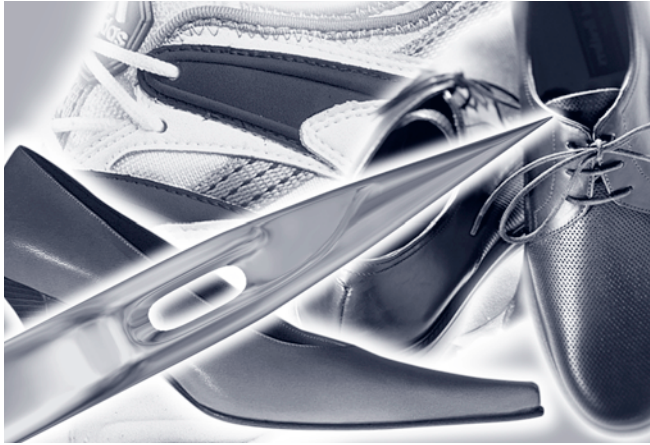


PRODUCT FOCUS

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SERVICEHOUSE



Special Issue FHS Needles

One hook
setting fits all
needle sizes from
NM 70 – NM 120

The FHS needle for shoes and footwear production

The production of shoes and footwear is a special challenge for the industry. Shoes have to fulfill a multitude of functions: as part of the wear outfit the production of shoes is orientated towards fashion demands. In this case shape, colour and materials appear in many variations and are undergoing a steady change – closely related to the pulse of time and its actual fashion.

Furthermore shoes and footwear are fulfilling functional aspects as well: be it the safety aspect in hard-toed shoes and boots as well as sports shoes, or the achievement of medical demands/properties in orthopedic shoes. Shoes have to be functional, flexible, fashionable and durable.

During production of shoes and footwear very different manufacturing technologies are used. The sewing technology for example has to show enormous flexibility in adapting to the various demands. A high quality product only can be achieved by selecting the correct sewing machine needle prior to production.

Especially the use of quite different materials puts a difficult task on the manufacturer: whether natural materials like leather, cotton or natural fiber felts are used or high-tech materials – they all demand a strong sensibility on selecting the right sewing parameters and correctly adjusting the sewing machines. Changing any of these parameters very often requires a lot of time.

With the **FHS** needle (FHS = **F**ixed **H**ook **S**etting) SCHMETZ is offering a new needle design in sizes NM 70 to NM 120. The use of the FHS needle reduces production cost by significantly reducing machine downtime because this innovative needle design avoids time-consuming re-adjustment of the hook setting in the sewing machine.

