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
12	80	135	12	3	FPEPR38013512
14	55/100	150	14	3	FPEPR3145515014
14	100	150	14	3	FPEPR31410015014
16	55/100	150	16	3	FPEPR3165515016
16	100	150	16	3	FPEPR31610015016

## HELICAL CUTTERS Z3 HMI

art. FPEP3

NB. POSITIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



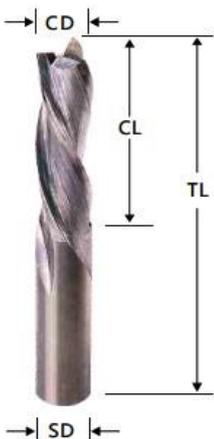
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
6	22	60	6	3	FPEP3622606
6	35	75	6	3	FPEP3635756
8	32	80	8	3	FPEP38328010
10	32	80	10	3	FPEP310328010
10	42	100	10	3	FPEP3104210010
10	52	100	10	3	FPEP3105210010
12	32	80	12	3	FPEP312328012
12	42	100	12	3	FPEP3124210012
12	52	100	12	3	FPEP3125210012
14	42	100	14	3	FPEP3144210014
14	60	110	14	3	FPEP3146011014
16	42	100	16	3	FPEP3164210016
16	55	110	16	3	FPEP3165511016
20	55	110	20	3	FPEP3205511020
20	72	120	20	3	FPEP3207212020
20	102	150	20	3	FPEP32010215020
20	180	230	20	3	FPEP32018023020
25	180	230	25	3	FPEP32518023025

## HELICAL CUTTERS Z3 HMI

art. FPEN3

NB. NEGATIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



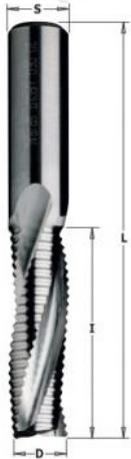
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
6	22	60	6	3	FPEN3622606
6	35	75	6	3	FPEN3635756
8	32	80	8	3	FPEN38328010
10	32	80	10	3	FPEN310328010
10	42	100	10	3	FPEN3104210010
10	52	100	10	3	FPEN3105210010
12	32	80	12	3	FPEN312328012
12	42	100	12	3	FPEN3124210012
12	52	100	12	3	FPEN3125210012
14	42	100	14	3	FPEN3144210014
14	60	110	14	3	FPEN3146011014
16	42	100	16	3	FPEN3164210016
16	55	110	16	3	FPEN3165511016
20	55	110	20	3	FPEN3205511020
20	72	120	20	3	FPEN3207212020
20	102	150	20	3	FPEN32010215020
20	180	230	20	3	FPEN32018023020
25	180	230	25	3	FPEN32518023025

## HELICAL CUTTERS Z3 HMI CHIP BREAKER

art. FPEPR3

NB. POSITIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



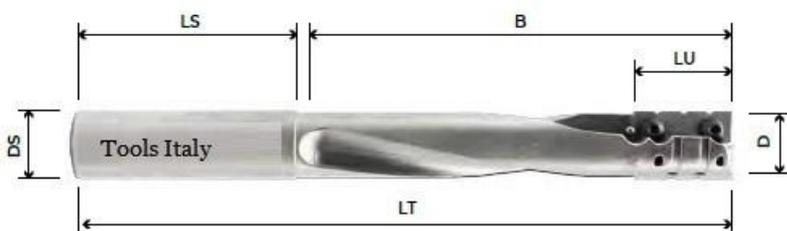
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
6	22	75	6	3	FPEPR3622756
6	35	75	6	3	FPEPR3635756
8	32	80	8	3	FPEPR3832808
8	42	90	8	3	FPEPR3842908
10	32	80	10	3	FPEPR310328010
10	42	100	10	3	FPEPR3104210010
10	52	100	10	3	FPEPR3105210010
12	32	80	12	3	FPEPR312328012
12	42	100	12	3	FPEPR3124210012
12	52	100	12	3	FPEPR3125210012
14	42	100	14	3	FPEPR3144210014
14	60	110	14	3	FPEPR3146011014
16	42	100	16	3	FPEPR3164210016
16	55	110	16	3	FPEPR3165511016
16	72	120	16	3	FPEPR3167212016
20	55	110	20	3	FPEPR3205511020
20	72	120	20	3	FPEPR3207212020
20	102	150	20	3	FPEPR32010215020
20	180	230	20	3	FPEPR32018023020
25	180	230	25	3	FPEPR32518023025

