

A breakthrough to a new world of Engine Driven Welders

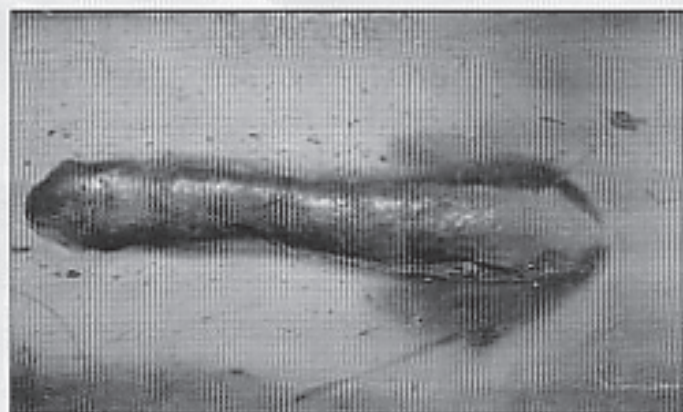
New DSP with Chopper Technology

- Digital electronic current control at high frequency (40 kHz) for more stable welding arc.
- MOSA proprietary software controls all the welding parameters (with Chopper Technology) not only the current.
- TIG welding "Contact-Start" easy to use.
- Higher efficiency means more power (up to 14%) available for welding and
- More auxiliary power available while welding.
- No reactance needed to smooth welding output means:
 - Less weight,
 - Less voltage drop and
 - Less heat and heat related problems
- Optional VRD (Voltage Reduction Device) for Australia.

Conventional analogic engine driven welders

- Traditional current control using normal rectifiers (SCR's) results in ripple which causes spatter and an unstable arc.
- Only the current can be controlled and it is not possible to adjust any other welding parameters.
- TIG welding requires HF box.
- Less welding power from the same source (engine).
- Less the auxiliary power available while welding.
- Reactance required to smooth the ripple and reduce spatter means
 - More weight,
 - Lower arc voltage and
 - Generates unnecessary heat and current loss
- No VRD available from the factory

