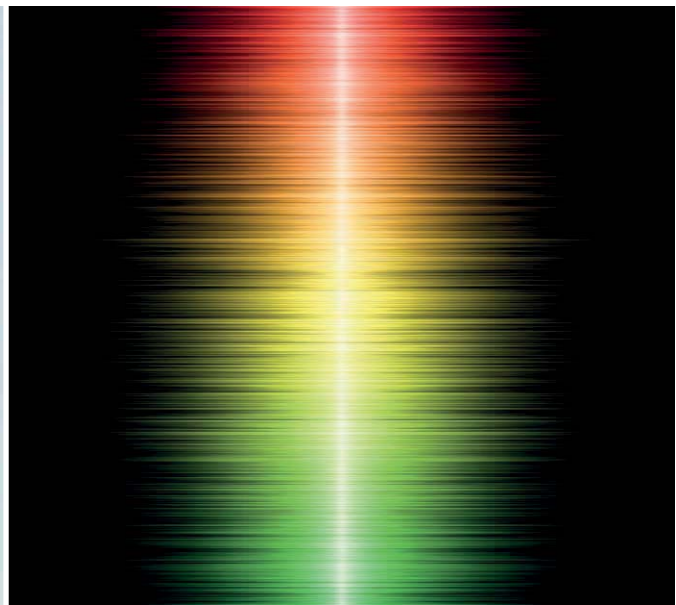


Bräcker



GRETENER[®] yarn carriers

High tech yarn carriers for high-speed spinning frames

GRETENER® high tech yarn carriers

High tech yarn carriers for high-speed spinning frames

Spinning tubes for the production of quality yarns at highest speeds require state of the art design, raw material and manufacturing processes.

GRETENER spinning tubes are exclusively made out of first grade compounds and by state of the art manufacturing technologies. They meet the highest quality requirements regarding dimensions, concentricity, run out stability and deformation. Hence they comply with ISO 368 standards in all aspects.

Only in combination with top quality spindles can GRETENER tubes guarantee the best possible performance.

Characteristics of the different raw materials

	ABS	PC	PBT 30 GV
Spindle revolution	18.000 rpm	20.000 rpm	25.000 rpm
Suitability for steaming	no	yes	yes
Auto doffing	yes	yes	yes
Mechanical stability	sufficient	good	very good
Run out ISO 368 tolerance	length related	180 - 210 mm / 0,20 mm 220 - 240 mm / 0,25 mm 230 - 280 mm / 0,40 mm	
Form stability	good	high	very high
Pressing-on-force	< 15 N*		< 15 N*

ABS Acrylnitril-Butadien-Styrol
 PC Polycarbonate
 PBT 30 GV Poly-Butylen-Terephthalat

* suitable for Rieter RoboDoff



Steaming of the GRETENER® yarn carriers

Generally the GRETENER tubes may be steamed (except ABS tubes). However, there are some limiting parameters which have to be taken into consideration. When spinning a “soft” core yarn (with elastan), we strongly recommend to run tests with a few tubes only, before going into steaming large badges. The same is true, when yarns with a higher shrinking factor than the regular cotton- or wool-blends have to be steamed.

Lifetime of GRETENER® yarn carriers

The potential lifetime of a tube depends on a number of aspects, each of which can influence the lifetime considerably. The life of a tube depends mainly on the way the tubes are handled in the spinning mill.

Attention should be paid to the following aspects:

- No cutting of the tube when removing bits and pieces of yarn
- No steaming with highly shrinkable yarns
- Prevent any treatment or contact with chemicals
- Prevent exposure to UV-rays
- Always use spindle-breaks – do not stop the spindle manually

Table 1 - Dimensions and total run-out tolerances of tubes, ISO 368

Dimensions in millimetres


























Lengths		Row								Permissible total run-out						
l_1	Permissible deviation	0		1		2		3		T_r^a	T_r^b	T_r^c				
		d_1	d_2	d_1	d_2	d_1	d_2	d_1	d_2							
Tubes with taper 1:38																
$d_3 = d_2 + 0,26$																
180	± 1,5	20,24	15,50	18,74	14,00	17,24	12,50			0,40	0,25	0,20				
190		20,24	15,24	18,74	13,74	17,24	12,24									
200		22,26	17,00	20,26	15,00	18,76	13,50									
210		22,27	16,74	20,27	14,74	18,77	13,24									
220		24,28	18,49	22,28	16,49	20,28	14,49	18,78	12,99							
230	± 2	24,30	18,25	22,3	16,25	20,30	14,25	18,8	12,75	0,40	-	-				
240		27,31	20,99	24,31	17,99	22,31	15,99	20,31	13,99							
250		27,32	20,74	24,32	17,74	22,32	15,74	20,32	13,74							
260		30,34	23,50	27,34	20,50	24,34	17,50	22,34	15,50							
270		30,35	23,24	27,35	20,24	24,35	17,24	22,35	15,24							
280		33,36	25,99	30,36	22,99	27,36	19,99	24,36	16,99							
290		33,37	25,74	30,37	22,74	27,37	19,74	24,27	16,64							
300		± 2,5	36,39	28,50	33,39	25,50	30,39	22,50	27,39				19,50			
Tubes with taper 1:64																
$d_3 = d_2 + 0,16$																
180	± 1,5	19	16,19	17	14,19	15	12,19			0,40	0,25	0,20				
190		20	17,03	18	15,03	16	13,03									
200		21	17,88	19	15,88	17	13,88	15	11,88							
210		22	18,72	20	16,72	18	14,72	16	12,72							
220		24	20,56	22	18,56	20	16,56	18	14,56							
230	± 2	24	20,41	22	18,41	20	16,41	18	14,41	0,40	-	-				
240		27	23,25	24	20,25	22	18,25	20	16,25							
250		27	23,09	24	20,09	22	18,09	20	16,09							
260		30	25,94	27	22,94	24	19,94	22	17,94							
270		30	25,78	27	22,78	24	19,78	22	17,78							
280		33	28,63	30	25,63	27	22,63	24	19,63							
290		33	28,47	30	25,47	27	22,47	24	19,47							
300		± 2,5	36	31,31	33	28,31	30	25,31	27				22,31			
a $n \leq 15\,000\text{ min}^{-1}$ (r/min of spindle) b $15\,000\text{ min}^{-1} < n \leq 18\,000\text{ min}^{-1}$ (r/min of spindle) c $n > 18\,000\text{ min}^{-1}$ (r/min of spindle)																

recommended

Tube type A with plain top

Tube type B with rolled-in top

GRETENER® yarn carriers – colour chart

	01 red		20 green
	02 blue		21 grey
	03 green		22 ivory
	04 yellow		24 light green
	05 violet		25 blue
	06 white		26 violet
	07 green		27 brown
	08 orange		28 pink
	09 grey		29 anthracite
	10 blue		30 brown
	11 lilac		31 brown
	12 orange		32 green
	13 black		

Color changes may appear with different raw materials.