

APT+ ADVANCED POWER TECHNOLOGY

PULSE MIG MACHINES



PARWELD APT+ M SERIES PROFESSIONAL MULTI-PROCESS PULSE MIG WELDING MACHINES

The APT+ Series of machines builds on the success of APT Series. APT+ represents a step change in the delivery and control of the welding arc, whilst maintaining the robust and reliable features of the APT series. With the APT+ we have implemented the latest micro processors with higher clock speeds and increased the communication speed between the power source and control panel by a factor of 100. This allows us to have even more precise control over the arc reducing energy input, increasing welding speeds and ensuring clean arc starts every time even with the most difficult materials.

All MIG / MAG Processes

- APT-Root Gap - for perfect root and gap filling applications
- APT-Deep - high performance arc with deep penetration
- Pulse and Double Pulse MIG/MAG
- Multi-Process Lift TIG, MMA welding and Arc gouging
- APT-Pipe specifically for pipe welding
- APT-Cold Pass for low heat input applications
- APT-Cold Braze

Operator feedback

The digital display indicates welding parameters as well as error codes for blocked airflow. Thermal Overload Protection prevents machine damage.

Access Control

Welding parameters can be locked by supervisor preventing tampering, ensuring quality is maintained.

Site Power Generators can be used without a problem

Easy lifting sling attachment

APT interconnection hose packages

- High quality materials for long service life
- Industrial-quality control plugs
- Highly flexible cable bundle
- Fabric-sheathed hoses can handle high pressure and temperature loads
- Gas hoses in accordance with EN 559 prevent shielding gas contamination
- Up to 40m interlink cables available



Digital Control Panel brings all functions to the workplace

Industrial wire feeder. One easy to follow panel allows access to hundreds of jobs.

Upto 99 Program Memory

Increases productivity. Saved programs can be called from the front panel or directly from the torch.

Steel / NiCr / Copper and Aluminium

A wide range of welding programs (Jobs) that provide the best performance on all metals available as standard. Optimised programs increase welding speeds with reduced energy input.

Advanced Power Technology

Delivers energy savings of up to 35% against conventional equipment, and superior arc control without spatter.

Cooling Tunnel Design

Cooling air is drawn through an internal tunnel which protects the electrical and electronic components from grinding dust and dirt, extending the machine's life.

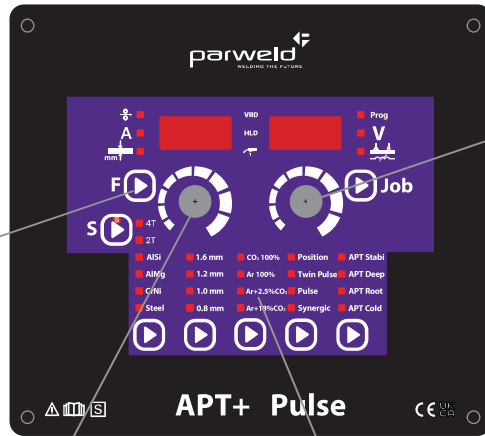
Intelligent Cooling System

Smart fan and pump operates only when needed, reducing noise, reducing energy consumption and increasing service intervals.

ONE SIMPLE INTERFACE TO SUIT ANY APPLICATION

OPTIMISED FOR PERFORMANCE

APT+ Pulse Panel



Welding Parameters, presets control the smallest detail

Quick and easy adjustment of many features such as Pre-gas, hot start, post gas, crater fill and burn-back

Function Control

Left Wheel to set Synergic value (wire speed, material thickness or current)

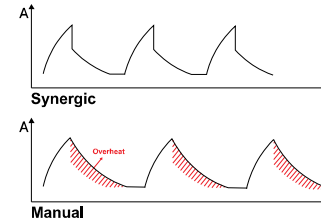
Job Control

Right Wheel job selection and trim or arc dynamics

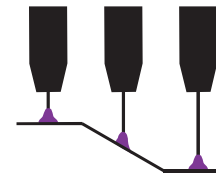
Easy, Intuitive Design

Easy to read interface
Intuitive self-explanatory operation
Only active functions are shown

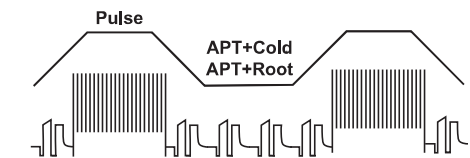
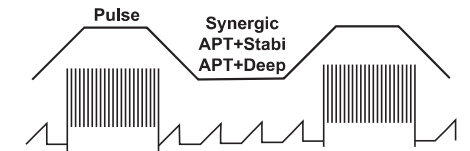
Precise control of shot circuit current for synergic welding with CO₂ shielding gas, eliminates excess current that generates spatter



Smart arc control, ideal when welding in tight spots where you can't maintain a constant arc length. APT+ constantly monitors and adjust wire speed to maintain the same arc length regardless of the wire stickout.