## AVANTECH 4 KNIVES DOOR

art. TFSMP

**Use:** Shank cutter for door locks with interchangeable reversible knives and body in HDM anti-vibration heavy metal

Diameter	Use. Length	A. Teeth	Thickness	S. Diameter	Tot. Length	Article
14	23	2	95	14	150	TFSMP14232
16	23	2	95	16	150	TFSMP16232



Spare parts	Dimension
	23x6x1,5
	23x7x1,5
	23x6x1,5
	23x7x1,5
	M3x4x6 T9

## HELICAL CUTTERS Z3 HMI CHIP BREAKER

art. FPENR3

NB. NEGATIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



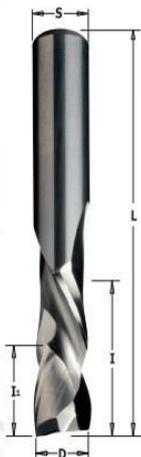
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
6	22	75	6	3	FPENR3622756
6	35	75	6	3	FPENR3635756
8	32	80	8	3	FPENR3832808
8	42	90	8	3	FPENR3842908
10	32	80	10	3	FPENR310328010
10	42	100	10	3	FPENR3104210010
10	52	100	10	3	FPENR3105210010
12	32	80	12	3	FPENR312328012
12	42	100	12	3	FPENR3124210012
12	52	100	12	3	FPENR3125210012
14	42	100	14	3	FPENR3144210014
14	60	110	14	3	FPENR3146011014
16	42	100	16	3	FPENR3164210016
16	55	110	16	3	FPENR3165511016
16	72	120	16	3	FPENR3167212016
20	55	110	20	3	FPENR3205511020
20	72	120	20	3	FPENR3207212020
20	102	150	20	3	FPENR32010215020
20	180	230	20	3	FPENR32018023020
25	180	230	25	3	FPENR32518023025

## MILLING WITH POSITIVE/NEGATIVE HELICAL CUTTER

art. FPEFPEUD

EXCELLENT FINISH ON BOTH SIDES OF THE PANEL

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



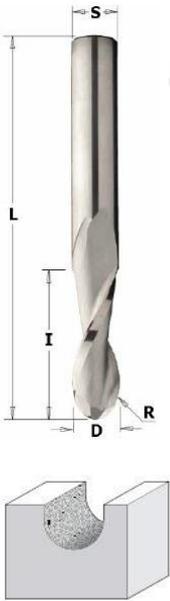
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
4	5/15	50	6	1+1	FPEUD41550611
5	8/22	60	6	1+1	FPEUD52260611
6	8/22	60	6	1+1	FPEUD62260611
8	7/32	80	8	2+2	FPEUD83280822
10	7/32	80	10	2+2	FPEUD1032801022
10	7/42	100	10	2+2	FPEUD10421001022
12	7/42	100	12	2+2	FPEUD12421001222
12	7/52	110	12	2+2	FPEUD12521101222
16	18/55	110	16	2+2	FPEUD16551101622
20	18/55	110	20	3+3	FPEUD20551102033

## ROUND HEAD HELICAL CUTTERS Z2 HMI

art. FPEPS2

POSITIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines.

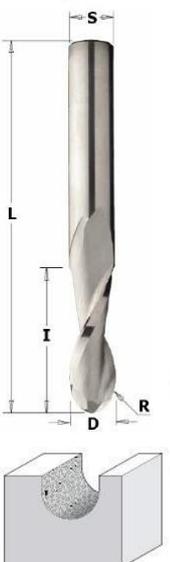


Diameter	Length Cut	Tot Length	Shank	Tooth	Article
2	8	50	6	2	FPEPS228506
3	12	50	6	2	FPEPS2312506
4	15	50	6	2	FPEPS2415506
5	15	50	6	2	FPEPS2515506
6	22	60	6	2	FPEPS2622606
6	27	70	6	2	FPEPS2627706
8	22	60	8	2	FPEPS2822608
8	27	70	8	2	FPEPS2827708
10	32	80	10	2	FPEPS210328010
10	42	100	10	2	FPEPS2104210010
12	32	80	12	2	FPEPS212328012
12	42	100	12	2	FPEPS2124210012
14	42	100	14	2	FPEPS2144210014
14	52	100	14	2	FPEPS2145210014
16	42	100	16	2	FPEPS2164210016
16	55	100	16	2	FPEPS2165510016
20	52	100	20	2	FPEPS2205210020
20	75	130	20	2	FPEPS2207513020
20	102	160	20	2	FPEPS22010216020

