



ATLAS

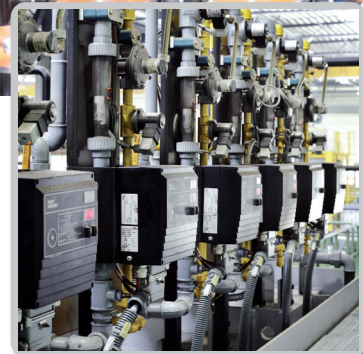


Is there anything more convincing than quality? The Ipsen **ATLAS**.

To Ipsen, quality means offering you technology that is intelligent, energy efficient, and easy to operate. With innovative technologies such as Recon[®] Burner, SuperQuench, and the revolutionary integrated HybridCarb process, we are not just refining proven technologies, we have optimized them up to the current available limits of the technical possibilities.



- **The powerful SuperQuench.**
- Most processes can't improve the qualities of every kind of steel. Ipsen SuperQuench can. It's the universal oil bath with incredible quenching performance. Thanks to improved propellers, stronger drive motors and optimized baffling, it can tackle even the most challenging alloys.



- **The clever Recon[®] Burner.**
- A stroke of genius: heat recuperation. Recon[®] Burners fitted with special ceramic inner linings that increase thermal efficiency from 50 % to more than 85 % – simply by recuperating the heat from the exhaust gasses.

The revolutionary HybridCarb

- is a completely gassing technique for
- gas carburizing: Process gas isn't burned off;
- it's recycled back into the heating chamber, reducing CO₂ emissions and process gas costs by as
- much as 90%. It's the engineer's choice because
- it is good for our climate and for your energy efficiency.



Top quality lining.

- The Ipsen Atlas is lined with extremely
- durable insulating firebrick and has a
- silicon-carbide hearth. The surrounding
- muffle protects the charge from
- exposure to direct heat and facilitates
- uniform temperature distribution
- throughout the load.

The Ipsen **ATLAS**: cunning innovations, clever interfaces, intelligent configuration.

What do you get when you combine intelligence and quality?

An atmosphere furnace that is state-of-the-art in both hardware

and software. Cunning innovations like the HybridCarb process

that help you save energy and resources. Clever interfaces that

give you comprehensive control over all aspects of heat treatment.

Intelligent automation software that simplifies your facility planning.

The Ipsen Atlas is a highly intelligent system that reduces your workload

and produces results efficiently. It's the engineer's choice because heat

treatment doesn't get smarter than this.

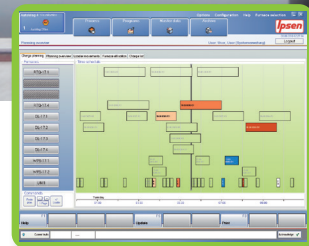
Are you hungry for quality that isn't energy-hungry? Ipsen **Advanced Efficiency.**

Heat treatment facilities' appetite for energy is not only an environmental challenge. It's a financial challenge, too, with energy prices rising and climate certificates on their way. If you want to perform cost-effective heat treatment you have to be energy efficient and use sensible recycling processes – such as Ipsen's **ADVANCED EFFICIENCY** concept.

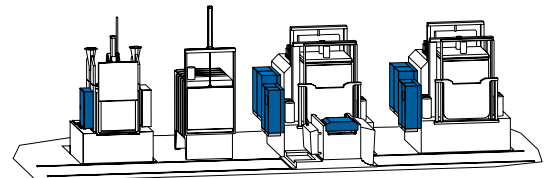


The Ipsen **ATLAS**: do more with less.

Going green makes more sense now than ever, but Ipsen has been working for years on how to use less energy and reduce costs while producing ever-better results. The latest contender in this field is the Ipsen Atlas. It is the engineer's choice because it has exemplary insulation, cutting edge recycling technologies, and it is pre-programmed for energy efficiency.



