



HP-GX 5010*plus*

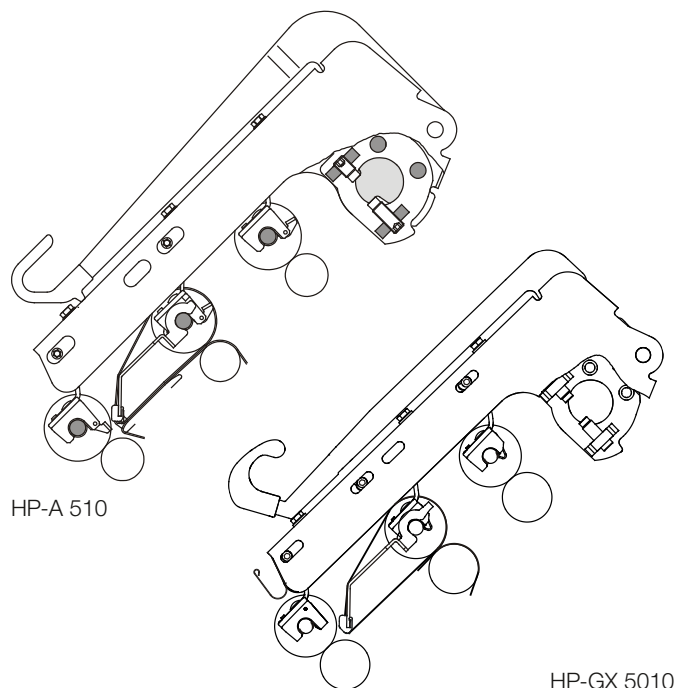
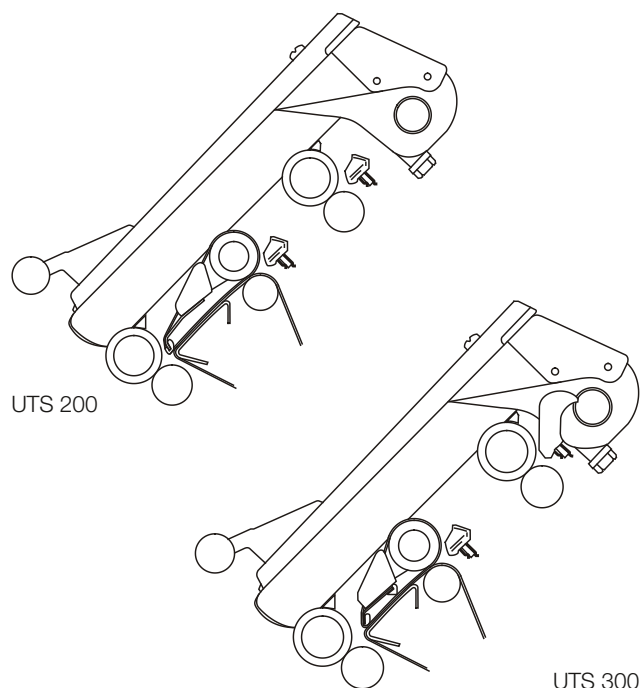
The Top Weighting Arm for Worsted Ring Spinning Frames



The HP-GX 5010*plus* meets the most challenging demands that high-end spinning mills make on a top weighting arm:

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

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 presented the first top weighting arm equipped with a plate spring, known as the UT type, with later applications on worsted spinning frames (UT 200) and roving frames (UT 500).

As the years have passed, the design has been continually improved and adapted to meet the demands of our customers. In the early sixties, SUESSEN offered three basic models for worsted spinning, the top weighting arms UTS 200, UTS 300 and UTZ 300, which could be specified in accordance with the relevant application. Naturally, all variants can be used both for the nip point drafting or slip-drafting system.

In 1988, SUESSEN released the entirely new HP-A Top Weighting Arm family, including the HP-A 510 for worsted ring spinning frames. The exceptional performance levels delivered by the HP top weighting arms are world renowned. And this was a decisive factor behind the EliTe® Compact Spinning System becoming the world's most successful compact spinning system.