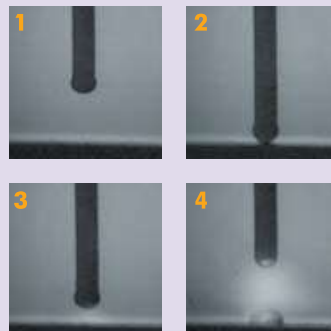
Hybrid pulsing, special programs such as APT root and APT pipe, using hybrid pulse profiles allowing a mix of short arc and pulse arc to allow weld metal solidification between pulses.



OPTIMISED FOR PERFORMANCE

Precise control of output ensures reduced heat input and allows faster welding speeds. Positional welding is possible with minimal skill.

Perfect starting, perfect arc starting time after time, precise rapid power and wire speed controls ensure crisp precise arc starting every time.



APT+ PULSE PANEL



Provides a full range of programs covering all materials and common gas mixtures. It also includes APT Deep, APT Pipe, APT Root Gap, APT Cold Pass and brazing programs.

Offers the specialist fabricator an extensive range of programs that will enhance weld quality and reduce production time. Depending on the model up to 300 specific JOBS are available, ideally suited to users performing specialist fabrication work, positional welding and specialist materials.

Material	Gas	Wire size			
		0.8	1.0	1.2	1.6
Synergic and Pulse Operation					
SG2 / SG3 - G3/G4Si1	Ar-82 / CO2-18	220/353/403/503	220/353/403/503	353/403/503	403/503
SG2 / SG3 - G3/G4Si3	CO2-100	220/353/403/503	220/353/403/503	353/403/503	403/503
308 / CrNi 19 9	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
309 / CrNi 23 13	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
310/ CrNi 26 21	Ar-97,5 / CO2-2,5		220/353/403/503	353/403/503	
316 / CrNi 19 12	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
318 CrNi 18 10	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
Duplex 2209 / CrNi 22 9 3	Ar-70 / He-30	220/353/403/503	220/353/403/503	353/403/503	403/503
Duplex 2209 / CrNi 22 9 3	Ar-78 / He-20 / CO2-2	220/353/403/503	220/353/403/503	353/403/503	403/503
NiCr 6625	Ar-70 / He-30	220/353/403/503	220/353/403/503	353/403/503	403/503
NiCr 6625	Ar-78 / He-20 / CO2-2	220/353/403/503	220/353/403/503	353/403/503	403/503
AlMg 4.5%	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
AlMg 4.5%	Ar-70 / He-30	220/353/403/503	220/353/403/503	353/403/503	403/503
AlMg 3%	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
AlSi	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
AlSi	Ar-70 / He-30	220/353/403/503	220/353/403/503	353/403/503	403/503
Al99	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
Al99	Ar-70 / He-30	220/353/403/503	220/353/403/503	353/403/503	403/503
CuSi	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
CuSi	Ar+2,5% CO2-2	220/353/403/503	220/353/403/503	353/403/503	403/503
CuAl	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
Brazing					
CuSi	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
CuSi	Ar+2,5% CO2-2	220/353/403/503	220/353/403/503	353/403/503	403/503
CuAl	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
CuAl	Ar+2,5% CO2-2	220/353/403/503	220/353/403/503	353/403/503	403/503
APT Deep, APT Deep Pulse					
SG2 / SG3 - G3Si1 / G4Si1	Ar-82 / CO2-18	220/303/403/503	220/353/403/503	353/403/503	403/503
SG2 / SG3 - G3Si1 / G4Si1	Ar-90 / CO2-10	220/353/403/503	220/353/403/503	353/403/503	403/503
308 / CrNi 19 9	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
309 / CrNi 23 13	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
310/ CrNi 26 21	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
316 / CrNi 19 12	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
318 CrNi 18 10	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
Duplex 2209 / CrNi 22 9 3	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	403/503
AlMg 4.5%	Ar-100			353/403/503	403/503
AlSi	Ar-100			353/403/503	403/503
Al99	Ar-100			353/403/503	403/503
FCW CrNi - Metal	Ar-82 / CO2-18	220/353/403/503	220/353/403/503	353/403/503	403/503
APT Root Gap, APT Root Gap Pulse					
SG2 / SG3 - G3Si1 / G4Si1	Ar-82 / CO2-18		220/353/403/503	220/353/403/503	
SG2 / SG3 - G3Si1 / G4Si1	CO2-100		220/353/403/503	220/353/403/503	
SG2 / SG3 - G3Si1 / G4Si1	Ar +CO2-10%		220/353/403/503	220/353/403/503	

