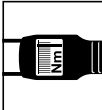




## Multiple Stud Nuts – Mounting tools

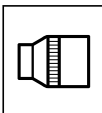
### Summary of advantages

For an optimum tensioning result SCHAAF recommends the application of mounting tools and accessories which are well-proven and adjusted to MSN. Further accessories like protection caps, electric screw driver, handling assistance and so on can be offered separately if requested.



#### Torque wrench

The calibrated and tested torque wrenches by SCHAAF guarantee an accurate pretensioning of the bolt connection. Non-tested torque wrenches may have a high deviation, which needs to be avoided. A wrong torque inevitably results in a wrong pretensioning force and thus, in an unknown operating condition fraught with risk.



#### Socket wrench top elements

Due to using SCHAAF's high-strength socket wrench top elements, the momentum of tension can be initiated permanently over the hexagonal of the pressure bolts into the MSN. Regular socket wrench top elements can not handle the high loads, especially when tensioning large quantities, and lead to a damage of the pressure bolts or to a demolition of the socket wrench top element. If demolished, there is a threat to the operator and it can be dangerous especially with high momentums of tensioning. Additionally, damaged pressure bolts endanger the dismantability of MSN.

■ Torque wrench and socket wrench top elements are available as a set according to the application.



#### Lubricants

MSN are delivered ready for use. If subsequently a lubrication of pressure bolts or the pressure disc should be necessary, only lubricants provided by SCHAAF are acceptable. Non-permitted lubricants have a negative influence on the friction ratio and the according tensioning result. Therefore, an unknown and wrong pretensioning force applies with high possibility.



#### Torque-Force-Testing (MSN-DKP)

The MSN are tested optimally on the own inhouse test bench before shipping. The positive result of the Torque-Force-Testing and the correctness of the momentum of tensioning can optionally be confirmed in a 3.1 MSN-DKP certificate of conformity DIN EN 10204.

#### Accessories manufactured by SCHAAF

- Mounting aids such as centering pin and lifting devices, or as requested by the customer
- Protection caps

#### Certificates and Acceptance Tests

- Material test reports
- Specific test reports
- Certificates as per special customer requirements
- Acceptance test as per customer's specifications



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SCHAAF develops and produces world leading technology in the field of joining technique in all sectors of the industry.

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