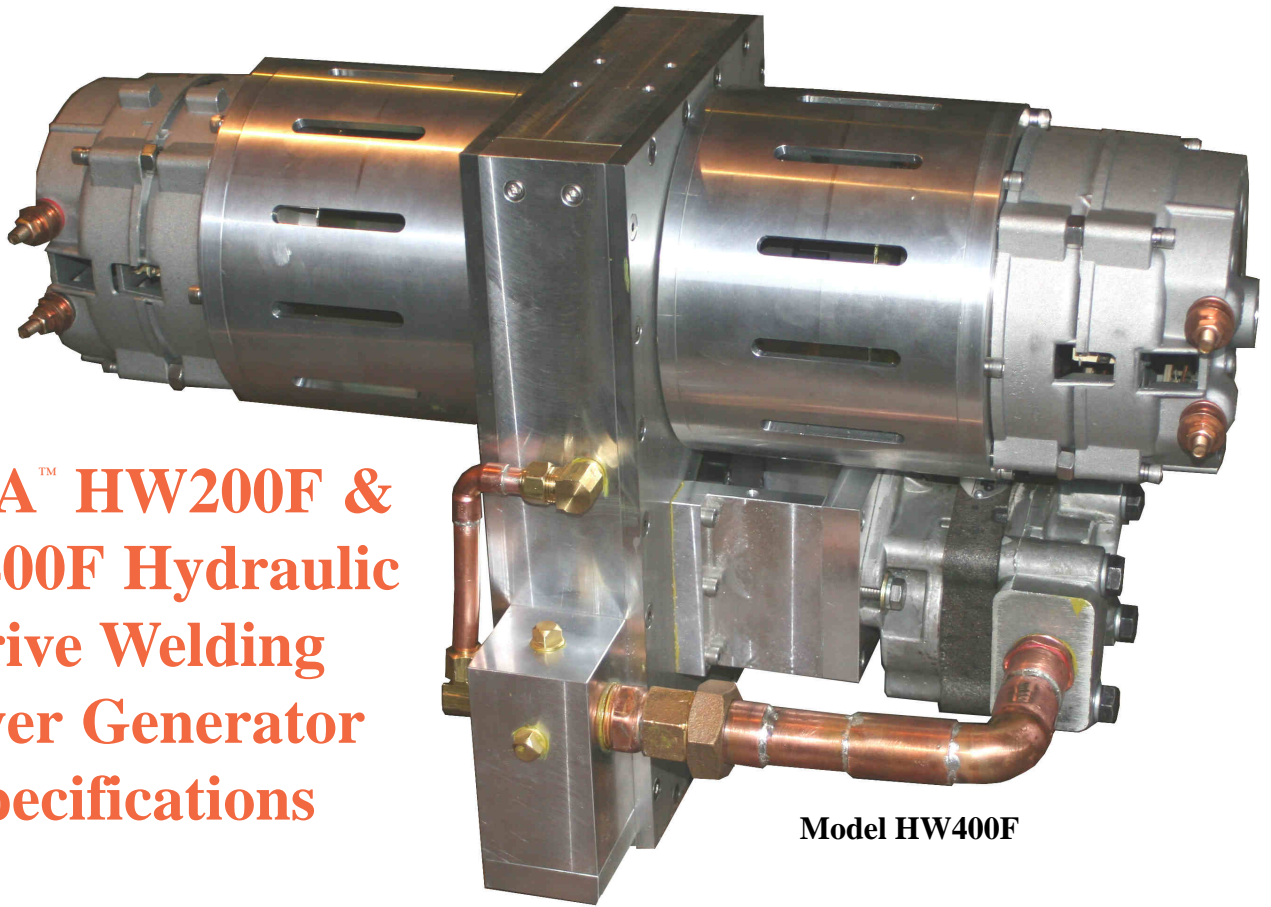


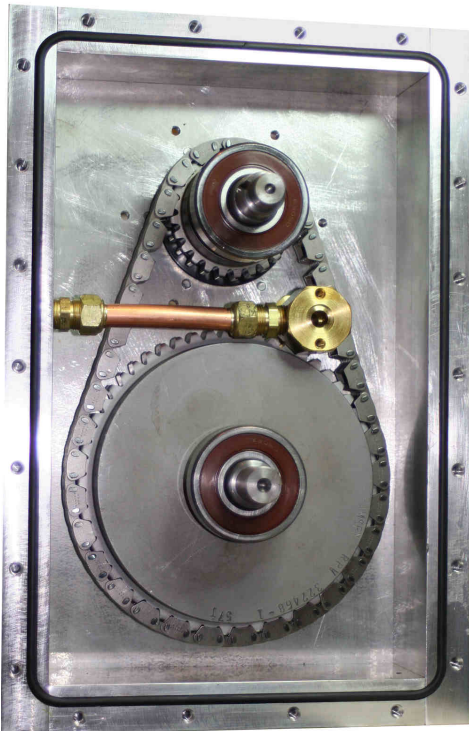
ZENA™ HW200F & HW400F Hydraulic Drive Welding Power Generator Specifications