Denotes Synergic Only Operation

APT Cold Pass, APT Cold Pass Pulse					
SG2 / SG3 - G3Si1 / G4Si1	Ar-82 / CO2-18	220/353/403/503	220/353/403/503	353/403/503	403/503
SG2 / SG3 - G3Si1 / G4Si1	CO2-100	220/353/403/503	220/353/403/503	353/403/503	
SG2 / SG3 - G3Si1 / G4Si1	Ar +CO2-10%		220/353/403/503	353/403/503	
307 / CrNi 19 9	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	
308 / CrNi 19 9	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	
316 / CrNi 19 12	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	
318 CrNi 18 10	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	
Duplex 2209 / CrNi 22 9 3	Ar-97,5 / CO2-2,5	220/353/403/503	220/353/403/503	353/403/503	
AlMg 4.5%	Ar-100		220/353/403/503	353/403/503	
AlSi	Ar-100		220/353/403/503	353/403/503	
Al99	Ar-100		220/353/403/503	353/403/503	
ZnAl (Fe to Al Welding)	Ar-100		220/353/403/503	353/403/503	
Mg-Mg Welding	Ar+He 30%			353/403/503	403/503
APT Cold Braze					
CuSi	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
CuAl	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
ZnAl	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
AlSi	Ar-100	220/353/403/503	220/353/403/503	353/403/503	403/503
APT Cladding					
NiCr 6625	Ar-70 / He-30		353/403/503	353/403/503	403/503
NiCr 6625	Ar-78 / He-20 / CO2-2		353/403/503	353/403/503	403/503
NiCr 6617	Ar-70 / He-30			353/403/503	403/503
309 / CrNi 23 13	Ar-97,5 / CO2-2,5			353/403/503	403/503
Co Based	Ar-100			353/403/503	403/503
APT Stabil					
SG2 / SG3 - G3Si1 / G4Si1	Ar-82 / CO2-18		220/353/403/503	353/403/503	
316 / CrNi 19 12	Ar-97,5 / CO2-2,5		220/353/403/503		
308 / CrNi 19 9	Ar-97,5 / CO2-2,5		220/353/403/503	353/403/503	
Metal Core wire					
FCW Steel	Ar-82 / CO2-18	220/303/403/503	220/353/403/503	353/403/503	403/503
FCW CrNi	Ar-97,5 / CO2-2,5			353/403/503	403/503
FCW High strength	Ar-82 / CO2-18			353/403/503	
Rutile/Basic Core wire					
FCW Steel Rutile	Ar-82 / CO2-18	220/303/403/503	220/353/403/503	353/403/503	403/503
FCW Steel Rutile	CO2-100			353/403/503	403/503
FCW Steel Rutile	Self Shielded		220/353/403/503	353/403/503	
FCW CrNi - Rutile	Ar-82 / CO2-18			353/403/503	403/503
FCW CrNi - Rutile	CO2-100			353/403/503	403/503
FCW Steel - Basic	Ar-82 / CO2-18			353/403/503	
Special					
MIG Manual	-	220/353/403/503	220/353/403/503	220/353/403/503	220/353/403/503
TIG	-	220/353/403/503	220/353/403/503	220/353/403/503	220/353/403/503
MMA	-	220/353/403/503	220/353/403/503	220/353/403/503	220/353/403/503
Gouging	403/503 Models				

Denotes Synergic Only Operation



Wire feeding – Precise and practical

37 mm wire-feed rolls, encoder motor and 4x4 wire-feed box give stable arc characteristic with reduced spatter

Simple, tool-free roll changing
Long-lasting rolls with two different wire diameters on the same roll

Function table, feed box and optional wheel kit



Hardware - Strong and easy to use

- Tool-free changing of interconnection hose packages
- Externally accessible connections
- Strain-relieved hose package with clamp and swivel system
- Protected hose package connections

Wire inching-button

Load the wire quickly without wasting gas



Gas test-button

Gas flow can be checked safely

Code	Description	Min-Max
F1	Pre gas flow	0-10 Secs Default is 0.1
F2	Start Ignition Mode	0, 1, 2 Default is 1
F3	Start Time	0-10 Seconds
F4	Start Amperage	1-200%
F5	Start Arc Correction	-9.9 to +9.9 V
F7	Start Slope	0-5 Seconds
F8	Double Pulse peak time	0.01 -10 Sec
F10	Double Pulse base time	0.01 -10 Sec
F11	Double pules base current level	1-100%
F12	Double pulse arc correction	-9.9 to +9.9 V
F15	Downslope time	0-10 Seconds
F16	End time	0-10 Seconds
F17	End Current	1-200%
F18	End current arc correction	-9.9 to +9.9 V
F20	Burn back adjustment	10-200
F21	Wire cutting mode	0,1,2 Default is 2
F22	Post gas time	0-10 seconds
F23	Smart Trigger function	OFF - ON

Code	Description	Min-Max
F24	Penetration Stabilisation	0-5 Default 2
F25	Hot start Time	0-10 seconds
F26	Hot start Amperage	1-200%
F27	Arc Force	-50 to +50%
F28	Antistick	0-2 Seconds
F29	VRD Function	0-1
F31	TIG V stop limit	10-30 Volts
F32	TIG Comfort stop tol	-2 to +2 Volts
F34	Tack/Stitch Mode	0-2
F35	Cooling mode	0,1,2,3,4 Default 0
F36	Motor current	Amps
F37	Motor current limit	0.7-7Amps
F38	F save, F Reset	0, 1
F39	Motor control Firmware	-
F40	Power control Firmware	-
F41	Arc on Time	- Hrs
F42	Machine on Time	- Hrs
F50	Load Resistance calibration	0-30 mOhm

High efficiency cooler ensures excellent torch performance

High-performance arcs need cool running torches. Cool running torches result in lower costs for consumables and torch maintenance, even under demanding environmental conditions

Modular structure

Cooling-unit is able to be added or removed from welding system as required. A cooling unit can be added to your package with ease due to this modular construction.