## ROUND HEAD HELICAL CUTTERS Z3 HMI

art. FPEPS3

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



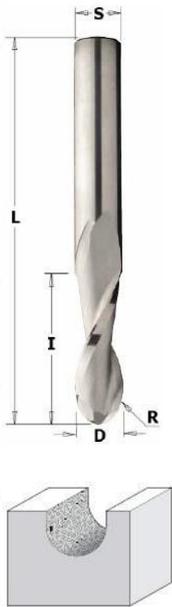
Diameter	Length Cut	Tot Length	Shank	Tooth	Article
8	22	60	8	3	FPEPS382260
8	27	70	8	3	FPEPS382770
10	32	80	10	3	FPEPS3103280
10	42	100	10	3	FPEPS31042100
12	32	80	12	3	FPEPS3123280
12	42	100	12	3	FPEPS31242100
14	42	100	14	3	FPEPS31442100
14	52	100	14	3	FPEPS31452100
16	42	100	16	3	FPEPS31642100
16	55	100	16	3	FPEPS31655100
20	52	100	20	3	FPEPS32052100
20	75	130	20	3	FPEPS32075130
20	102	160	20	3	FPEPS320102160

## ROUND HEAD HELICAL CUTTERS Z2 HMI

art. FPENS2

NEGATIVE HELIC

**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines.

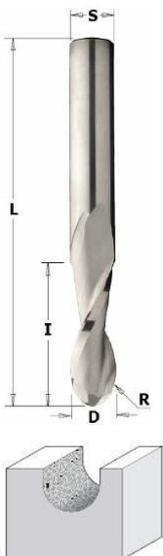


Diameter	Length Cut	Tot Length	Shank	Tooth	Article
2	8	50	6	2	FPENS228506
3	12	50	6	2	FPENS2312506
4	15	50	6	2	FPENS2415506
5	15	50	6	2	FPENS2515506
6	22	60	6	2	FPENS2622606
6	27	70	6	2	FPENS2627706
8	22	60	8	2	FPENS2822608
8	27	70	8	2	FPENS2827708
10	32	80	10	2	FPENS210328010
10	42	100	10	2	FPENS2104210010
12	32	80	12	2	FPENS212328012
12	42	100	12	2	FPENS2124210012
14	42	100	14	2	FPENS2144210014
14	52	100	14	2	FPENS2145210014
16	42	100	16	2	FPENS2164210016
16	55	100	16	2	FPENS2165510016
20	52	100	20	2	FPENS2205210020
20	75	130	20	2	FPENS2207513020
20	102	160	20	2	FPENS22010216020

## ROUND HEAD HELICAL CUTTERS Z3 HMI

art. FPENS3

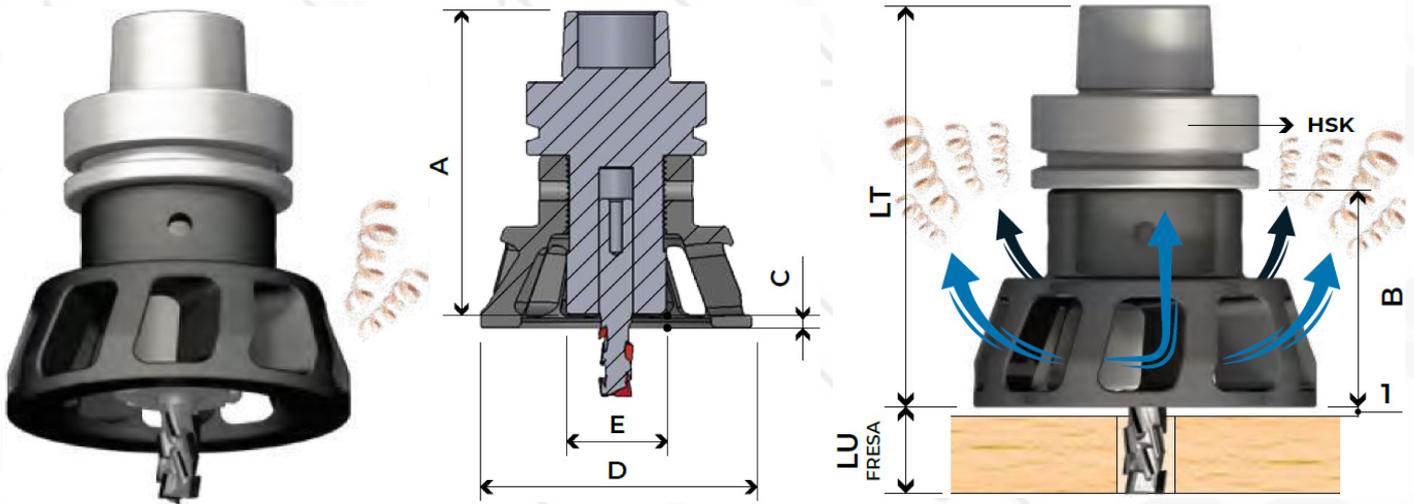
**Use:** Ideal for contouring, sectioning and shaping to measure on solid wood and its derivatives on CNC machines



