

**VANGUARD**

**CPW 125 - 4**

CONTINUOUSLY POWERED WELDING



Distributed Exclusively by:

**PipeLine  
Machinery**



Your Global Partner for Pipeline Solutions

# CPW 125 Welding Package



# An outstanding choice for Productivity and Versatility

## Continuously Powered Welding

Utilizing substantial research with industry leaders and technicians, Vanguard Equipment, Inc. developed the CPW 125 welding package. PipeLine Machinery International is proud to be the exclusive distributor of this state-of-the-art unit that will revolutionize the quality and efficiency of on-site pipeline welding.

### Unique features of this package include:

- The power generation is independent of the carrier allowing the unit to be moved without shutting down the power which results in a faster cycle time for welding a joint of pipe.
- A closely governed genset results in tighter frequency control creating higher quality welds and fewer weld repairs.
- The cycling time of line-up clamps is much quicker with the CPW125 welding package. The air compressor delivers the air at both a higher volume [64.1-90 cfm (1815 liters/min.-2548.5 liters/min.)] and pressure [250 psi (17.2 bar)] depending which option is chosen. The fact that there is no down time for the compressor while moving the unit adds to its ability to replenish the air much faster than other designs.
- The CPW125 unit is ergonomically designed and safety engineered to CSA/ UL/ SAE and CE on request.

## Fuel Efficiency

A direct-coupled diesel engine provides zero mechanical loss to the AC generator resulting in excellent fuel efficiency (20 to 44 gallons per shift, depending on welding operation).

## Cooling System

A heavy-duty, three-piece radiator is mounted on isolators for tough construction jobs and long life.

## Installation

The welding module can be both installed and removed quickly. The module is bolted to the carrier and the fuel line is connected to the carrier's fuel tank. The front platform module, if required, is pinned to the carrier using existing tractor pins for easy installation and removal. Both of these modules can be easily removed when not in use to free the machine for other work or rentals.

## Versatility

The CPW125 welding package is designed and built for flexibility. Interchangeable adapter plates allow for mounting onto whichever carrier is desired (for example: D5M/N, D6M/N, D6D/E, 571G/F, 572G/R or Challenger units) via its winch mounts, or it can be supplied in a self-contained, skid-mount arrangement.

## Dual Frequency

The unit can be supplied in either 50 or 60 Hz available as standard or, optional dual frequency is also available at the flick of a switch.

## Air System

Improved high-pressure air system offers continuous operation, delivering 50% more air over previous industry standard.



# Welding Modules

## Generator Module

### DESIGN

170 hp 6 cylinder engine equipped with 24 volt starting system, idle control, ether starting aid, block heater, pan heater, heavy duty radiator, primary and secondary fuel filters, and a 156 kVA generator. The complete generator is mounted on rugged isolator mounts, and housed in a lockable enclosure.

### RATING

156 kVA @ 60 Hz, 125 kVA @ 50 Hz

### VOLTAGE

120/ 240/ 480/ 60 Hz or 240/ 415/ 50 Hz

### OPTIONAL

- Arctic winter package
- Pony fuel tank for D5M, D5N
- Engines



## Control Distribution Module

### DESIGN

Control Box Nema 3 with Nema 4 enhancements mounted on isolators with 2 lockable doors CSA/ UL /CE Approved

### RATING

200 AMP

### CONTROLS

- Engine oil pressure, water temperature, DC volt and hour meter gauges
- Engine start/stop control, cold weather ether assist and idle/run throttle control
- Engine low coolant, high water temperature, low oil and over-speed safety shut downs
- Emergency shut down button

### AIR COMPRESSOR

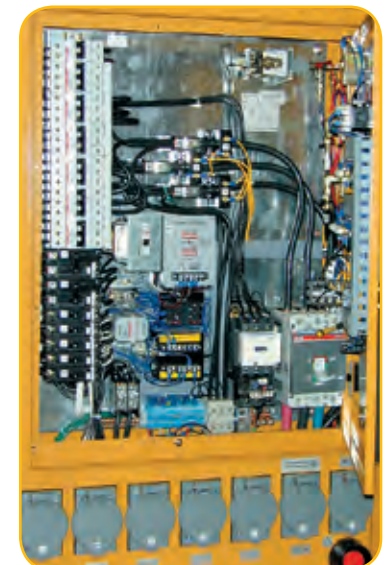
- Start/stop control
- Air pressure gauge

### ELECTRICAL

- 200 AMP main breaker and sub power circuits
- Supply frequency protection
- Main power supply gauges
- 5-230 volt/50 Hz or 5-120 volt and 2-230 volt /60 Hz receptacles, 4-480 volt welding receptacle

### OPTIONS

- Additional 480 volt welding receptacle
- 5-230 volt/50 Hz and 5-120 volt and 2-230 volt /60 Hz available on dual voltage/dual frequency combination machine. The dual frequency operation is available at the flick of a switch.



