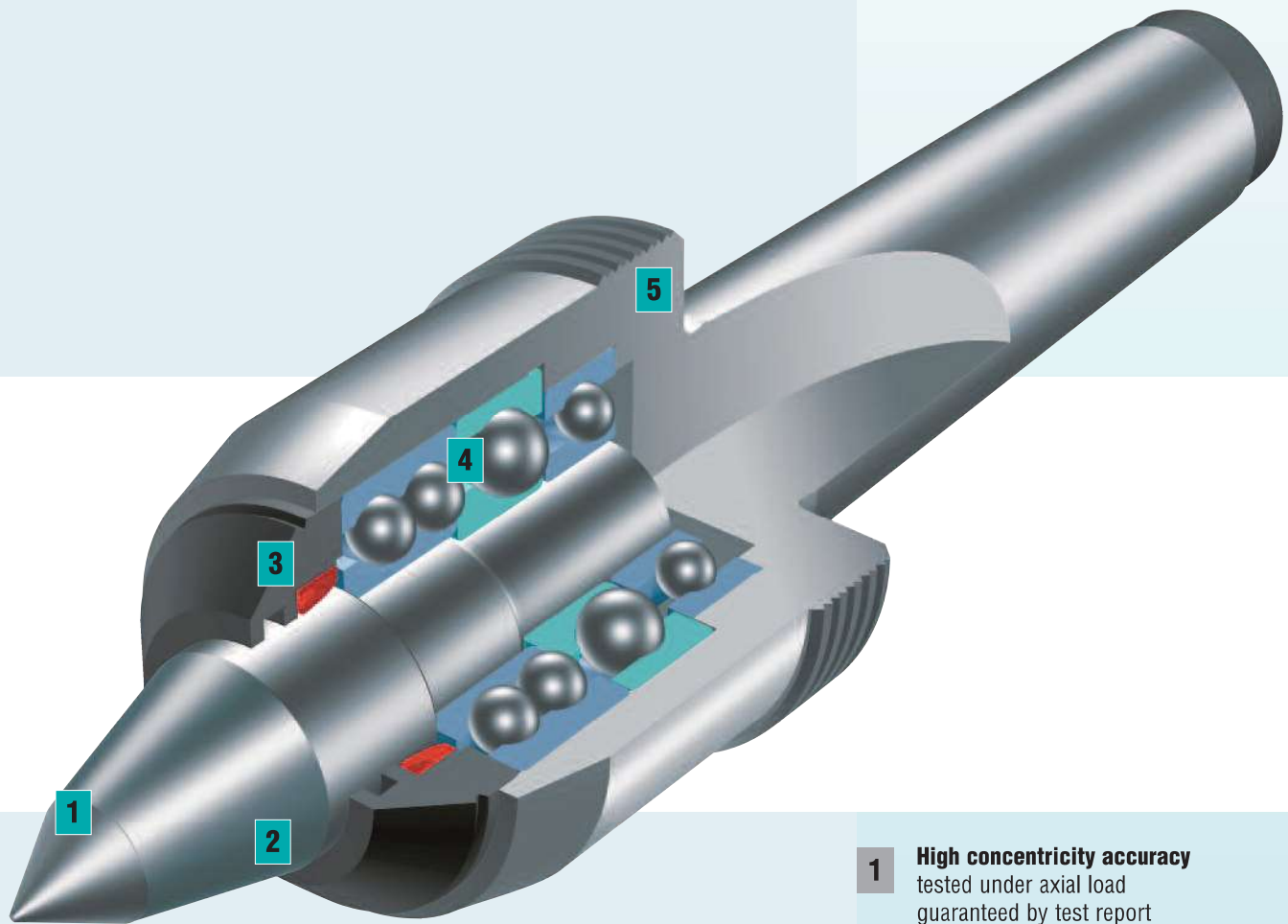


High Performance Centres for Turning and Grinding



Series NC – a class on its own



The BRUCKNER TOP-SEAL-SYSTEM provides a triple-layer protection from dirt and coolant (see the principle on page 20). The robust precision bearings have been specially designed for turning operations requiring high

r.p.m. The NC series user works with high performance centres showing their class particularly when „the going gets tough“.

