

Automatic Girth Welder (AGW-EX) 3 O'clock Welder

AGW1-EX & AGW2-EX standard design features:

- USA made Lincoln or Miller SAW welding systems.
- Dual German engineered SEW drive motors (2 horizontal travel motors).
- Expandable and removable operator platform is designed to fit in narrow spaces then extend to give the operator more room. Frame depth 650mm to 1000mm or 25.5in to 39.3in when the seating frame extension is not installed or is installed on the back of the frame.
- External ladders.
- Personnel hatches in each of the internal levels.
- Anchor points above ladders and hatches for personnel fall restraint devices.
- Removable handrails with gate on top of frame.
- Frame height adjustment is completed by bolted connections between the upper and lower frames.
- Industrial blower for flux recovery.
- For use on plate width (height) from 1.6m to 3.2m or 5.2ft to 10.5ft.
- Minimum tank diameter this AGW can be used on is 4.5m or 15ft there is no maximum tank diameter.
- Frame to shell plate clearance settings 75mm/175mm/300mm or 2.9in/6.8in/11.8in.
- Travel speed 0-2900mm or 0-114in per min.
- Max load allowed on each operator platform 250KG or 551LB.
- Single sided AGW1-EX weight 1023KG or 2255LB.
- Double sided AGW2-EX weight 1894KG or 4176LB.

Optional AGW-EX features:

- Single sided frame AGW1-EX.
- Double sided frame AGW2-EX.
- Intercom for double sided AGW2-EX.
- Weld seam wire wheel buffing attachment.
- Pre-heat torch.
- Flux hopper heater.
- USA made Lincoln or Miller electric power sources in an enclosed steel cabinet.
- Mobile power source (MPS) trailer with or without Lincoln or Miller diesel power sources.
- Davit arm with an electric winch that is mounted on top of AGW frame to lift AGW welding consumables from the ground level. Available winch cable lengths 30m / 40m or 98ft / 131ft.
- Additional frame section for use over 1100mm or 43in deep upper shell plate stiffeners.
- SALA or Miller rescue davit arm as shown.



Light Weight Automatic Girth Welder (AGW-LW) 3 O'clock welder

AGW1-LW & AGW2-LW design features:

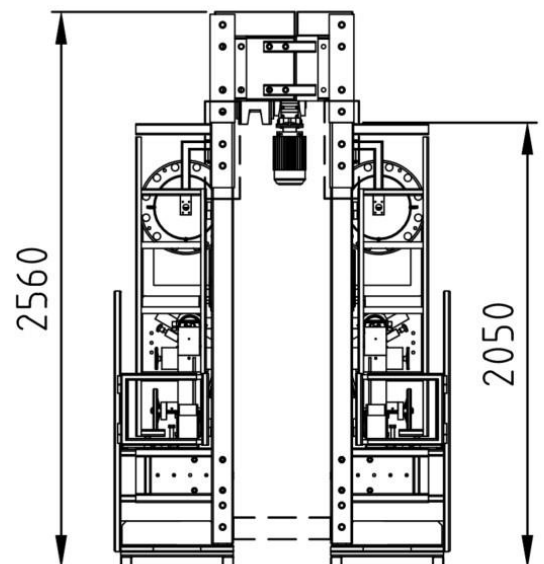
- USA made Lincoln or Miller SAW welding systems.
- Dual German engineered SEW drive motors (2 horizontal travel motors).
- Retractable and removable operator platform is designed to fit in narrow spaces then extend to give the operator more room. AGW frame depth 550mm to 800mm or 21.6in to 31.4in when the frame is retracted or extended.
- Ladder to access flux hopper and opposite side of AGW.
- Anchor points above ladders for personal fall restraint devices.
- Removable handrails on top of frame.
- Frame height adjustment is completed by bolted connections between the upper and lower frames.
- Industrial blower for flux recovery.
- For use on plate width (height) from 1.6m to 3.2m or 5.2ft to 10.5ft.
- Minimum tank diameter this AGW can be used on is 4.5m or 15ft there is no maximum tank diameter.
- Frame to shell plate clearance settings 100mm/350mm/450mm or 3.9in/13.7in/17.7in.
- Travel speed 0-2900mm/min or 0-114 in/min.
- Max load allowed on each operator platform 250kg or 551LB.
- Single sided AGW1-LW 790KG /1742LB.
- Double sided AGW2-LW 1412KG / 3113LB.
- Frame height can be reduced for shipping as shown on the packing height drawing.

