Handler[®] 190

230-Volt Wire Feed Welder



March 2020



500554 (machine only) **500554001** (with SpoolRunner™ 100)

Includes

- 10 ft. (3 m) HR-100 MIG gun with ergonomic, rubber-padded handle
- 10 ft. (3 m) work cable with clamp
- Power cord with plug
- Built-in gas solenoid valve and dual-gauge regulator with gas hose
- .030 in. (0.8 mm) contact tips
- Quick Select[™] drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire
- Sample spool of .030 in. (0.8 mm) self-shielding flux-cored wire
- Material thickness gauge

Quick Specs



Rated Output 130 A at 21.5 VDC, 30% duty cycle

Mild Steel Thickness Range

24 ga.-5/16 in.







Reliable. Durable. Superior arc with 190 A of power.

Weld as thin as 24 gauge up to 5/16 inch in a single pass with a broad output range of 25-190 amps. Easily weld thicker materials with multiple passes.

Quick and easy setup with Quick Select™ drive rolls which offer three grooves — two for different sizes of solid wire and a third for flux-cored wire.

Easy to set and adjust for different materials and thicknesses — features seven output voltage settings for finer control, less spatter and cleaner welds.

The Handler 190 also features a direct plug-in for the optional SpoolRunner 100 spool gun. The use of a spool gun eliminates wire feed problems associated with soft aluminum wire and other mild or stainless steel wires.

Applications

- Maintenance/repair
- DIY Metal art
- Auto body
- Farm/ranch applications
- Home repair

| Features | Benefits |
|---|---|
| Seven-position voltage control and infinite wire feed speed | Offers easier fine control of the output parameters for improved arc performance with less spatter, and better bead appearance with less clean up. |
| Spool gun ready | Spool guns enhance feedability and reduce "bird-nesting" associated with soft aluminum wires. No additional control box or adapter is required to connect the SpoolRunner 100 spool gun. |
| Built-in wire feeder with quick-release drive roll lever | Positive feed with adjustable tension plus easy accessibility to thread new wire. |
| Spool hub assembly accommodates 4- or 8-inch spools | Offers you flexibility to use small or large spools of wire to better suit your welding needs. |
| Convenient polarity changeover with tip holder | Access makes it quick and easy to change polarity for solid or tubular wire. Includes convenient storage holes for spare tips. |
| Quick Select drive roll | Makes setup quicker by offering three grooves — two for different sizes of solid wire and a third for flux-cored wire. |
| Hobart 5/3/1 industrial warranty | Five-year warranty on transformers, stabilizers and main rectifiers; three years on generators, PC boards and drive systems; and one year on guns (MIG, plasma and TIG torches). |



