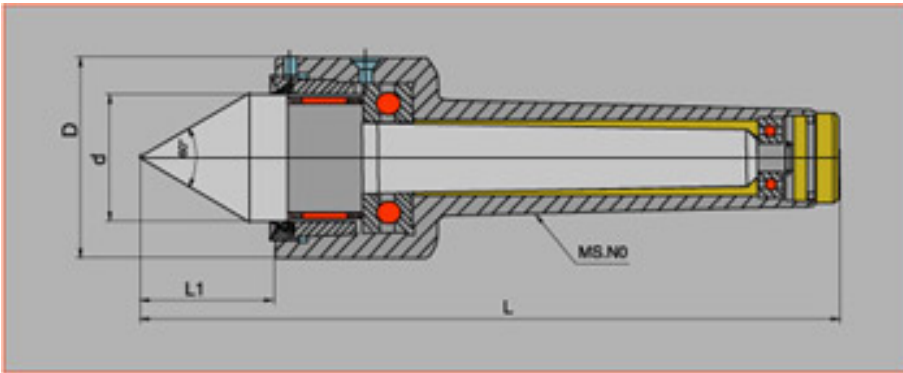


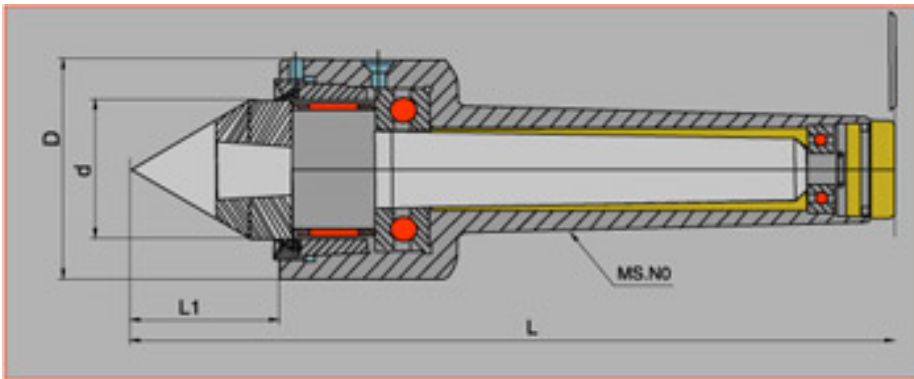
## CENTER



- 1.Center is assembled with bearing and plane thrust bearing.
- 2.Can be used at medium speed.
- 3.The shaft is made of alloy steel and through heat treatment (HRC60;ã ;À 2;ã) it processes super steel trait and high durability.

Art.No	Size	D (mm)	d (mm)	L (mm)	L1 (mm)	Ma Load(N)	r/min r/min	Accuracy(mm)
003080	MT2	36	22	125	25.5	340	6000	0.005
003081	MT3	47	30	162	32	400	5000	0.005
003082	MT4	55	35	194	37.5	1300	3500	0.005
003083	MT5	70	45	240	47	2000	3500	0.005
003084	MT6	90	60	318	62	4000	6000	0.005

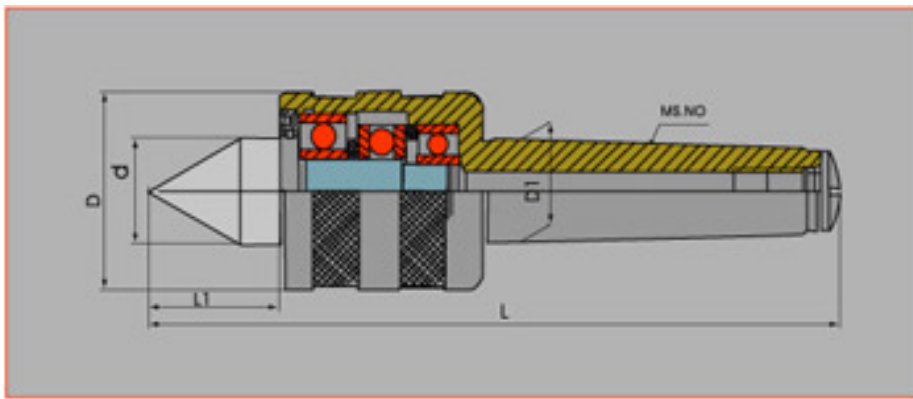
## SUPER ROLLING CENTER



- 1.Center is assembled with bearing and plane thrust bearing.
- 2.Can be used at medium speed.
- 3.The shaft is made of alloy steel and through heat treatment (HRC60;ã ;À 2;ã) it processes super steel trait and high durability.