Diameter	Length Cut	Tot Length	Shank	Tooth	Article
8	22	60	8	3	FPENS382260
8	27	70	8	3	FPENS382770
10	32	80	10	3	FPENS3103280
10	42	100	10	3	FPENS31042100
12	32	80	12	3	FPENS3123280
12	42	100	12	3	FPENS31242100
14	42	100	14	3	FPENS31442100
14	52	100	14	3	FPENS31452100
16	42	100	16	3	FPENS31642100
16	55	100	16	3	FPENS31655100
20	52	100	20	3	FPENS32052100
20	75	130	20	3	FPENS32075130
20	102	160	20	3	FPENS320102160

## DUST AND CHIP EXTRACTOR FOR CNC NESTING - TURBOFAN HIGH PRECISION

art. TFAN16



**Description:** Dust and chip extractor turbine with high precision EOC16 collet 0.015mm and high clamping force. Made of special wear-resistant steel with external phosphating treatment. Opening with special key for EOC16 chucks code RIC9013016. CNC nesting with high cleanliness of the work table panel and maximum performance.

D	LT	Chuck	Collet	Rotation	Ring	A	B	C	E	Article
95	112	HSK63F	EOC16	DX	EOC16	107	61	5	35	TFAN16

## COLLET EOC16

ER 25	D	Article	D	Article
	2	ECALL01 01	8	ECALL01 07
	3	ECALL01 02	9	ECALL01 08
	4	ECALL01 03	10	ECALL01 09
	5	ECALL01 04	12	ECALL01 10
	6	ECALL01 05	14	ECALL01 11
	7	ECALL01 06	16	ECALL01 12

