



05

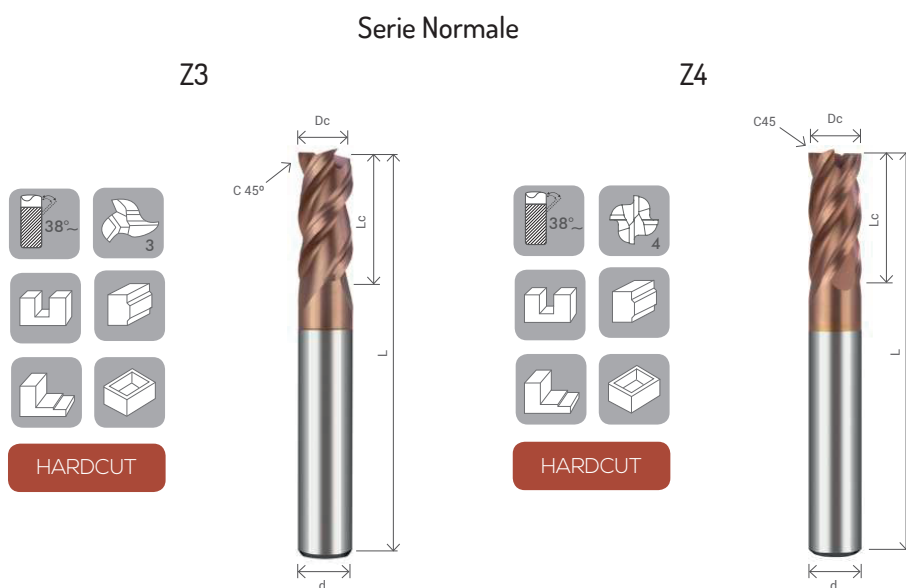
FRESE AD ALTO RENDIMENTO
HIGH PERFORMANCE END MILLS
HAUTE PERFORMANCE
SHOCHLEISTUNGSBEARBEITUNG

STAR-EVO: FRESA Z3/Z4 ELICA VARIABLE 35°/38°

Serie Normale

- EN** Z3/Z4 STAR-EVO. UNEQUAL HELIX ANGLES 35°-38° - Normal Series
- FR** Z3/Z4 STAR-EVO. HÉLICE DIFFÉRENTE 35°-38° - Serie Normale
- DE** Z3/Z4 STAR-EVO. UNGLEICHER DRALLWINKEL 35°-38° - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.



SERIE NORMALE - Normal Series

Ref.	Dimensione - Dimension (mm)				
3 Taglienti (Z3)	Dc	d	Lc	C-45°	L
STAR-EV03030R	3	6	8	0,05	50
STAR-EV03040R	4	6	11	0,05	50
STAR-EV03050R	5	6	13	0,07	50
STAR-EV03060R	6	6	16	0,10	50
STAR-EV03080R	8	8	19	0,15	60
STAR-EV03100R	10	10	22	0,15	73
STAR-EV03120R	12	12	26	0,25	75
STAR-EV03140R	14	14	30	0,30	85
STAR-EV03160R	16	16	32	0,35	92
STAR-EV03200R	20	20	38	0,35	100

SERIE NORMALE - Normal Series

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
STAR-EV04030R	3	6	8	0,05	50
STAR-EV04040R	4	6	11	0,05	50
STAR-EV04050R	5	6	13	0,07	50
STAR-EV04060R	6	6	16	0,10	50
STAR-EV04080R	8	8	19	0,15	60
STAR-EV04100R	10	10	22	0,15	73
STAR-EV04120R	12	12	26	0,25	75
STAR-EV04140R	14	14	30	0,30	85
STAR-EV04160R	16	16	32	0,35	92
STAR-EV04200R	20	20	38	0,35	100

STAR-EVO: FRESA Z4 ELICA VARIABLE 35°/38°

Weldon DIN6535 / Misure Speciali

- EN** Z4 STAR-EVO: UNEQUAL HELIX ANGLES 35°-38° | WELDON DIN6535 / Special Sizes
FR Z4 STAR-EVO: HÉLICE DIFFÉRENTE 35°-38° | WELDON DIN6535 / Tailles spéciales
DE Z4 STAR-EVO: UNGLEICHER DRALLWINKEL 35°-38° | WELDON DIN6535 / Sondergrößen

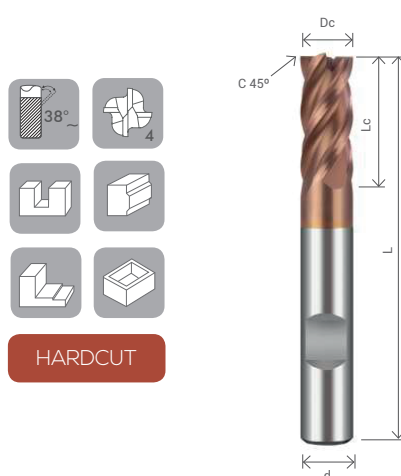
IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.

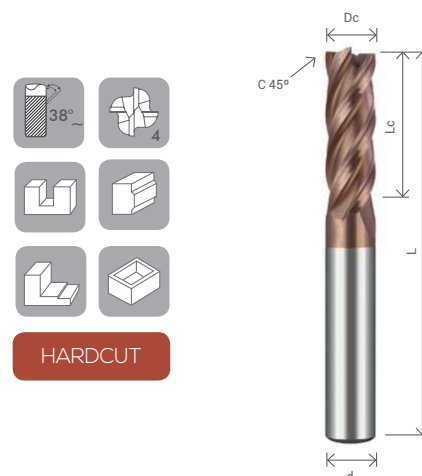
FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Weldon



Misure Speciali



WELDON

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
STAR-EVO4030RW	3	6	8	0,05	57
STAR-EVO4040RW	4	6	11	0,05	57
STAR-EVO4050RW	5	6	13	0,07	57
STAR-EVO4060RW	6	6	16	0,10	57
STAR-EVO4080RW	8	8	19	0,15	63
STAR-EVO4100RW	10	10	22	0,15	73
STAR-EVO4120RW	12	12	26	0,25	84
STAR-EVO4140RW	14	14	30	0,30	85
STAR-EVO4160RW	16	16	32	0,35	92
STAR-EVO4200RW	20	20	38	0,35	104

MISURE SPECIALI - Special Sizes

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
STAR-EVO4100-25R	10	10	25	0,15	73
STAR-EVO4120L-35R	12	12	35	0,25	83
STAR-EVO4160-45R	16	16	45	0,35	100
STAR-EVO4160-52R	16	16	52	0,35	100
STAR-EVO4160-65R	16	16	65	0,35	150
STAR-EVO4200-55R	20	20	55	0,35	104
STAR-EVO4200-70R	20	20	70	0,35	150

STAR-PLUS: FRESA Z4 ELICA VARIABLE 35°/38°

Scarico Ribassato / Weldon DIN6535

EN Z4 STAR-PLUS. UNEQUAL HELIX ANGLES 35°-38° | REDUCED NECK / WELDON DIN6535

FR Z4 STAR-PLUS. HÉLICE DIFFÉRENTE 35°-38° / WELDON DIN6535

DE Z4 STAR-PLUS. UNGLEICHER DRALLWINKEL 35°-38° / WELDON DIN6535

IT Acciaio, acciaio inossidabile, ghisa, rame, titanio e acciaio temprato 56 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, and hardened steels up to 56 HRC.

