



OPTeARC EMIG 300A, 350A, 400A, 450A, 500A, 650A **Synergic CC/CV multi-process industrial welding machines**

MIG, MAG, MMA, TIG, ARC AIR GOUGING, (SMAW, FCAW, MCAW, CAC)

The OPTeARC EMIG range of machines are constructed using the very latest Mitsubishi Hybrid chopper technology, this combines the performance advantages of inverter technology with the ruggedness of transformer based machines.

The performance benefits of this technology are not to be underestimated. Firstly synergic one knob control makes for fast easy setting for any weld & setting this machine up is actually easier than a conventional switched MIG. There is an arc length trim control so you can manually adjust the wire where required. The welding characteristics are superior to any conventional machine; the arc control system & variable inductance guarantee very low spatter across the range, the PCB monitors the arc up to 10,000 times per second & makes tiny corrections to the output to seamlessly maintain the exact weld power. It even compensates if the wire feed is slipping or a poor earth develops. In addition here is a built in arc start circuit for instant smooth arc starting every time you press the trigger.

To achieve all the advantages of these models you would previously have had to purchase a complex inverter based machine, however inverter technology is not rugged & reliable in industrial environments, they all suffer from major blow ups & typically have a life span of a few years for the best made German machines & much less for others.

Our OPTeARC hybrid chopper technology solves the problem; you get all the performance benefits of a good inverter but with the rugged reliability of transformer based machines.

Furthermore, simple internal build & only one PCB means less to go wrong & easy maintenance.

The benefits of the OPTeARC EMIG machines really do add up, which makes these machines the perfect choice for all demanding welding applications.

Main features

- True multi process CC/CV, MIG, MMA, TIG, gouging etc.
- Lift ARC TIG function & MMA anti-stick function are included.
- Infinite control of output power so you get the exact setting you need.
- Variable arc length trim / wire speed on MIG/MAG.
- Infinitely variable inductance to obtain the best welding characteristic for every job.
- Wire feed creep starts for perfect arc initiation every time you press the trigger.
- Superb super smooth welding arc with minimal spatter across the range.
- Automatic compensation for unstable input power.
- Automatic compensation for long welding cables.
- Digital meter shows approximate set welding material thickness prior to welding.
- Digital meter shows exact welding volts & amps when welding for EN1090 & quality standards etc.
- Torch trigger latching (2T-4T) torch trigger function.
- Electronic burnback control to carefully control finish of each weld.
- Wire feeder fitted with metal 4x4 wire feed system & powerful motor.
- 100% copper wound transformer with 5 year warranty & 2 years on all other parts.
- Rugged transformer & Mitsubishi chopper technology for unbeatable reliability in all industries.

All models can be supplied as 400V three phase or 230V single phase or 230/400V dual voltage. Other voltages on request.

Specifications *	EMIG 300	EMIG350	EMIG400	EMIG450	EMIG500	EMIG650
Amps range	10-300A	10-350A	15-400A	20-450A	20-500A	20-650A
Max OCV	75V DC	75V DC	80V DC	85V	85V	85V
Duty cycle @60%	300A	350A	400A	450A	500A	650A
Duty cycle @100%	230A	270A	310A	350A	390A	500A
MIG / MAG welding	Yes	Yes	Yes	Yes	Yes	Yes
MMA Arc welding	Yes	Yes	Yes	Yes	Yes	Yes
TIG lift arc function	Yes	Yes	Yes	Yes	Yes	Yes
Arc air gouging	No	No	Light only	Yes	Yes	Yes
MIG welding wire size	0.6-1.4	0.6-1.6	0.6-1.6	0.6-1.6	0.6-2.4	0.6-3.2
400V models Input fuse (D)	16A	16A	16/20A	32A	32A	32/45A
230V single phase fuse (D)	32A	32A/45A	45A	63A	63A	N/A

*Duty cycles quoted are on TIG & at 40°C, at lower temp the duty cycle increases, on MIG, MMA & gouge the duty cycle reduces by 6%.

All models comply with BS EN60974-1, BS EN50199, WEE/HD0071U2

Guaranteed rugged & reliable technology built to last 25+ years in industry!

PTO for further information & options.

