

# HP-GX 3010

The Top Weighting Arm for Short-Staple Ring Spinning Frames

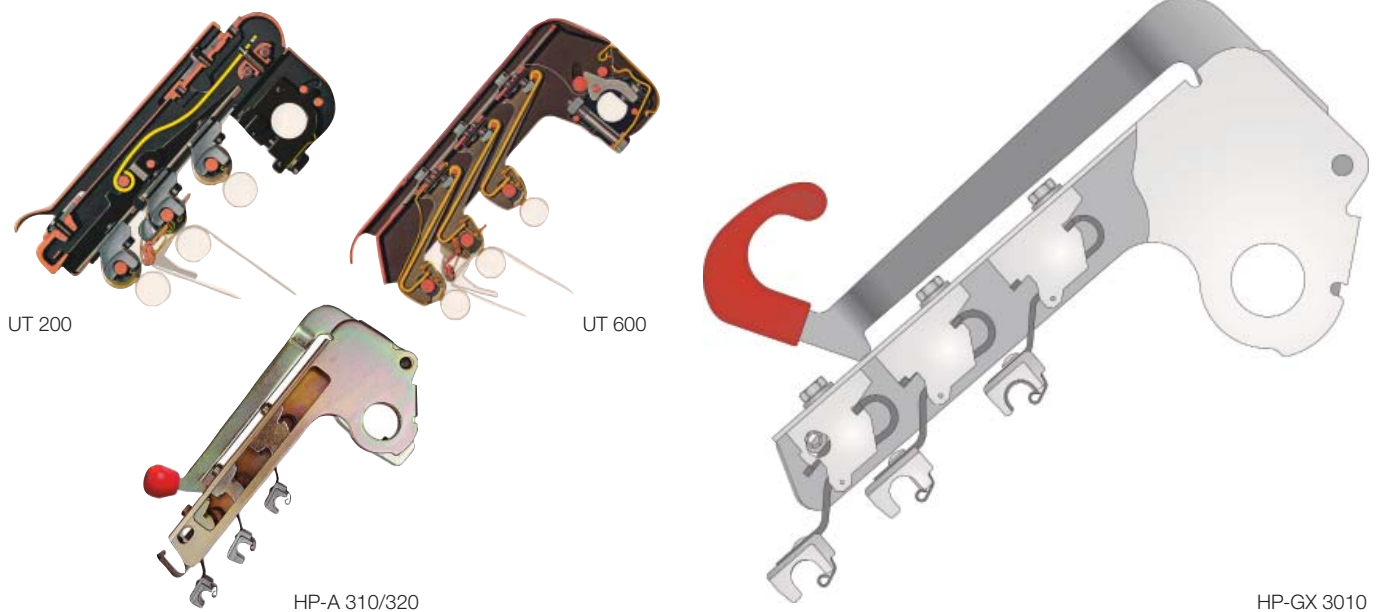


The HP-GX 3010-E for compact spinning with the Elite®CompactSet Spinning System

The HP-GX 3010 meets even the most challenging demands that high-end spinning mills make on a top weighting arm:

- Optimum yarn quality
- High consistency of all yarn parameters
- Sustained yarn quality
- Minimal variation between spinning positions
- Maximum drafts
- Easiest operation
- No restrictions in regard to raw material
- Free from wear

## Milestones in the Manufacture of SUESSEN Top Weighting Arms



For years now, SUESSEN has set the highest standards in the design of top weighting arms equipped with plate springs. Ever since its introduction to the market fifty years ago, this design has proven highly successful. In 1956, SUESSEN developed the first top weighting arm equipped with a plate spring, known as the UT type.

As the years have passed, the design has been continually improved and adapted to meet the unique needs of our customers. Improvements have also been made to the application on worsted spinning frames and roving frames.

In 1988, SUESSEN developed the entirely new HP-A Top Weighting Arm. Spinning straight from the sliver (RingCan method) enabled SUESSEN to achieve total drafts of up to 200 with the HP-A 320 Top Weighting Arm.