NEW LEVEL OF WELDING QUALITY



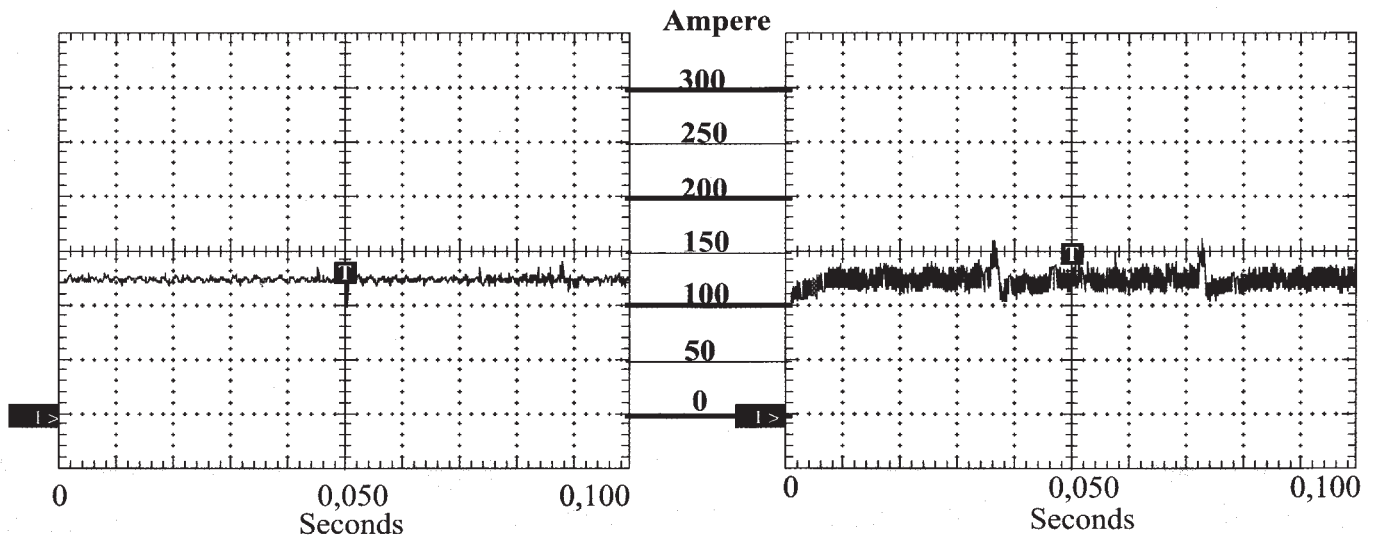
CONVENTIONAL



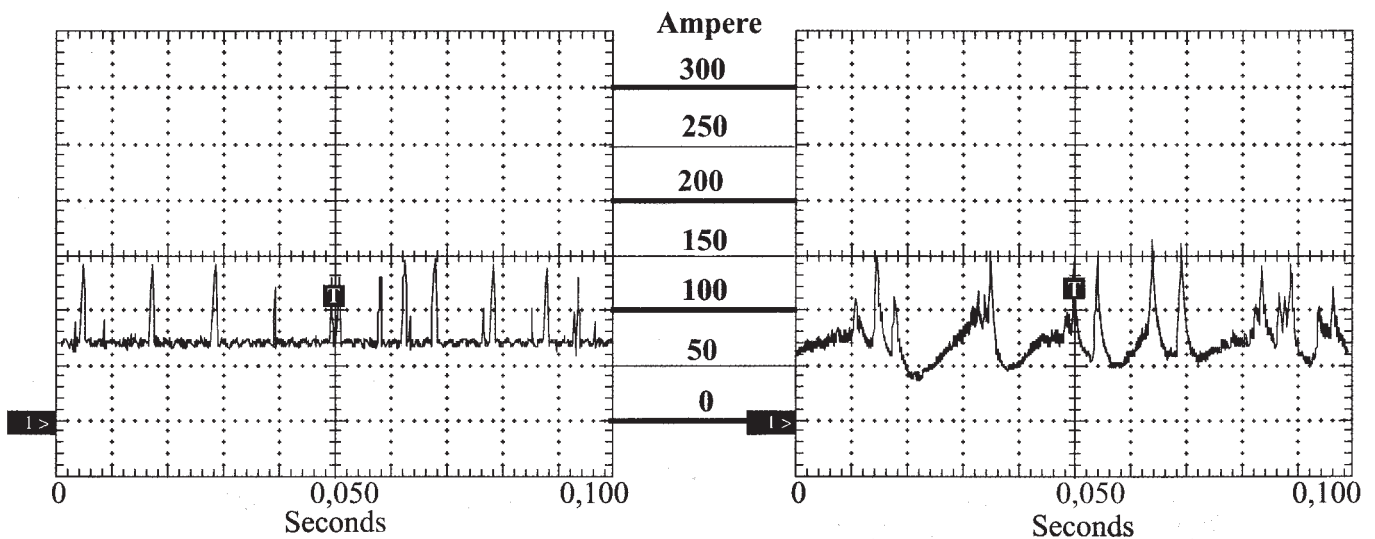
NEW DSP

CONVENTIONAL

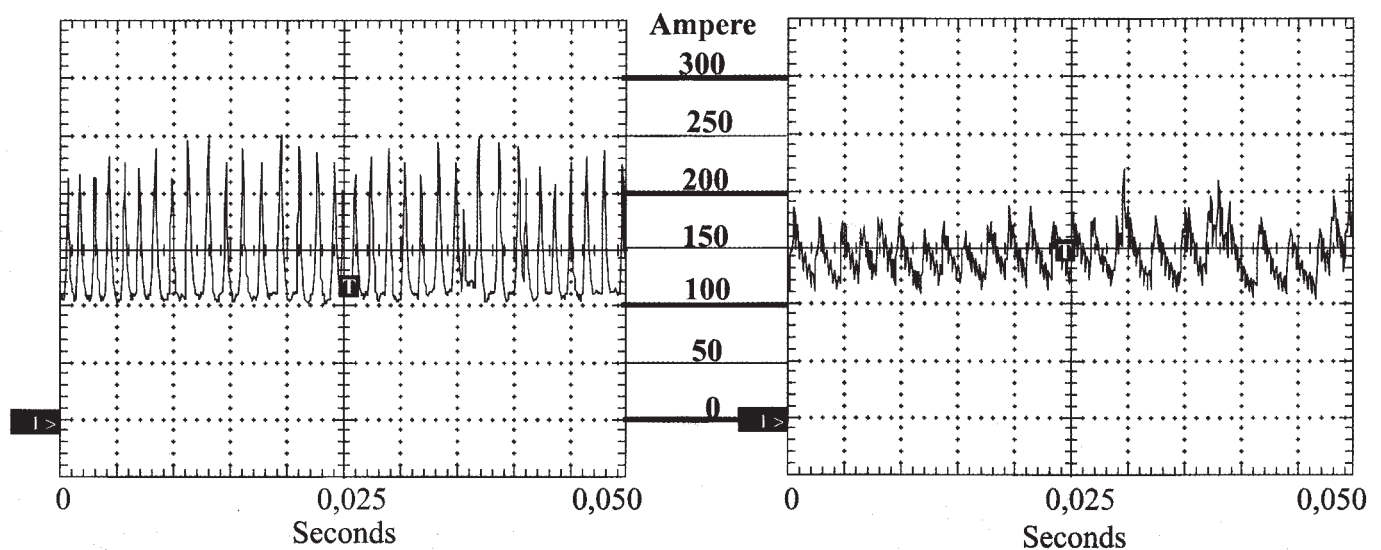
CONSTANT CURRENT (7018 electrode, 3,25 mm (1/8"), 125A, 23V)



CONSTANT CURRENT with ARC FORCE (6010 Electrode, 3.25 mm (1/8") 75A, 25V)



CO₂ (wire 0,8 mm, 130A, 20V, 8m/min.)



In conclusion all the oscilloscope traces show that the new DSP has *superior performances* with a smoother arc and lack of ripple which means less spatter and a more stable arc.