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Weld Set Reference: Z213716
Power Wave® 300C (Imperial units)

(§) Requires Advanced machine

Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	3XX Stainless	0.035 in	CV	90% He 7.5% Ar 2.5% CO_2	100 to 800 in/min	Pinch -10.0 to 10.0	N/A	N/A
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)				
			Precision Pulse™	90% He 7.5% Ar 2.5% CO_2	100 to 600 in/min	Ultimarc® -10.0 to 10.0		
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	100 to 800 in/min			
			Rapid X® (§)	98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
			RapidArc®	98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
			Smart Pulse™ (§)	90% He 7.5% Ar 2.5% CO_2	125 to 800 in/min			
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)				
			STT® (Root Pass) (§)	90% He 7.5% Ar 2.5% CO_2	100 to 350 in/min			
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)				
		0.040 in	CV	90% He 7.5% Ar 2.5% CO_2	100 to 800 in/min	Pinch -10.0 to 10.0		
				98% Ar 2% CO_2	100 to 690 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	100 to 800 in/min			
			Precision Pulse™	90% He 7.5% Ar 2.5% CO_2	100 to 750 in/min	Ultimarc® -10.0 to 10.0		
				98% Ar 2% CO_2	60 to 600 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	100 to 750 in/min			
			Smart Pulse™ (§)	90% He 7.5% Ar 2.5% CO_2	100 to 800 in/min			
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				

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Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	3XX Stainless	0.040 in	Smart Pulse™ (§)	Tri-Mix (He)	100 to 800 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
			STT® (Root Pass) (§)	90% He 7.5% Ar 2.5% CO_2	100 to 300 in/min			
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)				
		0.045 in	CV	90% He 7.5% Ar 2.5% CO_2	75 to 525 in/min	Pinch -10.0 to 10.0		
				98% Ar 2% CO_2	75 to 575 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	75 to 525 in/min			
			Precision Pulse™	90% He 7.5% Ar 2.5% CO_2	60 to 400 in/min	Ultimarc® -10.0 to 10.0		
				98% Ar 2% CO_2	50 to 500 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	60 to 400 in/min			
			Rapid X® (§)	98% Ar 2% CO_2	100 to 600 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
			RapidArc®	98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
			Smart Pulse™ (§)	90% He 7.5% Ar 2.5% CO_2	100 to 645 in/min			
				98% Ar 2% CO_2	100 to 625 in/min			
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)	100 to 645 in/min			
			STT® (Root Pass) (§)	90% He 7.5% Ar 2.5% CO_2	90 to 250 in/min			
				98% Ar 2% CO_2				
				98% Ar 2% O_2				
				Ar-Mix				
				Tri-Mix (He)				
	Al 4XXX	0.035 in	AC Pulse (§)	100% Ar	125 to 700 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
			CV		150 to 750 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		125 to 800 in/min	Ultimarc® -10.0 to 10.0		
		3/64 in	AC Pulse (§)		125 to 500 in/min			
			CV		125 to 590 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		85 to 600 in/min	Ultimarc® -10.0 to 10.0		
		1/16 in	AC Pulse (§)		100 to 350 in/min			
			CV		75 to 340 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		75 to 340 in/min	Ultimarc® -10.0 to 10.0		

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Weld Set Reference: Z213716
Power Wave® 300C (Imperial units)

(§) Requires Advanced machine

Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	Al 5XXX	0.035 in	AC Pulse (§)	100% Ar	150 to 800 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
			CV		175 to 750 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		150 to 800 in/min	Ultimarc® -10.0 to 10.0		
		3/64 in	AC Pulse (§)		100 to 700 in/min			
			CV		125 to 750 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		85 to 700 in/min	Ultimarc® -10.0 to 10.0		
		1/16 in	AC Pulse (§)		100 to 400 in/min			
			CV		125 to 470 in/min	Pinch -10.0 to 10.0		
			Precision Pulse™		100 to 400 in/min	Ultimarc® -10.0 to 10.0		
	Metal Core	0.045 in	CV	75% Ar 25% CO_2	100 to 525 in/min	Pinch -10.0 to 10.0	N/A	N/A
				80% Ar 20% CO_2	100 to 490 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Precision Pulse™	80% Ar 20% CO_2	75 to 490 in/min	Ultimarc® -10.0 to 10.0		
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Smart Pulse™ (§)	80% Ar 20% CO_2	100 to 510 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			STT® (Root Pass) (§)	75% Ar 25% CO_2	90 to 225 in/min			
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				Ar-Mix				
		0.052 in	Low Fume Pulse™ (§)	Ar-Mix	60 to 610 in/min			
	Si Bronze	0.035 in	STT® Braze (§)	100% Ar	140 to 450 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
		0.040 in			120 to 350 in/min			
		0.045 in			90 to 300 in/min			
	Steel	0.035 in	AC STT®(§)	75% Ar 25% CO_2	75 to 300 in/min	Balance 0 to 100 %	Ultimarc® -10.0 to 10.0	N/A
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			CV	100% CO_2	75 to 800 in/min	Pinch -10.0 to 10.0	N/A	N/A
				75% Ar 25% CO_2	100 to 815 in/min			
				80% Ar 20% CO_2				

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Weld Set Reference: Z213716
Power Wave® 300C (Imperial units)