**Increase production – reduce cost:
The FHS needle for production of shoes and footwear**

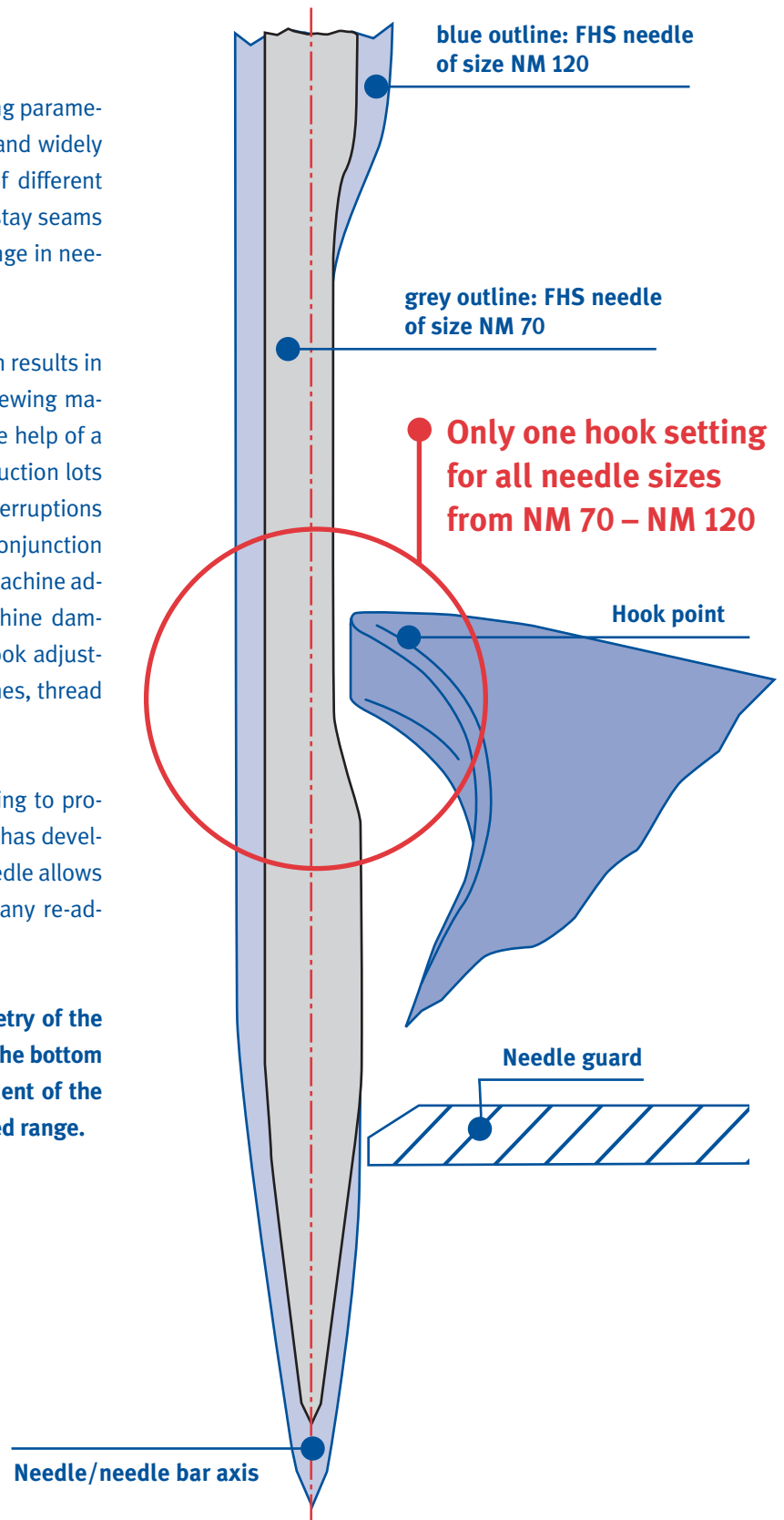
For production of shoes and footwear many sewing parameters have to be observed. A lot of very different and widely changing materials are used. Sewing threads of different sizes are needed – be it for decorative seams or stay seams as well as back seams. This often requires a change in needle size as well as point style.

Especially the change of needle size in production results in a time-consuming adjustment of the hook in a sewing machine: the machine has to be re-adjusted with the help of a mechanic. Particularly with regard to small production lots with changing materials this means: numerous interruptions of the work process, machine downtime and in conjunction with this cost intensive production losses. If the machine adjustments are not or not correctly adapted machine damages are a common result. Furthermore faulty hook adjustment can lead to sewing problems like skip stitches, thread breakage and poor seam appearance.

In order to avoid faults in hook adjustment leading to production losses and machine downtime SCHMETZ has developed a new needle design. The SCHMETZ FHS needle allows changing sizes from NM 70 to NM 120 without any re-adjustment of the hook.