- **Intelligent technology for more energy efficiency: AutoMag® 4.0.**
- Smart process control software does more than simply monitor batches and control their treatment. It also assures the optimal use of energy and other resources. AutoMag® 4.0 makes your heat treatment easy to control and continuously more energy efficient.



Optimal energy recovery:

Recon® Burner.

Recon® Burners re-use heat energy multiple times. They capture valuable heat from exhaust gases and return it to the combustion process. The burners are very easy to adjust and clean, too.

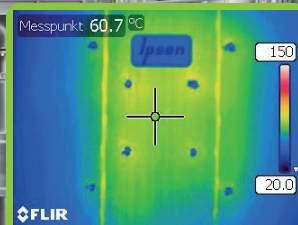


Splendid Insulation.

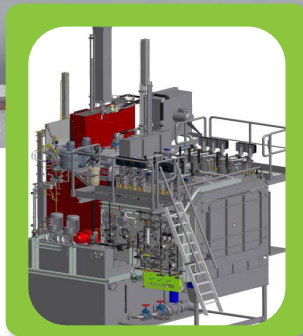
The energy efficiency of the Ipsen Atlas is in part thanks to the excellent insulation provided by a combination of high grade insulating materials.



The difference between the insulation of a conventional furnace and ...



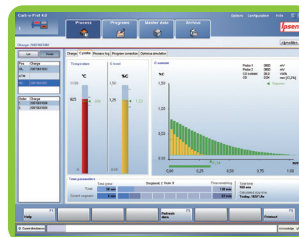
... a modern Ipsen furnace



Less CO₂, lower costs:

HybridCarb.

You shouldn't be wasting gas and energy during gas carburizing. The revolutionary HybridCarb system significantly reduces process gas and energy consumption.



Everything under control:

Carb-o-Prof®.

The Carb-o-Prof® furnace control software assures you maximum efficiency, with easy, comprehensive, and reliable control, as well as analysis and process optimization.

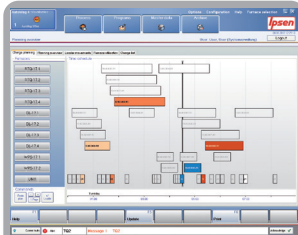
PLC systematic control and savings.

PLC provides intelligent, individual control of each Recon® Burner, producing the best results while consuming the least energy possible.

Isn't it especially smart when everything is made easier for you?

Ipsen has worked hard to make planning and configuring your facility with the Ipsen **ATLAS** as simple as possible. All our components are intelligently configured for maximum compatibility. This means it is simple to expand or modify your equipment at any time.

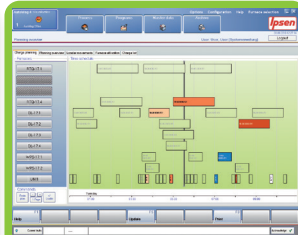
Time-optimised job-planning



Rapid individual-batch view

If you need to get a batch out in a hurry, you can control it with this view. Other jobs are hidden, allowing you to see exactly where the prioritised job is in your facility and what treatment stage it is undergoing.

Energy optimised, cost-saving job-planning



Efficiency planning view

This shows the planned process. The time-axis clearly displays what will happen when during the heat treatment process. Processes are optimised for cost-savings and energy efficiency using this view.

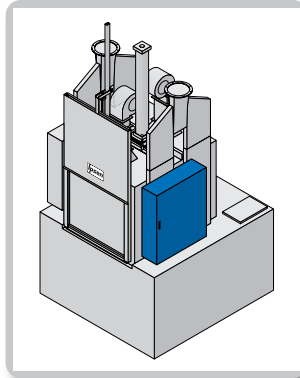
AutoMag® 4.0.

- Everything under control.
- AutoMag® 4.0 can control all the components of your Ipsen Atlas facility automatically.
- The software calculates optimal capacity utilization, too. It's the engineer's choice because it gives you even more efficient use of energy and resources.