Art.No	Size	D (mm)	d (mm)	L (mm)	L1 (mm)	Ma Load(N)	r/min (rmp)	Accuracy(mm)
003085	MT2	36	22	125	25.5	340	6000	0.005
003086	MT3	47	30	162	32	400	5000	0.005
003087	MT4	55	35	194	37.5	1300	3500	0.005
003088	MT5	70	45	240	47	2000	3500	0.005
003089	MT6	90	60	318	62	4000	6000	0.005

## MEDIUM-DUTY LIVE CENTER

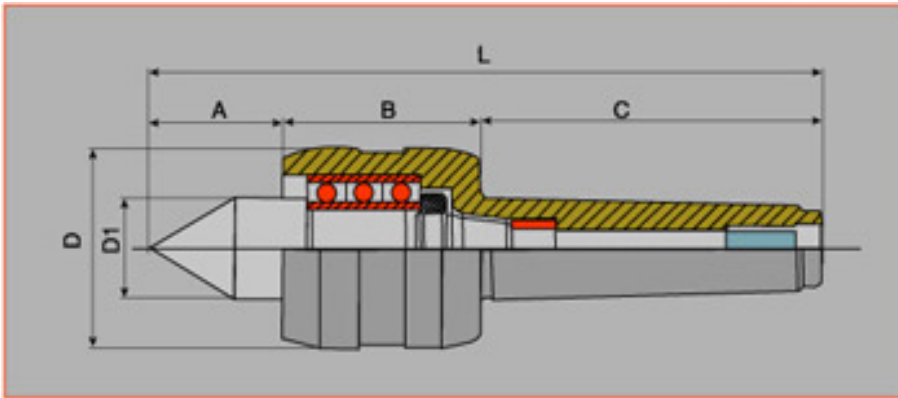


- 1.Center is assembled with bearing and plane thrust bearing.
- 2.Can be used at medium speed.
- 3.The shaft is made of alloy steel and through heat treatment (HRC60;ã ;À 2;ã) it processes super steel trait and high durability.

Art.No	Size	MS.NO	L (mm)	D (mm)	L1 (mm)	d (mm)	D1 (mm)	Ma Load(N)	r/min (rmp)	Accuracy(mm)
003090	D411	1	115	34	20	18	12.065	900	5000	0.01
003091	D412	2	145	45	26	25	17.780	1500	5000	0.01
003092	D413	3	170	52	30	28	23.825	2000	4200	0.01
003093	D414	4	205.7	60	34.7	32	31.267	3200	3200	0.01
003094	D415	5	254	77	45	45	44.399	3600	1000	0.015
003095	D416	6	362	125	68.5	75	63.348	10000	800	0.015



## SUPER HIGH-SPEED WATER-PROOF TYPE



1. The thimble located berel ball bearing.
2. Suitable for CNC machine, high speed and light duty; waterproof and dustproof design.
3. The mandrel adopt alloy steel and heat treatment (HRC60; Å 2; Å) Super steel trait and durability.