An ITW Welding Company Sales: 800-626-9420 Service: 800-332-3281







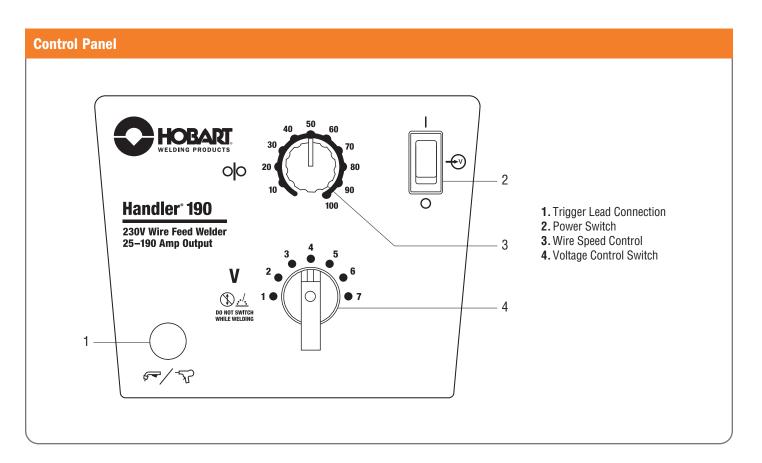


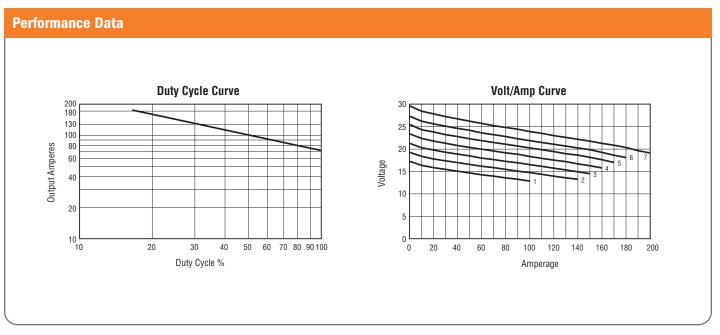




| Specifications (Subject to change without notice.) | | | | | | | | |
|--|---|--------------|--------------|-----------------|------------------------------|--|--|-------------------|
| Welding Amp Range | Rated Output | Amps Input a | t Rated Outp | ut, 60 Hz KW | Max. Open Circuit Voltage | Wire Feed Speed Range | Dimensions | Net Weight |
| 25-190 A | 130 A at 21.5 VDC, 30% duty cycle on 60 Hz | 20.5 | 4.7 | 3.88 | 31 VDC | 40-700 ipm 50-740 ipm at no load | H: 12.375 in. (315 mm) W: 10.625 in. (270 mm) D: 19.5 in. (495 mm) | 68 lb. (31 kg) |

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.







Accessories



SpoolRunner™ 100 Spool Gun 300796

- 10 ft. (3 m) cable
- Weld 16 gauge-3/16 in. (1.6-4.8 mm) aluminum with the Handler 190
- Rated at 150 amps at 60-percent duty cycle
- For .023 .035 in. (0.6 0.9 mm) aluminum, steel and stainless steel wire on 4 in. (102 mm) diameter spools
- Includes rugged plastic carrying case
- Shipped with three .030 in. (0.8 mm) and three .035 in. (0.9 mm) contact tips



HR-100 Replacement MIG Gun 284546 Comes in 10 ft. (3 m) length with liner for .030-.035 in. (0.8-0.9 mm)



Small Cart/Cylinder Rack 194776
Designed for portable MIG welders.
Accommodates large and small gas cylinders.



Protective Cover 195186 Weather-resistant nylon resists stains and mildew while protecting the finish of your welder.

| Consumables | | | | | | | | |
|--|--|---|--|--|--|--|--|--|
| Item | For HR-100 Gun/Power Source — Hobart Package Part # | For HR-100 Gun — Miller Package Part # | For SpoolRunner 100 — Hobart Package Part # | | | | | |
| Contact Tips | | | | | | | | |
| .023/.025 in. (0.6 mm) | 770174 (5 per package) | 087299 (10 per package) | 199730 (5 per package) | | | | | |
| .030 in. (0.8 mm) | 770177 (5 per package) | 000067 (10 per package) | 186419 (5 per package) | | | | | |
| .035 in. (0.9 mm) | 770180 (5 per package) | 000068 (10 per package) | 186406 (5 per package) | | | | | |
| .045 in. (1.2 mm) | 770183 (5 per package) | 000069 (10 per package) | _ | | | | | |
| MIG Nozzle | 770404 | 169715 | 186405 | | | | | |
| Gasless Flux-cored Nozzle | 770487 | 226190 | _ | | | | | |
| Tip Adapter | 770402 | 169716 | _ | | | | | |
| Liners | | | | | | | | |
| .023/.025 in. (0.6 mm) | 196139 | 194010 | _ | | | | | |
| .030/.035 in. (0.8/0.9 mm) | 196139 | 194011 | _ | | | | | |
| .035/.045 in. (0.9/1.2 mm) | 196140 | 194012 | _ | | | | | |
| Power Source Drive Rolls | | | | | | | | |
| Quick Select™ drive roll for .024 in. (0.6 mm) or .030/.035 in. (0.8/0.9 mm) solid wire, and .030/.035 in. (0.8/0.9 mm) flux-cored wire | 261157 | 261157 | _ | | | | | |
| Dual-groove, V-knurled drive roll for .030–.035 in. (0.8–0.9 mm) and .045 (1.2 mm) flux-cored wire | 202926 | 202926 | _ | | | | | |
| SpoolRunner 100 Drive Roll | | | | | | | | |
| For .023 in. (0.6 mm) wire | _ | _ | 199731 | | | | | |
| For .030/.035 in. (0.8/0.9 mm) wire | _ | _ | 186413 | | | | | |
| SpoolRunner 100 Push Roll | | | | | | | | |
| For .023 in. (0.6 mm) wire | _ | _ | 199732 | | | | | |
| For .030/.035 in. (0.8/0.9 mm) wire | _ | _ | 186414 | | | | | |



Handler® 190 Welding Guide

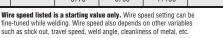
The Handler 190 is capable of running the following wires: .023 - .035 in. (0.6 - 0.9 mm) mild steel or stainless steel

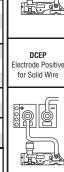
.030-.045 in. (0.8-1.2 mm) flux-cored .030-.035 in. (0.8-0.9 mm) aluminum

Settings are approximate. Adjust as required. Thicker materials can be welded using proper technique, joint preperation and multiple passes.