Two types:

- ▶ Slim design for ease of access minimum rolling resistance for small and medium work through low-friction bearings
- ▶ With extra high duty bearings for higher loads

- 1 High concentricity accuracy**
tested under axial load
guaranteed by test report
- 2 Through-hardened alloy tool steel
centrepoint**
- 3 TOP-SEAL-SYSTEM**
protects the bearings from
dirt and coolant
- 4 Large-dimensioned precision
roller bearings**
robust bearings to absorb the radial
and axial forces.
Maintenance-free permanent
lubrication
- 5 Housing**
of high tensile alloy tool steel.
Housing and shank are case-
hardened to protect from damage

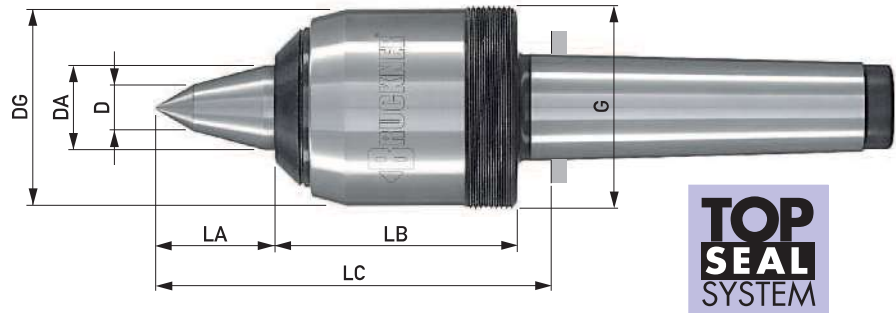
**Produced according to BRUCKNER WORKS
STANDARD (page 8)**

Types NC 33, NC 43

For high r.p.m.
Centrepoint 60°/40°
with draw-off thread

Runout
max. 0.005 mm, with test report

Application
For turning operations requiring high r.p.m.
Triple-layer protection of bearings from penetration of coolant by the **TOP-SEAL-SYSTEM** (principle on page 20)



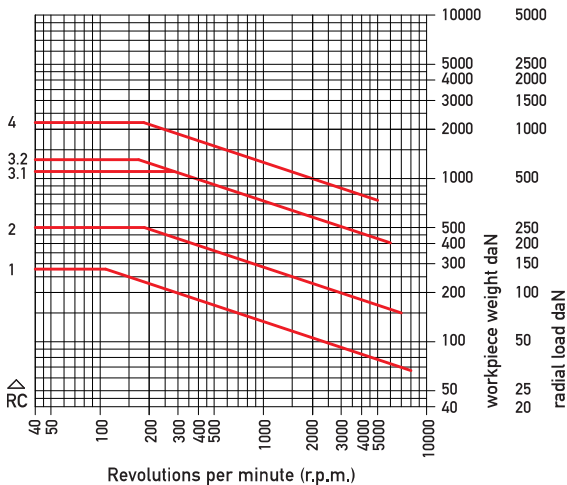
Type NC	ID.No.	33.045-2	33.045-3	43.058-3	33.058-4	43.076-4	33.076-5	43.095-5	33.095-6
Draw-off nut	ID.No.	M45A	M45A	M60	M60	M80	M80	M100	M100
Morse taper		2	3	3	4	4	5	5	6
DA		20	20	25	25	35	35	45	45
D		6	6	14	14	16	16	20	20
DG		45	45	58	58	76	76	95	95
LA		25	25	35	35	44	44	54	54
LB		57	57	70	70	81	81	103	103
LC		87	88	112	112	132	132	164	164
G		M 45x2	M 45x2	M 60x1.5	M 60x1.5	M 80x2	M 80x2	M 100x2	M 100x2
Workpiece weight max. daN*		280	280	500	500	1100	1300	2200	2200
r.p.m. max. *		8000	8000	7000	7000	6000	6000	5000	5000
radial/axial load graph		RC1/AC1	RC1/AC1	RC2/AC2	RC2/AC2	RC3.1/AC3	RC3.2/AC3	RC4/AC4	RC4/AC4

The thread specifications of the ID.Nos. 33.045-2 and 33.045-3 are similar to that of type A, fitting the special nut for type A (page 16).

