RIFAST® SNB

FOR APPLICATIONS WITH THICKNESSES BETWEEN 0.6 AND 1.0 MM

OPTIMAL FIT PLATFORM – Technical Product Sheet

RIFAST® SNB SELF PIERCING RIVETING STUD

The new self piercing riveting bolt for fully automated mechanical joining in metal applications

THE RIFAST® SYSTEMS ADVANTAGE

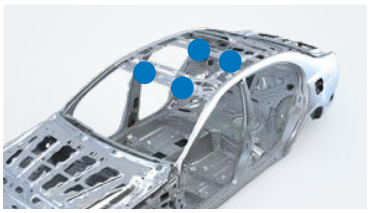
Systems expertise from designing, manufacturing clinch fasteners and automation equipment to consultation and realization in serial production

With over 25 years of expertise as a full system provider RIFAST® is the partner for developing economical solutions for reliable integration of mechanically joined clinch fasteners. The systems approach of clinch fasteners through automation equipment for in-die and off-line operations guarantees the optimal joint connection. The mechanical joining with the RIFAST® staking die designed to the customer component ensures consistent performance values in addition to eliminating thermal influences and distortions observed during welding.

THE RIFAST® SELF PIERCING RIVETING BOLT ADVANTAGE

Compact, robust, self piercing and lightweight for low thicknesses

With its compact and lightweight design, the RIFAST® self piercing riveting bolt is the newest innovation for low thickness applications. The self piercing design enables clinching without pre-pierced hole which reduces process time and simplifies the tool design. It is available with several thread ends according to DIN EN ISO 4753. The RIFAST® SNB is the optimal solution for thicknesses between 0.6 mm and 1.0 mm.



Examples of applications

RIFAST® SNB e.g. BIW, underbody, roof frames

TECHNICAL DATA

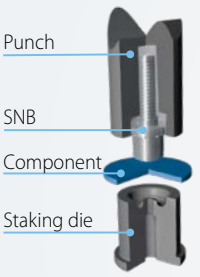
Strength Grade	8.8 (DIN EN ISO 898-1)
Surface Coating	OEM-approved coatings
Tensile Strength	150 - 600 N/mm²
Component Material	Steels
Automation Equipment	Press, C-frame (automatic or manual)
Thread size	**M6, other sizes available upon request**
Application Thickness (mm)	0.6 - 1.0
Push-Out (kN)* in 0.6 mm and 1.0 mm	2.5 and 4.0
Torque-Out (Nm)* in 0.6 mm and 1.0 mm	15

* Performance values for reference, based on metal sheets made out of steel DC01 at the RIFAST® application lab

Performance values for push-out and torque-out are dependent on the component material, the application thickness and in combination with RIFAST® staking die. Performance values for other component materials and application thickness can be validated through RIFAST® Application Engineering.

MECHANICAL JOINING PROCESS AND CROSS-SECTION

POSITIONING



The component is positioned above the RIFAST® staking die. RIFAST® SNB is placed in the insertion position.

PIERCING & RIVETING

During the insertion operation, the punch applies pressure to the RIFAST® SNB which is subsequently pressed into the component.

FINAL STEP

The tool opens and the finished component can be removed.

Cross section RIFAST® SNB M6 clinched in steel DC01 with wall thickness 1.0 mm