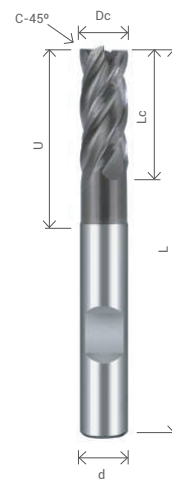
FR Acier, acier inoxydable, fonte grise, cuivre, titane et acier jusqu'à 56 HRC.

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan und gehärteter stahl 56 HRC.

Scarico Ribassato



Weldon



SCARICO RIBASSATO

Reduced Neck

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
STAR-PLUS4030U20H	3	6	8	20	0,05	57
STAR-PLUS4040U20H	4	6	11	20	0,05	57
STAR-PLUS4050U21H	5	6	13	21	0,07	57
STAR-PLUS4060U21H	6	6	13	21	0,10	57
STAR-PLUS4080U27H	8	8	19	27	0,15	63
STAR-PLUS4100U32H	10	10	22	32	0,15	73
STAR-PLUS4120U38H	12	12	26	38	0,25	83
STAR-PLUS4140U40H	14	14	30	40	0,30	84
STAR-PLUS4160U44H	16	16	32	44	0,35	92
STAR-PLUS4200U55H	20	20	38	55	0,35	104

SCARICO RIBASSATO CON WELDON

Reduced neck with Weldon

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
STAR-PLUS4030U20HW	3	6	8	20	0,05	57
STAR-PLUS4040U20HW	4	6	11	20	0,05	57
STAR-PLUS4050U21HW	5	6	13	21	0,07	57
STAR-PLUS4060U21HW	6	6	13	21	0,10	57
STAR-PLUS4080U27HW	8	8	19	27	0,15	63
STAR-PLUS4100U32HW	10	10	22	32	0,15	73
STAR-PLUS4120U38HW	12	12	26	38	0,25	83
STAR-PLUS4140U40HW	14	14	30	40	0,30	84
STAR-PLUS4160U44HW	16	16	32	44	0,35	92
STAR-PLUS4200U55HW	20	20	38	55	0,35	104

STAR-TOP: FRESA Z4 ELICA VARIABLE 35°/38°

Scarico Ribassato / Weldon DIN6535

EN Z4 STAR-TOP UNEQUAL HELIX ANGLES 35°-38° | REDUCED NECK / WELDON DIN6535

FR Z4 STAR-TOP HÉLICE DIFFÉRENTE 35°-38° / WELDON DIN6535

DE Z4 STAR-TOP UNGLEICHER DRALLWINKEL 35°-38° / WELDON DIN6535

IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.

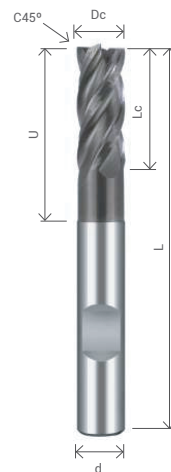
FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Scarico Ribassato



Weldon



SCARICO RIBASSATO

Reduced Neck

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
STAR-TOP4030U20PB	3	6	8	20	0,05	57
STAR-TOP4040U20PB	4	6	11	20	0,05	57
STAR-TOP4050U21PB	5	6	13	21	0,07	57
STAR-TOP4060U21PB	6	6	13	21	0,10	57
STAR-TOP4080U27PB	8	8	19	27	0,15	63
STAR-TOP4100U32PB	10	10	22	32	0,15	73
STAR-TOP4120U38PB	12	12	26	38	0,25	83
STAR-TOP4140U40PB	14	14	30	40	0,30	84
STAR-TOP4160U44PB	16	16	32	44	0,35	92
STAR-TOP4200U55PB	20	20	38	55	0,35	104

SCARICO RIBASSATO CON WELDON

Reduced neck with Weldon

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
STAR-TOP4030U20PBW	3	6	8	20	0,05	57
STAR-TOP4040U20PBW	4	6	11	20	0,05	57
STAR-TOP4050U21PBW	5	6	13	21	0,07	57
STAR-TOP4060U21PBW	6	6	13	21	0,10	57
STAR-TOP4080U27PBW	8	8	19	27	0,15	63
STAR-TOP4100U32PBW	10	10	22	32	0,15	73
STAR-TOP4120U38PBW	12	12	26	38	0,25	83
STAR-TOP4140U40PBW	14	14	30	40	0,30	84
STAR-TOP4160U44PBW	16	16	32	44	0,35	92
STAR-TOP4200U55PBW	20	20	38	55	0,35	104

XURY-EVO: FRESA Z4 ELICA VARIABLE 43°/45°

Serie Normale / Weldon DIN6535

- EN** Z4 XURY-EVO UNEQUAL HELIX ANGLES 43-35° | REDUCED NECK | WELDON DIN6535 - Normal Series
- FR** Z4 XURY-EVO HÉLICE DIFFÉRENTE 43-35° | COL RÉDUIT | WELDON DIN6535 - Serie Normale
- DE** Z4 XURY-EVO UNGLEICHER DRALLWINKEL 43-35° | REDUZIERTER HALS | WELDON DIN6535 - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, cooper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Serie Normale



Weldon



SERIE NORMALE

Normal Series

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
XURY-EV04060B	6	6	13	0,2	57
XURY-EV04080B	8	8	19	0,25	63
XURY-EV04100B	10	10	22	0,35	73
XURY-EV04120B	12	12	26	0,35	83
XURY-EV04140B	14	14	30	0,4	84
XURY-EV04160B	16	16	32	0,5	92
XURY-EV04200B	20	20	38	0,5	104

SERIE NORMALE CON WELDON

Normal Series with Weldon

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
XURY-EV04060BW	6	6	13	0,2	57
XURY-EV04080BW	8	8	19	0,25	63
XURY-EV04100BW	10	10	22	0,35	73
XURY-EV04120BW	12	12	26	0,35	83
XURY-EV04140BW	14	14	30	0,4	84
XURY-EV04160BW	16	16	32	0,5	92
XURY-EV04200BW	20	20	38	0,5	104

XURY-EVO: FRESA Z4 ELICA VARIABLE 43°/45°

Scarico Ribassato / Weldon DIN6535

EN Z4 XURY-EVO UNEQUAL HELIX ANGLES 43-35° | REDUCED NECK | WELDON DIN6535

FR Z4 XURY-EVO HÉLICE DIFFÉRENTE 43-35° | COL RÉDUIT | WELDON DIN6535

DE Z4 XURY-EVO UNGLEICHER DRALLWINKEL 43-35° | REDUZIERTER HALS | WELDON DIN6535

IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.

FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Scarico Ribassato



Weldon



SCARICO RIBASSATO

Reduced Neck

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
XURY-EV04030U11B	3	6	8	11	0,07	57
XURY-EV04030U20B	3	6	8	20	0,07	57
XURY-EV04040U14B	4	6	11	14	0,09	57
XURY-EV04040U20B	4	6	11	20	0,09	57
XURY-EV04050U16B	5	6	13	16	0,12	57
XURY-EV04050U21B	5	6	13	21	0,12	57
XURY-EV04060U21B	6	6	13	21	0,2	57
XURY-EV04080U27B	8	8	19	27	0,25	63
XURY-EV04100U32B	10	10	22	32	0,35	73
XURY-EV04120U38B	12	12	26	38	0,35	83
XURY-EV04140U40B	14	14	30	40	0,4	84
XURY-EV04160U44B	16	16	32	44	0,5	92
XURY-EV04200U55B	20	20	38	55	0,5	104

SCARICO RIBASSATO CON WELDON

Reduced neck with Weldon

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
XURY-EV04030U11BW	3	6	8	11	0,07	57
XURY-EV04030U20BW	3	6	8	20	0,07	57
XURY-EV04040U14BW	4	6	11	14	0,09	57
XURY-EV04040U20BW	4	6	11	20	0,09	57
XURY-EV04050U16BW	5	6	13	16	0,12	57
XURY-EV04050U21BW	5	6	13	21	0,12	57
XURY-EV04060U21BW	6	6	13	21	0,2	57
XURY-EV04080U27BW	8	8	19	27	0,25	63
XURY-EV04100U32BW	10	10	22	32	0,35	73
XURY-EV04120U38BW	12	12	26	38	0,35	83
XURY-EV04140U40BW	14	14	30	40	0,4	84
XURY-EV04160U44BW	16	16	32	44	0,5	92
XURY-EV04200U55BW	20	20	38	55	0,5	104

XURY-TITAN: FRESA Z4 ELICA VARIABLE 43°/45°

Serie Normale / Weldon DIN6535

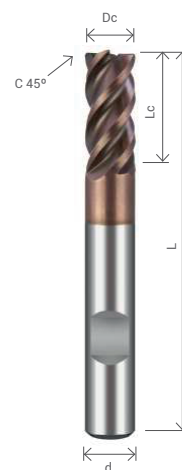
- EN** Z4 XURY-TITAN UNEQUAL HELIX ANGLES 43-35° | WELDON DIN6535 - Normal Series
- FR** Z4 XURY-TITAN HÉLICE DIFFÉRENTE 43-35° | WELDON DIN6535 - Serie Normale
- DE** Z4 XURY-TITAN UNGLEICHER DRALLWINKEL 43-35° | WELDON DIN6535 - Normale Serien

- IT** Acciaio inossidabile, titanio, leghe di titanio e leghe resistenti al calore.
- EN** Stainless steel, titanium, titanium alloys and heat resistance alloys.
- Acier inoxydable, alliages de titanie, titane, alliages de et résistance à la chaleur.
- FR**
- Rostfreier stahl, titan, warmfeste und legierungen.
- DE**

Serie Normale



Weldon



SERIE NORMALE

Normal Series

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
XURY-TITAN4060R	6	6	13	0,2	57
XURY-TITAN4080R	8	8	19	0,25	63
XURY-TITAN4100R	10	10	22	0,35	73
XURY-TITAN4120R	12	12	26	0,35	83
XURY-TITAN4140R	14	14	30	0,4	84
XURY-TITAN4160R	16	16	32	0,5	92
XURY-TITAN4200R	20	20	38	0,5	104

SERIE NORMALE CON WELDON

Normal Series with Weldon

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C-45°	L
XURY-TITAN4060RW	6	6	13	0,2	57
XURY-TITAN4080RW	8	8	19	0,25	63
XURY-TITAN4100RW	10	10	22	0,35	73
XURY-TITAN4120RW	12	12	26	0,35	83
XURY-TITAN4140RW	14	14	30	0,4	84
XURY-TITAN4160RW	16	16	32	0,5	92
XURY-TITAN4200RW	20	20	38	0,5	104

XURY-TITAN: FRESA Z4 ELICA VARIABLE 43°/45°

Serie Normale / Weldon DIN6535 / Scarico Ribassato

EN Z4 XURY-TITAN UNEQUAL HELIX ANGLES 43-35° | REDUCED NECK | WELDON DIN6535 - Normal Series

FR Z4 XURY-TITAN HÉLICE DIFFÉRENTE 43-35° | WELDON DIN6535 - Serie Normale

DE Z4 XURY-TITAN UNGLEICHER DRALLWINKEL 43-35° | WELDON DIN6535 - Normale Serien

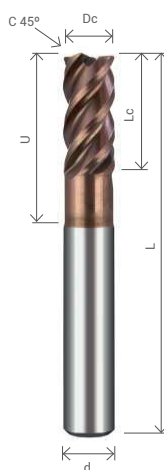
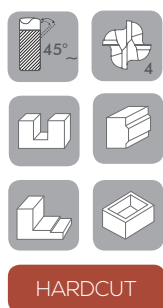
IT Acciaio inossidabile, titanio, leghe di titanio e leghe resistenti al calore.

EN Stainless steel, titanium, titanium alloys and heat resistance alloys.

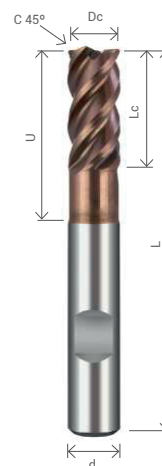
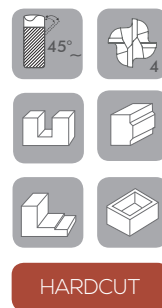
FR Acier inoxydable, alliages de titane, titane, alliages de et résistance à la chaleur.

DE Rostfreier stahl, titan, warmfeste und legierungen.

Serie Normale



Weldon



SERIE NORMALE - SCARICO RIBASSATO

Normal Series - Reduced neck

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
XURY-TITAN4030U11R	3	6	8	11	0,07	57
XURY-TITAN4030U20R	3	6	8	20	0,07	57
XURY-TITAN4040U14R	4	6	11	14	0,09	57
XURY-TITAN4040U20R	4	6	11	20	0,09	57
XURY-TITAN4050U16R	5	6	13	16	0,12	57
XURY-TITAN4050U21R	5	6	13	21	0,12	57
XURY-TITAN4060U21R	6	6	13	21	0,2	57
XURY-TITAN4080U27R	8	8	19	27	0,25	63
XURY-TITAN4100U32R	10	10	22	32	0,35	73
XURY-TITAN4120U38R	12	12	26	38	0,35	83
XURY-TITAN4140U40R	14	14	30	40	0,4	84
XURY-TITAN4160U44R	16	16	32	44	0,5	92
XURY-TITAN4200U55R	20	20	38	55	0,5	104

SCARICO RIBASSATO CON WELDON

Reduced neck with Weldon

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	Lc	U	C-45°	L
XURY-TITAN4030U11RW	3	6	8	11	0,07	57
XURY-TITAN4030U20RW	3	6	8	20	0,07	57
XURY-TITAN4040U14RW	4	6	11	14	0,09	57
XURY-TITAN4040U20RW	4	6	11	20	0,09	57
XURY-TITAN4050U16RW	5	6	13	16	0,12	57
XURY-TITAN4050U21RW	5	6	13	21	0,12	57
XURY-TITAN4060U21RW	6	6	13	21	0,2	57
XURY-TITAN4080U27RW	8	8	19	27	0,25	63
XURY-TITAN4100U32RW	10	10	22	32	0,35	73
XURY-TITAN4120U38RW	12	12	26	38	0,35	83
XURY-TITAN4140U40RW	14	14	30	40	0,4	84
XURY-TITAN4160U44RW	16	16	32	44	0,5	92
XURY-TITAN4200U55RW	20	20	38	55	0,5	104

ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <55HRC

Scarico Rastremato 1° - Serie Normale

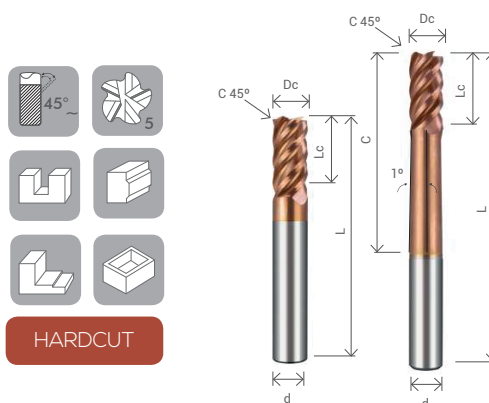
EN Z5 ILEX UNEQUAL HELIX ANGLES 43-35° | REDUCED NECK 1° | WELDON DIN6535 - Normal Series

FR Z5 ILEX HÉLICE DIFFÉRENTE 43-35° | COL RÉDUIT - Serie Normale

DE Z5 ILEX UNGLEICHER DRALLWINKEL 43-35° | REDUZIERTER HALS - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
ILEX-06K01-C	6	6	14	—	0,1	53
ILEX-06K01-M	6	6	14	32	0,1	65
ILEX-06K01-L	6	6	14	42	0,1	75
ILEX-06K01-LL	6	6	14	51	0,1	81
ILEX-08K01-C	8	8	18	—	0,1	60
ILEX-08K01-M	8	8	18	42	0,1	75
ILEX-08K01-L	8	8	18	58	0,1	90
ILEX-08K01-LL	8	8	18	71	0,1	109
ILEX-10K015-C	10	10	22	—	0,15	65
ILEX-10K015-M	10	10	22	51	0,15	81
ILEX-10K015-L	10	10	22	71	0,15	109
ILEX-10K015-LL	10	10	22	82	0,15	109

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
ILEX-12K02-C	12	12	26	—	0,2	81
ILEX-12K02-M	12	12	26	51	0,2	81
ILEX-12K02-L	12	12	26	71	0,2	109
ILEX-12K02-LL	12	12	26	86	0,2	117
ILEX-16K02-C	16	16	38	—	0,2	81
ILEX-16K02-M	16	16	38	61	0,2	109
ILEX-16K02-L	16	16	38	76	0,2	109
ILEX-16K02-LL	16	16	38	101	0,2	150
ILEX-20K02-C	20	20	45	—	0,2	100
ILEX-20K02-M	20	20	45	71	0,2	109
ILEX-20K02-L	20	20	45	86	0,2	130
ILEX-20K02-LL	20	20	45	101	0,2	150

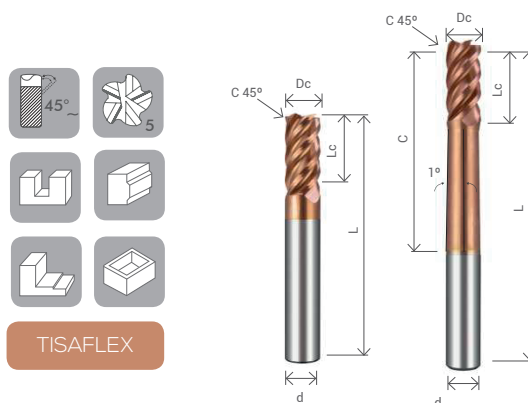
ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <65HRC

Scarico Rastremato 1° - Serie Normale

- EN** Z5 ILEX U.H.A. 43-35° | REDUCED NECK 1° - Normal Series
- FR** Z5 ILEX H.D. 43-35° | DE HAUTE PERFORMANCE - Serie Normale
- DE** Z5 ILEX U.D. 43-35° | HOCHLEISTUNGSBEARBEITUNG - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 65 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 65 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 65 HRC.
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 65 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
S-ILEX-06K01-C	6	6	14	—	0,1	53
S-ILEX-06K01-M	6	6	14	32	0,1	65
S-ILEX-06K01-L	6	6	14	42	0,1	75
S-ILEX-06K01-LL	6	6	14	51	0,1	81
S-ILEX-08K01-C	8	8	18	—	0,1	60
S-ILEX-08K01-M	8	8	18	42	0,1	75
S-ILEX-08K01-L	8	8	18	58	0,1	90
S-ILEX-08K01-LL	8	8	18	71	0,1	109
S-ILEX-10K015-C	10	10	22	—	0,15	65
S-ILEX-10K015-M	10	10	22	51	0,15	81
S-ILEX-10K015-L	10	10	22	71	0,15	109
S-ILEX-10K015-LL	10	10	22	82	0,15	109

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
S-ILEX-12K02-C	12	12	26	—	0,2	81
S-ILEX-12K02-M	12	12	26	51	0,2	81
S-ILEX-12K02-L	12	12	26	71	0,2	109
S-ILEX-12K02-LL	12	12	26	86	0,2	117
S-ILEX-16K02-C	16	16	38	—	0,2	81
S-ILEX-16K02-M	16	16	38	61	0,2	109
S-ILEX-16K02-L	16	16	38	76	0,2	109
S-ILEX-16K02-LL	16	16	38	101	0,2	150
S-ILEX-20K02-C	20	20	45	—	0,2	100
S-ILEX-20K02-M	20	20	45	71	0,2	109
S-ILEX-20K02-L	20	20	45	86	0,2	130
S-ILEX-20K02-LL	20	20	45	101	0,2	150

ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <56HRC

Refrigerazione centrale / Scarico Rastremato 1° / Alto Rendimento

EN Z5 ILEX UNEQUAL HELIX ANGLES 43-35° | REDUCED NECK 1° | CENTRAL COOLANT - Normal Series

FR Z5 ILEX HÉLICE DIFFÉRENTE 43-35° | COL RÉDUIT 1° - Serie Normale

DE Z5 ILEX UNGLEICHER DRALLWINKEL 43-35° | REDUZIERTER HALS 1° - Normale Serien

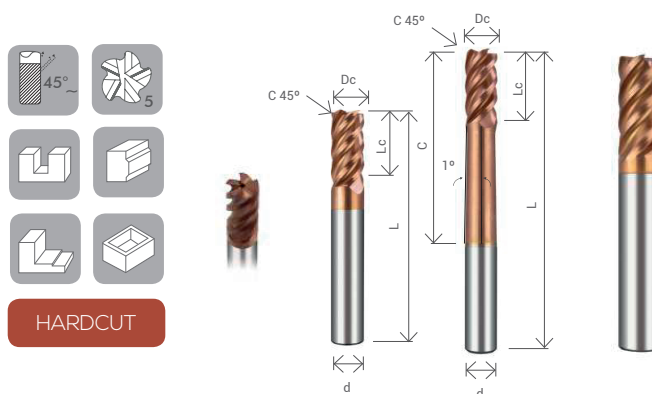
IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.

FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
ILEX-06K01-C-0	6	6	14	—	0,1	53
ILEX-06K01-M-0	6	6	14	32	0,1	65
ILEX-06K01-L-0	6	6	14	42	0,1	75
ILEX-06K01-LL-0	6	6	14	51	0,1	81
ILEX-08K01-C-0	8	8	18	—	0,1	60
ILEX-08K01-M-0	8	8	18	42	0,1	75
ILEX-08K01-L-0	8	8	18	58	0,1	90
ILEX-08K01-LL-0	8	8	18	71	0,1	109
ILEX-10K015-C-0	10	10	22	—	0,15	65
ILEX-10K015-M-0	10	10	22	51	0,15	81
ILEX-10K015-L-0	10	10	22	71	0,15	109
ILEX-10K015-LL-0	10	10	22	82	0,15	109

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	C-45°	L
ILEX-12K02-C-0	12	12	26	—	0,2	81
ILEX-12K02-M-0	12	12	26	51	0,2	81
ILEX-12K02-L-0	12	12	26	71	0,2	109
ILEX-12K02-LL-0	12	12	26	86	0,2	117
ILEX-16K02-C-0	16	16	38	—	0,2	81
ILEX-16K02-M-0	16	16	38	61	0,2	109
ILEX-16K02-L-0	16	16	38	76	0,2	109
ILEX-16K02-LL-0	16	16	38	101	0,2	150
ILEX-20K02-C-0	20	20	45	—	0,2	100
ILEX-20K02-M-0	20	20	45	71	0,2	109
ILEX-20K02-L-0	20	20	45	86	0,2	130
ILEX-20K02-LL-0	20	20	45	101	0,2	150

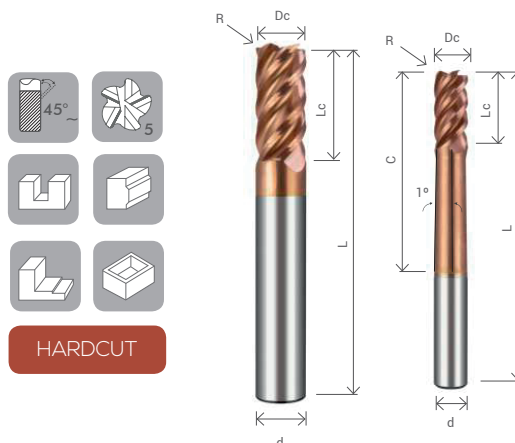
ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <56HRC

Scarico Rastremato 1° - Serie Normale

- EN** Z5 ILEX U.H.A. 43-35° | REDUCED NECK 1° - Normal Series
- FR** Z5 ILEX H.D. 43-35° | COL RÉDUIT 1° - Serie Normale
- DE** Z5 ILEX U. D. 43-35° | REDUZIERTER HALS 1° - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
ILEX-06R05-C	6	6	14	—	0,5	53
ILEX-06R05-M	6	6	14	32	0,5	65
ILEX-06R05-L	6	6	14	42	0,5	75
ILEX-06R05-LL	6	6	14	51	0,5	81
ILEX-08R05-C	8	8	18	—	0,5	60
ILEX-08R05-M	8	8	18	42	0,5	75
ILEX-08R05-L	8	8	18	58	0,5	90
ILEX-08R05-LL	8	8	18	71	0,5	109
ILEX-10R05-C	10	10	22	—	0,5	65
ILEX-10R05-M	10	10	22	51	0,5	81
ILEX-10R05-L	10	10	22	71	0,5	109
ILEX-10R05-LL	10	10	22	82	0,5	109

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
ILEX-12R1-C	12	12	26	—	1	81
ILEX-12R1-M	12	12	26	51	1	81
ILEX-12R1-L	12	12	26	71	1	109
ILEX-12R1-LL	12	12	26	86	1	117
ILEX-16R2-C	16	16	38	—	2	81
ILEX-16R2-M	16	16	38	61	2	109
ILEX-16R2-L	16	16	38	76	2	109
ILEX-16R2-LL	16	16	38	101	2	150
ILEX-20R2-C	20	20	45	—	2	100
ILEX-20R2-M	20	20	45	71	2	109
ILEX-20R2-L	20	20	45	86	2	130
ILEX-20R2-LL	20	20	45	101	2	150

ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <65HRC

Refrigerazione centrale / Scarico Rastremato 1° - Serie Normale

EN Z5 ILEX U.H. A. 43-35° | REDUCED NECK 1° - Normal Series

FR Z5 ILEX H.D. 43-35° | COL RÉDUIT - Serie Normale

DE Z5 ILEX U. D. 43-35° | REDUZIERTER HALS - Normale Serien

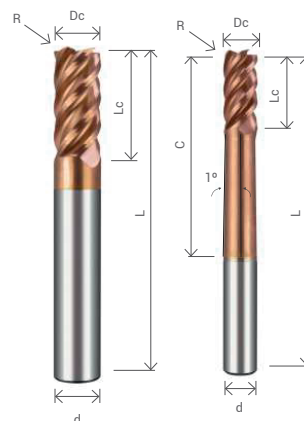
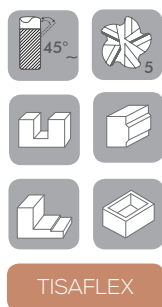
IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 65 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 65 HRC.

FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 65 HRC.

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 65 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
S-ILEX-06R05-C	6	6	14	—	0,5	53
S-ILEX-06R05-M	6	6	14	32	0,5	65
S-ILEX-06R05-L	6	6	14	42	0,5	75
S-ILEX-06R05-LL	6	6	14	51	0,5	81
S-ILEX-08R05-C	8	8	18	—	0,5	60
S-ILEX-08R05-M	8	8	18	42	0,5	75
S-ILEX-08R05-L	8	8	18	58	0,5	90
S-ILEX-08R05-LL	8	8	18	71	0,5	109
S-ILEX-10R05-C	10	10	22	—	0,5	65
S-ILEX-10R05-M	10	10	22	51	0,5	81
S-ILEX-10R05-L	10	10	22	71	0,5	109
S-ILEX-10R05-LL	10	10	22	82	0,5	109
S-ILEX-12R1-C	12	12	26	—	1	81
S-ILEX-12R1-M	12	12	26	51	1	81

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
S-ILEX-12R1-L	12	12	26	71	1	109
S-ILEX-12R1-LL	12	12	26	86	1	117
S-ILEX-16R2-C	16	16	38	—	2	81
S-ILEX-16R2-M	16	16	38	61	2	109
S-ILEX-16R2-L	16	16	38	76	2	109
S-ILEX-16R2-LL	16	16	38	101	2	150
S-ILEX-20R2-C	20	20	45	—	2	100
S-ILEX-20R2-M	20	20	45	71	2	109
S-ILEX-20R2-L	20	20	45	86	2	130
S-ILEX-20R2-LL	20	20	45	101	2	150
ILEX-20R2-LL	20	20	45	101	2	150

ILEX: FRESA Z5 ELICA VARIABLE 43°/45° <55HRC

Refrigerazione centrale / Scarico Rastremato 1° - Serie Normale

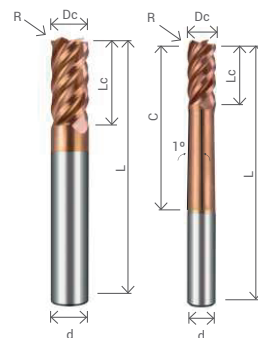
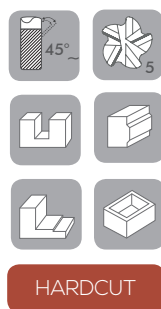
EN Z5 ILEX U.H.A. 43-35° | REDUCED NECK 1° | CENTRAL COOLANT - Normal Series