The exceptional performance levels delivered by the HP family of top weighting arms are world renowned. And this was a decisive factor behind the EliTe® Compact Spinning System establishing itself as the leading compact spinning system in the short-staple and worsted sector and becoming the world's most successful compact spinning system.

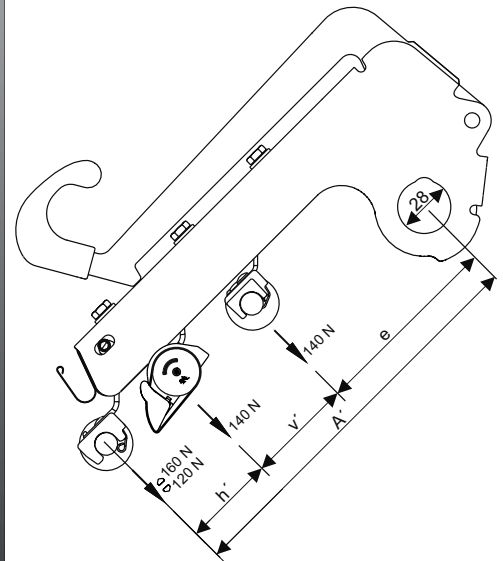
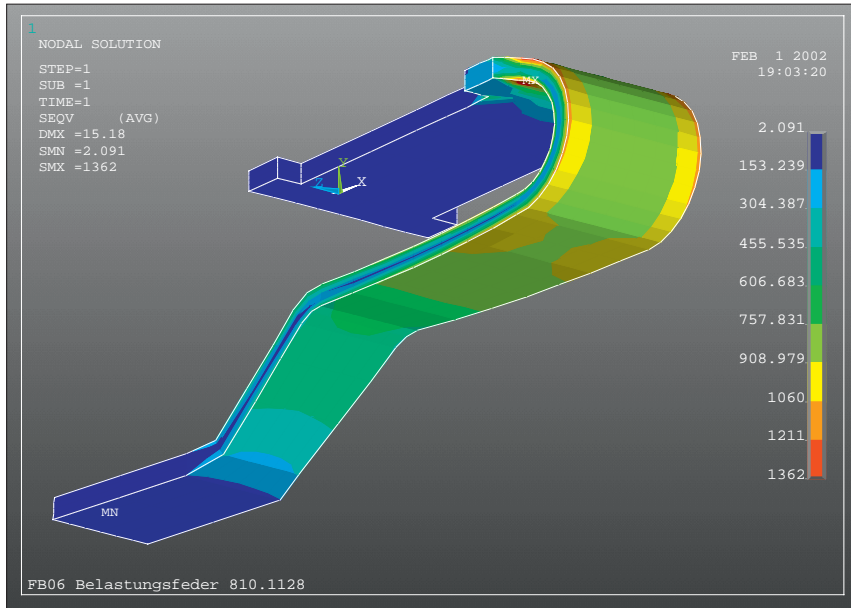
Once again, the success of SUESSEN's products has arisen through our continuous focus on improving and developing our range in line with the changes in the market.

We are pleased to announce that the next step has been taken in regard to further improvements. In close cooperation with our customers and by utilizing the extensive experience of the engineers in our R&D department, we proudly introduce to the market the HP-GX 3010 Top Weighting Arm.

Once again, we are able to deliver to our valued customers an approved system with plate spring that fully meets all of the requirements to make it the best on the market.

SUESSEN is again 'raising the bar' with regard to the evaluation of top weighting arms.

# The Distinctive Features of the HP-GX 3010



## Principle of frictionless load

The critical feature of the HP-GX 3010 is that the top rollers are loaded directly by heavy-duty plate springs without clearance or friction. Furthermore, the plate spring is supported free from play in the top arm body. At the same time, the plate spring serves as a guiding element and prevents the possibility of lateral forces from acting on the top roller position.

