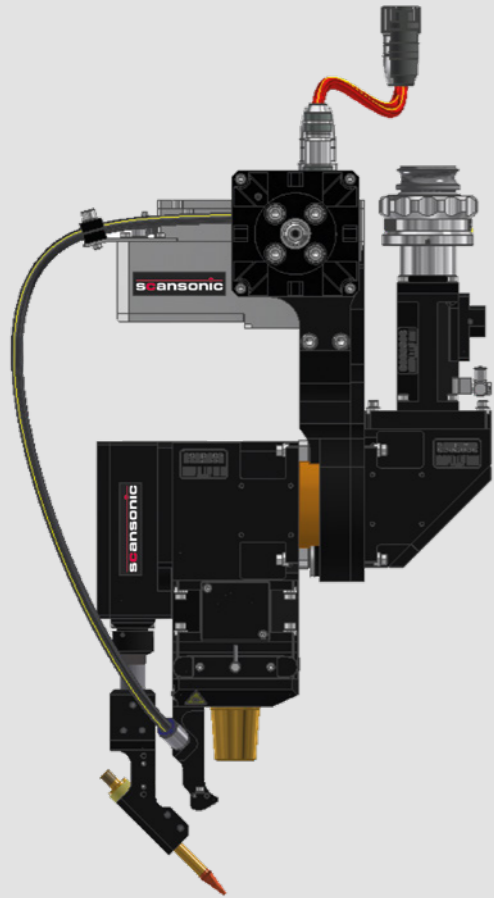


ALO 4

THE NEXT GENERATION.

ALO4^{BASIC}

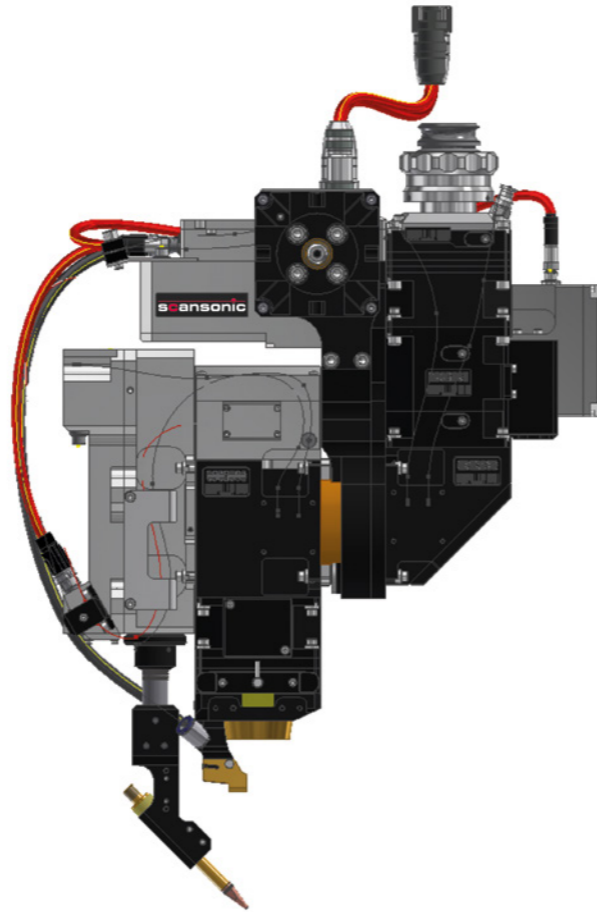
FOCUSED ON THE ESSENTIAL



- ✓ COST-EFFICIENT ACCESS TO SIMPLE BRAZING AND WELDING APPLICATIONS
- ✓ MOTOR CURRENT CONTROLLED SWIVEL AXIS
- ✓ EASY START-UP, SET-UP AND HANDLING CONCEPT

ALO4

CUSTOMIZED FOR ALL INDIVIDUAL TACTILE BRAZING AND WELDING APPLICATIONS

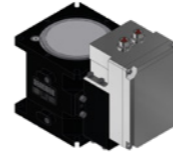


- ✓ PRECISE CLOSED-LOOP CONTROL OF THE PROCESS FORCES AND 3D TILT COMPENSATION TO ELIMINATE DISTURBING INFLUENCES
- ✓ CUSTOMIZABLE AND EXTENDABLE THROUGHOUT ENTIRE PRODUCT LIFE CYCLE
- ✓ FLEXIBLE CHOICE OF MAGNIFICATIONS AND BEAM SHAPES TO REACH OPTIMAL BRAZING AND WELDING RESULTS



TELESCOPIC ARM TA MOTION/TA FIX

- High application flexibility by new compact design
- Increased stability through intelligent component integration



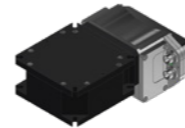
AUTOFOCUS

- Automatic adjustment of the laser beam focus
- Optimized seam quality control



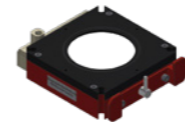
SWIVEL AXIS

- Higher precision by increased power
- Redundant safety functions for flexible laser cell design



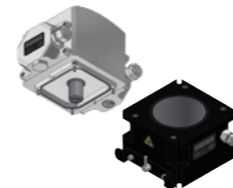
FOM-MOTION

- Motor driven lateral beam to wire adjustment
- Included in ALO4 recipes



PROTECTIVE GLASS MONITOR

- Continuous monitoring of protective glass contamination
- Based on innovative temperature algorithms



SCeye®

- Enhanced data logging and video recording during the process
- Extended process monitoring e.g. range control and slip-off detection

ALO4

BENEFITS

- ✓ FULLY INTEGRATED WIRE-FEEDER-SYSTEM FOR EASY HANDLING VIA OPTICS' USER INTERFACE
- ✓ NEW OPTICS CONTROL WITH INTEGRATED PROTECTIVE GLASS MONITORING, MEDIA FLOW CONTROL AND TRIGGERING OF LASER SOURCE
- ✓ INTUITIVE GRAPHICAL USER INTERFACE AND RECIPE SELECTION ENABLE FAST PROCESS PARAMETER ADJUSTMENT AND EASY DATA TRANSFER TO OTHER OPTICS
- ✓ BACKUP AND RESTORE OF PROCESS PARAMETERS
- ✓ SHORTER START-UP TIMES, FASTER OPTICS EXCHANGE AND MORE EFFICIENT SERVICE THROUGH PLUG-AND-PLAY HARDWARE AND INTERFACE ARCHITECTURE
- ✓ RESPONDING TO INDUSTRIES' INCREASING CONNECTIVITY AND DOCUMENTATION REQUIREMENTS BY EXTENDED RECORDING OF PROCESS AND OPTICS SYSTEM DATA
- ✓ VIDEO CAPTURING FOR DETAILED PROCESS OBSERVATION, FASTER OPTICS SET-UP, PRECISE AND FAST FAULT DIAGNOSTICS
- ✓ MOTOR DRIVEN LATERAL ADJUSTMENT ENSURES CONSTANT SEAM QUALITY TO ADDRESS DIVERSE BEAM-TO-WIRE POSITIONS AND/OR ALTERNATING BODY DESIGNS ON A SINGLE PRODUCTION LINE