(§) Requires Advanced machine

Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	Steel	0.035 in	CV	85% Ar 15% CO_2	100 to 815 in/min	Pinch -10.0 to 10.0	N/A	N/A
				90% Ar 10% CO_2				
				Ar-Mix				
			Low Fume Pulse™ (§)	Ar-Mix	75 to 815 in/min	Ultimarc® -10.0 to 10.0		
			Precision Pulse™	80% Ar 20% CO_2	100 to 800 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Rapid X® (§)	80% Ar 20% CO_2	75 to 800 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			RapidArc®	80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Smart Pulse™ (§)	80% Ar 20% CO_2	100 to 800 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			STT® (Root Pass) (§)	75% Ar 25% CO_2	100 to 350 in/min			
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
		0.040 in	AC STT®(§)	75% Ar 25% CO_2	75 to 250 in/min	Balance 0 to 100 %	Ultimarc® -10.0 to 10.0	
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			CV	100% CO_2	100 to 725 in/min	Pinch -10.0 to 10.0	N/A	
				75% Ar 25% CO_2	100 to 595 in/min			
				80% Ar 20% CO_2	100 to 615 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Low Fume Pulse™ (§)	Ar-Mix	75 to 800 in/min	Ultimarc® -10.0 to 10.0		
			Precision Pulse™	80% Ar 20% CO_2	75 to 600 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				

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(§) Requires Advanced machine

Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	Steel	0.040 in	Precision Pulse™	Ar-Mix	75 to 600 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
			Rapid X® (§)	80% Ar 20% CO_2	75 to 800 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			RapidArc®	80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Smart Pulse™ (§)	80% Ar 20% CO_2	100 to 670 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			STT® (Root Pass) (§)	75% Ar 25% CO_2	100 to 275 in/min			
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
		0.045 in	AC STT®(§)	75% Ar 25% CO_2	75 to 200 in/min	Balance 0 to 100 %	Ultimarc® -10.0 to 10.0	
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			CV	100% CO_2	50 to 585 in/min	Pinch -10.0 to 10.0	N/A	
				75% Ar 25% CO_2	50 to 595 in/min			
				80% Ar 20% CO_2	50 to 490 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Low Fume Pulse™ (§)	Ar-Mix	100 to 680 in/min	Ultimarc® -10.0 to 10.0		
			Precision Pulse™	80% Ar 20% CO_2	75 to 400 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Rapid X® (§)	80% Ar 20% CO_2	75 to 690 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			RapidArc®	80% Ar 20% CO_2	75 to 675 in/min			
				85% Ar 15% CO_2				

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(§) Requires Advanced machine

Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GMAW	Steel	0.045 in	RapidArc®	90% Ar 10% CO_2	75 to 675 in/min	Ultimarc® -10.0 to 10.0	N/A	N/A
				Ar-Mix				
			Smart Pulse™ (§)	80% Ar 20% CO_2	100 to 660 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			STT® (Root Pass) (§)	75% Ar 25% CO_2	90 to 250 in/min			
				80% Ar 20% CO_2				
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
		0.052 in	CV	100% CO_2	50 to 390 in/min	Pinch -10.0 to 10.0		
				75% Ar 25% CO_2	50 to 335 in/min			
				80% Ar 20% CO_2	50 to 320 in/min			
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
			Precision Pulse™	80% Ar 20% CO_2	75 to 355 in/min	Ultimarc® -10.0 to 10.0		
				85% Ar 15% CO_2				
				90% Ar 10% CO_2				
				Ar-Mix				
	Manual CV	None	Manual CV	Any Shielding Gas	10.0 to 45.0 V	Pinch -10.0 to 10.0	N/A	N/A
FCAW-S	Self-Shielded	None	Self-Shielded	No gas	10.0 to 45.0 V	Pinch -10.0 to 10.0	N/A	N/A
FCAW-G	Manual CV	None	Manual CV	Any Shielding Gas	10.0 to 45.0 V	Pinch -10.0 to 10.0	N/A	N/A
	Steel	0.045 in	Gas-Shielded	100% CO_2	175 to 600 in/min	Pinch -10.0 to 10.0	N/A	N/A
				75% Ar 25% CO_2				
				Ar-Mix				
		0.052 in		100% CO_2	150 to 500 in/min			
				75% Ar 25% CO_2				
				Ar-Mix				
		1/16 in		100% CO_2	125 to 400 in/min			
				75% Ar 25% CO_2	125 to 375 in/min			
				Ar-Mix				

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Process type	Wire type	Wire size	Waveform	Gas Type	Workpoint Limits	Wave Control 1	Wave Control 2	Wave Control 3
GTAW	GTAW	N/A	HF TIG (§)	Helium, Argon	5 to 350 A	N/A	N/A	N/A
			Touch Start					
			HF TIG Pulse (§)			Frequency 0.3 to 35.6 Hz	Background 20 to 100 %	
			Touch Start TIG Pulse					
			HF AC TIG (§)		10 to 350 A	AC Frequency 50 to 200 Hz	AC Balance 35 to 85 %	DC Offset -30 to 30 %
			Touch Start AC TIG (§)					
SMAW	SMAW	N/A	AC SMAW (§)	No gas	15 to 350 A	Arc Force -10.0 to 10.0	Hot Start 0.0 to 10.0	AC Frequency 20 to 100 Hz
			Crisp (EXX10)					N/A
			DCEN SMAW (§)					
			Soft (EXX18)					
			Stainless (E3XX)					
CAG	Carbon Arc	N/A	Arc Gouge	No gas	60 to 350 A	N/A	N/A	N/A