

Flow Drilling Joining Systems

RSF25

For Flow Drilling Screws

RSF25

Model RSF25 - for installation of flow drilling screws

Flow Drilling Technology

- + For single sided accessibility
- + For assembling different materials with various thicknesses
- + More than two layers can be joined
- + Joining process with a low influence of heat
- + Metric thread formation
- + High loosening torque and excellent vibration resistance
- + Able to take high shearing and peeling loads
- + Suitable for hybrid joints (adhesives)

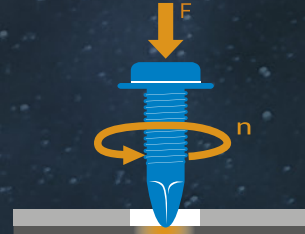
WEBER RSF Flow Drilling Joining System

- + Freely configurable process parameters
- + Automatic pre-hole floating head compensation
- + Controlled jaws to prevent screw tipping
- + Fast tool changing by hand
- + Over 1,000 systems in worldwide use
- + Flexible spindle design
- + Patented WEBER depth gradient and innovative boost function

Technical data

Torque [Nm]	up to 15
EC-Drive [RPM]	up to 8,000
Max. axial force at 6 bar [N]	up to 3,600
Holding down force at 6 bar [N]	up to 1,400
Cycle time (Joining process) [s]	from 1,6
Usable Screws [mm]	M4 - M6 18 - 25

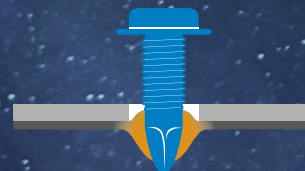
Step 1
Flow drilling screw
contacts the surface at
low pressure & RPM



Step 2
High RPM and force
brings the material to
plasticize and „flow“



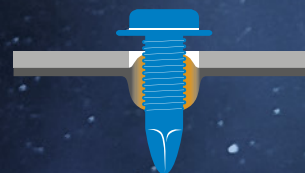
Step 3
Formation of cylindrical
passage



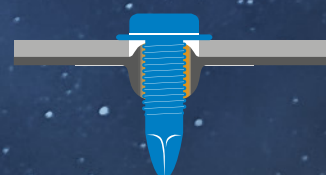
Step 4
End of „flow“-phase,
beginning of thread
rolling process
(reduced RPM & thrust)



Step 5
Normal screwdriving



Step 6
Material cools &
constricts around the
fastener, forming an air &
water tight joint



Versions

- + Compact spindle
555 x 250 x 380 mm (L x W x H)
- + Straight spindle
745 x 230 x 380 mm (LxBxH)