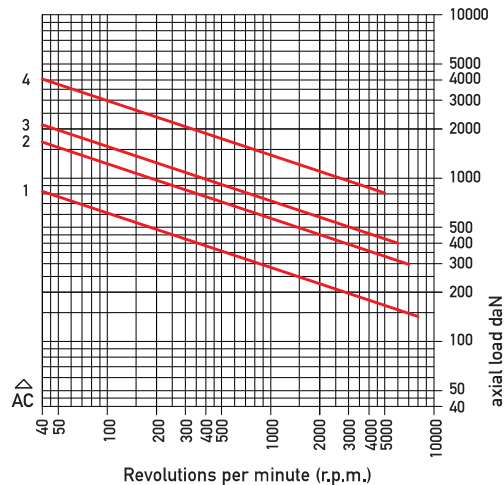
* observe the load graphs

Radial and axial loads for a bearing life of 2,000 operating hours (reading example on page 11)

Radial – Type NC



Axial – Type NC

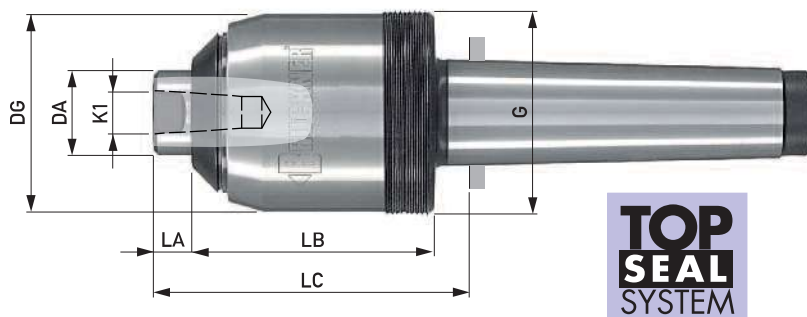


Types NCE 34, NCE 44

For high r.p.m
Centrepoint with internal taper 1:7.5
for interchangeable inserts
 with draw-off thread

Runout
 max. 0.005 mm, with test report

Application
 Variable clamping possibilities for CNC turning through interchangeable inserts. In the case of a collision or insert wear, type NCE offers the advantage that, simply by changing the insert, the high performance centre is immediately ready for use again.
 Multiple use is made possible by eight different insert styles (page 21).

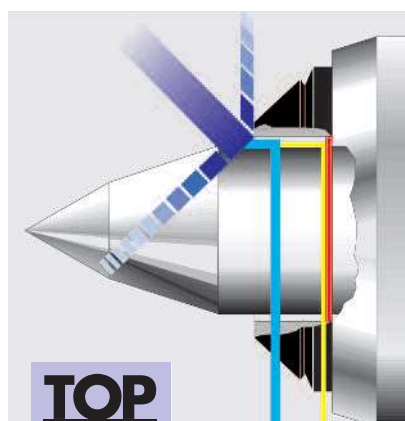


Type NCE	ID.No	34.045-2	34.045-3	44.058-3	34.058-4	44.076-4	34.076-5	44.095-5	34.095-6
Draw-off nut	ID.No.	M45A	M45A	M60	M60	M80	M80	M100	M100
Morse taper		2	3	3	4	4	5	5	6
DA		20	20	25	25	35	35	45	45
DG		45	45	58	58	76	76	95	95
K1		11	11	15	15	22	22	28	28
LA		9	9	11	11	13	13	14	14
LB		57	57	70	70	81	81	103	103
LC		72	73	88	88	101	101	124	124
G		M 45x2	M 45x2	M 60x1,5	M 60x1,5	M 80x2	M 80x2	M 100x2	M 100x2
SW		16	16	22	22	30	30	41	41
r.p.m. max.		8000	8000	7000	7000	6000	6000	5000	5000
suitable insert (page 21)		482..	482..	484..	484..	487..	487..	485..	485..
load	The load of type NCE is limited by the interchangeable inserts (page 21)								

The thread structure of the ID.Nos. 34.045-2 and 34.045-3 is similar to that of type A, fitting the special nut for type A (page 16).

BRUCKNER TOP-SEAL-SYSTEM

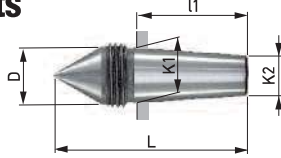
- The coolant does not hit the seal ring away, but flows with reduced energy into the first labyrinth channel.
- There the largest part of the coolant is drained through the first drain aperture.
- The small residue is wiped off the seal into the second labyrinth channel and flows through the second drain aperture.