Model HW400F

Generator Output Power:	Model HW400F	400A DC, 100% Duty Cycle
	Model HW200F	200A DC, 100% Duty Cycle
Size (Mounting Envelope)	Model HW400F	26" W x 15" H x 10" D
	Model HW200F	16" W x 15" H x 10" D
Approx. Weight:	Model HW400F	131 lb.
	Model HW200F	98 lb.
Compatible "Standard" ZENA Welding Power Control Systems:	Standard Controls (WC.12 series control module & WSC.XX electrode holder with built in controls)	
	ZENA Standard Manlift Control System (WC.12, 1 or 2 WC.12S slave control modules, PCIM.Mod power control interface, PCIM.Pot panel mounted power control dial, customer supplied momentary contact SPST for power On/Off)	
NOTE: Custom control systems, including: Dual Operator Controls and DC Genset/AC Inverter power supplies, are also available.	ZENA 2 or 3 Wire Electrode Contact Sensing Manlift Control System (WC.12, 1 or 2 WC.12S, PCIM.Mod, PCIM.Pot, TS101 electrode contact sensor switch for welding power On/Off control)	
	ZENA 2 or 3 Wire Electrode Contact Sensing Manlift Control System (WC.12, 1 or 2 WC.12S, PCIM.Mod, PCIM.Pot, TS101 electrode contact sensor switch for welding power On/Off control)	
MIG or Flux Core Welding Capability:	Yes -- compatible with CV/CC spool feeder units or spool guns with appropriate ZENA adapter for each device. (Factory direct Ready Welder Spool gun/ZENA Spool Gun Power Supply package is also available.)	

Preventive/Routine Maintenance Required:	None
Min./Max. Working Hydraulic Fluid Flow Required:	16 - 18 gpm
Absolute Max. Hydraulic Fluid Flow:	20 gpm
Min./Max. Working Hydraulic Pressure at Motor:	2,000 - 2,500 psi
Absolute Max. Pressure:	3,000 psi
Drive Motor Specifications:	30 hp/3600 rpm @ 20 gpm/3,000 psi
Motor to Generator Drive:	Maintenance Free, Silent Chain
Drive System Estimated Service Life:	20,000 hr. mean time before failure
Drive System Lubrication Method:	Continuous, Pressure Oiler
Recommended Lubricant:	Any Hydraulic Fluid (including ATF)
Drive System Lubrication Fluid Source:	Motor Hydraulic Fluid via Motor Outlet Tap (requires generator mount above oil reservoir, or External Electric Oil Pump (systems where generator can not be mounted above reservoir tank) (requires separate lube oil tank)



Our incredibly Smooth Silent Chain Drive is the Key to Long Term Maintenance Free Operation.

These second generation hydraulic drive ZENA welders have been specifically designed for field retrofit to, and use in, all types and brands of hydraulically driven manlifts -- particularly equipment destined for long term use in rental service.

For the past 6 years, ZENA's hydraulic drive welding systems have provided their owners with an inherently reliable and easy to install welder -- and, of course a welder which provides the owner with the remarkable welding qualities that all ZENA welding systems are well known for - but, still, one that required some preventive maintenance, even if it was only for a periodic belt change. And, because of the compact closed case design of our first generation hydraulic units, component replacement in the field, however infrequent, could be difficult and/or time consuming.

Our new hydraulic drive welders provide incredible reliability with minimal need for maintenance of any type without hindering their capability to produce enough arc welding current to satisfy virtually any commercial welding application, whether stick or wire feed.

Assuming proper installation in a relatively clean and well ventilated location, **there is absolutely no preventive maintenance required for hydraulic drive -- or, for welding power generating components.** No belts to tighten and/or replace; pulleys to align; no engine specific considerations as to unit location/drive/engine compartment cooling, etc.; no brackets to fabricate, adjust or replace; etc. And, best of all, this welding system does not have to be factory installed. **It's designed for field retrofitted, in your service shop, by your maintenance technicians.** Upgrade from a 200A unit to a 400A model, adding DC Genset functionality is also a snap. For example, serviceability on these welder is so good that replacing a power generator in the field takes less than 10 minutes using only a small Allen wrench! In fact, the complete hydraulic generator assembly can be removed and/or replaced just about as quickly!

This is a welding system which has been designed to outlive the equipment in which it is installed -- and to be easy to move to a new lift as an old lift is retired!