High capacity heat exchanger and independent fan cooling

The fans of the motor and the heat exchanger are separate, improving water cooling efficiency



Built for heavy industrial applications

High pressure 4.5 bar water pump for use with long hose packages

Easy service and maintenance

Easy access to the components in the cooling unit

Coolant level indicator

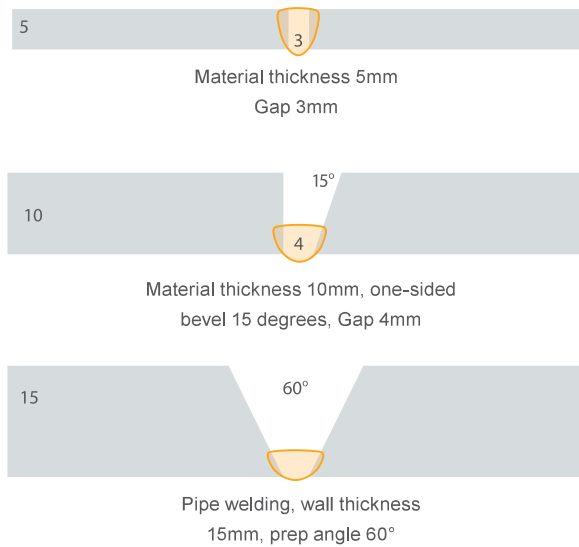
Easy to read coolant level indicator with min/max scale

Intelligent Cooling System

Operates cooling unit only when needed, reducing noise, energy use and increasing service intervals

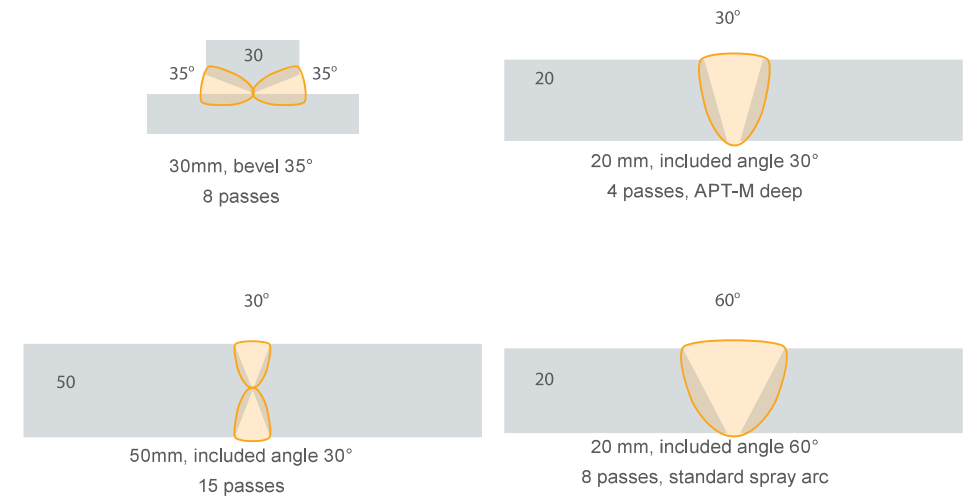
APT+ M ROOT - WELDING OF NON-ALLOY AND LOW-ALLOY STEEL

- Perfect gap bridging
- Good root formation and excellent sidewall fusion
- High arc stability for root welding in all positions
- High welding speed and melt rate compared to TIG or MMA welding
- Low-spatter process
- Rapid digital control of the process, easy to guide and to control
- Uses standard welding torches
- For manual and mechanised applications
- Flat, smooth weld surface and virtually spatter-free process for reduced post-weld finishing



APT+ M DEEP - WELDING OF FILLING PASSES AND COVER PASSES IN NON-ALLOY AND LOW-ALLOY STEEL

- Easy to learn, even for inexperienced welders, thanks to rapid digital control of the process, virtually spatter free, reduced undercuts
- Deep penetration for excellent root and sidewall fusion
- Reduced heat, directionally stable arc
- Enables weld seam volume to be reduced, potential for over 50% reduction of welding time, suitable for manual and automated welding
- Perfect welding even with very long stick-outs
- Excellent gap bridging even at high power
- Excellent wetting of the material surface, smooth weld surface even on heavily oxidised or dirty sheet metal

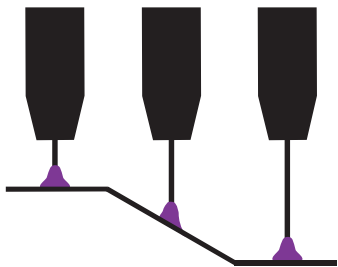


APT+ M COLD PASS - WELDING AND BRAZING OF THIN SHEET METAL MADE FROM NON ALLOY, LOW-ALLOY, HIGH-ALLOY STEEL AND GALVANISED SHEET METAL

- Short-circuit welding with low heat input due to digital control of droplet transfer using APT
- Reduced discolouration and distortion
- Flat, smooth weld surface, virtually spatter-free, reduced post weld finishing work, excellent wetting of surfaces when brazing
- Rapid digital control of the arc ensures the arc is easy to guide and control
- Minimal spatter formation, minimises impact on corrosion resistance even with galvanised materials

APT+ M STABI

- Dynamic arc control ensures constant arc length even if the free wire stick out varies
- Ideal for restricted access welding



APT+ M ADVANCED POWER TECHNOLOGY

Using advanced power components with Ultra-fast switching to ensure precise control of the arc to give outstanding weld quality on all materials and in all applications.

