



COLDWATER

MACHINE COMPANY

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 ISO 9001:2008

Systems – Stations - Automation

SOLID-STATE JOINING

SPINMELD™

HARMS+WENDE HWH

SOLID-STATE JOINING

SPOTMELD™

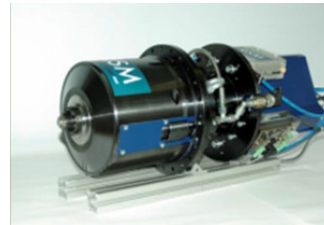
High Speed Friction Welders

Friction Welding Advantages

- *Material remains below melting temperature: Low material stress.*
- *Combinations of dissimilar materials possible.*
- *Very repeatable weld process for safety critical applications.*



RSM401
RK18, RK30 & RK38



RSM410 RK31

Friction welding System	Speed (RPM)	Power (KW)	Force (KN)/LBf	Max core Diameter (mm)	Max area with surface pressure of 100N/mm ²	Average Friction weld time	Process options
RSM401RK18	23,300	1.80	10.7 / 2.4K	< 11.0 mm	< 95 mm ²	Approx. 3 Sec	3 –Friction phases 1- forge phase
RSM401RK30	21,000	3.00	14.2 / 3.19K	< 13.5 mm	< 142 mm ²	Approx. 3 Sec	3 –Friction phases 1- forge phase
RSM401RK38	21,000	3.80	14.2 / 3.19K	< 13.5 mm	< 142 mm ²	Approx. 3 Sec	3 –Friction phases 1- forge phase
RSM410RK31	21,000	30.00	25.0 / 5.6K	< 17.0 mm	< 250 mm ²	Approx. 3 Sec	3 –Friction phases 1- forge phase Angle Control
RSM500RK	8,000	29.00	40.0 / 9.0K	< 22.5 mm	< 400 mm ²	Approx. 3 Sec	1 –Friction phase 1- forge phase Angle Control