Optional features:

- Single sided frame AGW1-LW.
- Double sided frame AGW2-LW.
- Intercom for double sided AGW2-LW.
- Weld seam wire wheel buffing attachment.
- Pre-heat torch.
- Flux hopper heater.
- USA made Lincoln or Miller electric power sources in an enclosed steel cabinet.
- Mobile power source (MPS) trailer with or without Lincoln or Miller diesel power sources.
- Davit arm with an electric winch with that is mounted on top of AGW frame to lift AGW welding consumables from the ground level.
Available winch cable lengths 30m / 40m or 98ft / 131ft.



Packing height of Main part:



Automatic Girth Welder (AGW-U) 3 O'clock Welder

One AGW designed for standard tank construction and tank jacking projects with 3 configurations from one double sided AGW.

AGW1-U & AGW2-U standard design features:

- USA made Lincoln or Miller SAW welding systems.
- Dual German engineered SEW drive motors (2 horizontal travel motors).
- One AGW2 with 3 configurations AGW1-U, AGW2-U or single sided AGW for use with a tank jacking system
- AGW1-U and AGW2-U built to work for standard bottom-up tank construction with tank scaffolding or wind girder that is at least 1200mm or 48in (deep) wide.
- Built for use on top-down tank jacking system projects when re-configured with the travel motor assembly connected to the bottom of the frame.
- External ladders.
- Personnel hatches in each of the internal levels.
- Anchor points above ladders and hatches for personnel fall restraint devices.
- Removable handrails with gate on top of frame.
- Frame height adjustment is completed by bolted connections between the upper and lower frames.
- Industrial blower for flux recovery.
- Frame depth 900mm or 35.4in.
- Frame to shell plate clearance settings 170mm or 6.6in.
- For use on plate width (height) from 1.8m to 3.2m or 5.9ft to 10.5ft.
- Minimum tank diameter this AGW can be used on is 4.5m or 15ft there is no maximum tank diameter.
- Travel speed 0-2900mm or 0-114in per min.
- Max load allowed on each operator platform 250KG or 551LB.
- Single sided AGW1-U weight 1050KG or 2315LB.
- Double sided AGW2-U weight 1750KG or 3858LB.

Optional AGW-EX features:

- Single sided frame AGW1-U.
- Double sided frame AGW2-U.
- Intercom for double sided AGW2-U.
- Weld seam wire wheel buffing attachment.
- Pre-heat torch.
- Flux hopper heater.
- USA made Lincoln or Miller electric power sources in an enclosed steel cabinet.
- Mobile power source (MPS) trailer with or without Lincoln or Miller diesel power sources.
- Davit arm with an electric winch that is mounted on top of AGW frame to lift welding consumables from the ground level. Winch cable length 30m or 98ft.



Electrogas Welder (EGW-V)

Single pass automatic vertical welder with copper backing bars for standard tank construction or tank jacking projects.

EGW1-V & EGW2-V design features:

- Designed for high production one or two pass vertical seam welding with gas shielded flux core wire (or self-shielded wire) and water-cooled copper backing bars on both sides of the welding process.
- Built for use on standard bottom-up tank construction with tank scaffolding or wind girder scaffold.
- Designed for use on top-down tank jacking system projects when re-configured with the travel motor assembly connected to the bottom of the EGW frame.
- Frame enclosed with aluminum panels to shield the welding process.
- Folding sides with flexible flame-resistant material to block the wind between the frame and the shell plate to shield the welding process.
- Lincoln LN10 wire feeder mounted inside the frame.
- Vertical welding carriage mounted on a rail in the ceiling of the EGW frame.
- Lincoln fume extraction system mounted inside the frame.
- Variable speed operator lift system rated for 280KG or 617LB.
- Anchor points above internal ladders and operator lift system for personnel fall restrain devices.
- Top of the frame is enclosed with removable handrails.
- For use on shell plate width (height) from 1.8m to 3.2m or 5.9ft to 10.5ft.
- Minimum tank diameter this EGW can be used on is 4.5m or 15ft there is no maximum tank diameter.
- Standard EGW-V design has a frame depth of 900mm or 35.4in for use on tanks with scaffolding that is at least 1200mm / 48in wide or tank jacking projects. Frame to shell plate clearance 300mm / 11.8in
- The narrow frame EGW-V design has a frame depth of 700mm or 27.5in for use on tanks that have a scaffold width (depth) minimum of 915mm or 36in. Frame to shell plate clearance 200mm / 7.8in / 9.8in
- Double sided AVW weight 2350KG or 5181LB
- Single sided AVW weight 1240KG or 2734LB