**Reliable. Durable. Efficient.**

## **Air Compressor Module**

### **DESIGN**

Gardner-Denver/Champion with four opposing cylinders, pressure lubricated for off-level operations, vibration mounted

### **RATING**

64.1 cfm (1815.1 litre/min) delivery @ 250 psi (17.2 bar) with 20 hp (15kW) electric motor, 50 or 60 Hz

### **DUTY CYCLE**

70% at 250 psi (17.2 bar), or continuous with synthetic oils

### **CONTROLS**

- Dual control allows compressor to run in either start/stop or constant run mode, by simply turning a valve
- Hydraulic unloader provides easy loadless starts and low oil protection

### **OPTIONS**

- 76.8 cfm (2174.7 litre/min) delivery @ 250 psi (17.2 bar) with 25 hp (19 kW) electric motor, 50 or 60 Hz
- 90.0 cfm (2548.5 litre/min) delivery @ 250 psi (17.2 bar) with 30 hp (22 kW) electric motor, 50 or 60 Hz
- Aftercooler which removes up to 65% of the moisture from compressed air



## **Air Tank Module**

### **DESIGN**

Low profile vertical air receiver certified to ASME code

### **RATING**

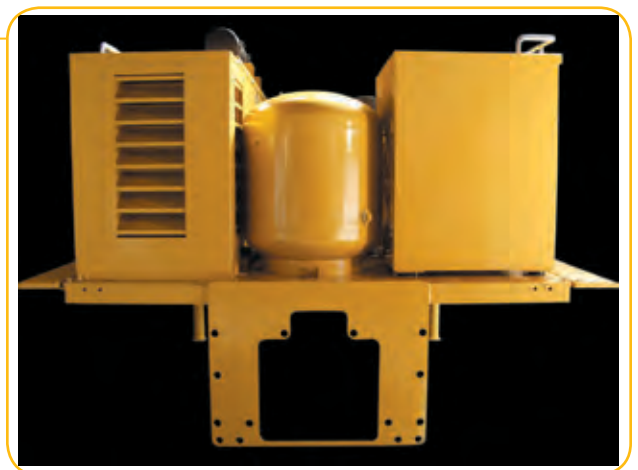
115 US gal (435.3 liters) at 250 psi (17.2 bar)

### **CONTROLS**

- Manual drip drain
- Safety relief valve

### **OPTIONS**

CRN approvals



# Welding Modules

## Welder Module

### DESIGN

4 welders of customer's choice, mounted in lockable box and vibration mounted, with sliding shelves for ease of servicing

### WELDERS

- Miller XMT 304, 456 MP or
- Lincoln Invertec V350-PRO Invertors 50/60 Hz

### OPTIONS

- Additional welders
- Other models of welders
- Service leads as required
- Whoser pole



