

Warm Compaction and **Densmix®**

Your route to excellent part performance
and productivity



Densmix®

Höganäs 
POWDER THAT EMPOWERS®

Warm Compaction

What is warm compaction?

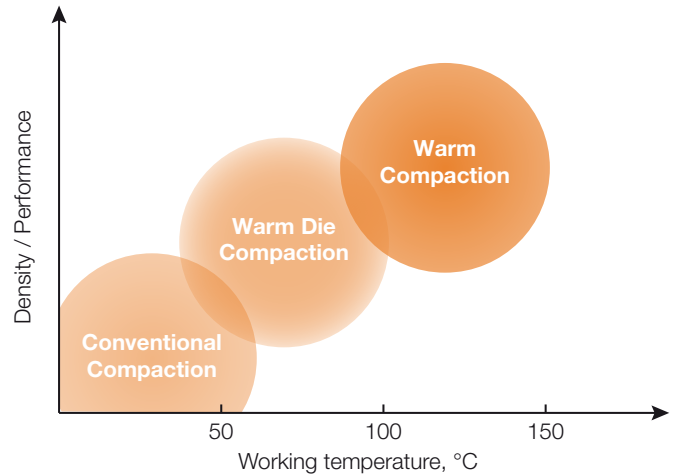
Warm compaction means pressing at elevated temperatures (>100°C) and is the logical choice to reach top performance levels on processes and parts.

The warm compaction process

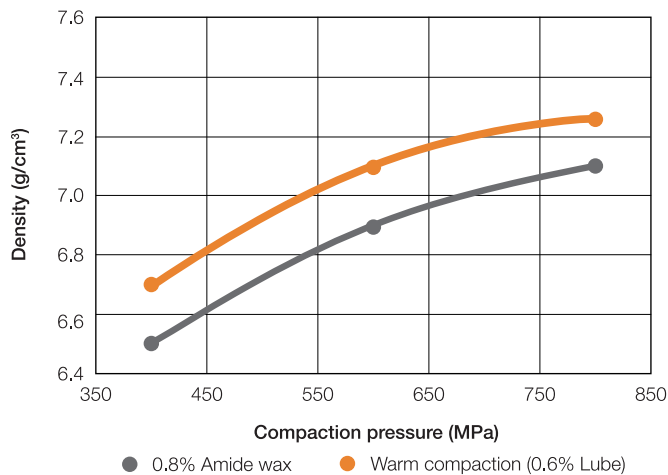
Pressing powder is all about converting mechanical energy into deformation. As deformation is a thermally activated process, warm compaction becomes a way to increase the compressibility of the powder.

Another benefit with warm compaction is that the lubricant system is made to work optimally at elevated temperatures. By combining the thermally activated deformation of the metal powder with the stable - higher temperature of the lubricant system, higher density parts with increased mechanical performance and more uniform properties can be obtained.

The compressibility improvement is typically in the range of 0.1-0.3 g/cm³. All material types will benefit from warm compaction.

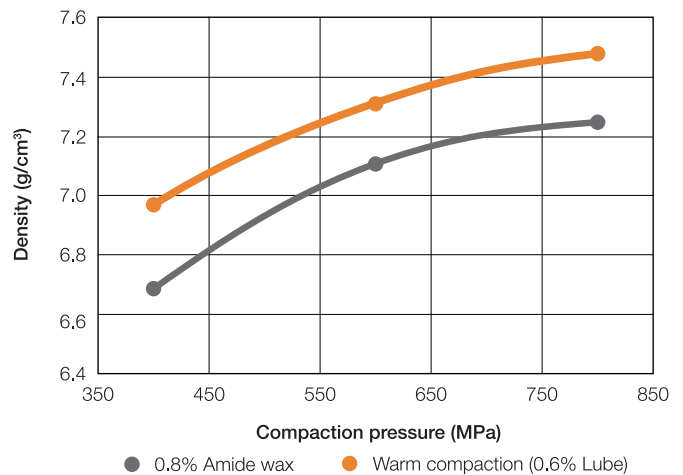


Astaloy CrM®



Astaloy CrM (3% Cr, 0.5% Mo) is a fully pre-alloyed powder.

Distaloy® AE



Distaloy AE (3% Cr, 0.5% Mo) is a fully pre-alloyed powder.

Densmix®

A Densmix offers you a press-ready mix for your warm compaction process giving excellent conditions for high product performance.

Densmix

- Has a tailor-made lubricant system designed to work at optimum temperatures in warm compaction
- Gives high and uniform densities and properties
- Is a bonded mix which improves part precision, tolerances, and reduces dusting
- Increases AD, flow and minimises segregation

A Densmix works optimally at 120°C powder and tool temperature.

Warm compaction process needs

In order to adapt your pressing line to warm compaction, heated tooling and a powder pre-heater is required. Different solutions are possible depending on your process and product design. We will support you in all stages of your adaptation process.

For more information, please contact us.



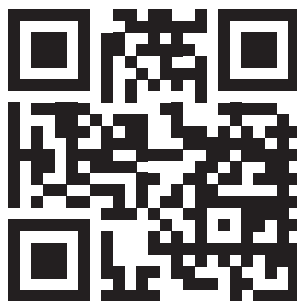


Driving positive change through material innovation

Höganäs' vision is to drive positive change through material innovation, which in turn will help us in our ambition to become the globally preferred partner for sustainable powder materials. Powder technology provides endless opportunities; not only does it empower our customers to reduce their material and energy consumption, but it also helps them use new and better techniques that make final products more efficient and less expensive. In short, powders are a resource-efficient alternative that are optimal for a range of industries.

World leader in powders

Höganäs is a global company with local presents all over the world. We are a global leader in advanced ceramic and metal powders. Contact your nearest Höganäs office today, click or scan the QR-code:



Scan the QR code for more information
about the Pressing & Sintering product line
and other Höganäs products.

www.hoganas.com/pmc

Höganäs 
POWDER THAT EMPOWERS®