Optional features:

- EGW1-V single sided frame with lift and welding system on one side.
- EGW2-V double sided frame with operator lift system on both sides or one side.
- Mobile power source (MPS) trailer and diesel power source.
- Lincoln Electric power sources in a steel cabinet.
- Davit arm with electric winch to lift welding consumables from the ground level. Winch cable length 30m or 98ft.



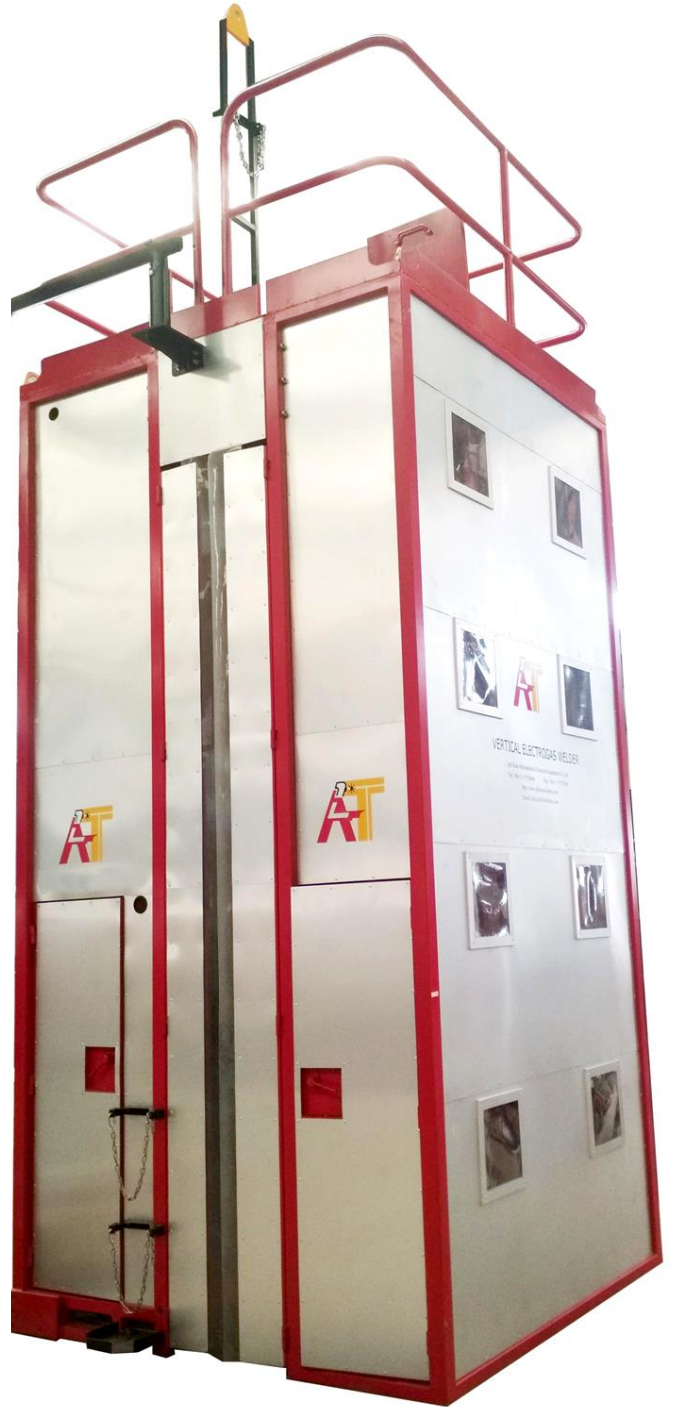
Automatic Vert Welder (AVW)

AVW1 & AVW2 design features:

