

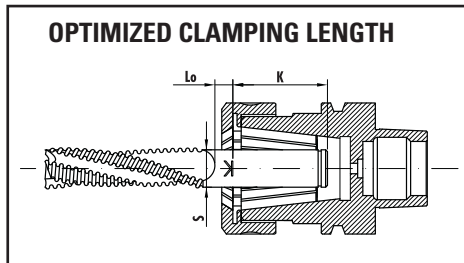
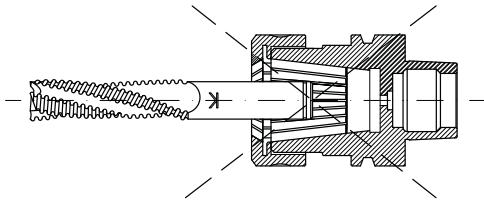
**SAFETY NORMS**

**Table 1.1:**  
Calculation of the minimum clamping length (Safety regulation EN847-1).

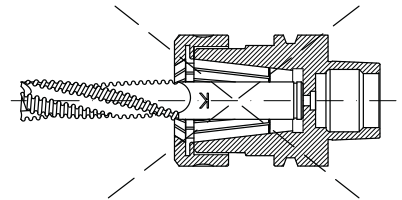
On the tool shank the minimum clamping length is marked.  
The shank has to be clamped as far as possible, but at least up to the marking of the minimum clamping length (K).  
The free shank length (Lo) should be as short as possible, granting a higher rigidity and smaller risk of tool breakage.

Shank diameter S (mm)	Min. clamping length K (mm)
$S \leq 10$	$K \geq 20$
$10 < S < 25$	$K = S \times 2$
$S \geq 25$	$K = S \times 1,8$

**WRONG ASSEMBLING**



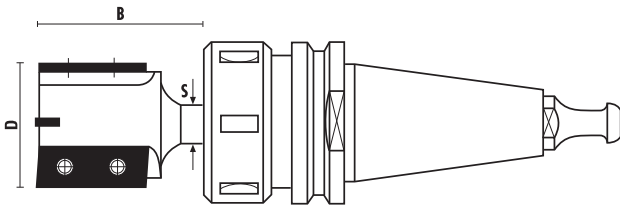
**WRONG ASSEMBLING**



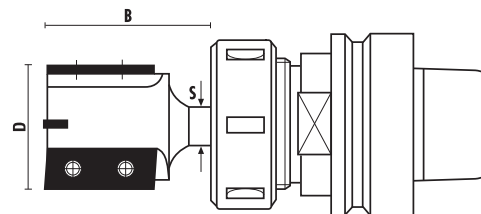
**Safety norm for the calculation of the minimum clamping length**

- D = Tool diameter
- B = Maximum safe length of the tool
- S = Shank diameter

**COLLET CHUCKS ISO30**



**COLLET CHUCKS HSK63F**



**Table 2.1:** Method for the calculation of the measure B for collet chucks ISO30

D (mm)	S (mm)								
	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20	Ø 25
6	81								
8	66	94							
10	59	82	105						
12	53	73	94	115					
14	48	66	85	105	124				
16	44	61	78	96	114	133			
18	41	57	73	89	106	123	140		
20	38	53	68	84	99	115	132	148	
25		45	59	72	86	100	114	129	153
30		40	52	64	77	89	102	115	125
35			47	58	69	81	92	104	106
40			43	53	64	74	85	91	92
45				49	59	68	78	80	81
50				46	55	64	71	71	73
55					51	60	64	64	66
60					48	56	58	59	60
65					46	52	53	54	56
70						48	49	50	52
75						46	47	49	51
80							47	47	51
85								47	51
90								47	50
95								47	50
100								47	50
105									49
110									49

**Table 2.2:** Method for the calculation of the measure B for collet chucks HSK63F

D (mm)	S (mm)								
	Ø 6	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16	Ø 18	Ø 20	Ø 25
6	81								
8	68	94							
10	59	82	105						
12	53	73	94	115					
14	48	66	85	105	124				
16	44	61	78	96	114	133			
18	41	57	73	89	106	123	140		
20	38	53	68	84	99	115	132	148	
25		45	59	72	86	100	114	129	165
30		40	52	64	77	89	102	115	147
35			47	58	69	81	92	104	133
40			43	53	64	74	85	95	123
45				49	59	68	78	88	114
50				46	55	64	73	83	106
55					51	60	69	78	100
60					48	56	65	73	94
65					46	53	61	69	90
70						51	59	66	85
75						48	55	63	82
80							53	60	78
85							51	58	75
90							49	56	72
95								56	70
100								52	68
105									65
110									64