FR Z5 ILEX H. D. 43-35° | COL RÉDUIT - Serie Normale

DE Z5 ILEX U.D. 43-35° | REDUZIERTER HALS - Normale Serien

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Z5 Scarico Rastremato 1°



SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

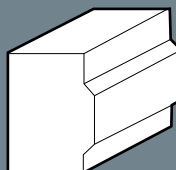
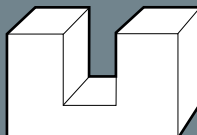
Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
ILEX-06R05-C-0	6	6	14	—	0,5	53
ILEX-06R05-M-0	6	6	14	32	0,5	65
ILEX-06R05-L-0	6	6	14	42	0,5	75
ILEX-06R05-LL-0	6	6	14	51	0,5	81
ILEX-08R05-C-0	8	8	18	—	0,5	60
ILEX-08R05-M-0	8	8	18	42	0,5	75
ILEX-08R05-L-0	8	8	18	58	0,5	90
ILEX-08R05-LL-0	8	8	18	71	0,5	109
ILEX-10R05-C-0	10	10	22	—	0,5	65
ILEX-10R05-M-0	10	10	22	51	0,5	81
ILEX-10R05-L-0	10	10	22	71	0,5	109
ILEX-10R05-LL-0	10	10	22	82	0,5	109
ILEX-12R1-C-0	12	12	26	—	1	81

SERIE NORMALE - SCARICO RASTREMATO 1°

Normal Series - Reduced Neck 1°

Ref.	Dimensione - Dimension (mm)					
5 Taglienti (Z5)	Dc	d	Lc	C	R	L
ILEX-12R1-M-0	12	12	26	51	1	81
ILEX-12R1-L-0	12	12	26	71	1	109
ILEX-12R1-LL-0	12	12	26	86	1	117
ILEX-16R2-C-0	16	16	38	—	2	81
ILEX-16R2-M-0	16	16	38	61	2	109
ILEX-16R2-L-0	16	16	38	76	2	109
ILEX-16R2-LL-0	16	16	38	101	2	150
ILEX-20R2-C-0	20	20	45	—	2	100
ILEX-20R2-M-0	20	20	45	71	2	109
ILEX-20R2-L-0	20	20	45	86	2	130
ILEX-20R2-LL-0	20	20	45	101	2	150

XURY-EVO / XURY-TITAN / ILEX / STAR-EVO / STAR-TOP

									
		Contornatura A e B, Scanalatura C Side milling A and B, Grooving C							
		A		B		C	Velocità di taglio vc / <i>Cutting speed</i> vc m/min		
ap		ae	ap	ae	ap	min	max	mm	
P	1	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	150	220	fz
	2	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	150	200	fz
	3	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	120	170	fz
	4	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	110	160	fz
	5	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	70	90	fz
M	1	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	90	115	fz
	2	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	80	100	fz
	3	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	95	125	fz
K	1	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	180	220	fz
	2	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	150	180	fz
	3	2XD	0,1-0,2xD	1,5xD	0,5xD	1xD	120	150	fz
S	1	2XD	0,1xD	1,5xD	0,5xD	1xD	60	100	fz
	2	2XD	0,1xD	1,5xD	0,5xD	1xD	50	80	fz
	3	2XD	0,1xD	0,3xD	0,3xD	1xD	30	50	fz
	4	2XD	0,1xD	0,3xD	0,3xD	1xD	25	40	fz
H	1	2XD	0,1xD	0,3xD	0,75xD	1xD	80	110	fz

- P1 ACCIAIO NON LEGATO <700 N/mm²
 P2 ACCIAIO BASSO LEGATO <24 HRC 700-1000 N/mm²
 P3 ACCIAIO ALTO LEGATO <30 HRC <700 N-mm²
 P4 ACCIAIO TEMPRATO 30-38 HRC
 P5 ACCIAIO TEMPRATO 38-48 HRC
 N1 ACCIAIO INOX AUSTENITICO 500-950 N-mm²
 N2 ACCIAIO INOX FERRITICO E MARTENSITICO 500-950 N/mm²
 N3 ACCIAIO INOX MARTENSITICO 800-1000 N/mm²
 K1 GHISA GRIGIA 100-400 N/mm²
 K2 GHISA GRIGIA NODULARE 200-800 N/mm²
 K3 GHISA GRIGIA MALLEABILE 350-700 N/mm²
 S1 LEGHE TITANIO MEDIA RESISTENZA 950 N/mm²
 S2 LEGHE TITANIO ALTA RESISTENZA 900-1400 N/mm²
 S3 LEGHE BASE NICHEL MEDIA RESISTENZA 950 N/mm²
 S4 LEGHE BASE NICHEL ALTA RESISTENZA 900/1400 N/mm²
 H1 ACCIAIO TEMPRATO 48-56 HRC

XURY-EVO / XURY-TITAN / ILEX / STAR-EVO / STAR-TOP

Avanzamento per dente consigliato (fz=mm/dente) per la contornatura (A) e (B), Per la scanalatura a C, ridurre il valore fz del 20%,
Recommended feed per tooth (fz=mm/tooth) for contouring (A) and (B), For C-slot, reduce the fz-value by 20%,

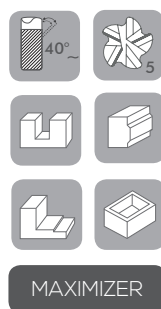
		D1 / Diametro / Diameter										
		mm	3,0	4,0	5,0	6,0	8,0	10,0	12,0	14,0	16,0	20,0
P	1	fz	0,022	0,028	0,035	0,045	0,06	0,07	0,08	0,09	0,1	0,11
	2	fz	0,022	0,028	0,035	0,045	0,06	0,07	0,08	0,09	0,1	0,11
	3	fz	0,022	0,028	0,035	0,045	0,06	0,07	0,08	0,09	0,1	0,11
	4	fz	0,018	0,023	0,030	0,035	0,050	0,060	0,070	0,080	0,09	0,10
	5	fz	0,015	0,017	0,025	0,030	0,040	0,050	0,055	0,065	0,07	0,08
M	1	fz	0,018	0,023	0,030	0,035	0,050	0,060	0,070	0,080	0,09	0,10
	2	fz	0,022	0,028	0,035	0,045	0,06	0,07	0,08	0,09	0,1	0,11
	3	fz	0,020	0,025	0,030	0,035	0,045	0,07	0,075	0,09	0,095	0,105
K	1	fz	0,022	0,028	0,035	0,045	0,06	0,07	0,08	0,09	0,1	0,11
	2	fz	0,018	0,023	0,030	0,035	0,050	0,060	0,070	0,080	0,09	0,10
	3	fz	0,018	0,023	0,030	0,035	0,050	0,060	0,070	0,080	0,09	0,10
S	1	fz	0,022	0,028	0,035	0,035	0,05	0,06	0,06	0,1	0,1	0,11
	2	fz	0,015	0,020	0,025	0,025	0,04	0,040	0,040	0,06	0,06	0,07
	3	fz	0,022	0,028	0,035	0,035	0,05	0,06	0,06	0,1	0,1	0,11
	4	fz	0,015	0,020	0,025	0,025	0,04	0,040	0,040	0,06	0,06	0,07
H	1	fz	0,018	0,023	0,030	0,035	0,050	0,060	0,070	0,080	0,09	0,10

