

Erratum to: Load bearing capacity of tool pin during friction stir welding

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In the article, the table 2 should be replaced with the following table.

Table 2 The tool material, dimensions and welding variables used for calculation of force and torque

Workpiece material	AA2524	Ti-6Al-4V	AA-6061	L80 steel	AA 7075
Tool material	Steel	Tungsten	H13 tool steel	Commercially pure tungsten	H13 tool steel
Tool shoulder diameter, mm	20.3	25.0	25.4	35.0	26.4
Pin diameter at root, mm	7.1	19.8	5.2–7.6	20.0	5.2
Pin diameter at tip, mm	7.1	0.2	5.2–7.6	20.0	1.5
Pin length, mm	6.2	9.9	1.8–5.6	12.0	5.1
Workpiece thickness, mm	6.4	10.3	9.5	12.7	6.0
Tool rotational speed, RPM	150–800	120–800	650	170	800
Welding speed, mm s ⁻¹	2.11	0.85–3.4	3.33	1.7	2.1
Axial pressure, MPa	130.7	40–137	20.0	92.5	20.0
*Specific heat, J kg ⁻¹ K ⁻¹	$929.3 - 6.27 \times 10^{-1}T + 1.48 \times 10^{-3} \times T^2 - 4.33 \times 10^{-8} \times T^3$	628.03 $-3.93 \times 10^{-1} \times T + 5.95 \times 10^{-4} \times T^2$	$929.3 - 6.27 \times 10^{-1}T + 1.48 \times 10^{-3} \times T^2 - 4.33 \times 10^{-8} \times T^3$	$330.21 \times \exp(9.56 \times 10^{-4}T)$	$852.3 + 1.25 \times T - 4.18 \times 10^{-4} \times T^2 - 1.25 \times 10^{-8} \times T^3$
*Thermal conductivity, W m ⁻¹ K ⁻¹	$25.22 + 0.39 \times T + 7.36 \times 10^{-6} \times T^2 - 2.52 \times 10^{-7} \times T^3$	4.44 $+4.34 \times 10^{-3} \times T + 1.05 \times 10^{-5} \times T^2$	$25.22 + 0.39 \times T + 7.36 \times 10^{-6} \times T^2 - 2.52 \times 10^{-7} \times T^3$	$47.28 + 0.0418 \times T - 1.05 \times 10^{-4} \times T^2 + 4.6 \times 10^{-8} \times T^3$	$74.52 + 0.25 \times T - 4.18 \times 10^{-5} \times T^2$

* Temperature, T, in K

The online version of the original article can be found at <http://dx.doi.org/10.1007/s00170-011-3759-7>.

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