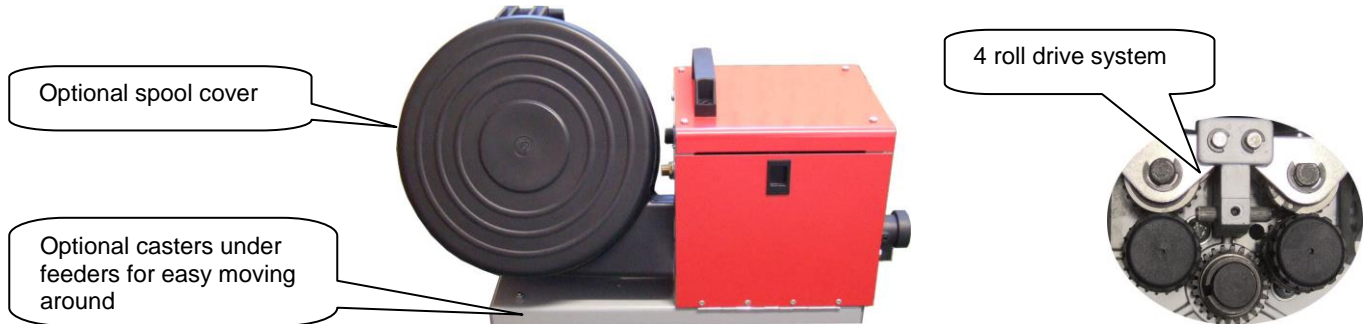




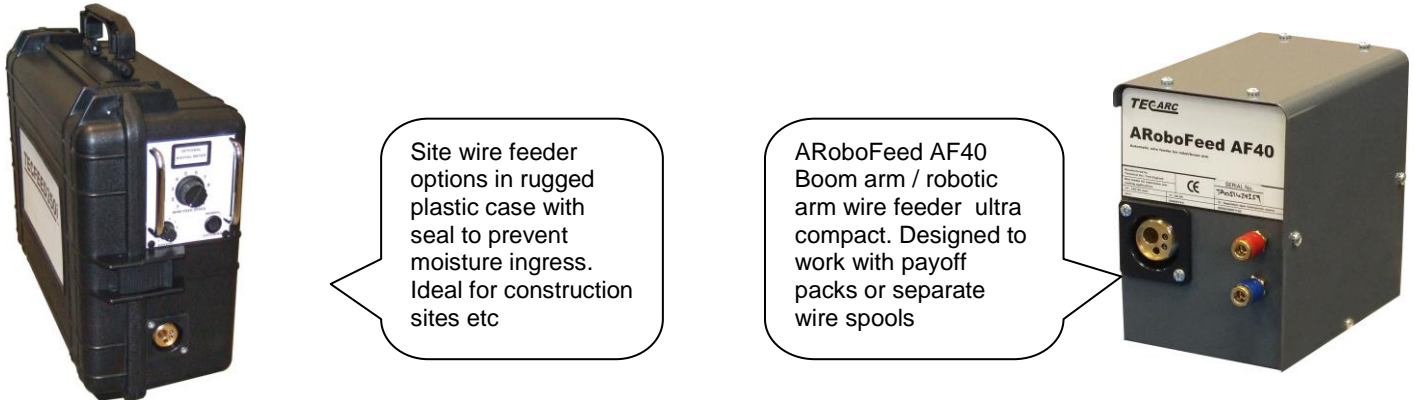
TEC ARC UK

OPTIONS

Open style MIG wire feeder instead of fully enclosed, this has an advantage for some applications, its more compact & slightly more rugged as less steelwork to get bashed & has a really strong 3mm chassis. The low height of between 350-400mm (depending on whether casters are fitted) means these are a good option for structural steel fabrication as they fit under low trestles.



Other MIG wire feeder options include our site wire feeder in a rugged GRP case with seal to keep out moisture & our ARoboFeed wire feeder which is ultra compact & designed to fit onto a robot arm or boom arm & work with a separate spool holder or bulk packs of MIG wire.



DC TIG options include our TIGSTART range of TIG boxes to provide full HF TIG.

Other options.

Water cooling unit built into power source.
 Push pull torch & spool on gun torches.
 Interconnecting leads up to 30M long.
 Welding cables up to 100M long.
 Hand remote control up to 100M long.
 DC TIG functions can be built into main power source if required.
 Carbon arc gouging torch & lead.
 Fan on demand so it only runs when machine is working hard.
 Different input voltages, 380V, 440V, 480V, 500V, 550V, etc
 Standard colour blue with red & yellow options.



We guarantee to fully support these machines with spares & service for a minimum of 20 years.
'Invest in the best' quality made British welding equipment