Art.No	Model	A (mm)	B (mm)	C (mm)	D (mm)	D1 (mm)	L (mm)	r/min (rpm)	Accuracy(mm)
003055	MT3	38	58	86	48	30	182	10000	0.005
003056	MT4	45	65	108	62	32	215	10000	0.005
003057	MT5	50	70	136	72	40	256	8000	0.005

## MEDIUM-LOAD-TYPE



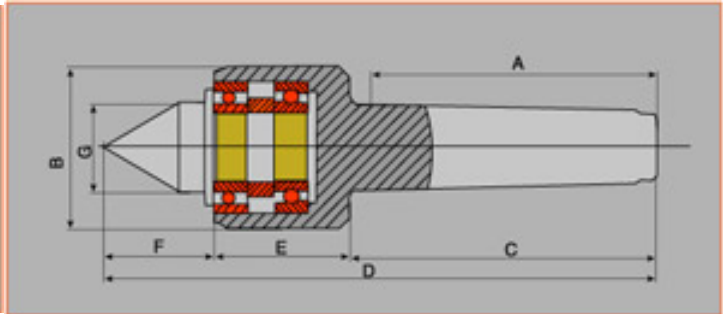
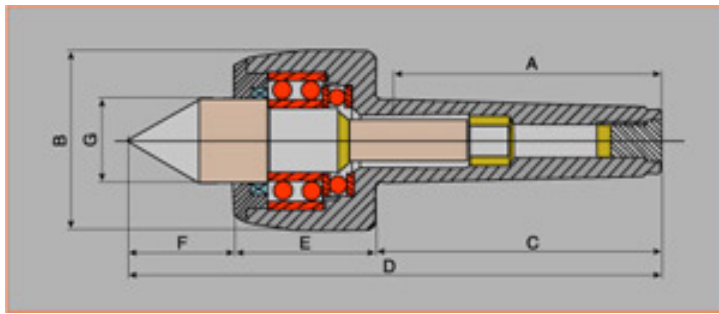
密封式顶尖  
Dustproof Center



中负荷顶尖  
Medium-load-Center

- 1.The thimble located berel ball bearing.
- 2.Suitable for middle speed duty; waterproof and dustproof design.
- 3.The mandrel adopt alloy steel and heat treatment (HRC60;  $\pm 2$ ) Super steel trait and durability.

- 1.Center is assembled with ball bearing and precision angular contact ball bearing.
- 2.Applicable to CNC lathes.Can be used at high speed turning.
- 3.The shaft is made of alloy steel and through heat treatment (HRC60;  $\pm 2$ ) it processes high rigidity and high durability.



Art.No	Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	r/min (rpm)	Accuracy(mm)
003058	MT1	54	38	59	118	34	25	19	4000	0.005
003059	MT2	65	38	71	131	34	25	19	4000	0.005
003060	MT3	81	41	87	134	35	29	22	4000	0.005
003061	MT4	103	57	113	197	51	33	29	4000	0.005
003062	MT5	132	64	141	238	57	40	32	3500	0.005
003063	MT6	184	89	194	330	83	54	44	3000	0.005

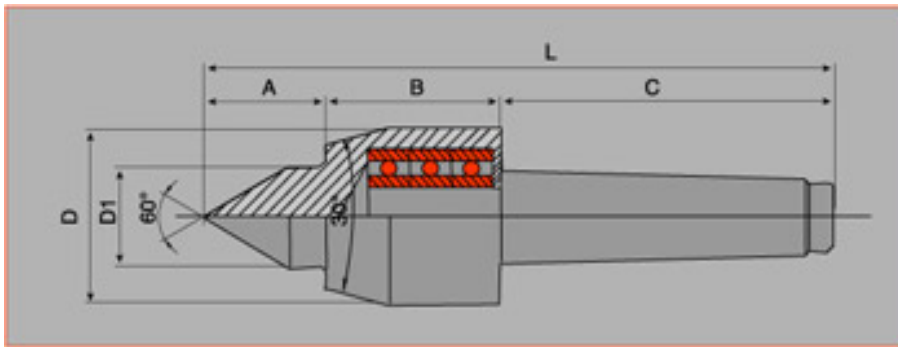


## NORMAL TYPE



STYLE A

STYLE B

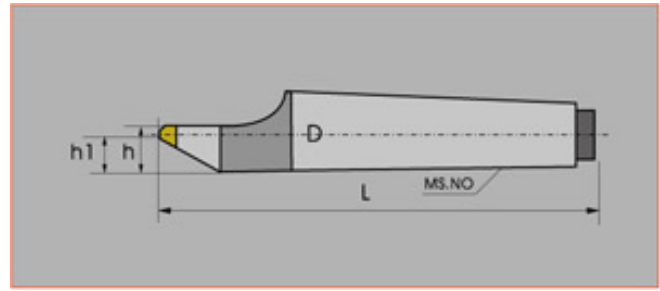


1. The center is assembled with ball bearing.
2. Suitable for middle /high speed and light duty.
3. The shaft adopt alloy steel and heat treatment (HRC60;ã ;À 2;ã) Super steel trait and durable.