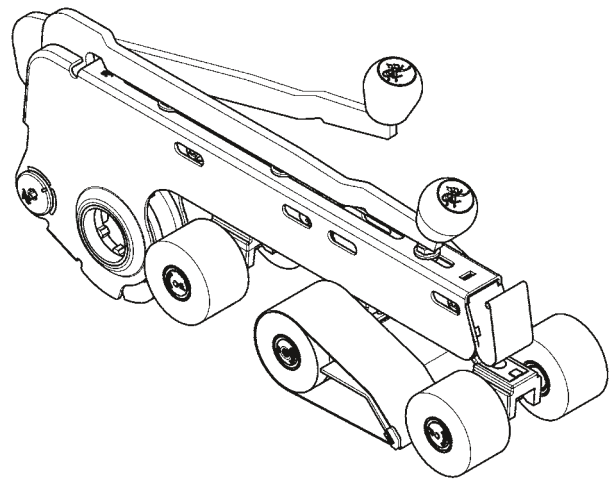
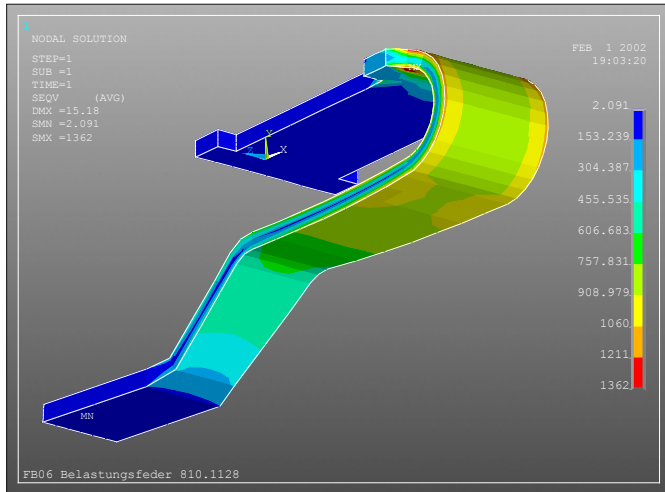
As the success of SUESSEN products is based on the continuous focus on improving and developing in line with the market requirements, SUESSEN took the next step in 2006 launching the HP-GX 3010 Top Weighting Arm for short-staple ring spinning machines.

Based on tremendous experience and inspired by the success of the new HP-GX 3010 Top Weighting Arm, the SUESSEN R&D department designed the HP-GX 5010 Top Weighting Arm for worsted ring spinning frames, in close cooperation with our customers.

We now proudly introduce to the market the new generation of Top Weighting Arms for worsted ring spinning frames – the HP-GX 5010*plus*.

SUESSEN Top Weighting Arms can be obtained as usual directly from SUESSEN or via OEMs for new machines.

The Distinctive Features of the HP-GX 5010plus



Principle of frictionless load

The critical feature of the HP-GX 5010plus 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 front 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 axes.

The HP-GX 5010plus top weighting arm is exclusively suitable for the shown standard $\varnothing 32$ mm support bar profile.

The height setting is now placed at the side of the top weighting arm. By an eccentric bolt setting is much easier, faster, and more precise.

The HP-GX 5010plus will provide you with the feature of partial load relief.

Non-corrosive surface coating

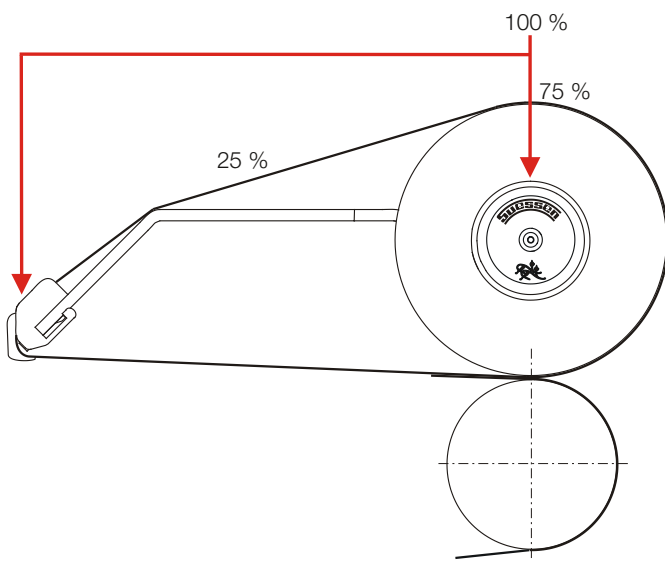
Corrosion tests carried out by independent laboratories showed that the HP-GX 5010plus surface has three times more resistance than ever achieved.

Top arm body and top weighting unit

All top rollers are adjustable with regard to pressure load and position.



HP-GX-C+ Cradles



Distance or load on all weighting units are set with the units being installed.

Top rollers can be easily clipped on the redesigned top roller support.

Manufacturing tolerances of the top arm body have been further reduced to improve the guidance and precise positioning of the weighting units.

HP-GX-C+ Cradles

The cradles are made out of steel. The rounded edge of a low-friction polymer creates a minimum degree of friction on the top aprons.

The redesigned retention system prevents the cradles from falling out when the Top Weighting Arm is opened.

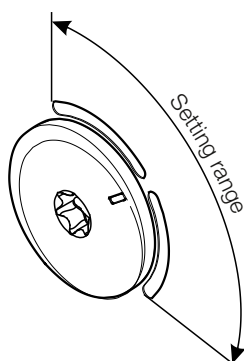
HP-GX-C+ Cradles are available for spindle gauges of 75 and 82.5 mm and for all standard fibre lengths.