Recommended Voltage and Wire Speed Settings for thickness of metal being welded. Number on left of slash is Voltage Setting/Number on right of slash is Wire Feed Setting

| Material Being Welded | Wire Type and Polarity Setting | Suggested Shielding Gas 20–30 CFH Flow Rate | Diameter of Wire Being Used | 24 ga. .024 in. (0.6 mm) | 20 ga. .036 in. (0.8 mm) | 18 ga. .048 in. (1.2 mm) | 16 ga. .060 in. (1.6 mm) | 11 ga. 1/8 in. (3.2 mm) | 3/16 in. (4.8 mm) | 1/4 in. (6.4 mm) | 5/16 in. (8.0 mm) | CHANGING POLARITY DCEN Electrode Negative |
|---|--------------------------------------|---|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|----------------------|---------------------|----------------------|---|
| Steel Solid Wird ER70S-6 (DCEP) | Solid Wire | R70S-6 Produces less spatter | .024" (0.6 mm) | 1/30 | 2/40 | 3/50 | 4/60 | 5/80 | 6/90 | _ | _ | for Flux-Cored Wire |
| | ER70S-6 | | .030" (0.8 mm) | _ | 1/40 | 2/50 | 3/50 | 5/60 | 6/60 | 6/70* | 7/80* | |
| | (DCEP) | | .035" (0.9 mm) | _ | 3/40 | 4/40 | 5/40 | 5/50 | 6/50 | 7/50* | 7/60* | |
| Solid Wire | Solid Wire | 70S-6 100% CO ₂ | .024" (0.6 mm) | _ | _ | 3/35 | 5/40 | 5/60 | 6/80 | 7/90* | _ | |
| Steel | ER70S-6 | | .030" (0.8 mm) | _ | _ | 4/40 | 5/40 | 5/50 | 6/50 | 7/50* | 7/50* | |
| | (DCEP) | | .035" (0.9 mm) | _ | _ | 3/25 | 4/25 | 5/40 | 6/40 | 7/40* | 7/40* | |
| Ctainless | Stainless | Tri-Mix 90% He/7.5% Ar/2.5% CO ₂ | .024" (0.6 mm) | _ | 3/40 | 3/40 | 4/50 | 6/60 | 7/70 | _ | _ | |
| Stainless Steel | Steel | | .030" (0.8 mm) | _ | 3/30 | 3/35 | 4/30 | 5/35 | 6/50 | 7/50* | _ | |
| | (DCEP) | | .035" (0.9 mm) | _ | 3/15 | 3/35 | 4/30 | 5/40 | 7/40 | 7/50* | _ | |
| | Flux Core | Required | .030" (0.8 mm) | _ | 1/35 | 1/40 | 2/40 | 4/60 | 5/40 | 6/40* | - | DCEP |
| Steel E7 | E71T-11 | | .035" (0.9 mm) | _ | 1/30 | 1/35 | 2/40 | 3/50 | 5/50 | 6/60 | 7/60* | Electrode Positive for Solid Wire |
| | (DCEN) | outdoor applications. | .045" (1.2 mm) | _ | _ | _ | 1/25 | 3/30 | 4/35 | 5/35 | 6/35* | |
| Aluminum | Aluminum** | | .030" (0.8 mm) | _ | _ | _ | 1/55 | 5/80 | 6/85 | _ | _ | |
| with Optional 4 | 4043 AL (DCEP) | | .035" (0.9 mm) | _ | _ | _ | _ | 5/60 | 6/70 | 7/80 | _ | |
| SpoolRunner™ 100 | Aluminum** | 100% Argon** | .030" (0.8 mm) | _ | _ | _ | 1/75 | 5/95 | 6/100 | _ | _ | |
| Spool Gun | 5356 AL (DCEP) | EP) IUU76 Argon** | .035" (0.9 mm) | _ | _ | _ | _ | 5/75 | 6/90 | 7/100 | _ | |
| Match feed roll groove to diameter of wire being used. Set tension knob setting to 3 at start. | | | CAUTION! Do r | | | | | is a starting val elding. Wire spee | | | | |





Adjust tension per instructions in the manual.

*Multiple passes may be required depending on the application and joint design.

Aluminum wire settings are with the SpoolRunner 100 spool gun attached. A spool gun eliminates many feedability issues associated with the soft aluminum wire. A "push angle" for the torch is normally recommended for aluminum

Typical Installation for Optional SpoolRunner™ 100 Spool Gun to Handler 190

. for more information

It's quick and easy to install the SpoolRunner 100 spool gun on the Handler 190. Just plug the power pin of the spool gun into the feedhead, attach the trigger lead and flip the switch on the inside panel for spool gun operation. Install the correct wire and gas for the job and it's ready to go.