- Built for low heat input multiple pass vertical welding with gas shielded wire.
- Frame enclosed with aluminum panels to shield the welding process.
- Lincoln or Miller wire feeder mounted inside the frame.
- GULLCO or Bug-O carriage mounted on a rail in the ceiling of the AVW frame.
- Lincoln fume extraction system mounted inside the frame.
- Variable speed operator lift system rated for 280KG or 617LB.
- Anchor points above ladders and operator lift system for personnel fall restrain devices.
- Top of the frame is enclosed with removable handrails.
- For use on shell plate width (height) from 1.6m to 3.2m or 5.25ft to 10.5ft.
- Minimum tank diameter this AVW and be used on is 4.5m or 15ft there is no maximum tank diameter.
- Frame depth 650mm or in 25.6in.
- Frame to shell plate clearance 75mm/175mm/300mm or 2.9in/6.8in/11.8in.
- Folding sides between the frame and the shell plate to shield the welding process from wind.
- Single sided AVW weight 1240KG or 2734LB.
- Double sided AVW weight 2350KG or 5181LB.

Optional features:

- Davit arm with electric winch to lift welding consumable from the ground level. Available winch cable lengths 30m / 40m or 98ft / 131ft.
- AVW1 single sided frame with lift and welding system on one side.
- AVW2 double sided frame with operator lifts and welding systems on both sides or one side.
- Miller or Sala rescue davit arm with manual winch.
- Mobile power source (MPS) trailer and diesel power sources.
- Lincoln or Miller electric power sources in a steel cabinet.



AUTOMATIC VERT BUGGY

Automatic Vert Buggy (AVB) standard features:

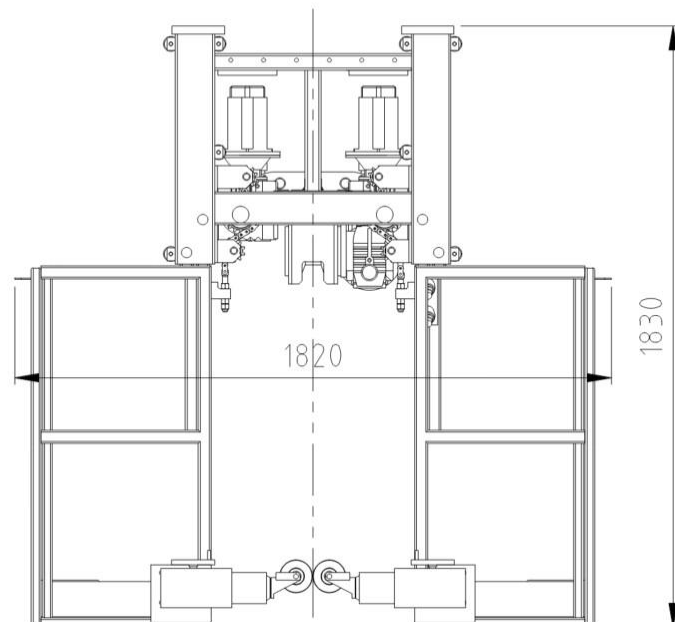
- Independent motorized vertical lift system on each side of the buggy that allows for one side of the AVB working platform to raise and lower while the other side stays stationary.
- Anchor points on the outside of the upper frame and the lower frame so equipment load arrestors can be added between the frames when required.
- Provides the operator with motorized access to both horizontal and vertical joints on the tank shell which can significantly increase production compared to using manual shell buggies for the same task.
- Retractable operator platform is designed to fit in narrow spaces then extend to give the operator more room. Frame depth 550mm to 800mm or 21.6in to 31.4in when the operator platform frame is retracted or extended.
- Personnel fall restraint device anchor points above the ladders on the top of the buggy vertical structure.
- Electrical system is designed on a case-by-case basis to work with the power supply that is available.
- Horizontal travel motors at a speed of 50-1500mm per min or 1.96-59in per min when wired for 110V power supply or at a speed of 100-2650mm per min or 3.9-104in per min when wired for 220V power supply.
- Axillary power supply outlets inside the AVB platforms to run hand tools such as small grinders and lights.
- The tool holders are bolted plates that can hold grinders, hammers, and bull pins.
- Adjustable platform wheel assemblies designed to press against the tank shell plate to add stability to the lower buggy frames.
- For use on a tank shell plate width (height) range of 5.9ft - 11.8ft or 1.8m - 3.6m.
- Minimum tank diameter this buggy can be used on is 4.5m or 15ft there is no maximum tank diameter.
- Frame to shell plate clearance 150mm/250mm/350mm or 5.9in/9.8in/13.7in.
- Each side of the working platforms has a capacity of 397lb or 180KG.
- Upper frame has a load-bearing capacity of 10,000lb or 4536KG.
- Only available as a double sided AVB frame design.
- Weight of double sided AVB 630KG or 1389LB.
- Frame height can be reduced for shipping as shown on the packing height drawing.