APT+ improves the efficiency of the power components reducing wasted heat by up to 50% and delivers long-term reliability.

APT+ uses high speed communication to ensure perfect synchronisation between wire feeding and welding power levels even when using long cable sets.



- APT+ M Pulse allows the user to make MIG, electrode (MMA) and TIG welding with a single machine.
- It provides welding without spatter by means of Synergic, Pulse.
- Comes with APT+ M Root, Deep, Cold, Position, Stabi and Pipe programs.
- Equipped with special programs for Steel / CrNi / Aluminum / Copper welding.
- Digital display and easy-to-use front panel, allows the welder to adjust all values from the wire feeder.
- Encoder drivemotor and 4x4 wire feed unit ensure stable arc formation. Especially with aluminum wires.
- APT+M Pulse Inverter Technology, delivers up to 35% energy saving.
- Stable arc characteristic across a wide range of processes.



APT+M 220C

Power Unit	APT+ M 220C
Mains Voltage (VAC)	230 ± 10%
Ampere Range (A)	20-200
Duty Cycle (40°C)	25% : 200 A, 23 V 60% : 110 A, 19 V 100% : 90 A, 18.1 V
Maximum Input Power (kVA)	7.2 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	610 x 245 x 450
Net Weight (kg)	26.5 kg

M SERIES PACKAGE OPTIONS

APT+M 220C Air Cooled Packages

APT+M 220C	Air Cooled Machine
APT+M-220C	Power Source Air Cooled
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR4V0810	D/Roll 0,8-1,0 V Groove

APT+M 220C-P1	Air Cooled Machine includes XP200A-30E Torch and UK Standard Gas Regulator
APT+M-220C	Power Source Air Cooled
XP200A-30E	XP8 200A 3m Torch
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR7V0810	D/Roll 0,8-1,0 V Groove-Steel

APT+M 220C-P1E	200, Air Cooled Machine includes Trolley XP200A-30E Torch and UK Standard Gas Regulator
APT+M-220C	Power Source Air Cooled
TR010	Trolley
XP200A-30E	XP8 200A 3m Torch
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR7V0810	D/Roll 0,8-1,0 V Groove-Steel

APT+M 220C-PT1	Air Cooled Machine includes XP200A-30E Torch
APT+M-220C	Power Source Air Cooled
XP200A-30E	XP8 200A 3m Torch
706101	Flow Meter 0-25LPM
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR7V0810	D/Roll 0,8-1,0 V Groove-Steel

APT+M 220C-PT1E	200, Air Cooled Machine includes Trolley and XP200A-30E Torch
APT+M-220C	Power Source Air Cooled
TR010	Trolley
XP200A-30E	XP8 200A 3m Torch
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR7V0810	D/Roll 0,8-1,0 V Groove-Steel

APT+M 220C Air Cooled Packages

Optional Items	Description
TR010	Trolley
DR7V0810	D/Roll 0,8-1,0 V Groove-Steel
DR7U0810	D/Roll 0,8-1,0 U Groove-Alu
DR7U1012	D/Roll 1,0-1,2 U Groove-Alu
APT-ALKIT-1*	Alu Kit - 220-353 MC XP8 Torch 1.0/1.2
APT-ALKIT-2*	Alu Kit - 220-353 MC BZL Torch 1.0/1.2
	*Includes Feed Rolls, Liner, Contact Tips

Replacement Items	Description
CKC203I	3m Work Return Lead
APTM-2A	2m Gas Supply Hose

M SERIES PACKAGE OPTIONS



APT+M 353C

Power Unit	APT+M 353C
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-350
Duty Cycle (40°C)	60% : 350 A, 29.8 V 100% : 250 A, 25.3 V
Maximum Input Power (kVA)	14.7 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	497 x 245 x 372
Net Weight (kg)	30 kg

APT+M 353C Air Cooled Packages

APT+M 353C	353, Air Cooled Machine inc Trolley
Stock Code	Description
APT+M 353C	Power Source Air Cooled
TR010	Trolley Compact APT+
CKC303	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
DR7V1012	D/Roll 1.0-1.2 V Groove

APT+M 353C-P1	353, Air Cooled Machine includes XP300A-30E Torch, Trolley and UK Standard Gas Regulator
Stock Code	Description
APT+M 353C	Power Source Air Cooled
TR010	Trolley Compact APT+
XP300A-30E	XP8 300A 3m Torch
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
CKC303	3m Work Return Lead 25mm
APTM-2A	2m Gas Supply Hose
DR7V1012	D/Roll 1.0-1.2 V Groove

APT+M 353C-P1E	353, Air Cooled Machine includes XP300A-30E Torch, Trolley
Stock Code	Description
APT+M 353C	Power Source Air Cooled
TR010	Trolley Compact APT+
XP300A-30E	XP8 300A 3m Torch
CKC303	3m Work Return Lead 25mm
APTM-2A	2m Gas Supply Hose
DR7V1012	D/Roll 1.0-1.2 V Groove