- P1 NON ALLOYED STEEL <700 N/mm²
P2 LOW ALLOYED STEEL <24HRC 700-1000 N/mm²
P3 HIGH ALLOYED STEEL <30HRC <700 N/mm²
P4 HARDENED STEEL 30-38HRC
P5 HARDENED STEEL 38-48HRC
M1 STAINLESS STEEL, AUSTENIC 500-950 N/mm²
M2 STAINLESS STEEL, FERRITIC, MARTENSITIC 500-950 N/mm²
M3 STAINLESS STEEL, MARTENSITIC 800-1000 N/mm²
K1 GREY CAST IRON 100-400 N/mm²
K2 ALLOYED GREY-NODULAR CAST IRON 200-800 N/mm²
K3 MALLEABLE CAST IRON 350-700 N/mm²
S1 TITANIUM ALLOYS, MEDIUM STRENGTH 950 N/mm²
S2 TITANIUM ALLOYS, HIGH STRENGTH 900-1400 N/mm²
S3 NICKEL BASED ALLOYS, MEDIUM STRENGTH 950 N/mm²
S4 HEAT RESISTANT NICKEL BASED ALLOYS, HIGH STRENGTH 900-1400 N/mm²
H1 HARDENED STEEL 48-56HRC

XURY-TROCO: FRESA Z5 TROCOIDALE – Scarico Ribassato

- EN** Z5 XURY-TROCO | REDUCED NECK
- FR** Z5 XURY-TROCO | COL RÉDUIT
- DE** Z5 XURY-TROCO | REDUZIERTER HALS

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 56 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 56 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 56 hrc
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 56 HRC.

Z5


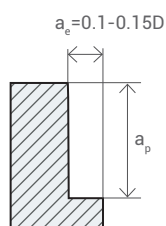
SCARICO RIBASSATO

Reduced neck

Ref.	Dimensione - Dimension (mm)					
5 Taglienti(Z5)	Dc	d	Lc	U	C-45°	L
XURY-TROCO5060U25H	6	6	18	25	0,1	62
XURY-TROCO5080U30H	8	8	24	30	0,15	70
XURY-TROCO5100U35H	10	10	30	35	0,2	80
XURY-TROCO5120U45H	12	12	36	45	0,2	94
XURY-TROCO5160U55H	16	16	48	55	0,4	110
XURY-TROCO5200U70H	20	20	60	70	0,4	126

XURY-TROCO Z5

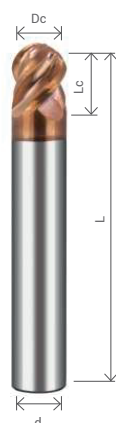
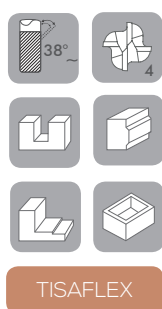
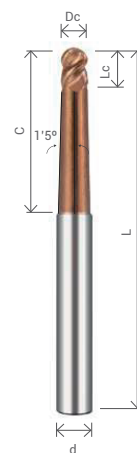
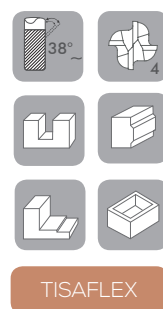
Materiale pezzo Workpiece material	Ghisa, Acciaio al carbonio, Acciaio legato -30 HRC Cast iron, Carbon steel, Alloy steel -30 HRC		Acciaio inossidabile Stainless steel		Acciaio pretemprato, Acciaio temprato 30-40HRC Pre-hardened steel, Quenched and tempered steel 30-40HRC		Acciaio pretemprato, Acciaio temprato 45-55HRC Pre-hardened steel, Quenched and tempered steel 45-55HRC	
6	250-350	0,065	150-220	0,055	150-230	0,055	55-75	0,050
8	250-350	0,075	150-220	0,065	150-230	0,065	55-75	0,060
10	250-350	0,100	150-220	0,080	150-230	0,080	55-75	0,070
12	250-350	0,120	150-220	0,100	150-230	0,100	55-75	0,090
16	250-350	0,150	150-220	0,130	150-230	0,130	55-75	0,110
20	250-350	0,200	150-220	0,170	150-230	0,170	55-75	0,130



BALL-EVO: FRESA Z4 ELICA VARIABLE SFERICA / CONICA 1,5°

- EN** Z4 BALL-EVO BALL NOSE END MILL I UNEQUAL HELIX ANGLES
- FR** Z4 BALL-EVO FRAISE CYLINDRIQUE HÉMISPHERIQUE I HÉLICE DIFFÉRENTE
- DE** Z4 BALL-EVO UNGLEICHER DRALLWINKEL I KUGELFRÄSER

- IT** Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 65 HRC.
- EN** Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 65 HRC.
- FR** Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 65 HRC.
- DE** Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 65 HRC.

Z4 Sferica

Z4 Conica


SFERICA - Spherical

Ref.	Dimensione - Dimension (mm)			
4 Taglienti (Z4)	Dc	d	Lc	L
BALL-EVO-4060	6	6	8	50
BALL-EVO-4060L	6	6	8	80
BALL-EVO-4060XL	6	6	8	100
BALL-EVO-4060XXL	6	6	8	150
BALL-EVO-4080	8	8	10	60
BALL-EVO-4080L	8	8	10	100
BALL-EVO-4080XL	8	8	10	150
BALL-EVO-4100	10	10	13	72
BALL-EVO-4100L	10	10	13	100
BALL-EVO-4100XL	10	10	13	150
BALL-EVO-4100XXL	10	10	13	200
BALL-EVO-4120	12	12	15	75
BALL-EVO-4120L	12	12	15	100
BALL-EVO-4120XL	12	12	15	150
BALL-EVO-4120XXL	12	12	15	200

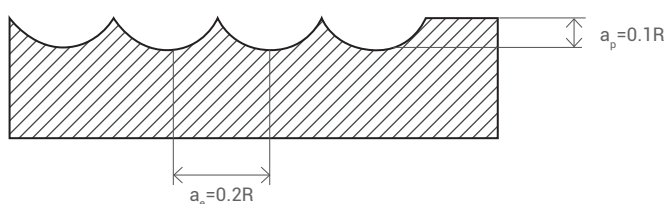
CONICA 1,5° - Conical 1,5°

Ref.	Dimensione - Dimension (mm)				
4 Taglienti (Z4)	Dc	d	Lc	C	L
BALL-EVO-CON4060	6	8	8	32	80
BALL-EVO-CON4060L	6	8	8	45	108
BALL-EVO-CON4080	8	10	10	32	80
BALL-EVO-CON4080L	8	10	10	48	108

