

Turning up the Heat on Cool Economy

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No Longer “Business As Usual” At Ipsen...

With the economic downturn affecting our nation and the world, it's not just “business as usual” at Ipsen, Inc. While most other manufacturing companies have felt the economic impact, Ipsen has been moving forward on a bold new initiative. Nobody could have anticipated the depth and breadth of the slowdown the global economy is experiencing now, with credit markets tight and domestic and offshore production operating – in many cases – at survival levels. However, two years ago, Ipsen was already looking ahead and anticipating a cooling economy at some point in the future, and planning for it. That time has arrived, and Ipsen is ready.

Ipsen's new initiative involves the expansion of the company's business model and a reinvention of the way it goes to market. A big part of this initiative is the introduction of a new compact, high-performance vacuum furnace system that offers broad application versatility coupled with the fastest possible delivery and installation times never before seen in the thermal processing industry.

Ipsen is the world-leading manufacturer of customized thermal processing equipment servicing the medical, aerospace, tool & die, commercial heat treatment, energy and automotive industries. Since the 1950s, Ipsen has been servicing these markets as the recognized leader in the engineering, design, and installation of vacuum furnace systems worldwide. Although a standard line of furnace sizes and general specifications have always been offered, until now it was necessary to engineer and manufacture – one at a time – each vacuum furnace system specifically to meet the customer's needs and performance requirements. In today's economy, however, there are a number of challenges to this business model:

1. Customized manufacturing inherently involves greater assembly cost.
2. Ordering customized heat treat equipment can involve long lead times, usually between 6–8 months, due to development of new designs
3. Using a large vacuum furnace is inefficient for small loads and can delay processing for critical deliveries, or it can compromise the provider's margins.
4. Current purchase options leave few choices to meet the

customer's cyclical production demands and cash flow requirements.

One way Ipsen is meeting this market challenge is by complementing its existing made-to-order equipment with an off-the-shelf vacuum heat treat system specifically designed to reduce lead times and costs for the customer.

Process Change: Gaining A Competitive Advantage

Typically, large process loads (of anything) take advantage of economies of scale to produce goods at lower cost. This model takes into consideration the capital cost of the equipment, the energy conservation that large-scale loads often deliver, and the consolidated manpower required for managing each process. A large vacuum furnace handling a full load of product in every cycle takes advantage of all of these cost reduction benefits to deliver the best product value for the heat treater and the customer.

But the large furnace has limitations. If several different small loads of parts require very specific (and unique) heat treatment recipes, or if the heat treatment provider needs to accommodate a quick turnaround project for a small load or short run, the large furnace system simply fails to deliver economically. So, there are cases where it makes sense to manage production using equipment that can respond in a customized way to the demands of the customer. A heat treater with a small load capability has a competitive advantage because he can respond quickly to urgent or short-term needs and deliver the goods just-in-time at a lower cost. By providing the option of a standard off-the-shelf vacuum furnace, Ipsen is helping its customers to meet their immediate needs in a tough economy.

Common Platform Equipment: Enter Titan

Titan, the new modular built furnace by Ipsen, has been developed based on a common design platform. It features extraordinary process versatility, operational simplicity and financial flexibility along with superior production efficiency. This new approach to common platform equipment is significantly more affordable than a comparable custom furnace, and allows Ipsen to ship within 2 weeks after order placement to give the customer an edge on a special project. Titan is able to adapt to



Titan – the versatile, quick installing vacuum furnace from Ipsen

customers' needs and budget because it can now process smaller loads much more efficiently than in a larger furnace.

The Titan scores on three grounds – versatility, simplicity and low investment:

Versatility:

The versatility of the Titan modular furnace offers customers the ability to add heat treating capacity for those who would like to bring jobs in-house quickly and affordably. Titan features a total work zone area (less hearth area) of 0.22 M3, and is capable of multiple heat treat processes including: annealing, solution heat treating, brazing, stress relieving, hardening and tempering. Its compact size, value and performance make it ideal for applications in various markets such as: tool & die parts, medical devices, plastic molds, aerospace components, land-based turbine parts, and automotive components, and other processes.

Simplicity:

Simplicity is often overstated but Ipsen's approach on this self-contained, skid-mounted system is undeniable. With rapid utility hookups and installation within one day, Titan allows companies to quickly respond to short-term project demands. Titan is designed for ease of use, making it

perfect for first-time heat treaters and experts alike. Titan's simple-to-master control system features a 17" screen and a PC-based Operator Interface Terminal that is mounted to the side of the furnace on an adjustable pendant. The control system provides:

- * Packaged heat treating recipes
- * User friendly maintenance screens
- * Controller that stores up to 1000 recipes
- * Real time data acquisition
- * Data trending and archiving
- * Easy measurement and language conversions
- * Modem for remote diagnostics
- * UPS and USB connections

Lower Investment

Titan utilizes proven and dependable Ipsen technologies but because it is constructed in a modular built environment, it is much less costly than a customized furnace and can be shipped within two weeks after order placement, allowing

customers to get into production faster. Sample testing on customer-furnished material is also available.

Titan's low sales price is a smart long-term investment with a quick payback. Titan is ready to start heat treating, and paying for itself immediately. And you can count on reliable performance for years to come.

Ipsen's Titan Succeeds in Response to the Demands of an Uncertain Economy

With the Titan furnace, Ipsen can help make the heat treating process more profitable with improved lead times to end users, less work in process, the ability to customize process demands, and by providing a more energy efficient alternative to running large process loads. Market versatility and operational simplicity add up to greater profitability for the heat treater in a struggling economy. This is another way Ipsen is making it easier for its customers to navigate an increasingly difficult economy and stay ahead of the competition.