

Centering Tool

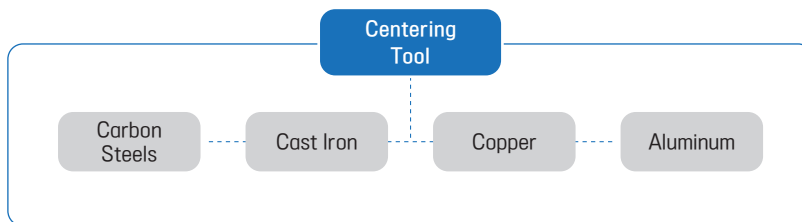
Characteristics

- Suitable for machining a wide range of materials, from carbon steel to cast iron, copper, and aluminum
- Processing the corners chamfering and R shape processing

Features

- Enough to customized work on corner chamfering and R shape processing
- Excellent retentivity for Flute hardness and High temperature harness by applied to TiAlN, AlTiN coating

Applications



Centering Tool

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EDP No. System

* If expressed as an integer, the decimal point is omitted.

C

①

DS

②

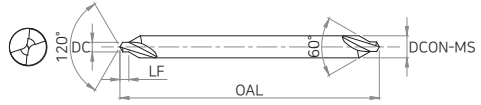
030

③

① Appearance	② Type	③ Diameter
C : Center	DS : Drill Spotting(Metric)	30
L : Leading	DA : Drill Spotting(Inch) (Variable Point Angle)	35
CE : Centering End Mill	DF : Drill Spotting Multy Type	40
CR : Corner Rounding	S : End Mill Solid Type	
CF : Chamfer	M : End Mill Brazed Type	
CC : Chamfer Cutter	C : Cutter	
	T : Tool	
	F : Face	

CDS Solid Center Drill

Centering Tool



Centering Tool

► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6



EDP No	DC	LF	OAL	DCONMS
CDS 010	1	1.5	40	3
CDS 015	1.5	2.2	40	4
CDS 020	2	3	45	5
CDS 025	2.5	3.8	45	6
CDS 030	3	4.8	55	8
CDS 040	4	6	60	10
CDS 050	5	7.5	65	12

► Applicable Working Material

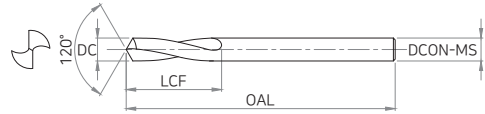
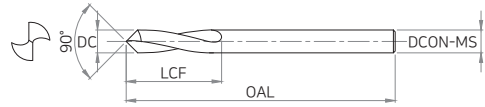
○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

LDS NC Spotting Drill

Centering
Tool

Centering
Tool



► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6



EDP No	DC	LCF	OAL	DCONMS	Point Angle
LDS 030	3	9	50	3	90°
LDS 030L	3	10	100	3	90°
LDS 030A	3	9	50	3	120°
LDS 040	4	10	50	4	90°
LDS 040L	4	12	100	4	90°
LDS 040A	4	10	50	4	120°
LDS 050	5	12	50	5	90°
LDS 050A	5	12	50	5	120°
LDS 060	6	13	60	6	90°
LDS 060L	6	18	110	6	90°
LDS 060A	6	13	60	6	120°
LDS 080	8	23	70	8	90°
LDS 080L	8	23	150	8	90°
LDS 080A	8	23	70	8	120°
LDS 100	10	24	80	10	90°
LDS 100L	10	24	150	10	90°
LDS 100A	10	24	80	10	120°
LDS 120	12	28	80	12	90°
LDS 120L	12	24	150	12	90°
LDS 120A	12	28	80	12	120°

► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

LDS NC Spotting Drill

Centering Tool

EDP No	DC	LCF	OAL	DCONMS	Point Angle
LDS 160	16	32	90	16	90°
LDS 160A	16	32	90	16	120°
LDS 200	20	35	100	20	90°
LDS 200A	20	35	100	20	120°

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► Applicable Working Material

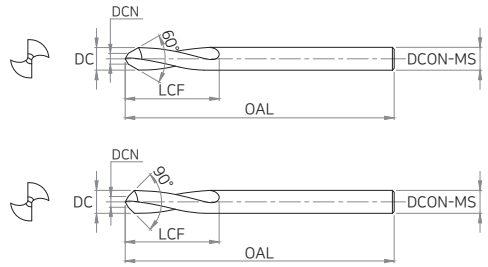
○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

LDF-W NC Spotting Drill - Multi Type

Centering Tool

Centering Tool



► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6



EDP No	DC	LCF	OAL	DCONMS	DCN
LDF 0360W	3	9	50	3	1.5
LDF 0390W	3	9	50	3	1.2
LDF 0460W	4	10	50	4	1.7
LDF 0490W	4	10	50	4	1.3
LDF 0560W	5	12	50	5	1.9
LDF 0590W	5	12	50	5	1.5
LDF 0660W	6	18	60	6	1.9
LDF 0690W	6	18	60	6	1.5
LDF 0860W	8	23	70	8	1.9
LDF 0890W	8	23	70	8	1.6
LDF 1060W	10	24	80	10	2.1
LDF 1090W	10	24	80	10	2.1
LDF 1260W	12	28	80	12	2.1
LDF 1290W	12	28	80	12	2.1

