Applications for Plasma Cutting Technology

Industry: OEM Manufacturing **Equipment:** MAX200[®] Mounted on Whitney Punch Press



Manufacturer of combustion equipment and systems

- Old plasma torch mounted on Whitney punch press had cut quality and reliability problems
- Retrofit Hypertherm MAX200 onto the Whitney punch press
- Company saw substantial increase in cut speed, improved cut quality, reduced consumable parts expense and minimal downtime
- Pavback in less than one year

Punch Press Retrofit Improves Cutting Operations

The company and products

Founded in the early 1900's, Hauck Manufacturing's 125 employees design, manufacture and supply a wide range of combustion equipment and systems for OEMs, installers and end users. The manufacture of these burners and their turbo blowers requires forming and fabricating a tremendous amount of mild steel, aluminum and stainless.

The problem

In 1989, Hauck began to look for ways to improve their metal cutting operations. They had a Whitney Punch Press with an air plasma system which was used constantly. The unit was giving them reliability problems and growth in the business made repair downtime unacceptable. In addition, the cut quality was such that many of the work pieces needed extra finishing to remove dross and prepare the edges for welding. Finally, many of the parts Hauck produced required holes which were drilled in a time consuming separate operation. If Hauck could find a way to cut the holes with plasma, they would save considerable time and the expense of another manufacturing step.

The solution

Ideally, Hauck wanted to leverage their investment in the Whitney system while improving its performance. They accomplished these goals by retrofitting the punch press with a GE control console and a Hypertherm MAX200 plasma torch. The MAX200 is a high capacity, dual gas, 200-amp system with a 1-inch (25 mm) production cut capacity on mild steel. It's 100% duty cycle and adjustable power output provided the durability and flexibility Hauck required for its range of cutting requirements.

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Benefits

The new system produced four important

- 1. Cut speed dramatically improved. The MAX200 cuts ½" (12 mm) steel at 80 inches per minute.
- 2. The MAX200 could cut holes in the plate which the old system couldn't. This saved an extra drilling step.
- 3. Dross cleanup was significantly reduced vs. the older system.
- 4. Consumable parts expenses dropped because the genuine Hypertherm consumable parts lasted significantly longer than the parts on the older system.

As Hauck's main metal cutting machine, the MAX200 was run hard, often logging 80 hours per week. Eight years later, the MAX200 is still at work, primarily cutting aluminum plate. Although it isn't running as many hours now (Hauck has since bought a Trumpf laser and a Hypertherm HyDefinition® HD1070® plasma system) the Hypertherm MAX200 still runs reliably.

Hauck's Ken Weikle states, "We've had the MAX200 for about 8 years now and we've had no trouble with it. It does a fine job. Our payback on retrofitting the Whitney system with the new console and torch was under a year - certainly a good investment for us."

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