Optional features:

- Equipment load arrestors between the upper and lower frames for an additional level of safety.

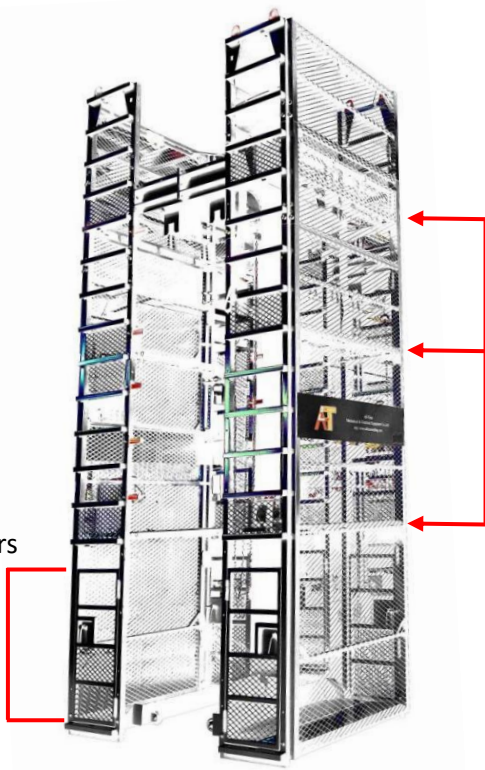


Packing height of Main part:



SHELL BUGGY

Access doors
on all sides



3 Bifold working levels inside standard height buggy



Additional cross members have been added to the frame to work as Ladder Rungs built into the side of the frame so the operator access the folding buggy levels.

The manual tank Shell Buggy is a universal solution to provide access for multiple operations during tank shell plate erection, fitting, welding, and inspection processes.

- Steel meshed covered back and side frames to help prevent dropped objects.
- Double sided buggy can be configured for single or double-sided use.
- Anchor points above ladder rungs for personnel fall restraint devices.
- The minimum tank diameter this buggy can be used on is 4.5M or 15ft in diameter there is no maximum tank diameter
- Built for use on shell plate width (height) from 2M to 3.6M or 6.5ft to 11.8ft.
- Frame depth of 650mm or 25.5in
- Frame to shell plate clearance 75mm/175mm/300mm or 2.9in/6.8in/11.8in
- Single sided Buggy weight 745KG or 1642LB
- Double sided Buggy weight 1200KG or 2646LB



Manual chain drive on both sides allows a single operator to move the unit into place. The drive wheels swivel to allow for easier travel on various tank diameters.



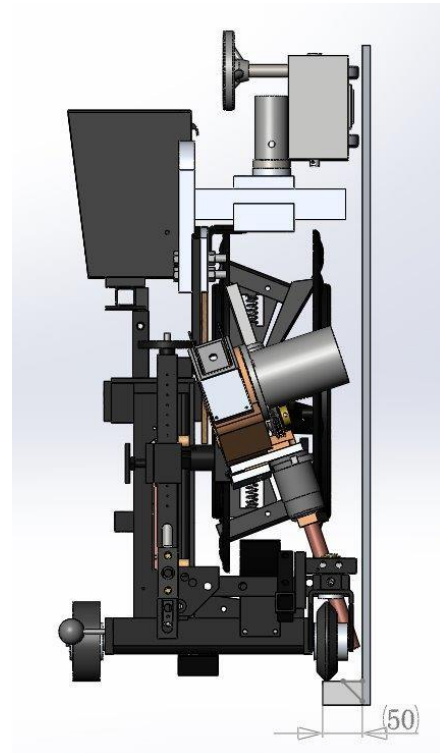
Hinged sides fold inward on top of the bi-folding levels and the back of the buggy once the top and bottom of the buggy frame has been unbolted and removed.