High-stability principle

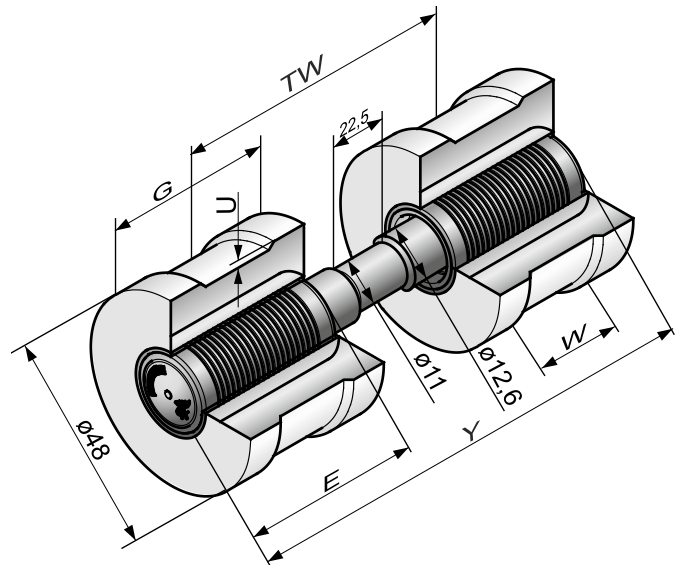
The high-stability principle guarantees a uniform load on the fibres at the front edge of the cradle.

Cradle Spacers

To ensure identical apron nips on both the left and the right of the top weighting arm, cradle spacers of different dimensions are used.



HP-R+ Top Rollers



The SUESSEN HP-R+ Top Rollers are of the loose boss type with non-removable bosses. The 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. They can have diameters of 40 mm or 50 mm.

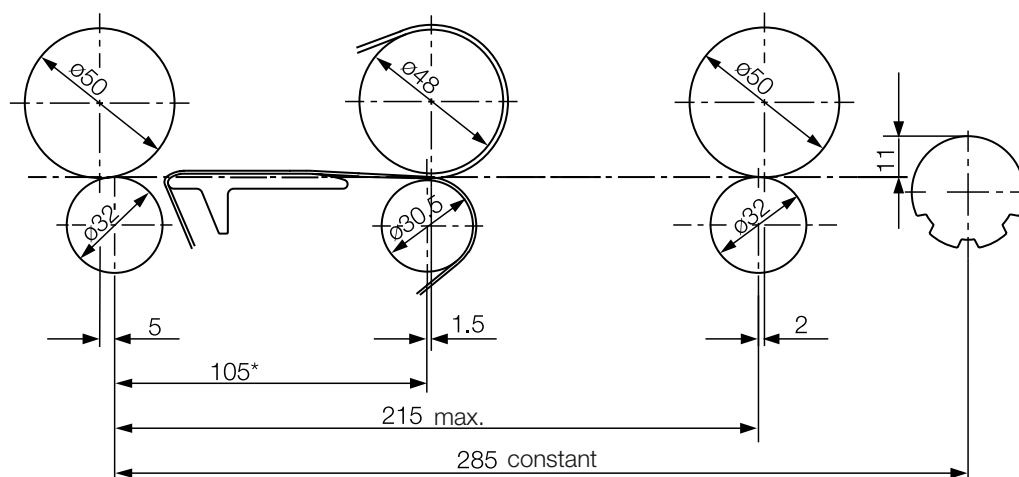
The precise apron top rollers have a rubber cot reducing the slippage between apron and roller. The top roller boss diameter is adapted to the specification of the other top rollers. It ensures a perfect smooth running of the apron and avoids the accumulation of dirt.

The recess of the apron top roller can be chosen between 0.5 and 1.5 mm.

With the design EliTe®CompactSet-L, the front top roller is replaced by an EliTop specified to fulfil the requirements.

Technical Data

Fibres	Wool, man-made fibres, blends
Cradle HP-GX-C ⁺	for all standard fibre lengths of worsted applications
Top apron length	for HP-GX-C ⁺ M-WO ..40 - 63.0 x 40 mm L-WO ..40 - 84.1 x 40 mm L-WO ..32 - 84.1 x 32 mm
Spindle gauge	75 / 82.5 mm
HP-R ⁺ Top Rollers	Top rollers without cots or with buffed cots
Saddle	Ø 11 mm x 22,5 mm wide, axle Ø 12.6 mm
Top roller cots and aprons	By all renowned manufacturers as per customer's specification
Top roller cots - Diameter Standard/EliTe [®] Compact	Top rollers: Ø 50 mm / Ø 40 mm Apron top roller: Ø 48 mm
Loads	Back: 245/290/335 N Middle: 105/135/165 N Front: 260/305/350 N
Partial load relief	All top rollers: 45 – 65 % of the nominal load
Cradle spacers	Brown 3.5 mm Grey 4.0 mm White 4.5 mm Yellow 5.0 mm Blue 6.0 mm Beige 7.0 mm Black 8.0 mm
Distance support bar – front top roller	A' = 290 mm / EliTe [®] Compact A' = 286 mm
Front top roller forehang: Standard / EliTe [®] Compact	5 mm / 1 mm (set in the factory)
Max. drafting zone: Standard / EliTe [®] Compact	h'+v' = 222 mm / 218 mm
Main drafting zone h'	More information in our Technical Memo SCT.3415
Break-drafting zone v'	More information in our Technical Memo SCT.3415



Given setting recommended for long-staple fibres (cradle L-WO) – other settings in SUESSEN Technical Memo SCT.3415

(* dimension depends on bottom apron nose bar applied)



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.

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