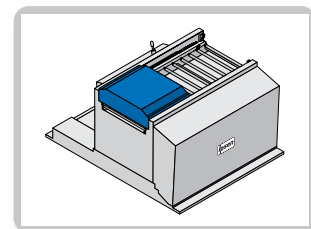
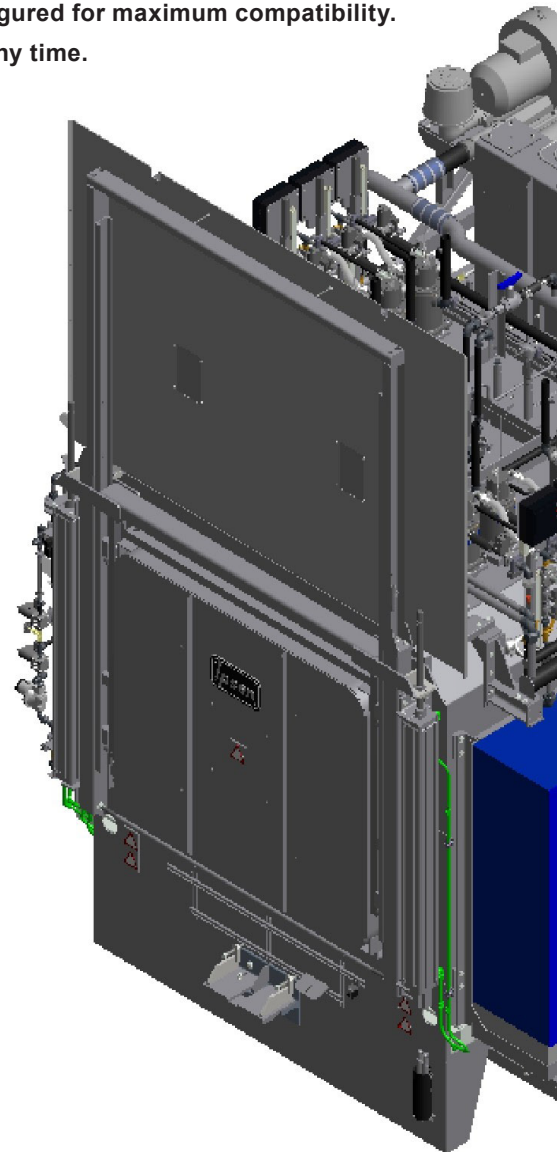
Retrofit any time: HybridCarb.

- Your investment in this revolutionary recycling technology will pay for itself in record time. But even if it doesn't warm your heart today, every Ipsen Atlas can be quickly and easily retrofitted with a HybridCarb recycling kit at any time.



