

## Starmix® 500i

For excellent lubrication and good filling

Starmix 500i is a bonded mix with excellent lubrication. It works well for tall parts and complicated shapes requiring additional lubrication and by applying warm die compaction, its properties can be further improved.

Good filling characteristics, another feature of the Starmix 500i, enables higher compaction rates as well as improved part precision.

As the Starmix 500i is free from zinc the staining tendency is low. Moreover, as there will be no zinc residues in the furnace, the need for furnace maintenance is reduced.

### Main product benefits

- » Excellent lubrication
- » Good flow and filling
- » High green strength
- » Zinc free with low staining tendency
- » Good DC stability



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## Basic product characteristics

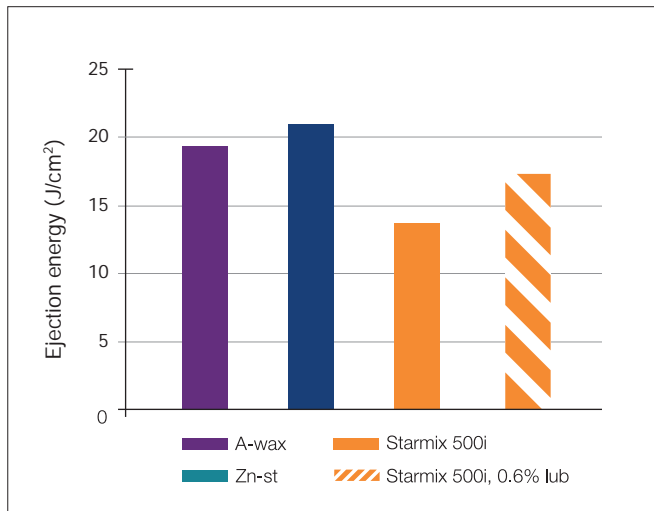
The following data is measured on mixes based on Distaloy® AB with 0.5% graphite and lubricant. Compaction was made with 600 MPa at room temperature.

	Starmix 500i	Premix	Premix
Lubricant	Lube E	Amide wax	Zn-st
Typical amount	0.6	0.8	0.8
Apparent density (g/cm³)	3.05	3.10	3.25
Flow (s/50g)	28	34	31
Green density (g/cm³)	7.10	7.05	7.08
Green strength (N/mm²)	16	12	10
Ejection energy (J/cm²)	37	40	50
Ejection force (N/mm²)	33	33	38
Zinc	No	No	Yes

The excellent lubrication properties of Starmix® 500i enables higher density, lower ejection energy as well as shiny part surfaces. The bonded Starmix 500i also features good filling characteristics. The filling index below shows how even cavities of different width

(2-13 mm) are filled. As a low index indicates a more even filling, Starmix 500i is an attractive alternative compared to premixes – even at higher fill shoe rates. It thereby allows you to improve tolerances simultaneously as productivity is increased.

### Ejection energy



#### Material

ASC100.29 + 20% Distaloy ACu + 0.9% graphite + 0.8% lubricant (or 0.6%)

#### Compaction

Rings 35/25x15 mm at P=600 MPa

### Filling index