M SERIES PACKAGE OPTIONS



APT+M 353CW

Power Unit	APT+M 353CW
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-350
Duty Cycle (40°C)	60% : 350 A, 29.8 V 100% : 250 A, 25.3 V
Maximum Input Power (kVA)	14.7 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	1128 x 1039 x 532
Net Weight (kg)	60.5 kg

Replacement Items	Description
CKC303	3m Work Return Lead
APTM-2A	2m Gas Supply Hose
XTSUC	Ultracool Coolant

APT+M 353CW Water Cooled Packages

APT+M 353CW, Water Cooled Machine includes Trolley	Stock Code	Description
APT+M 353C	Power Source Air Cooled	
TR010	Trolley Compact APT+	
APT906	Under Mount Water Cooler	
CKC303	3m Work Return Lead	
APTM-2A	2m Gas Supply Hose	
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel	

APT+M 353CW-P1, Water Cooled Machine includes; PRO4400 Torch, Trolley and UK Standard Gas Regulator	Stock Code	Description
APT+M 353C	Power Source Air Cooled	
TR010	Trolley Compact APT+	
PRO4400-30ER	Double Water Cooled Mig Torch 3m	
700113	1 Gauge Argon Regulator	
706101	Flow Meter 0-25LPM	
APT906	Under Mount Water Cooler	
CKC303	3m Work Return Lead	
APTM-2A	2m Gas Supply Hose	
DR7V0810	D/Roll 0.8-1.0 V Groove-Steel	
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel	
XTSUC	Ultracool Coolant	

APT+M 353CW-P1E, Water Cooled Machine includes; PRO4400 Torch and Trolley	Stock Code	Description
APT+M 353C	Power Source Air Cooled	
TR010	Trolley Compact APT+	
PRO4400-30ER	Double Water Cooled Mig Torch 3m	
APT906	Under Mount Water Cooler	
CKC303	3m Work Return Lead	
APTM-2A	2m Gas Supply Hose	
DR7V0810	D/Roll 0.8-1.0 V Groove-Steel	
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel	
XTSUC	Ultracool Coolant	

APT+M 353CW Water Cooled Packages

Optional Items	Description
APT907C	Under Mount Water Cooler Compact m/c
DR7V0810	D/Roll 0.8-1.0 V Groove-Steel
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
DR7V1216	D/Roll 1.2-1.6 V Groove-Steel
DR7U0810	D/Roll 0.8-1.0 U Groove-Alu
DR7U1012	D/Roll 1.0-1.2 U Groove-Alu
APT-ALKIT-1*	Alu Kit - 220-353 MC XP8 Torch 1.0/1.2
APT-ALKIT-2*	Alu Kit - 220-353 MC BZL Torch 1.0/1.2
	*Includes Feed Rolls, Liner, Contact Tips

M SERIES PACKAGE OPTIONS



APT+M 403S

Power Unit	APT+M 403S
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-400
Duty Cycle (40°C)	60% : 400 A, 32 V 100% : 300 A, 27.5 V
Maximum Input Power (kVA)	17.8 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	1346 x 1039 x 530
Net Weight (kg)	60kg

APT+M 403S Air Cooled Machine Packages

APT+M 403S	403, Air Cooled Machine includes Trolley
Stock Code	Description
APT+M403S	Power Source Air Cooled
TR011	Trolley Separate APT+
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel

APT+M 403S-P1	403, Air Cooled Package includes XP350A-30E Torch, Trolley and UK Standard Gas Regulator
Stock Code	Description
APT+M403S	Power Source Air Cooled
TR011	Trolley Separate APT+
XP350A-30E	XP8 350A 3m Torch
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
DR7V1216	D/Roll 1.2-1.6 V Groove-Steel

APT+M 403S-P1E	403, Air Cooled Package includes XP350A-30E Torch and Trolley
Stock Code	Description
APT+M403S	Power Source Air Cooled
TR011	Trolley Separate APT+
XP350A-30E	XP8 350A 3m Torch
706101	Flow Meter 0-25LPM
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
DR7V1216	D/Roll 1.2-1.6 V Groove-Steel

M SERIES PACKAGE OPTIONS



APT+M 403SW

Power Unit	APT+M 403SW
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-400
Duty Cycle (40°C)	60% : 400 A, 32 V 100% : 300 A, 27.5 V
Maximum Input Power (kVA)	17.8 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	1346 x 1039 x 530
Net Weight (kg)	119 kg

Replacement Items	Description
CKC403	3m Work Return Lead
APT+WF	Wire Feed Unit APT+
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
APTMC05W-7	5m Water Cooled Interconnect Lead Set 7 Pin

APT+M 403SW Water Cooled Machine Packages

APT+M 403SW	400, Water Cooled Machine includes Trolley
Stock Code	Description
APT+M 403S	Power Source Air Cooled
TR011	Trolley Separate APT+
APT+907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Water Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel