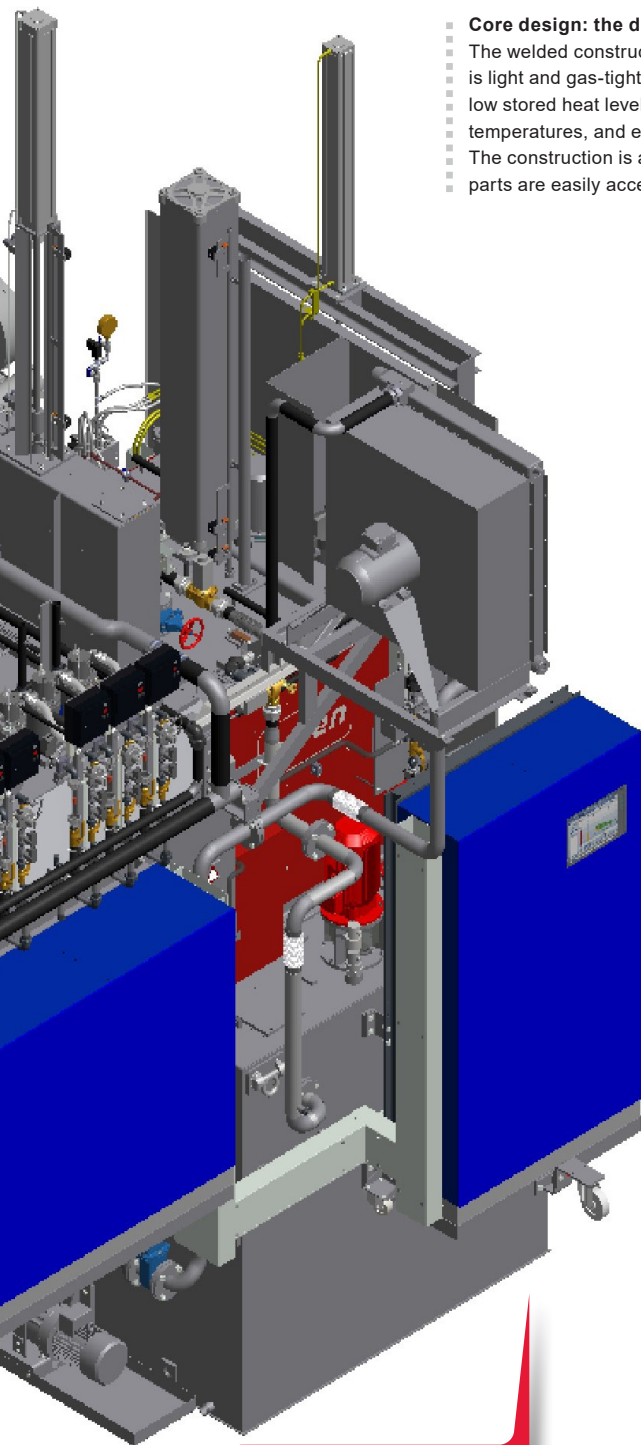
The space-saving washer.

- The Ipsen two-stage oil skimming system is extremely compact, provides optimal washing compound usage, and high throughput. The cleaning effect is increased by the up and down motion of the basket – especially helpful for tightly-packed loads.

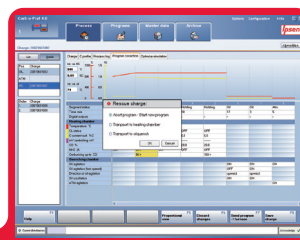
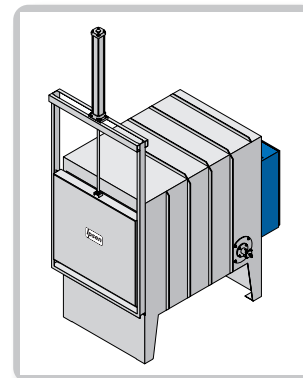


The reliable loader.

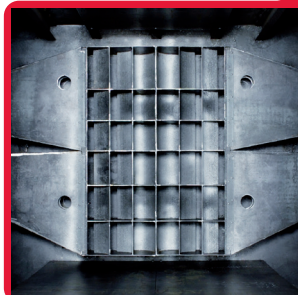
- Ipsen's compact and reliable loader is only slightly larger than the charge baskets themselves.
- And it prevents charges from getting jammed during transport, and minimizes wear and tear on your equipment, baskets, and operators.



- **Core design: the draw furnace.**
- The welded construction of Ipsen's draw furnace is light and gas-tight. This gives it advantages including
- low stored heat levels, fast adjustment to changing treatment temperatures, and excellent temperature uniformity.
- The construction is also low-maintenance and all its working parts are easily accessible and replaceable.



- **Keep it simple: Carb-o-Prof®.**
- Ipsen's furnace software also
- enables untrained operators to
- reliably perform any heat treatment process necessary. What-
- you-see-is-what-you-get ... if only
- everything was this easy!



- **Making the hard part easy with SuperQuench.**
- Precise quenching is one
- of the biggest challenges in heat
- treatment. Now you can easily
- take on this challenge with the
- high-performance Ipsen Super-
- Quench oil bath.

About Ipsen

Backed by 70 Years of experience, it is our mission to strengthen heat treatment through expert-driven solutions. We are committed to delivering proven technology for a range of applications that enable you to transform space exploration, improve titanium medical implants and develop more efficient cars and jet engines.

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