BALL-EVO Z4

Materiale pezzo Workpiece material	Cast iron, Carbon steel, Alloy steel -30 HRC		Stainless steel		Pre-hardened steel, Quenched and tempered steel -40HRC		Pre-hardened steel, Quenched and tempered steel -50HRC		Hardened steel 56-62HRC	
Diametro Ø mm Diameter Ø mm	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/ minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/ minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/ minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/ minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/ minute)
1.0	40000	960	22300	240	32000	385	25000	330	22280	295
1.5	32000	1020	16500	255	24000	435	19000	330	16700	295
2.0	24000	1080	11150	275	16000	480	13000	330	11140	295
2.5	15500	1150	5550	445	8000	665	6500	450	5570	385
3.0	15500	1150	5550	445	8000	665	6500	450	5570	385
4.0	11500	1150	5550	445	8000	665	6500	450	5570	385
5.0	9500	1270	4450	445	6400	665	5000	455	4455	405
6.0	8000	1270	3700	470	5300	700	4200	470	3715	420
8.0	6000	1575	2750	550	4000	850	3200	535	2785	465
10	4800	1455	2200	520	3200	785	2500	535	2230	465
12	4000	1330	1850	520	2650	740	2100	505	1855	450
14	3500	1300	1550	500	2400	730	1800	475	1670	425
16	3000	1270	1350	455	2000	725	1600	455	1395	395
18	2700	1200	1250	455	1800	700	1400	425	1275	375
20	2400	1150	1100	445	1600	675	1250	400	1115	360

Massima
profondità di
taglio
Max. Cutting
depth



TURBO: FRESA PER ALTO AVANZAMENTO - Serie Normale / Serie Lunga

EN Z4 TURBO HIGH FEED END MILL I Normal and Long Series

FR Z4 TURBO FRAISE CYLINDRIQUE DE HAUTE AVANCE I Normale et Longue Series

DE Z4 TURBO HOCHVORSCHUBFRÄSER I Normale und Lange Series

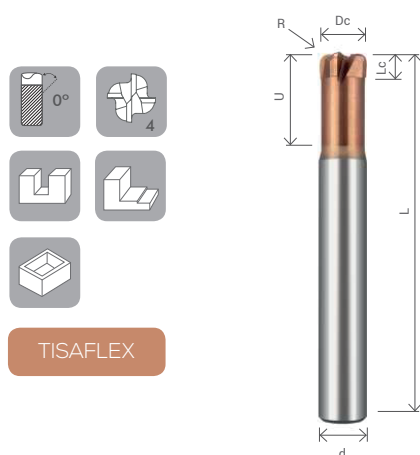
IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 65 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 65 HRC.

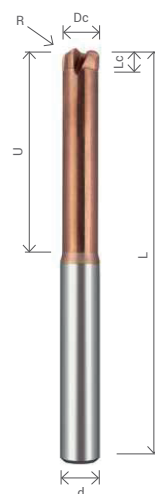
FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 65 HRC.

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 65 HRC.

Z4 Serie Normale



Z4 Serie Lunga



SERIE NORMALE - Normal Series

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	R	Lc	U	L
TURBO4030X-R0,5	3	6	0,5	1,5	12	60
TURBO4040X-R0,5	4	6	0,5	2	12	60
TURBO4060X-R1.0	6	6	1	3	14	60
TURBO4080X-R2.0	8	8	2	4	18	60
TURBO4100X-R2.0	10	10	2	5	20	72
TURBO4120X-R2.0	12	12	2	6	22	83

SERIE LUNGA - Long Series

Ref.	Dimensione - Dimension (mm)					
4 Taglienti (Z4)	Dc	d	R	Lc	U	L
TURBO4030XL-R0,5	3	6	0,5	1,5	20	80
TURBO4040XL-R0,5	4	6	0,5	2	20	80
TURBO4060XL-R1.0	6	6	1	3	30	80
TURBO4080XL-R2.0	8	8	2	4	40	80
TURBO4100XL-R2.0	10	10	2	5	50	100
TURBO4120XL-R2.0	12	12	2	6	50	110

TURBO Z4

Materiale pezzo Workpiece material	Ghisa, Acciaio al carbonio, Acciaio legato -30 HRC Cast iron, Carbon steel, Alloy steel -30 HRC		Acciaio pretemprato, Acciaio temprato -40HRC Pre-hardened steel, Quenched and tempered steel -40HRC		Acciaio pretemprato, Acciaio temprato -45HRC Pre-hardened steel, Quenched and tempered steel -45HRC		Acciaio pretemprato, Acciaio temprato -50HRC Pre-hardened steel, Quenched and tempered steel -50HRC		Acciaio temprato 55-62HRC Hardened steel 55-62HRC	
Diametro Ø (mm) Diameter Ø (mm)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/minute)	Rotante (minimo -1) Rotating (minimum -1)	Avanzamento (mm/minuto) Feed (mm/minute)
3	10500	6250	8500	4500	7450	3900	5300	2600	3200	995
4	7950	6600	6350	4800	5550	4200	4000	2750	2400	1050
6	5300	7000	4250	5100	3700	4450	2650	2850	1600	1150
8	4550	7000	3200	5100	2800	4450	2000	2850	1200	1150
10	3200	7000	2550	5100	2250	4450	1600	2850	955	1150
12	2650	7000	2100	5100	1850	4450	1350	2850	795	1150
	max Ap: 0,5mm Ae: 0,5D Ap: 0,2R		max Ap: 0,5mm Ae: 0,5D Ap: 0,2R		max Ap: 0,5mm Ae: 0,5D Ap: 0,2R		max Ap: 0,5mm Ae: 0,5D Ap: 0,2R		max Ap: 0,5mm Ae: 0,5D Ap: 0,2R	

FRESA A SMUSSARE 60°/90°

EN Z4/Z6 COUNTERSINKER, 60°/90°

FR Z4/Z6 CHAMFREIN, 60°/90°

DE Z4/Z6 KEGELSENKER, 60°/90°

IT Acciaio, acciaio inossidabile, ghisa, rame, titanio, leghe resistenti al calore e acciaio temprato 65 HRC.

EN Steel, stainless steel, cast iron, copper, titanium, heat resistance alloys and hardened steels up to 65 HRC.

FR Acier, acier inoxydable, fonte grise, cuivre, titane, alliages de résistance à la chaleur et acier jusqu'à 65 HRC.

DE Stahl, rostfreier stahl, gubeisen, kupfer, titan, warmfeste legierungen und gehärteter stahl 65 HRC.

Z4/Z6 60°



Z4/Z6 90°



FRESE A SMUSSARE Z4/Z6 60°

Z4/Z6 COUNTERSINKER 60°

Ref.	Dimensione - Dimension (mm)			
	Dc	d	Z	L
MES-ACH60-4040	4	4	4	50
MES-ACH60-4060	6	6	4	50
MES-ACH60-4080	8	8	4	60
MES-ACH60-4100	10	10	4	72
MES-ACH60-6100	10	10	6	72
MES-ACH60-4120	12	12	4	75
MES-ACH60-6120	12	12	6	75

FRESE A SMUSSARE Z4/Z6 90°

Z4/Z6 COUNTERSINKER 90°

Ref.	Dimensione - Dimension (mm)			
	Dc	d	Z	L
MES-ACH90-4040	4	4	4	50
MES-ACH90-4060	6	6	4	50
MES-ACH90-4080	8	8	4	60
MES-ACH90-6080	8	8	6	60
MES-ACH90-4100	10	10	4	72
MES-ACH90-6100	10	10	6	72
MES-ACH90-4120	12	12	4	75
MES-ACH90-6120	12	12	6	75
MES-ACH90-4160	16	16	4	92
MES-ACH90-6160	16	16	6	92