

### **Thermo Secure Gold 3000**

### The high-end shrink fit chuck from Guhring

- perfect concentricity thanks to length setting screw with axial force damping
- 6 locating bores for highest balance
- maximum operational safety with optical temperature indicator
- optimal corrosion protection due to coating
- standard range for HSK-A, ISO taper and MAS-BT

2010 edition



# Thermo Secure Gold 3000 No fear of high temperatures

Temperature indicator provides protection

Up until now one couldn't tell a chuck's temperature. With the optical temperature indicator on Guhring Thermo Secure Gold 3000 chucks this source of danger is a thing of the past.

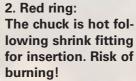
A red ring signals: Attention, hot! Risk of burning! The chuck has a temperature above appr. 45° C.

When the temperature drops below appr. 45° C, the ring turns blue. The chuck can now be held without danger. With a shrink fitted tool optimal clamping is now achieved.

A coated shrink fit chuck - of course! The PVD-coating provides outstanding corrosion protection and prevents the tarnishing of the chuck when heating and cooling. In addition, it counteracts contamination that occurs on conventional shrink fit chucks i.e. with cast iron, graphite and MQL machining. Subsequently, it ensures a longer chuck life.

# **Thermo Secure Gold 3000**

for maximum operational safety



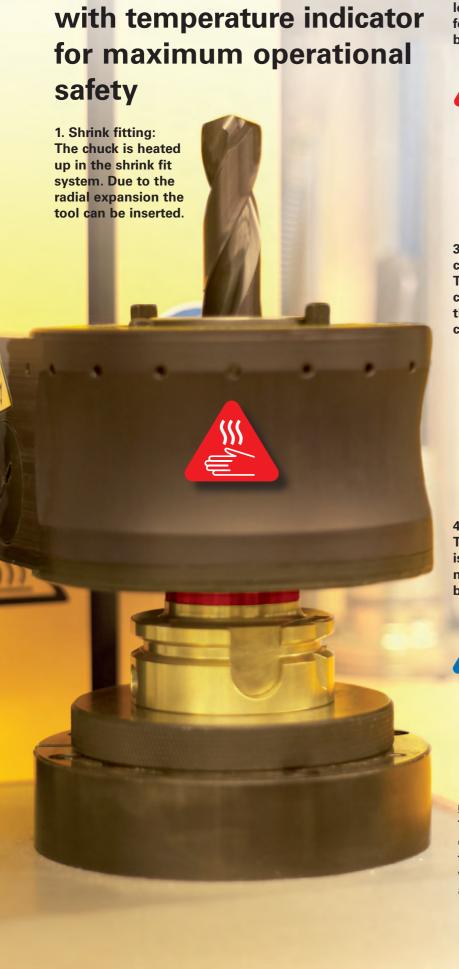


3. Putting on the cooling adapter: Through controlled cooling of the chuck the tool is securely clamped.





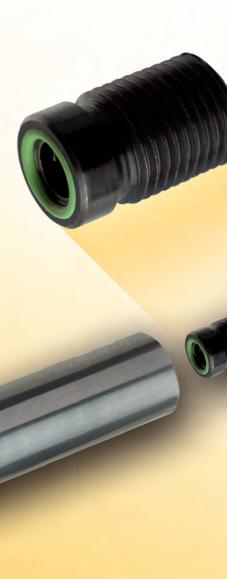
5. Finished: The tool and holder can be removed from the shrink fit system without danger and applied.





## Thermo Secure Gold 3000 Length setting screw with axial force damping

When shrink fitting, the heating and subsequent cooling of the chuck and tool not only causes the desired radial shrinking but also the unwanted axial shrinking. If the clamped tool is sitting on the setting screw, it can result in small inaccuracies in tool concentricity with conventional solutions. The new length setting screw with axial force damping from Guhring completely offsets this axial length difference through the integrated, flexible compensating element. The length setting screw with axial force damping can be retrofitted to conventional Guhring chucks on request!



## Thermo Secure Gold 3000 6 locating bores for highest balance

An imbalance produces a centrifugal force which is detrimental to the smooth running of the cutting tool. The consequence is a deterioration of the machined feature as well as a shorter tool life. Compensating to eliminate the imbalance completely is crucial for highly accurate machining.

Thanks to the six balancing holes of the newThermo Secure Gold 3000 an imbalance – in contrast to conventional holders with four balancing holes – can be compensated with pinpoint accuracy, easily and with total reliability.



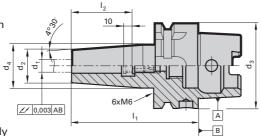
#### **HSK-A shrink fit chucks TSG 3000**

#### **Product information**

- coating for protection against oxidation, cleanliness and longevity
- safety colour ring for maximum operator safety
- with axial damping screw for optimal concentricity
- MQL suitable
- for tool shank tolerance h6
- to DIN 69882-8
- balancing quality G6.3 at 15,000 rev./min
- designed with 6xM6 balancing screws for the highest accuracy

#### Scope of delivery

- incl. setting screw, Guhring no. 4941
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- for MQL application order as special tool holder with coolant delivery set
- special dimensions on request







4726

Guhring no.