In addition, the mechanical treatment of the wider top roller supports will guarantee the precise parallelism of the top and bottom roller axles.

The HP-GX 3010 will provide you with the feature of partial load relief.

## Setting of front top roller position

The position of the front top roller on the HP-GX is set in the factory. The SUESSEN HP-GX 3010 is the only High-End top weighting arm capable of providing you with the ability to adjust the front top roller position to meet your precise technological requirements.

## Non-corrosive surface coating

The HP-GX 3010 surface is both acid-resistant and rust-resistant. Consequently, it is fully capable of coping with even the most rigorous requirements in industrial application.

Corrosion tests carried out by independent laboratories showed that this surface has three times more resistance than ever achieved.

## Ergonomic handle

In cooperation with our customers and by closely considering ergonomic aspects, SUESSEN has developed a new handle. Its shape has been optimized to ensure absolute ease of handling.

## HP-GX Cradles



### HP-GX-AC Cradles (AC = Active Cradle)

The high-stability principle ensures a uniform load on the front edge of the cradle without an additional and unprecise spring. The new cradle geometry will permit the shortest of settings between the clamping points. The cradles are made out of a special synthetic material so that they only create a minimum degree of friction on the top aprons, but are still high-strength and non-deformable.

In the SUESSEN Active Cradle the top aprons are tensioned by a spring-loaded leading edge. Variations in apron length or tension are automatically compensated. So it is often possible to use lower cradle spacers, and top aprons can be replaced more comfortably.

### HP-GX-C Cradles

For spinning medium- and long-staple cotton, special longer cradles type M (for medium-staple) and L (for long-staple) are offered.



### PINSpacer and PINSpacer NT

The innovative PINSpacer NT (**N**ew **T**echnology) is the result of intensive studies: the design solves the problem of separating the two setting parameters of "apron nip" and "pin position".

The new PINSpacer NT makes allowance for the whole potential of adjustment: for a pre-selected apron nip, it is possible to adjust the immersion depth of the pin by 5 different attachments to the demands of the spinning mill.

Owing to the oval cross-section of the PIN NT, the fibres are securely prevented from running over the pin. By the inclination of the pin, fibres are reliably guided to the pin's underside.

PINSpacers NT can be applied on all SUESSEN Active Cradles and are offered for all spindle gauges.

## HP-GX-R Top Rollers



The SUESSEN HP-GX-R Top Rollers are of the loose boss type with non-removable bosses. The wide standard saddle will provide additional support to the guidance and precision of the top roller position.

The back and front top rollers can be obtained either without cots or with buffed cots of all popular brands.

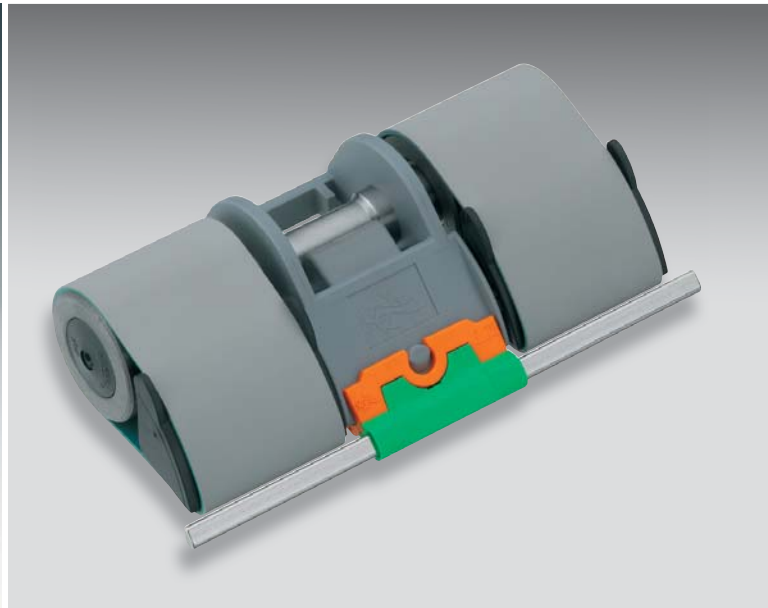
The precise middle top rollers have a boss diameter of 25 mm, which ensures a perfect apron movement and avoids the accumulation of dirt.

