

AK182 hydraulic Chuck

Agenda

- 1. Product description**
- 2. Lab test**
- 3. Product program**
- 4. Advantages and customer benefits**
- 5. Application area**
- 6. Competition**
- 7. Additional information**



AK182 hydraulic chuck

1. Product description

All typical couplings

SK, BT and HSK

Clamping diameter

12, 20, 32 mm

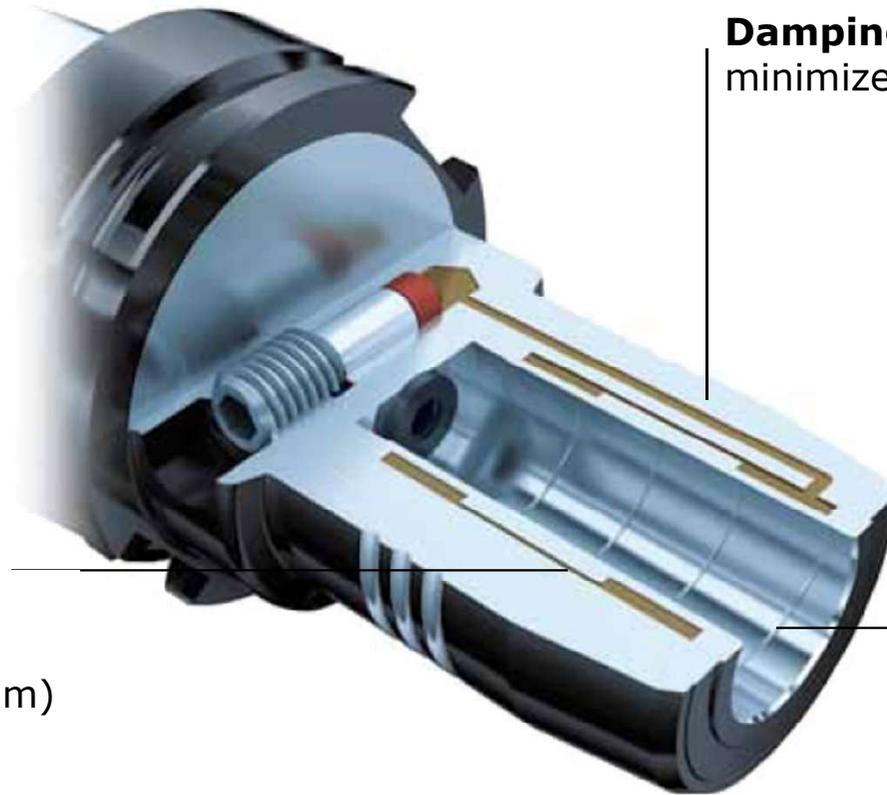
Usable for all shank versions



simple handling

AK182 hydraulic chuck

1. Product description



Damping function
minimizes risk of pull out

Clamping force
max. torque
(up to 900 Nm for 20 mm)

runout accuracy
steady < 0,003 mm

AK182 hydraulic chuck

1. Product description intermediate bushing

Runout accuracy $\leq 2 \mu\text{m}$

Intermediate bushing are in 2 versions available:

sealed

- Up to 80 bar coolant pressure
- Perfect for tools with internal coolant

With peripheral coolant

- Guides the coolant along the chip flutes direct to the cutting edge



AK182 hydraulic chuck

3. Product program

adaptors:



	D 12	D 20	D 32
SK 40	x	x	
SK 50		x	x
BT 40	x	x	
BT 50		x	x
HSK 63	x	x	
HSK 100		x	x

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3. Product program

Intermediate bushing



	with peripheral-coolant	for internal coolant
D 12	3, 4, 5, 6, 8	3, 4, 5, 6, 8
D 20	3, 4, 5, 6, 8, 10,12,14,16	3, 4, 5, 6, 7, 8, 9, 10,11,12,13,14,15,16
D 32	6, 8, 10,12,14,16,18, 20,25	6, 8, 10,12,14,16,18, 20,25

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4. Advantages and customer benefits

Quality:

- high surface quality
- → excellent runout accuracy
- Improvement of milling result
- → based on perfect coolant supply (with and without internal coolant)

Costs:

- Increase of tool life especially in milling
- → damping function
- Simple handling
- Universal use
 - with intermediate bushing



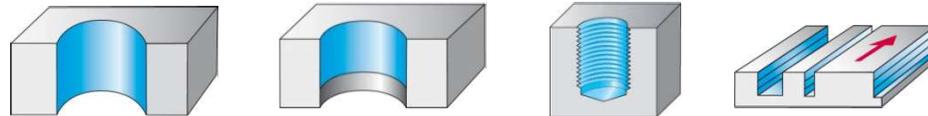
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5. Application area

ISO –material group

P	M	K	N	S	H	O
● ●	● ●	● ●	● ●	● ●	● ●	● ●

Operation



Additional info

for milling see next page

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5. Application area

- **Full slotting with AK182**

Recommended limits for ap [mm]

	Dc [mm]	Recommended limits for ap [mm]							
		12			16		20		
		AK182...12 direct	AK182...20 reduced	AK182...32 reduced	AK182...20 reduced	AK182...32 reduced	AK182...20 direct	AK182...32 reduced	
Material	X37CrMoV5-1	1.2343	10	15	30	10	24	8	20
	42CrMo4 (850 N/mm ²)	1.7223	11	16	38	10	20	10	22
	X100CrMoV5	1.2363	10	15	30	10	25	10	20
	X46Cr13	1.4034	10	13	30	10	30	10	23
	GGG-50	0.7050	12	18	40	12	30	10	28
	GGG-60	0.7060	12	18	30	12	30	10	25
	AlZnMgCu1,5	3.4365	30	40	40	40	40	16	40
	Inconel 718	2.6468	8	12	27	10	23	8	18

- **Hint: pay attention to the limit of spindle load (i.e. HSK63)!**