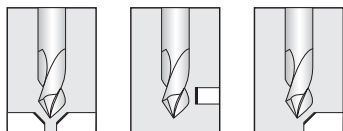
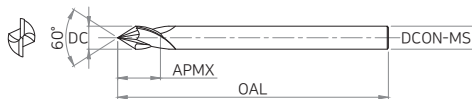
► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

CES302(60°)

Centering End Mill - Solid Type(60°)



Centering Tool

Centering Tool

► Tolerance

DC		Shank Dia
All Sizes	0 ~ -0.05	h6



EDP No		DC	APMX	OAL	DCONMS
Uncoated	Coated				
CES302 030-60S3	CES302 030-60S3-C	3	6	50	3
CES302 040-60S4	CES302 040-60S4-C	4	8	50	4
CES302 050-60S5	CES302 050-60S5-C	5	10	50	5
CES302 060-60	CES302 060-60-C	6	12	60	6
CES302 080-60	CES302 080-60-C	8	16	70	8
CES302 100-60	CES302 100-60-C	10	18	70	10
CES302 120-60	CES302 120-60-C	12	20	75	12

► Applicable Working Material

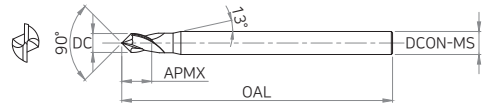
○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

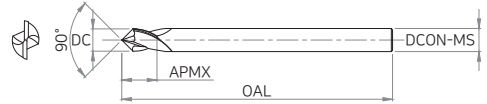
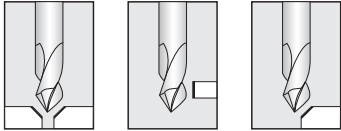
CES302(90°)

Centering End Mill - Solid Type(90°)

Centering Tool



Centering Tool



► Tolerance

DC		Shank Dia
All Sizes	0 ~ -0.05	h6



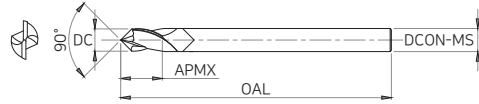
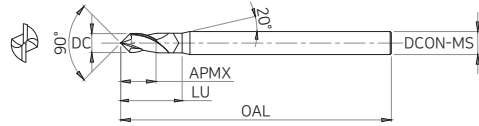
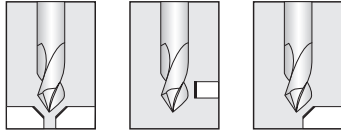
EDP No		DC	APMX	OAL	DCONMS
Uncoated	Coated				
CES302 020	CES302 020-C	2	5	50	3
CES302 030	CES302 030-C	3	6	50	6
CES302 030S3	CES302 030S3-C	3	6	50	3
CES302 040	CES302 040-C	4	8	50	6
CES302 040S4	CES302 040S4-C	4	8	50	4
CES302 050	CES302 050-C	5	10	50	6
CES302 050S5	CES302 050S5-C	5	10	50	5
CES302 060	CES302 060-C	6	12	60	6
CES302 080	CES302 080-C	8	16	70	8
CES302 100	CES302 100-C	10	18	70	10
CES302 120	CES302 120-C	12	20	75	12
CES302 140	CES302 140-C	14	24	80	14
CES302 160	CES302 160-C	16	26	80	16
CES302 200	CES302 200-C	20	32	100	20

► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRC55	SKD11 HRC55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

CEM-W Centering End Mill - Brazed Type



Centering Tool

Centering Tool

► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h7



EDP No	DC	APMX	LU	OAL	DCONMS
CEM 1016W	10	15	33	115	16
CEM 1216W	12	20	39	145	16
CEM 1620W	16	23	39.5	150	20
CEM 2025W	20	25	43.8	155	25

► Applicable Working Material

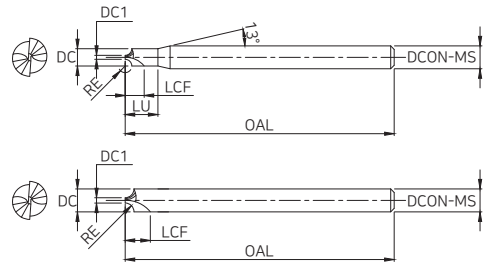
○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