8 single sided Shell Buggy frames shown folded and stacked.



Magnetic Kit (For Lincoln LT7 Tractor)



Weld Seam Tracking Attachment (For Lincoln LT7 Tractor)

This is an add-on accessory for Lincoln's LT7 Tractor (K227-1) or similar welding tractors for lap and butt welds. It is applicable for storage tank base plate designed with lap and butt welded joints. The kit consists of (1) component:

- a. **Weld Seam Tracking Attachment – Idle wheel used to replace Lincoln original steering wheel (Fig.1)**

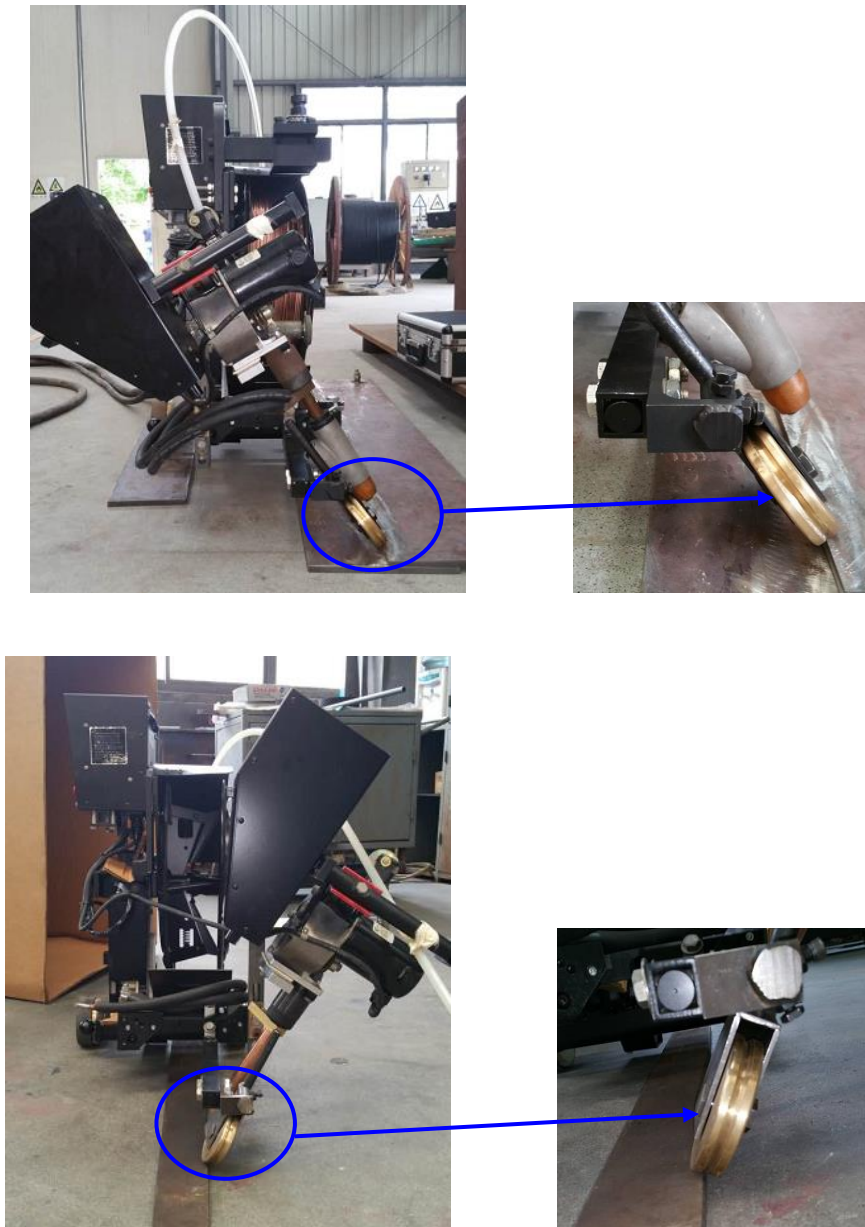


Fig. 1