HSK-A d <sub>3</sub>	for clamping-Ø d <sub>1</sub> h6 mm	d <sub>2</sub> mm	d4 mm	l <sub>1</sub> mm	l <sub>2</sub> mm	incl. setting screw Guh.no. Code no.		kg	Code no.	Availability
63	6	21	27	80	36	4941	6,100	1.00	6,063	•
63	8	21	27	80	36	4941	8,100	1.00	8,063	•
63	10	24	32	85	41	4941	10,100	1.00	10,063	•
63	12	24	32	90	46	4941	12,100	1.00	12,063	•
63	14	27	34	90	46	4941	14,100	1.00	14,063	•
63	16	27	34	95	49	4941	16,100	1.00	16,063	•
63	18	33	42	95	49	4941	18,100	1.00	18,063	•
63	20	33	42	100	51	4941	20,100	1.00	20,063	•
63	25	44	53	115	57	4941	25,100	2.00	25,063	•
63	32	44	53	120	61	4941	32,100	2.00	32,063	•
100	6	21	27	85	36	4941	6,100	2.00	6,100	•
100	8	21	27	85	36	4941	8,100	2.00	8,100	•
100	10	24	32	90	41	4941	10,100	2.00	10,100	•
100	12	24	32	95	46	4941	12,100	2.00	12,100	•
100	14	27	34	95	46	4941	14,100	2.00	14,100	•
100	16	27	34	100	49	4941	16,100	2.00	16,100	•
100	18	33	42	100	49	4941	18,100	2.50	18,100	•
100	20	33	42	105	51	4941	20,100	2.50	20,100	•
100	25	44	53	115	57	4941	25,100	3.00	25,100	•
100	32	44	53	120	61	4941	32,100	3.00	32,100	•

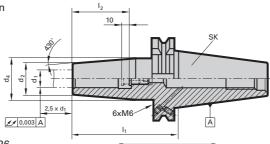
#### ISO taper shrink fit chucks DIN 69871 form AD/BTSG 3000

#### **Product information**

- coating for protection against oxidation, cleanliness and longevity
- safety colour ring for maximum operator safety
- with axial damping screw for optimal concentricity
- for ISO40 to DIN 69871 form AD/B
- balancing quality G6.3 / 15,000 rev./min
- designed with 6xM6 balancing screws for the highest accuracy
- form B supplied with threaded pins in bores.
- for tool shank tolerance h6

#### Scope of delivery

- incl. setting screw Guhring no. 4941 for wet application
- order draw bolt Guhring nos. 4925, 4926 separately
- special dimensions on request
- ISO 50 on request
- order as special holder for MQL application



Guhring no.



4727

- Order as special florder for Meze application										
SK	for clamping-Ø d <sub>1</sub> h6 mm	d <sub>2</sub> mm	d <sub>4</sub> mm	l <sub>1</sub> mm	l <sub>2</sub> mm	incl. setting screw Guh.no. Code no.		kg	Code no.	Availability
40	6	21	27	80	36	4941	6,041	1.00	6,040	•
40	8	21	27	80	36	4941	8,040	1.00	8,040	•
40	10	24	32	80	41	4941	10,050	1.00	10,040	•
40	12	24	32	80	46	4941	12,100	1.00	12,040	•
40	14	27	34	80	46	4941	14,100	1.00	14,040	•
40	16	27	34	80	49	4941	16,100	1.00	16,040	•
40	18	33	42	80	49	4941	18,100	1.00	18,040	•
40	20	33	42	80	51	4941	20,100	1.50	20,040	•
40	25	44	53	100	57	4941	25,100	1.50	25,040	•
40	32	44	53	100	61	4941	32,100	1.50	32,040	•

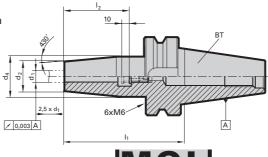
#### MAS-BT shrink fit chucks TSG 3000

#### **Product information**

- coating for protection against oxidation, cleanliness and longevity
- safety colour ring for maximum operator safety
- with axial damping screw for optimal concentricity
- MAS BT to JIS B 6339
- for tool shank tolerance h6
- balancing quality G6.3 / 15,000 rev./min
- designed with 6xM6 balancing screws for the highest accuracy

#### Scope of delivery

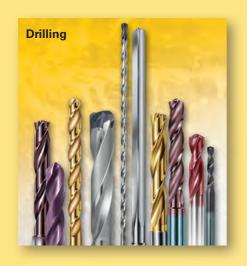
- incl. setting screw Guhring no. 4941 with axial force damping
- order draw bolt Guhring no. 4927, 4928 separately
- special dimensions on request
- MAS-BT 50 on request
- order as special holder for MQL application







BT	for					incl.		kg	Code no.	Availability
	clamping-Ø	d <sub>2</sub>	d4	I <sub>1</sub>	l <sub>2</sub>	setting screw				
	d <sub>1</sub> h6 mm	mm	mm	mm	mm		Code no.			
40	6	21	27	90	36	4941	6,041	1.00	6,040	•
40	8	21	27	90	36	4941	8,040	1.00	8,040	•
40	10	24	32	90	41	4941	10,050	1.00	10,040	•
40	12	24	32	90	46	4941	12,100	1.00	12,040	•
40	14	27	34	90	46	4941	14,100	1.50	14,040	•
40	16	27	34	90	49	4941	16,100	1.50	16,040	•
40	18	33	42	90	49	4941	18,100	2.00	18,040	•
40	20	33	42	90	51	4941	20,100	2.00	20,040	•
40	25	44	53	100	57	4941	25,100	2.00	25,040	•
40	32	44	53	100	57	4941	32,100	2.00	32,040	•



















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