Intralube® HD

Powder mix solution

Your new powder mix solution for demanding compaction jobs and higher density levels

Intralube HD is our latest development of press-ready mixes that will enable you to achieve higher compacted densities.

Our new, highly efficient lubricant system works most efficiently at elevated die temperatures. Due to its excellent lubricity, more difficult and challenging components with even more demanding aspect ratios or tall fill heights can be compacted. Intralube HD can also be used with lower lubricant addition, thus gaining higher compact densities. From the newest member of the Intralube mix family, you can expect the same proven benefits, such as ease of use, robust processing, clean burn off – no zinc and low stain tendency.

Main product benefits

- Excellent lubrication
- Higher green strength
- Higher compacted densities
- Enabling compaction of tall components
- Zinc free, clean burn off
- Improved surface quality

Best Practice

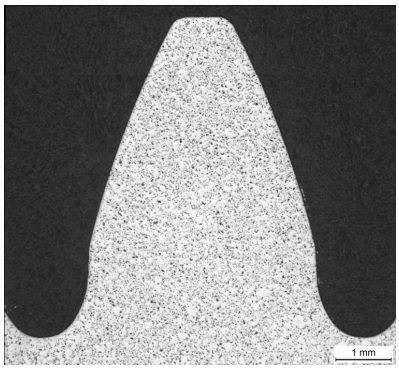
Intralube® HD works well at room temperature, but optimal efficiency is achieved at elevated die temperatures.

The best lubricity and ejection performance is achieved when setting the die temperature to 80-90 °C. A lower lubricant content can be used giving the same ejection performance.

Mix type	Lubricant %	Die temp. °C
Intralube HD	0.50	90
Intralube E	0.65	70
Premix, Amide wax	0.80	45

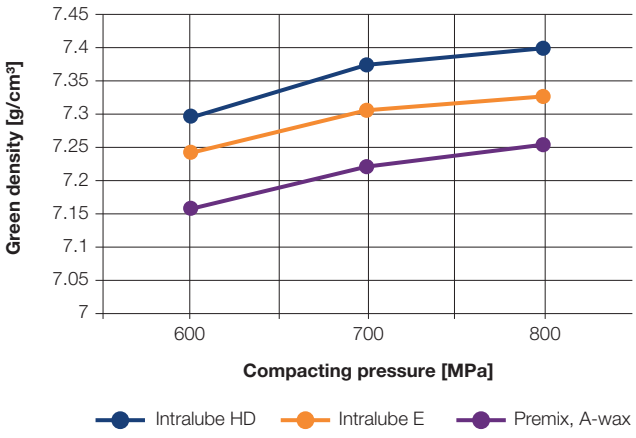
Compaction of bushings 40/20x15mm
ASC100.29 + 2% Cu + 0.4% C + Lubricant

A 3 level helical transmission gear was compacted to a density of 7.3 g/cm³ using Intralube HD with a lubricant content of 0.55%, resulting in very uniform density within the gear. The largest density improvement is found at high compacting pressures.

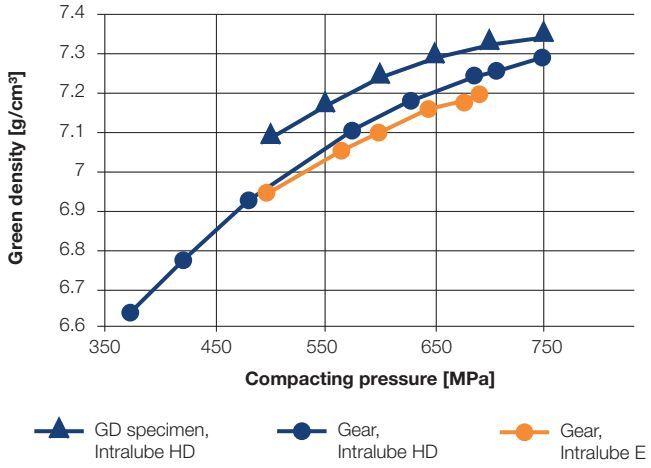


Helical gear teeth.
Distaloy AQ + 0.4% C + 0.55% Lub. P=750 MPa WDC at 70°C.

ASC100.29 + 2% Cu + 0.4% C + 0.5 - 0.8 % Lubricant, WDC



Distaloy® AQ + 0.4% C + 0.55 - 0.65% Lubricant, WDC at 70 °C



Compressibility of different mix types and geometries.

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