Art.No	Model	A (mm)	B (mm)	C (mm)	D (mm)	D1 (mm)	L (mm)	r/min (rpm)	Accuracy(mm)
003070	MT1	21	31	56	32	16	108	4000	0.005
003071	MT2	26	37	69	40	22	132	4000	0.005
003072	MT3	32	46	86	45	26	164	4000	0.005
003073	MT4	34	46	108	48	30	188	4000	0.005
003074	MT5	50	62	136	68	45	248	3500	0.005

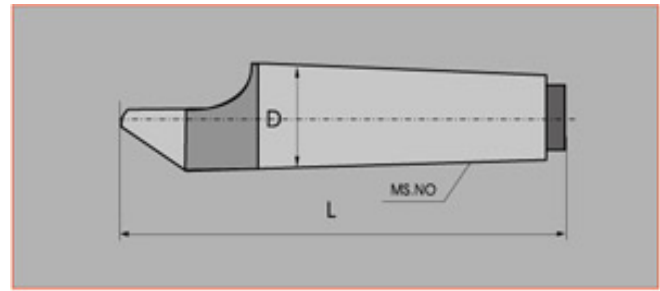
## CENTER SERIES

### CARBIDE HALF-NOTCHED CENTER



Art.No	Size	MS. NO	D (mm)	L (mm)	NET.WT	Accuracy (mm)
003007	D142	2	17.78	100	0.15	0.010
003008	D143	3	23.825	125	0.34	0.010
003009	D144	4	31.267	160	0.71	0.010
003010	D145	5	44.399	200	1.78	0.010
003011	D146	6	63.348	280	5.0	0.010

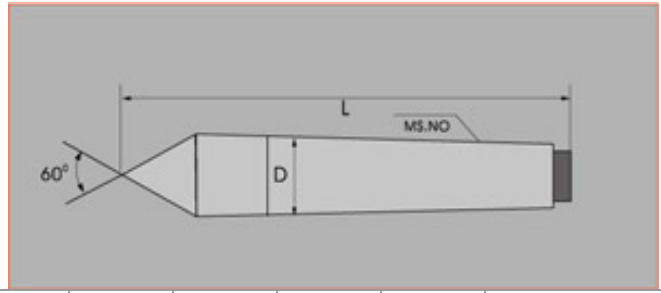
### HALF-NOTCHED CENTER



Art.No	Size	MS. NO	D (mm)	L (mm)	NET.WT	Accuracy (mm)
003001	D121	1	12.065	80	0.054	0.010
003002	D122	2	17.78	100	0.143	0.010
003003	D123	3	23.825	125	0.323	0.010
003004	D124	4	31.267	160	0.703	0.010
003005	D125	5	44.399	200	1.862	0.010
003006	D126	6	63.348	280	4.925	0.010

## CENTER SERIES

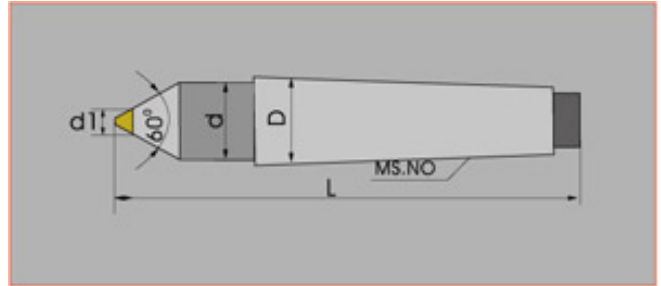
### DEAD CENTER



Art.No	Size	MS. NO	D (mm)	L (mm)	Weight (Kg)	Accuracy (mm)
003012	D111	1	12.065	80	0.057	0.010
003013	D112	2	17.78	100	0.150	0.010
003014	D113	3	23.825	125	0.334	0.010
003015	D114	4	31.267	160	0.746	0.010
003016	D115	5	44.399	200	1.862	0.010
003017	D116	6	63.348	280	4.925	0.010