art. ECALL01

## SPECIAL KEY FOR TURBOFAN

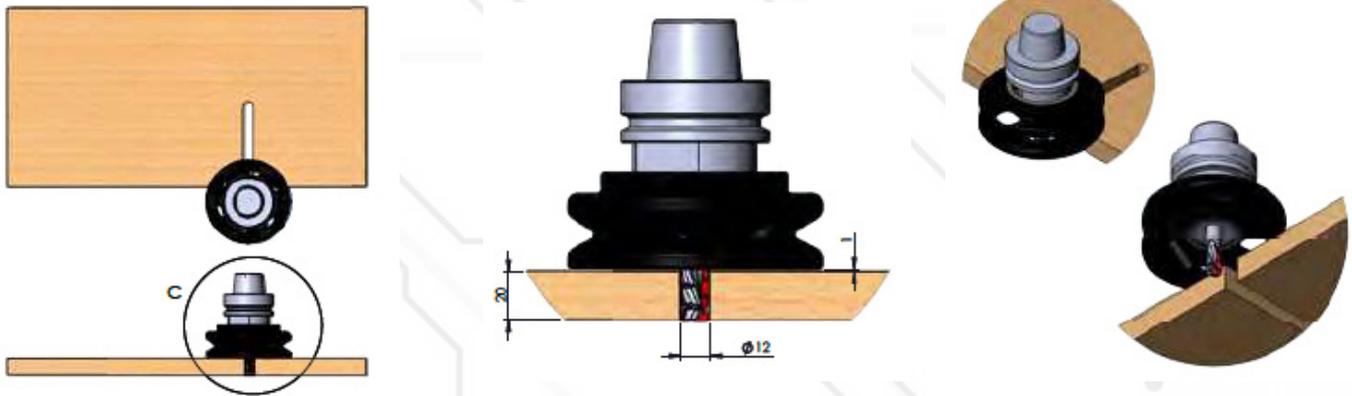
art. T529/2

KEY	D	LT	Article	Net Price
	60	200	T529/2	€ 18,00

**Description:** Special key for TFAN16 - TURBOFAN High Precision EOC16.

# DUST AND CHIP EXTRACTOR FOR CNC NESTING - TURBOFAN

art. TFAN01



**Description:** Collet nut with chip extraction turbine applicable on tools holders HSKER32 HSKER40 EOC25 (T529/1) and HYDRO ETP. The turbine replaces the standard collet nut or is externally applied to the HYDRO ETP spindle. Maximum extraction of the chip on the worked surface. Recommended for nesting operations with sacrificed panel where the chips cannot evacuate in the low part of the panel. The extraction of the chip allows an increase in durability and finishing of the tool. The alloy body of the turbine is coated to increase hardness and a steel ring is fitted inside. Possibility to use it from 10000 rpm up to 20000 rpm. Workable materials: chipboard, mdf, corian, osb, multilayer, plastic materials. Note: Use the turbine as possible as near the panel (1 mm min - 3 mm max) guaranteeing a vacuum and therefore a better evacuation of the chip. To block and unlock the turbine no special key is required a standard key for ER40 is required.

D	B	Ring	Type	Article
105	40	ER32		TFAN01 01
105	40	ER40		TFAN01 02
105	40	EOC25		TFAN01 03
100	40		HYDRO ETP D12	TFAN01 04
100	40		HYDRO ETP D16 / D20	TFAN01 05

GHIERA IN ACCIAIO INTERNA PER EVITARE QUALSIASI FORMA DI FRIZIONAMENTO E USURA CON IL MANDRINO PORTAPINZA.

SIDE STEEL RING NUT TO AVOID ANY KIND OF CLUTCHING AND WEARING WITH THE TOOL HOLDER.

TURBINA IN ALLUMINIO (CON RIVESTIMENTO ESTERNO ANTI-USURA) CALETTATA E FISSATA CON GRANI ALLA GHIERA IN ACCIAIO INTERNA.

TURBINE IN ALUMINUM (WITH EXTERNAL ANTI-WEAR COATING) FIXED WITH GRAINS TO THE INSIDE STEEL RING.



APERTURE LATERALI PER AUMENTARE LA DEPRESSIONE E ALLEGGERIRE LA TURBINA.  
SIDE OPENINGS TO INCREASE THE VACUUM AND LIGHTEN THE TURBINE.

FESSURE PER CHIAVI DI SERRAGGIO STANDARD PER HSK63 ER40 A SETTORE DIN6388 CODICE AEM8029002. (LA CHIAVE SPECIALE DI APERTURA E SERRAGGIO DELLA TURBINA NON E' PIU' NECESSARIA).

SLOTS FOR STANDARD TIGHTENING KEYS FOR HSK63 ER40 IN SECTOR DIN6388 CODE AEM8029002 (THE TURBINE OPENING AND TIGHTENING KEY IS NO LONGER NECESSARY).

## CHUCKS WITH ELASTIC COLLETS ER32/40 HSK ATTACHMENT

art. HSK32 – HSK49



**Use:** For HOMAG, WEEKE, BIESSE, SCM CNC machines, MORBIDELLI, and MASTERWOOD

- 1) avoid overheating;
- 2) reduces resin accumulation;
- 3) improves spindle performance and life;
- 4) protects against corrosion and rust.

With CHROME coating

Shank	Description	Collet	Right rotation
HSK-63F	completo di ghiera	ER32	HSK3201
HSK-63F	completo di ghiera	ER40	HSK4001

Without CHROME coating

Shank	Description	Collet	Right rotation
HSK-63F	completo di ghiera	ER32	AEM8001
HSK-63F	completo di ghiera	ER40	AEM8003

## CHUCKS WITH ELASTIC COLLETS ER32/40 ISO30 ATTACHMENT

art. AEM8002



**Use:** For HOMAG, WEEKE, BIESSE, SCM CNC machines, MORBIDELLI, and MASTERWOOD

Shank	Description	Collet	Right rotation
ISO 30	completo di ghiera	ER32	AEM8002
ISO 30	completo di ghiera	ER40	AEM8007

Description	Collet	Right rotation
 12,8 – 9	ER32	
	ER40	
 13 – 9	ER32	
	ER40	
 12 – 8	ER32	
	ER40	