## Front Platform Module

### DESIGN

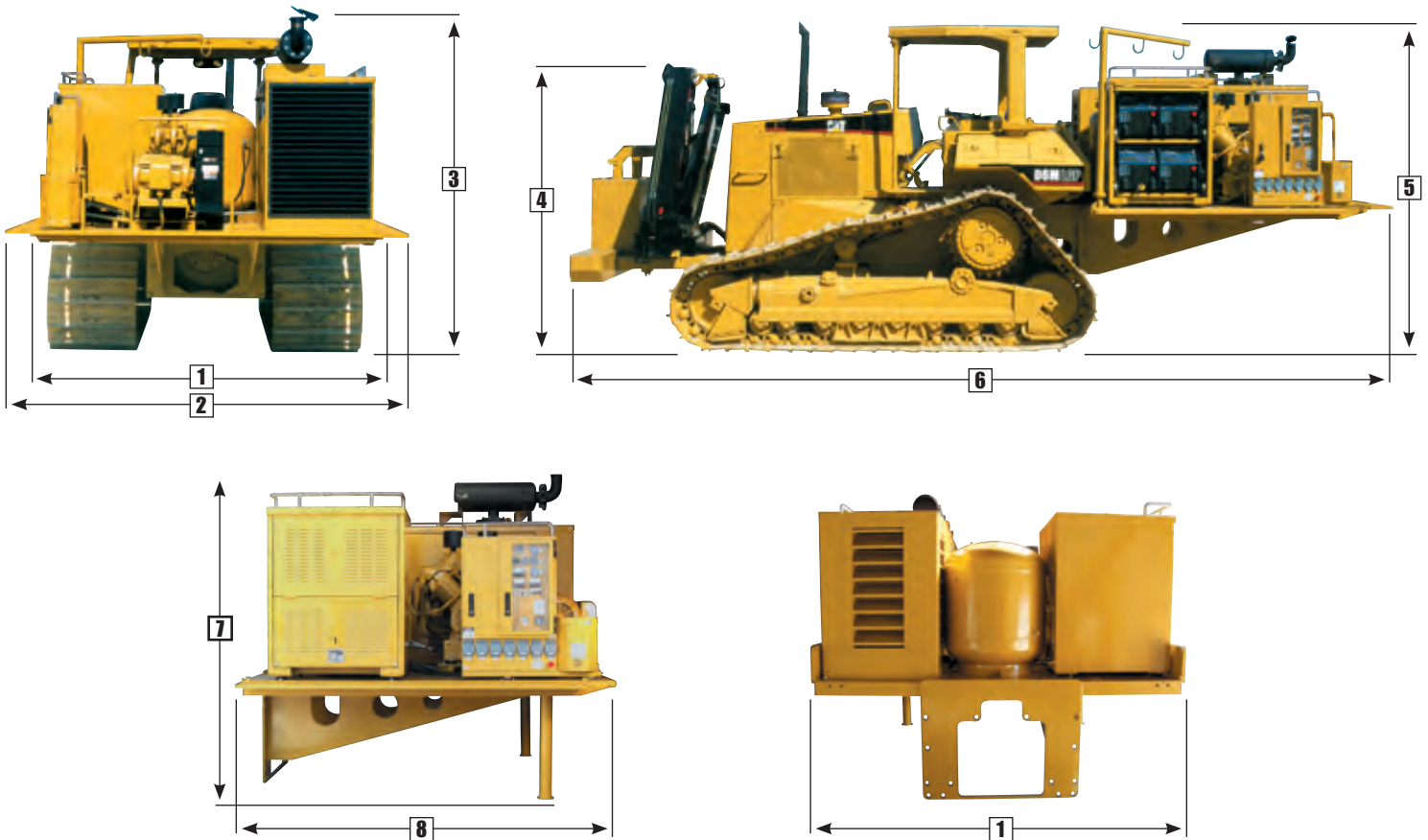
Welded fabrication that pins onto machine with universal bolting patterns for various optional equipment and appropriate counterweight

### OPTIONS

- Lockable toolbox
- Various racks available to accommodate various gas bottles
- Various cranes available as per customer request



# Dimensions



## CPW-125 D6M/N Mounted Welder Package

<b>1</b>	Transport width (catwalks stowed)	107.75 in	2737 mm
<b>2</b>	Working width (catwalks extended)	125.5 in	3188 mm
<b>3</b>	Machine height from tip of D6M/N grouser to ROPS cab	126 in	3197 mm
	To Welding package exhaust (transport)	122.5 in	3111 mm
	To Welding package exhaust (working)	127 in	3223 mm
<b>4</b>	Crane Height (stowed) from tip of D6M/N grouser	112.7 in	2863 mm
<b>5</b>	Height Welding package, to Whoser pole from tip of D6M/N grouser	121.8 in	3093 mm
<b>6</b>	Overall length D6M/N LGP Tack Rig package		
	Transport (catwalks stowed)	294.5 in	7480 mm
	Working (catwalks extended)	303.7 in	7714 mm
<b>7</b>	Height Welding package alone	121.8 in	3093 mm
<b>8</b>	Overall length Welding package alone (catwalks stowed)	103.9 in	2638 mm
	Additional length Welding package bolt-on front catwalks	14.1 in	358 mm

### Estimated weights:

Weight Welding package alone (includes 4 x 456MP welders, Whoser pole).	8140 lb	2785 kg
Weight D6M Tack Rig package (estimated) - ROPS canopy	49 315 lb	22 369 kg
Less air system (air compressor and tank)	-1470 lb	-667 kg

Dimensions are approximate.



# Features

## Features of the CPW125 welding package include:

### ALTITUDE:

The 60 Hz unit will work up to an altitude of 8000 ft (2439 m)

### GRADEABILITY:

45° (100 percent) slope, intermittent operation

### SECURITY:

All compartments lockable

### TEMPERATURE:

-40° F to 122° F (-40° C to 50° C)

### COMPRESSOR:

Can run in a continuous or air-on-demand mode

### NOISE LEVEL:

Acoustic enclosure and tuned exhaust system reduces noise emissions

### VISION:

The unit has a line of sight to the rear of the machine

### SERVICEABILITY:

Welders are mounted on slide out trays for ease of servicing. All major components, filters, and lube points are easily accessible for operation and service.

Materials and specifications are subject to change without notice. Machines featured in photos may include additional equipment. Contact PLM for available options.



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