ROTORCRAFT
Swiss Spinning Solutions | Hans Stahlecker

RS11

No. 11-02
GC and GC-P

Rotorcraft Sales

Issue
October 2018

GreenCompact

Toparms PK, short staple

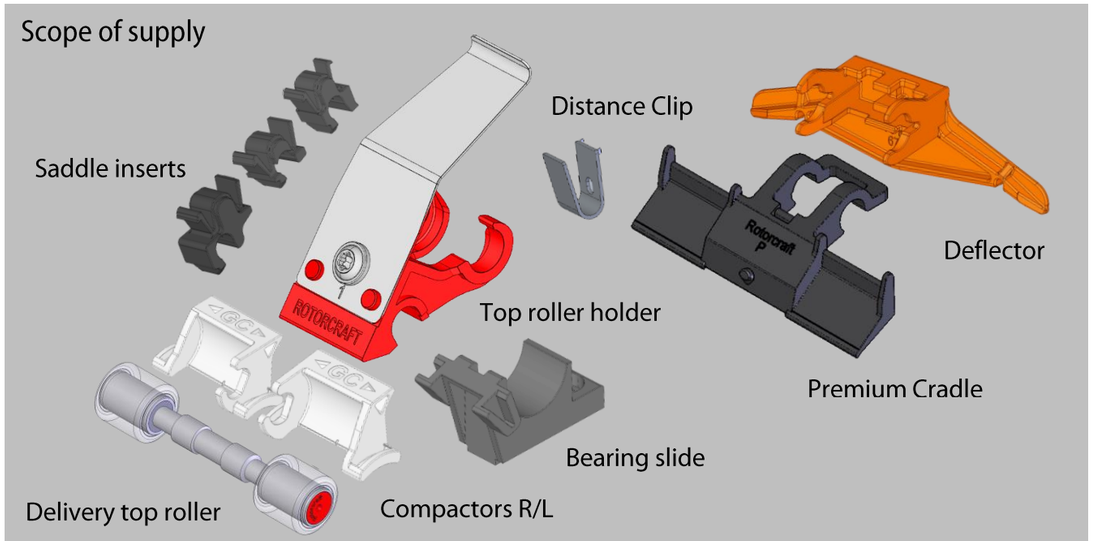


Present yarn quality at lower cost – better yarn at present cost

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Scope of supply



ROTORCRAFT
Swiss Spinning Solutions | Hans Stahlecker

Rotorcraft AG Switzerland
Baffllesstrasse 14, CH-9450 Altstätten
Tel. +41 71 757 89 60
Fax +41 71 757 89 61
E-Mail info@oe-rotorcraft.com
Internet www.oe-rotorcraft.com

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Compact yarn

For valid reasons, ring spun yarn is considered to be the most universal all-purpose yarn for the production of fabrics.

Nevertheless, the ongoing search for improvements to staple fiber yarns presented the world's textile industry with a new development: Compact yarn

Above all stands the economic viability - thus the ultimate aim compared to regular yarn has to be:

- Make a better yarn at the same cost
- Make the same yarn at lower cost

Achieving this goal, potential is offered by:

- Premium yarn price for high strength
- lower yarn twist at same spindle speed
- Using a more economic raw material mix
- Extracting a lower comber noil percentage
- Improved performance of the frame using an optimized spinning geometry

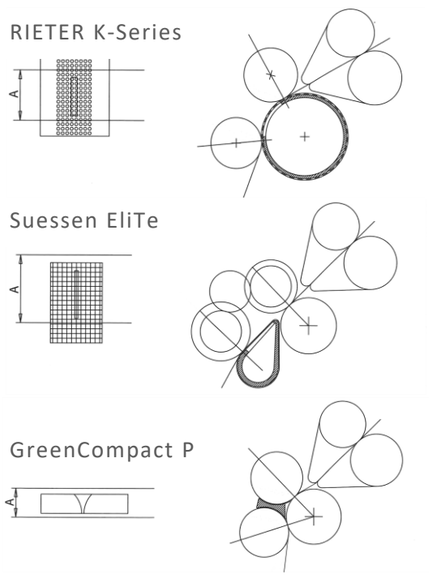
- **Up to 13% production output per year**

Compact principles

GreenCompact delivers spinning results equal to competing systems regarding hairiness reduction and increased yarn strength.

The simplicity of the system and its components and the absence of suction lead to results of superior consistency and value for money.

The fiber flow and working principle of GreenCompact P and the pneumatic systems Suessen EliTe and RIETER K-Series are shown to the opposite.



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GreenCompact

1st generation, until 2014 (RoCoS)

Earlier RoCoS-assemblies were simply clipped to the Toparm without changing any roller settings. The compacting zone is defined by the compactor body situated between front top roller and delivery top roller.

2nd generation GreenCompact Premium (GC-P) – Unique solution

Unlike to any other drafting geometries – GC-P's front top roller and compacting unit are attached to the Toparm with a modified off set (recessed).

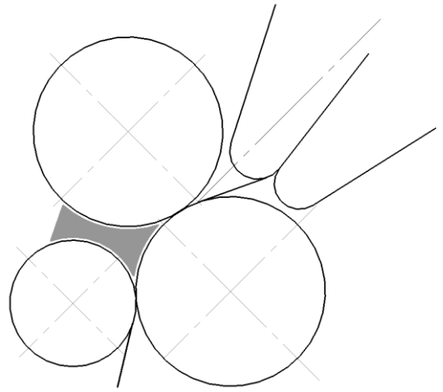
This «back-hang» allows to decline the drafting plane, leading to deflection of the fibers leaving the extended Premium cradle. The added friction caused by deflection and the short Nip point distance cradle to roller prevents fibers from leaving the fiber strand and getting lost as fluff.

Unlike to other spinning geometries the back-hang of the GC-P compacting unit allows the yarn to detach «earlier» from the bottom cylinder and to leave with an ideal angle towards the spindle. On frames with a short distance between drafting and spindle, yarn break tendency is significantly limited. Therefore, higher spindle speeds at an average of 20'500 are safely performed.

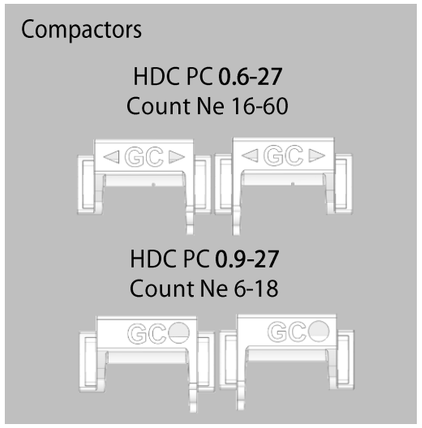
All-in-all GreenCompact Premium provides up to 40% improved yarn values compared to standard yarn, substantial yarn break reduction and a frame which stays clear of fluff. All these benefits go along **without any additional costs for suction** (of >6 $/spindle/year).

HDC Compactors and Ne-Count range

In order to spin the desired range of yarn count, suitable Compactors need to be picked. Please see available Compactors to the opposite:



Pict. 1



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