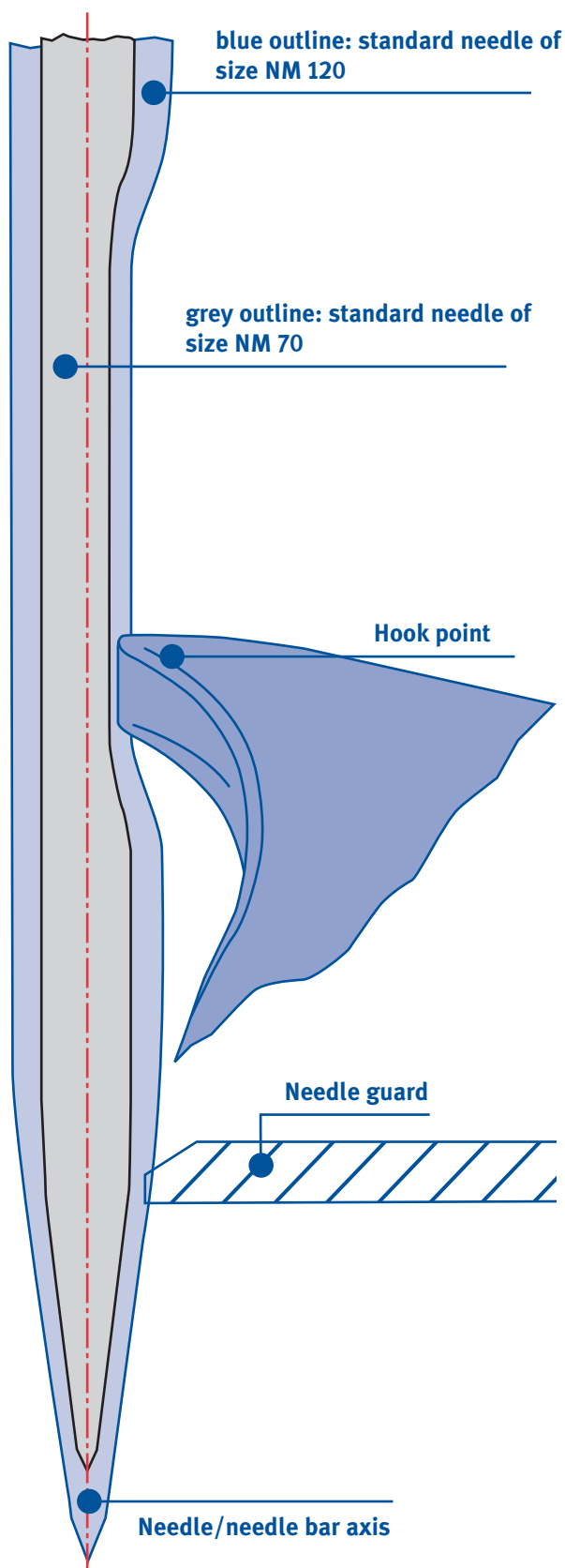
With the specific, patent-pending needle geometry of the FHS needle the distance from the hook point to the bottom of the scarf always remains constant, independent of the needle size to be used within the afore mentioned range.

R normal round point with new FHS design



The SCHMETZ FHS needle – increasing in needle size – only grows to one side in the scarf and point area; the distance from the bottom of the scarf to the hook point remains constant.

R normal round point with **standard design**



The needle in standard design – increasing in needle size – reduces the distance from the bottom of the scarf to the hook point. The hook setting has to be adapted accordingly.

The FHS Needle – Tested on the shop floor and reliable

In cooperation with one of the most renowned shoe manufacturers in the world the novel needle type FHS was developed by SCHMETZ. Tests of the FHS needle on the shop floor are showing clearly reduced downtime of the sewing machines because hook re-adjustments are not necessary anymore when changing the needle in the size range of NM 70 to 120. The operator is allowed to work more efficiently as well as independent of the mechanic. The hook runs with less mechanical stress therefore reducing wear as well as mechanical damage. All in all production planning will be simplified because just changing the needle will be required most of the time without constantly changing the hook setting. Planning new investments will be easier by considering the more flexible use of machinery because machine capacities – assigned to the various thread sizes in use – can be reduced.

The advantages of the FHS needle at a glance:

- Reduction of machine downtime, increased production
- Operators work more efficient
- Operators are more autonomous in changing the needle
- Better protection, less wear of the hook
- Less damage caused by faulty hook adjustment
- Better flexibility of the production process
- Reduction of machinery in operation possible

Form to copy and fax: + 49 (0) 24 06 / 85-186

Do you have any further questions about the use of FHS needles in the production of shoes and footwear?
Would you like recommendations on needle selection and sewability of your fabrics in advance of production?
Challenge the SERVICEHOUSE experts and take advantage of our offer.

We will be pleased to send you information on:

Our range of service:

Company name
Attention
Position
Address
Postcode/City
Country
Phone
Fax
E-Mail

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Sample needles, tips and information

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Sewing reports tailored to match your sewing goods as well as solutions for your complex sewing demands

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INFORMATION

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Sewing information for special industries and applications

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Product information for special industries and applications

GUIDE TO SEWING TECHNIQUES

Manual for sewing industry

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TRAINING-ON-SITE

Industry specific training including the latest information on needles, threads, machines and applications

SYMPOSIUM

Interdisciplinary knowledge sharing and exchange of expertise for skilled sewing industry staff