CRC Corner Rounding Cutter

Centering Tool

Centering Tool



► Tolerance

DC		Shank Dia
All Sizes	±0.05	h6

CARBIDE
AITIN
2
30° HELIX
R ±0.01

EDP No	DC	DC1	RE	LCF	LU	OAL	DCONMS
CRC 209 050	2	0.9	0.5	2	3	45	4
CRC 209 075	2.5	0.9	0.75	2.5	4	45	4
CRC 209 100	3	0.9	1	3	5	50	6
CRC 259 100	8	5.9	1	8	-	60	8
CRC 214 150	4.5	1.4	1.5	4.5	8	50	6
CRC 249 150	8	4.9	1.5	8	-	60	8
CRC 214 200	5.5	1.47	2	5.5	10	50	6
CRC 239 200	8	3.9	2	8	-	60	8
CRC 219 250	7	1.9	2.5	7	13	60	8
CRC 219 300	8	1.9	3	8	-	60	8
CRC 219 350	9	1.9	3.5	9	13	70	10
CRC 219 400	10	1.9	4	10	-	70	10
CRC 219 450	11	1.9	4.5	11	13	80	12
CRC 219 500	12	1.9	5	12	-	80	12
CRC 239 600	16	3.9	6	16	-	85	16
CRC 259 700	20	5.9	7	20	-	85	20
CRC 239 800	20	3.9	8	20	-	85	20

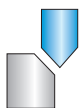
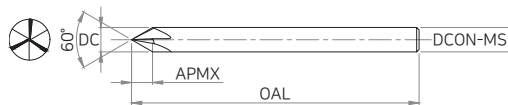
► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

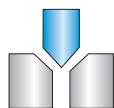
H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRC55	SKD11 HRC55~	Steel ~HB225 ~HB225	HB225 ~325	HRc30~50	~FC500					
		○			○	○		○	○	

CFT-W Chamfer Tool

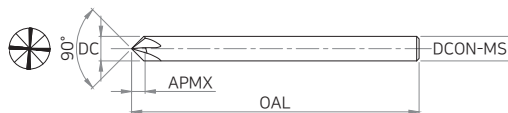
Centering Tool



Available work(O)



Available work(O)



Centering Tool

► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6

CARBIDE
TIAlN
3-4
0° HELIX
60°
90°
DATA P.750

EDP No	DC	APMX	OAL	DCONMS	ZEFP	Point Angle
CFT 0660W	6	5.1	50	6	3	60°
CFT 0690W	6	3	50	6	3	90°
CFT 0860W	8	6.9	60	8	3	60°
CFT 0890W	8	4	60	8	3	90°
CFT 1060W	10	8.6	70	10	4	60°
CFT 1090W	10	5	70	10	4	90°
CFT 1260W	12	10.3	75	12	4	60°
CFT 1290W	12	6	75	12	4	90°

► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	Steel HRc30~50	~FCD500					
		○			○	○		○	○	

CCT Chamfer Cutter

Centering Tool



Centering Tool



► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6

CARBIDE
AITIN
2
0° HELIX
90°
DATA P.750

EDP No	DC	APMX	OAL	DCONMS
CCT 502 030 S3	3	1.5	60	3
CCT 502 040 S4	4	2	60	4
CCT 502 060	6	3	60	6
CCT 502 080	8	4	65	8
CCT 502 100	10	5	70	10
CCT 502 120	12	6	75	12

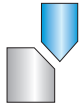
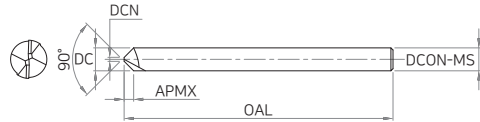
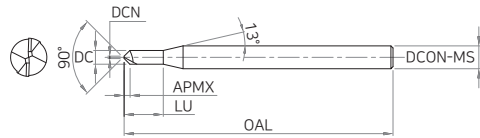
► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

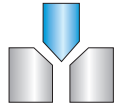
H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRC55	SKD11 HRC55~	~HB225	HB225 ~325	HRc30~50	~FCD500					
		○			○	○		○	○	

CCF Chamfer Cutter Face

Centering Tool



Available work(O)



Available work(O)

Centering Tool

► Tolerance

DC		Shank Dia
All Sizes	0 ~ +0.1	h6

CARBIDE
AITIN
2
5° HELIX
90°
DATA P.750

EDP No	DC	APMX	LU	OAL	DCONMS	DCN
CCF 502 020 S4	2	0.85	6	50	4	0.3
CCF 502 020	2	0.85	6	50	6	0.3
CCF 502 040 S4	4	1.85	-	50	4	0.3
CCF 502 040	4	1.85	12	50	6	0.3
CCF 502 060	6	2.85	-	50	6	0.3
CCF 502 080	8	3.8	-	60	8	0.4
CCF 502 100	10	4.75	-	70	10	0.5
CCF 502 120	12	5.75	-	75	12	0.5

► Applicable Working Material

○ : GOOD ◎ : EXCELLENT

H		P			K	N			M	S
Hardened Steel		Carbon Steel	Alloy Steel	Prehardened Steel	Cast Iron	Copper	Graphite	Aluminum	Stainless Steel	Heat Resistant Alloy
SKD61 ~HRc55	SKD11 HRc55~	~HB225	HB225 ~325	Steel HRc30~50	~FCD500					
		○			○	○		○	○	