## TRAVELING TECHNOLOGY HIGH TRAVEL SPEED WITH PIPE-END DETECTION SYSTEM (PEDS)

- Electric proportional drive system.
- Uphill or downhill up to 14%
- Automatic steering system. Driving through 40D bend
- Automatic slowdown at pipe end system (PEDS)
- Automatic drive stop at clamping position by PEDS
- Automatic leveling system

## ADDITIONAL FEATURES

Easy to operate and understand "self-explaining" control display (pictograms)

Wireless Remote control for driving, clamping etc.

All controls are located in sealed cabinets

Cabinets with critical parts are conditioned depending on circumstances they are cooled or heated



**INTERNAL WELDER** 





### ALWAYS MOVING FORWARD

Qapqa B.V. De Amer 24, 8253 RC Dronten The Netherlands

T +31 (0) 321 386 677 info@gapga.com



ART

## THE HIGHEST QUALITY **ON CROSS-COUNTRY** PIPELINES

The ART-system is able to produce high quality welds with short handling time. The very well-known defects at the start position resulting from insufficient penetration and lack of fusion are resolved by the new patented welding technology.



# **ART-SYSTEM**

Patented welding technique, providing **fully fused** starts



# CLAMPING METHODOLOGY **ROUND-UP PIPE ENDS AND CLOSING JOINT**

- Three stage electro-mechanical clamping system 600T clamping force
- Clamping force stages programmable and loggable
- Clamping system is capable to round up pipe ends
- The clamping system presses the two pipe ends towards each other closing the joint
- Laser aided final weld path detection

# WELDING TECHNOLOGY TO MINIMIZE WELD REPAIR

- Patented dual welding technology preventing LOF and insufficient penetration
- Three independent operation "robotic" weld heads with automatic lead/lag angle adjustment, cross movement & height control
- Special pulsed welding process

The laser aided final weld path detection system provides exact coordinates to the independent "robotic" welding heads. These innovative welding heads with automatic lead/lag angle adjustment, cross movement & height control, start with GTAW and create a full penetrating melting puddle. Right after, the system then immediately switches to GMAW in a split second and starts in the fluid puddle generating full fusing starts.

The fully-electric operated ART-system with high capacity battery pack is equipped with a three-stage electro-mechanical clamping system, providing up to 600 tons clamping force, to increase roundness of pipes ends and precise line-up. The angled clamping pistons are pushing pipe ends towards each other providing closed joint fit-up. Besides these cutting edge features and the fast drive system with automatic steering and levelling function, the ARTsystem is also equiped with a pipe end detection system (PEDS) and conditioned cabinets for critical electronics.



