Doffer wire for synthetic fibers D40-30-52C CBF

For high production output and better yarn quality

The worldwide production of synthetic fibers has more than doubled between the years 2000 and 2014, from 28 million tons to 57 million tons. This is accompanied by a trend towards finer synthetic fibers and microfibers.

Groz-Beckert is supporting this trend with the development of the high performance doffer wire D40-30-52C CBF, which meets the high demands of spinning mills which process synthetics. The special geometry and high teeth/inch² (PPSI) result in a significantly better yarn quality with regard to yarn imperfections.

**Function/mode of action**
The fiber transfer from the cylinder to the doffer is a deciding factor for carding quality. At the typical high production output rates, the fiber transfer rate not only has to be sufficiently high, it is also and in particular important for it to be as uniformly high as possible. The finer the fibers, the higher the selected number of teeth/inch² (PPSI) has to be. Significantly fewer trailing fiber hooks occur due to the high tooth density of 520 PPSI, which is reflected directly in the yarn quality in the form of a significant reduction in yarn imperfections.

**Physical properties:**
- Curved tooth shape
- Special surface treatment
- High strength carbon steel
- Special hardness profile
- Tight geometric tolerances

**Customer benefits:**
- Improved yarn quality
- High efficiency of the card
- Long life-time of the wires
High efficiency
The special tooth shape in combination with the surface properties of the D40-30-52C CBF wires produces a self-cleaning effect which results in high efficiency of the card. The high surface quality prevents accumulation of fibers/impurities on the doffer.

Life-time
The D40-30-52C CBF doffer wires made of high carbon steel are even suitable for processing dull synthetic fibers, which are highly abrasive and can greatly reduce the life-time of wires.

IPI*-values

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<th></th>
<th>Standard</th>
<th>D40-30-52C CBF</th>
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<tbody>
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<td>Up to 30%</td>
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<tr>
<td>fewer</td>
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*IPI: Imperfection Indicator