### CARBIDE CENTER



Art.No	Size	MS. NO	D (mm)	L (mm)	Weight (Kg)	Accuracy (mm)
003018	D122	2	17.78	100	0.151	0.010
003019	D123	3	23.825	125	0.335	0.010
003020	D124	4	31.267	160	0.746	0.010
003021	D125	5	44.399	200	1.826	0.010
003022	D126	6	63.348	280	5.23	0.010

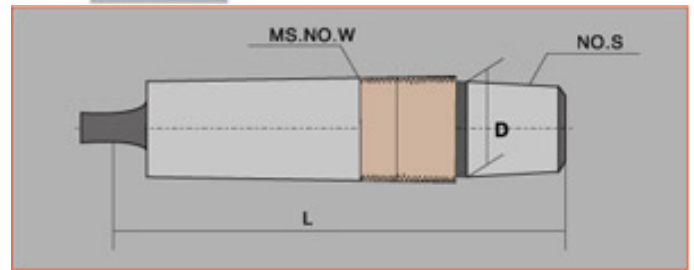
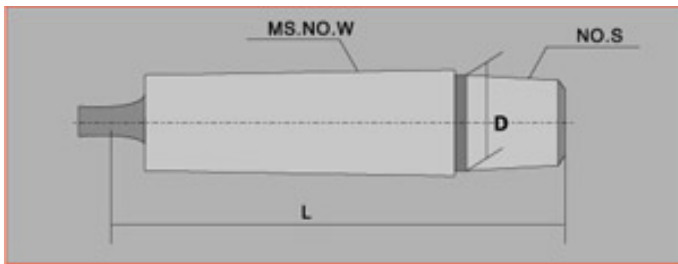
## MORSE TAPER DRILL CHUCK ARBORS WITH TANG



**STYLE A**



**STYLE B**

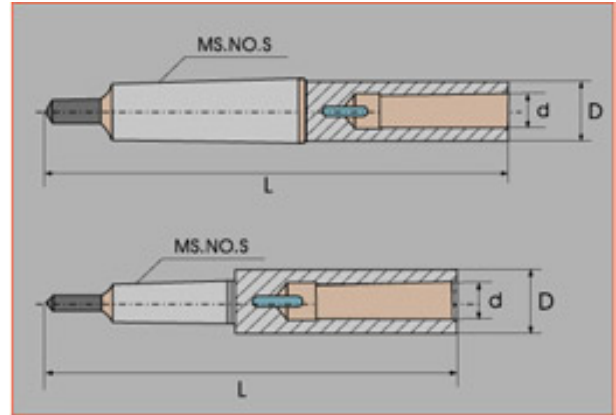


Art.No	Size	L (mm)	D (mm)	Art.No	Size	L (mm)	D (mm)	Art.No	Size	L (mm)	D (mm)
001001	MS1-B10	84	10.094	001020	MS2-JT4	124	28.55	001040	MS4-B22	167	21.793
001002	MS1-B12	88	12.065	001021	MS2-JT6	107	17.17	001041	MS4-B24	177	23.825
001003	MS1-B16	94	15.733	001022	MS2-JT33	107	15.85	001042	MS4-JT2	148	14.199
001004	MS1-B18	100	17.78	001023	MS3-B10	116	10.094	001043	MS4-JT33	157	20.599
001005	MS1-JT0	80	6.35	001024	MS3-B12	120	12.065	001044	MS4-JT4	168	28.55
001006	MS1-JT1	85	9.754	001025	MS3-B16	126	15.733	001045	MS4-JT5	173	3.589
001007	MS1-JT2	91	14.199	001026	MS3-B18	134	17.78	001046	MS4-JT6	151	17.17
001008	MS1-JT3	99	20.599	001027	MS3-B22	143	21.793	001047	MS4-JT33	151	15.85