APT+M 403SW-P1	400, Water Cooled Machine includes Trolley PRO4400 Torch and UK Standard Gas Regulator
Stock Code	Description
APT+M 403S	Power Source Air Cooled
TR011	Trolley Separate APT+
PRO4400-30ER	Double Water Cooled Mig Torch 3m
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
APT+907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Water Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel

APT+M 403SW-P1E	400, Water Cooled Machine includes Trolley PRO4400 Torch
Stock Code	Description
APTM403S	Power Source Air Cooled
TR011	Trolley Separate APT+
PRO4400-30ER	Double Water Cooled Mig Torch 3m
APT+907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Water Cooled Interconnect Lead Set 7 Pin
CKC403	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel

Optional Items	Description
APT+907	Under Mount Water Cooler Separate APT+
APTMC10A-7	10m Air Cooled Interconnect Lead Set 7 Pin
APTMC20A-7	20m Air Cooled Interconnect Lead Set 7 Pin
APTMC30A-7	30m Air Cooled Interconnect Lead Set 7 Pin
APTMC40A-7	40m Air Cooled Interconnect Lead Set 7 Pin
APTMC10W-7	10m Water Cooled Interconnect Lead Set 7 Pin
APTMC20W-7	20m Water Cooled Interconnect Lead Set 7 Pin
APTMC30W-7	30m Water Cooled Interconnect Lead Set 7 Pin
APTMC40W-7	40m Water Cooled Interconnect Lead Set 7 Pin
APT+WWF	Wire Feeder Wheel Kit
APTM-CB	Wire Feed Counter Balance Boom
DR7V0810	D/Roll 0.8-1.0 V Groove-Steel
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
DR7V1216	D/Roll 1.2-1.6 V Groove-Steel
DR7U0810	D/Roll 0.8-1.0 U Groove-Ali
DR7U1012	D/Roll 1.0-1.2 U Groove-Ali
DR7U1216	D/Roll 1.2-1.6 U Groove-Ali
DR7K1216	D/Roll 1.2-1.6 K Groove-F/Cor
DR7K2428	D/Roll 2.4-2.8 K Groove-F/Cor
APT-ALKIT-3*	Alu Kit -403-503 XP8 Torch 1.0/1.2
APT-ALKIT-4*	Alu Kit - 404-503 MC BZL Torch 1.0/1.2

*Includes Feed Rolls, Liner, Contact Tips

M SERIES PACKAGE OPTIONS



APT+M 503S

Power Unit	APT+M 503S
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-500
Duty Cycle (40°C)	60% : 500 A, 36.5 V 100% : 400 A, 32 V
Maximum Input Power (kVA)	24.8 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	1050 x 1270 x 530
Net Weight (kg)	92 kg

APT+M 503S Air Cooled Machine Packages

APT+M 503S	503, Air Cooled Machine includes Trolley
Stock Code	Description
APT+M 503S	Power Source Air Cooled
TR011	Trolley Separate APT+
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove

APT+M 503S-P1	503, Air Cooled Machine includes XP350A-30E Torch and UK Standard Gas Regulator
Stock Code	Description
APT+M 503S	Power Source Air Cooled
TR010	Trolley Separate APT+
XP350A-30E	XP8 350A 3m Torch
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove

APT+M 503S-P1E	503, Air Cooled Machine includes XP350A-30E Torch
Stock Code	Description
APT+M 503S	Power Source Air Cooled
TR010	Trolley Separate APT+
XP350A-30E	XP8 350A 3m Torch
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove

M SERIES PACKAGE OPTIONS



APT+M 503SW

Power Unit	APT+M 503SW
Mains Voltage (VAC)	400 ± 10%
Ampere Range (A)	20-500
Duty Cycle (40°C)	60% : 500 A, 36.5 V 100% : 400 A, 32 V
Maximum Input Power (kVA)	24.8 V
Open Circuit Voltage (VDC)	75
Dimensions (HxWxL, mm)	1346 x 1039 x 532
Net Weight (kg)	119 kg

APT+M 503SW Water Cooled Machine Packages

APT+M 503SW	503, Water Cooled Machine includes Trolley
Stock Code	Description
APT+M 503S	Power Source Air Cooled
TR011	Trolley Separate APT+
APT907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel

APT+M 503SW-P1	503, Water Cooled Package includes Trolley PRO4400 Torch and UK Standard Gas Regulator
Stock Code	Description
APTM503S	Power Source Air Cooled
TR011	Trolley Separate APT+
PRO4400-30ER	Double Water Cooled Mig Torch 3m
700113	1 Gauge Argon Regulator
706101	Flow Meter 0-25LPM
APT907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
XTSUC	Ultracool Coolant

APT+M 503SW-P1E	503, Water Cooled Package includes Trolley PRO4400 Torch
Stock Code	Description
APT+M 503S	Power Source Air Cooled
TR011	Trolley Separate APT+
PRO4400-30ER	Double Water Cooled Mig Torch 3m
APT907	Under Mount Water Cooler Separate APT+
APTMC05W-7	5m Air Cooled Interconnect Lead Set 7 Pin
CKC503	3m Work Return Lead
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
XTSUC	Ultracool Coolant