Two qualities of top rollers are available:

- HP-GX-R SD - Standard
- HP-GX-R MS - Micro-Seal

## Technical Data

|   |   |                           |                  |       |
|---|---|---------------------------|------------------|-------|
| Fibres  | Cotton, man-made fibres, blends                               |                           |                  |       |
| Cradle  | HP-GX-AC K  | – fibres up to 42 mm      |                  |       |
|   | HP-GX-C M   | – fibres from 41 to 50 mm |                  |       |
|   | HP-GX-C L   | – fibres from 48 to 65 mm |                  |       |
| Top apron length                                    | for HP-GX-AC K  | – 37,0 x 30 mm            |                  |       |
|   | for HP-GX-C M   | – 41,5 x 30 mm            |                  |       |
|   | for HP-GX-C L   | – 51,3 x 30 mm            |                  |       |
| Spindle gauge                                       | 70 / 75 / 82.5 mm   |                           |                  |       |
| Top rollers   | Standard: HP-GX-R SD  |                           |                  |       |
|   | Optional: HP-GX-R MS  |                           |                  |       |
|   | Without cots or with buffed cots                              |                           |                  |       |
| Saddle  | Ø 11.36 mm (with recess Ø 9.5 mm) x 16.2 mm                   |                           |                  |       |
| Top roller cots and aprons                          | By all renowned manufacturers as per customer's specification |                           |                  |       |
| Top roller cots: possible diameters                 | 28 – 35 mm  |                           |                  |       |
| Loads   |   | Conventional              | Compact Spinning |       |
|   | Back:   | 140 N                     | 140 N            |       |
|   | Middle:   | 140 N                     | 140 N            |       |
|   | Front:  | Level I                   | 120 N            | 140 N |
|   |   | Level II                  | 160 N            | 190 N |
| Partial load relief                                 | All top rollers   | 40 - 70 N                 |                  |       |
| Cradle spacers                                      | 2.5 mm – 6.0 mm   |                           |                  |       |
| PINSpacer   | 2.0 – 5.0 mm  |                           |                  |       |
| PINSpacer NT  | 2.25 – 4.0 mm   |                           |                  |       |
| Distance support bar – front top roller             | A' = 206.5 mm (Compact: A' = 207.5 mm)                        |                           |                  |       |
| Front top roller forehang: Standard / EliTe®Compact | b = 3.5 mm / 4.5 mm (set in the factory)                      |                           |                  |       |
| Max. drafting zone: Standard / EliTe®Compact        | h'+v' = 146.5 mm / 147.5 mm                                   |                           |                  |       |
| Main drafting zone h'                               | With Cradle HP-GX-AC K – 49.5 mm (set in the factory)         |                           |                  |       |
|   | With Cradle HP-GX-C M – 57.5 mm                               |                           |                  |       |
|   | With Cradle HP-GX-C L – 73 mm maximum                         |                           |                  |       |
| Break-drafting zone v'                              | With Cradle HP-GX-AC K – 46 - 70 mm minimum                   |                           |                  |       |
|   | With Cradle HP-GX-AC M – usually 60 - 80 mm                   |                           |                  |       |
|   | With Cradle HP-GX-C L – 73 mm maximum                         |                           |                  |       |



Suessen is built on a solid foundation. In conjunction with the sister companies, Bräcker, Graf and Novibra, Suessen is securely embedded in the network of total solution and application expertise in yarn processing.

Bräcker [www.bracker.ch](http://www.bracker.ch)  
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Novibra [www.novibra.cz](http://www.novibra.cz)

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