

powerprofile

RENTAL

CUSTOMER: Applied Air Systems,
Lakefield, Minnesota, USA
END USER: Multi-Tech Systems,
Mounds View, Minnesota, USA

Customer Requirement: Compressed air for manufacture of
printed circuit boards

Scope of Supply: **Equipment** –
Sullair TSR 20 electric, sound-attenuated,
variable-speed air compressor

Services –
Equipment calibration to meet end
user need

Cat® Dealer: Ziegler Power Systems,
Shakopee, Minnesota, USA



This Sullair TSR 20 variable-speed electric compressor helped Multi-Tech Systems continue production while its in-plant compressed air system was checked out and adjusted. The unit was supplied by Cat Rental Power dealer Ziegler Power Systems in Shakopee, Minn.

POWER NEED

Compressed air is critical to production at Multi-Tech Systems. Without it, four lines that make printed circuit boards on two daily shifts shut down, leaving up to 125 production workers idle. In the summer of 2005, inadequate factory air pressure was interrupting production three to four times per day, for five to 15 minutes at a time.

That was unacceptable for Multi-Tech, an ISO 9001:2000-certified global manufacturer of telephone, Internet, remote access, and device networking products, based in Mounds View, Minnesota, USA. “We’ve been in business for 35 years and are profitably producing product many other companies have to go off-shore to equal,” says Rick Oelkers, automation supervisor. “With all of our manufacturing done in the United States at this one plant, it is vital that operations do not stop. All of our surface-mount machines need air, and for almost 2 months, we had one shutdown per week. Then things began to get worse.”

The company hired Applied Air Systems, Inc., of Lakeville, Minnesota, to audit its compressed air system and recommend corrective actions. Because the audit and subsequent repairs would mean taking the air system off-line, Multi-Tech needed a reliable, temporary compressed air source to sustain production.

SOLUTION

Applied Air Systems teamed with Cat Rental Power dealer Ziegler Power Systems in Shakopee, Minnesota, USA, to deliver the temporary compressed air capacity Multi-Tech needed.

Applied Air specializes in analyzing and monitoring compressed air systems and develops turnkey plans to optimize performance and cost. Owner John Staber had audited the Multi-Tech compressed air system three years earlier. He also had a business relationship with Dave Carlson, rental sales representative with Ziegler.

It was 3 p.m. on a work day when Staber called Carlson and explained the problem at Multi-Tech. Carlson had a fleet of 24 diesel compressors (425 to 1,600 cfm) and six electric units (100 to 200 hp) at his disposal.

An electric unit was clearly the choice for Multi-Tech. “For a manufacturing plant that operates continuously, fuel cost for a diesel unit is very high,” says Carlson. “It can amount to three times the cost of the rental. Furthermore, the industry standard for a fuel tank on a portable compressor is eight to ten hours of capacity. If the customer operates for long hours, a fuel truck has to come in a couple of times per day. With an electric compressor, apart from requiring an electrician to make the connection, you have only one cost – the price of the rental.”

Carlson and Staber agreed that a Sullair TSR 20 electric compressor would best meet Multi-Tech’s need. “It’s a specialized unit with a variable-speed drive,” says Carlson. “It’s really 16 machines in one: It operates at 100, 125, 150, or 200 hp, in each case at four pressures from 100 to 175 psi. It’s a versatile machine that fits numerous applications, and it’s so energy efficient that it often costs less to operate than the customer’s in-plant air system.”

RESULT

The trailer-mounted TSR 20 compressor, fully self-contained and sound attenuated, performed flawlessly for one month while the Multi-Tech air system was thoroughly checked out, adjusted, and tested.

Ziegler had the unit in stock when Staber called. The team at Ziegler set the machine for the appropriate power rating and pressure – 100 hp at 100 psi. “We picked the unit up the next morning and hooked it up that same day,” says Staber. “Multi-Tech had an air hook-up in its compressor room that we tapped into. We ran electrical wiring from the compressor to their panel, and their electrician made the connection. We started the compressor, got the pressure adjusted, and off they went.”

The unit delivered reliable compressed air through 19 hours of daily plant operation while corrections were made to the in-house system. When that system was tested, the rental unit was placed on standby.

Carlson observes that compressed air is a mission-critical utility for many manufacturing plants. “When electricity stops, production goes down,” he says. “When temperature control is lost, production stops. It’s the same with compressed air.”

“Our Sullair unit provided an air supply that was trouble-free. We helped a company that was having serious production problems. We were able to respond and within 24 hours get them online with a reliable source of air. It was a big win for everyone involved.”