APT+M 503

Optional Items	Description
APT907	Under Mount Water Cooler Separate APT+
APTMC10A-7	10m Air Cooled Interconnect Lead Set 7 Pin
APTMC20A-7	20m Air Cooled Interconnect Lead Set 7 Pin
APTMC30A-7	30m Air Cooled Interconnect Lead Set 7 Pin
APTMC40A-7	40m Air Cooled Interconnect Lead Set 7 Pin
APTMC10W-7	10m Water Cooled Interconnect Lead Set 7 Pin
APTMC20W-7	20m Water Cooled Interconnect Lead Set 7 Pin
APTMC30W-7	30m Water Cooled Interconnect Lead Set 7 Pin
APTMC40W-7	40m Water Cooled Interconnect Lead Set 7 Pin
APT+WFV	Wire Feeder Wheel Kit
APT+CB	Wire Feed Counter Balance Boom
DR7V0810	D/Roll 0.8-1.0 V Groove-Steel
DR7V1012	D/Roll 1.0-1.2 V Groove-Steel
DR7V1216	D/Roll 1.2-1.6 V Groove-Steel
DR7U0810	D/Roll 0.8-1.0 U Groove-Alu
DR7U1012	D/Roll 1.0-1.2 U Groove-Alu
DR7U1216	D/Roll 1.2-1.6 U Groove-Alu
DR7K1216	D/Roll 1.2-1.6 K Groove-F/Cor
DR7K2428	D/Roll 2.4-2.8 K Groove-F/Cor
APT-ALKIT-3*	Alu Kit - 403-503 XP8 Torch 1.0/1.2
APT-ALKIT-4*	Alu Kit - 404-503 MC BZL Torch 1.0/1.2

**Includes Feed Rolls, Liner, Contact Tips*

Replacement Items	Description
CKC503	3m Work Return Lead
APT+WF	Wire Feed Unit
APTMC05A-7	5m Air Cooled Interconnect Lead Set 7 Pin
APTMC05W-7	5m Water Cooled Interconnect Lead Set 7 Pin





WIRE FEEDING UNIT	APT+WF
Wire Feed Speed (m/min.)	24
Max Spool Dia (mm)	300
Duty Cycle (40°C)	60% : 600 A
Torch Connection	EURO
Protection Class	IP 21
Standards	CE
Dimensions (HxWxL, mm)	336 x 242 x 509
Net Weight (kg)	12

POWER UNIT	APT+M 220C	APT+M 353C	APT+M 353CW	APT+M 403S
Input Voltage(VAC)	230 ± 10%	400 ± 10%	400 ± 10%	400 ± 10%
Output Range (MIG, A)	20-200	20-350	20-350	20-400
Duty Cycle (40°C)	25% : 200 A, 23.0 V 60% : 110 A, 19.0 V 100% : 90 A, 18.1 V	- 60% : 350 A, 29.8 V 100% : 250 A, 25.3 V	- 60% : 350 A, 29.8 V 100% : 250 A, 25.3 V	- 60% : 400 A, 32.0 V 100% : 300 A, 27.5 V
Max. Input Power (kVA)	7.2	14.7	14.7	17.8
Open Circuit Voltage (VDC)	75	75	75	75
Dimensions (HxWxL, mm)	610 x 245 x 450	497 x 245 x 372	1128 x 1039 x 532	1050 x 1250 x 530
Net Weight (kg)	26.5	30	60.5	60
Standard Accessories	3m Power Cable (4 x 2.5 mm ²)	3m Power Cable (4 x 2.5 mm ²)	3m Power Cable (4 x 2.5 mm ²)	3m Power Cable (4 x 4 mm ²)
Accessories	2m Ground Cable (16 mm ²)	3m Ground Cable (25 mm ²)	3m Ground Cable (25 mm ²)	3m Ground Cable (50 mm ²)
Interconnection				5m A/C
Trolley		✓	✓	✓
Water Cooler			✓	

APT+M 403SW	APT+M 503S	APT+M 503SW
400 ± 10%	400 ± 10%	400 ± 10%
20-400	20-500	20-500
- 60% : 400 A, 32.0 V 100% : 300 A, 27.5 V	- 60% : 500 A, 36.5 V 100% : 400 A, 32.0 V	- 60% : 500 A, 36.5 V 100% : 400 A, 32.0 V
17.8	24.8	24.8
75	75	75
1346 x 1039 x 530	1050 x 1270 x 530	1346 x 1039 x 532
119	92	119
3m Power Cable (4 x 4 mm ²)	3m Power Cable (4 x 6 mm ²)	3m Power Cable (4 x 6 mm ²)
3m Ground Cable (50 mm ²)	3m Ground Cable (50 mm ²)	3m Ground Cable (50 mm ²)
5m W/C	5m A/C	5m W/C
✓	✓	✓
✓		✓

COOLING UNIT	APT+M 907, APT+M 503, APT+M 403	APT+M 907C, APT+M 353
Cooling Capacity (W)	1300	1300
Tank Capacity (L)	5	5
Max. Pressure (bar)	5	5
Max. Temperature (°C)	70	70
Standard	CE	CE
Dimensions (HxWxL, mm)	243 x 245 x 700	243 x 245 x 700
Net Weight (kg)	23	23

Parweld reserves the right to make changes without notification.