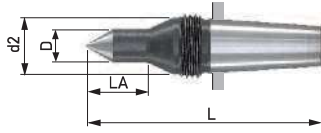
Interchangeable inserts

taper 1:7.5, in gauge accuracy

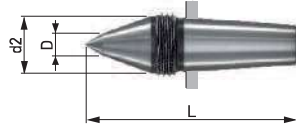
Form AO, 60°
draw-off thread



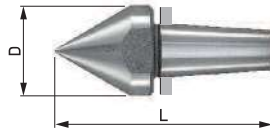
Form ASL, 60°
slim, extended
draw-off thread



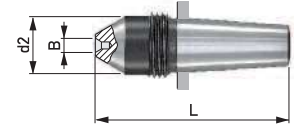
Form AKOP, 60°/40°
extended
draw-off thread



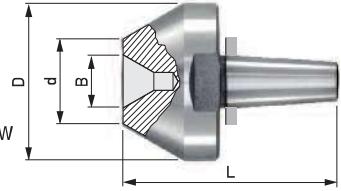
Form A, 60°
for hollow parts
spanner flat



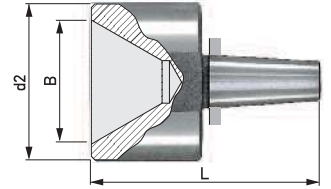
Form B, centre 60°
for centreless workpieces,
draw-off thread



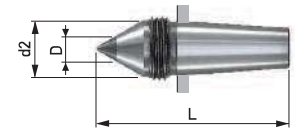
Form C, centre 60°
for centreless workpieces,
external angle 60° for hollow
parts, spanner flat



Form D, centre 60°
for centreless workpieces,
spanner flat



Form AOHM, 60°
with carbide insert
draw-off thread



Basic centre Type: NCE	Interchangeable inserts	radial load max. daN	inserts dimensions						thread SW	taper dimensions taper 1:7.5		
			D	d2	B	d	L	LA		K1	K2	l1
34.045-2 34.045-3	482AO	90	11.7				45		M 14x1.5	11	8	23
	482ASL	30	6	11.7		55	15	M 14x1.5				
	482AKOP	90	5	11.7		50		M 14x1.5				
	482A	90	17			45		SW14				
	482B	90	11.7		4x2	45		M 14x1.5				
	482C	90	28		8x3	12	45	SW24				
	482D	90	28		20x6		45	SW24				
	482AOHM	60	7	11.7		45		M 14x1.5				
44.058-3 34.058-4	484AO	160	15.7			53		M 18x1.5	15	11	30	
	484ASL	100	9	15.7		65	17	M 18x1.5				
	484AKOP	160	6	15.7		58		M 18x1.5				
	484A	160	25			60		SW22				
	484B	110	15.7		4x2	53		M 18x1.5				
	484C	160	44		15x5	24	60	SW41				
	484D	160	44		35x12		64	SW41				
	484AOHM	60	7	15.7		53		M 18x1.5				
44.076-4 34.076-5	487AO	300	21.6			74		M 24x1.5	22	16.4	42	
	487ASL	100	9	21.6		86	17	M 24x1.5				
	487AKOP	300	8	21.6		80		M 24x1.5				
	487A	300	32			82		SW27				
	487B	240	21.6		5x2,5	74		M 24x1.5				
	487C	300	55		20x6	30	82	SW50				
	487D	300	55		45x15		85	SW50				
	487AOHM	200	11	21.6		74		M 24x1.5				
44.095-5 34.095-6	485AO	500	27.7			93		M 30x1.5	28	21	52.5	
	485ASL	180	13	27.7		110	27	M 30x1.5				
	485AKOP	500	8	27.7		105		M 30x1.5				
	485A	500	45			105		SW41				
	485B	500	27.7		7x3	93		M 30x1.5				
	485C	500	65		25x6	35	105	SW55				
	485D	500	65		55x20		105	SW55				
	485AOHM	500	18	27.7		93		M 30x1.5				

ID.No.	content
P 10	100 g

Installation paste

Makes insert change easier.
Apply thinly and evenly to the insert taper.

for hard turning



for vertical turning machines



with internal taper 1:7.5 for interchangeable inserts



with spring and coloured pressure indication



High Performance Bullnose Live Centres Special Designs

for mounting chucks



pointed design



with carbide cap and flange mounting



with carbide triple contact pads





from small to large



HSK40



with sealing air connection



ABS50



Captor4



large centrepoint



carbide spherical centre

live collet chuck



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