## CONE HOLDER HANDS FOR CNC MACHINES

art. TALL



Model
Portautensili ISO 30
Portautensili HSK

## NUTS FOR ISO30 AND HSK CHUCKS

	Model
	ER 8 A
	ER 11 A
	ER 16 A
	ER 8
	ER 11
	ER 16
	ER 20
	ER 25
	ER 32
	ER 40



## “DIN6499” BICONICAL ELASTIC COLLET

VERY HIGH PRECISION 0.005 mm

ER 11	D	Article
	2	TCALL112
	3	TCALL113
	4	TCALL114
	5	TCALL115
	6	TCALL116

art. TCALL11

ER 16	D	Article	D	Article
	2	TCALL162	7	TCALL167
	3	TCALL163	8	TCALL168
	4	TCALL164	9	TCALL169
	5	TCALL165	10	TCALL1610
	6	TCALL166		

art. TCALL16

ER 20	D	Article	D	Article
	2	TCALL202	8	TCALL208
	3	TCALL203	9	TCALL209
	4	TCALL204	10	TCALL2010
	5	TCALL205	11	TCALL2011
	6	TCALL206	12	TCALL2012
	7	TCALL207	12,7	TCALL20127

art. TCALL20

ER 25	D	Article	D	Article
	3	TCALL253	9	TCALL259
	4	TCALL254	10	TCALL2510
	5	TCALL255	12	TCALL2512
	6	TCALL256	13	TCALL2513
	7	TCALL257	14	TCALL2514
	8	TCALL258	16	TCALL2516

art. TCALL25

ER 32	D	Article	D	Article
	3	TCALL323	12,7	TCALL32127
	4	TCALL324	14	TCALL3214
	5	TCALL325	15	TCALL3215
	6	TCALL326	16	TCALL3216
	7	TCALL327	17	TCALL3217
	8	TCALL328	18	TCALL3218
	9	TCALL329	19	TCALL3219
	10	TCALL3210	20	TCALL3220
	11	TCALL3211		
	12	TCALL3212		

art. TCALL32

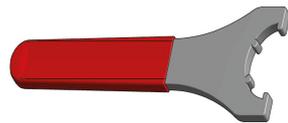
ER 40	D	Article	D	Article
	3	TCOLL403	12,7	TCOLL40127
	4	TCOLL404	14	TCOLL4014
	5	TCOLL405	16	TCOLL4016
	6	TCOLL406	18	TCOLL4018
	7	TCOLL407	19	TCOLL4019
	8	TCOLL408	20	TCOLL4020
	9	TCOLL409	25	TCOLL4025
	10	TCOLL4010		
	11	TCOLL4011		
	12	TCOLL4012		

art. TCALL40

## RING REMOVER KEYS FOR ISO30 AND HSK SPINDLES

art. T529/1

IMPRESSION KEY	Type
	ER 11
	ER 16
	ER 20

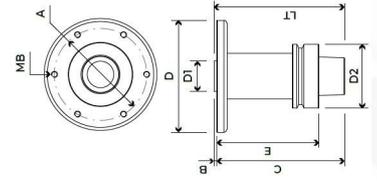
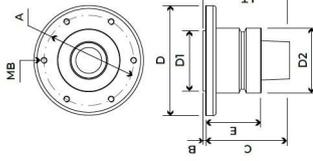
IMPRESSION KEY	Type
	ER 25
	ER 32
	ER 40

SECTOR KEY	Type
	ER 25
	ER 32
	ER 40



## TOOL HOLDER HSK63F FOR SAW BLADE FOR CNC PANTOGRAPH

art. HSK63F A – HSK63F B



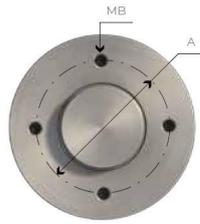
**A TYPE – MAX D350**

**B TYPE – MAX D350**

D1	E	D	LT	C	D2	A	B	FT/PH Pin/Hole	Type
30	50	106	77,6	75	63	90	2,6	N6/M6/Int90	A
30	100	110	127,6	125	63	90	2,6	N6/M6/Int90	B

## SAWBLADE TOOL HOLDER WITH SHANK

art. TH8033



Sawblade tool holder with shank for lamello Clamex hole 22 and sawblades with hole 20/30

DS	D1	LS	LT	B	Pin Hole	A	MB	D
16	22	70	90	4	4	35,9	M4	50
20	22	70	125	4	4	35,9	M4	50
20	30	70	90	2,5	4	45/48	M5/M6	60

## UNIVERSAL ASSEMBLY SUPPORT FOR CHUCKS HSK63F-ISO30

art. THSK63 – TISO30

HSK 63F

ISO 30



D Diameter	SUITABLE FOR	Article
50	ISO30 ER32 ER40 DIN2080	TISO30
63	HSK63 ER32 ER40 DIN2080	THSK63