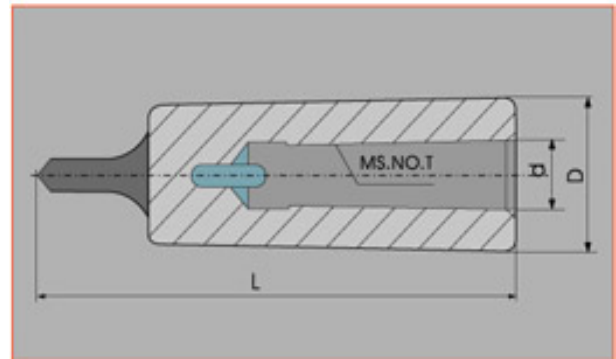
001009	MS1-JT6	94	17.17	001028	MS3-B24	153	23.825	001048	MS5-B16	184	15.733
001010	MS1-JT33	94	15.85	001029	MS3-JT0	112	6.35	001049	MS5-B18	192	17.78
001011	MS2-B10	97	10.094	001030	MS3-JT1	117	9.754	001050	MS5-B22	200	21.793
001012	MS2-B12	101	12.065	001031	MS3-JT2	123	14.199	001051	MS5-B24	210	23.825
001013	MS2-B16	107	15.733	001032	MS3-JT3	132	20.599	001052	MS5-JT3	190	20.599
001014	MS2-B18	115	17.78	001033	MS3-JT4	143	28.55	001053	MS5-JT4	201	28.55
001015	MS2-B22	124	21.793	001034	MS3-JT5	148	35.89	001054	MS5-JT5	206	35.89
001016	MS2-JT0	93	6.35	001035	MS3-JT6	126	17.17	001055	MS5-JT6	184	17.17
001017	MS2-JT1	98	9.754	001036	MS3-JT33	126	15.85	001056	MS5-JT33	184	15.85
001018	MS2-JT2	104	14.199	001037	MS4-B12	145	12.065	001057	MS-JT6	246	17.17
001019	MS2-JT3	112	20.599	001038	MS4-B16	151	15.733				
				001039	MS4-B18	159	17.788				

## MORSE TAPER SLEEVES

STYLE A



STYLE B



Art.No	Size	MS. NO.S	MS. NO.T	D (mm)	d (mm)	L (mm)	NET.WT	Accuracy (mm)
002030	R2 <sub>i</sub> Á1	2	1	18.6	12.065	92	0.1	0.015
002031	R3 <sub>i</sub> Á1	3	1	24.1	12.065	99	0.24	0.015
002032	R3 <sub>i</sub> Á2	3	2	24.7	17.78	112	0.12	0.015
002033	R4 <sub>i</sub> Á1	4	1	31.6	12.065	124	0.6	0.015
002034	R4 <sub>i</sub> Á2	4	2	31.6	17.78	124	0.5	0.015
002035	R4 <sub>i</sub> Á3	4	3	32.4	23.825	140	0.38	0.02
002036	R45 <sub>i</sub> Á1	5	1	44.7	12.065	156	1.59	0.02
002037	R45 <sub>i</sub> Á2	5	2	44.7	17.78	156	1.49	0.02
002038	R5 <sub>i</sub> Á1	5	3	44.7	23.825	156	1.36	0.02
002039	R5 <sub>i</sub> Á4	5	4	45.5	31.267	171	0.95	0.02
002040	R6 <sub>i</sub> Á1	6	1	63.8	12.065	218	3.84	0.02
002041	R6 <sub>i</sub> Á2	6	2	63.8	17.78	218	3.73	0.02
002042	R6 <sub>i</sub> Á3	6	3	63.8	23.825	218	3.85	0.02
002043	R6 <sub>i</sub> Á4	6	4	63.8	31.267	218	3.12	0.02
002044	R6 <sub>i</sub> Á5	6	5	63.8	44.399	218	1.95	0.02