

JIP Clean-Mix-LEX

Segregation-free iron powder reducing the ejection force

JFE Steel Corporation

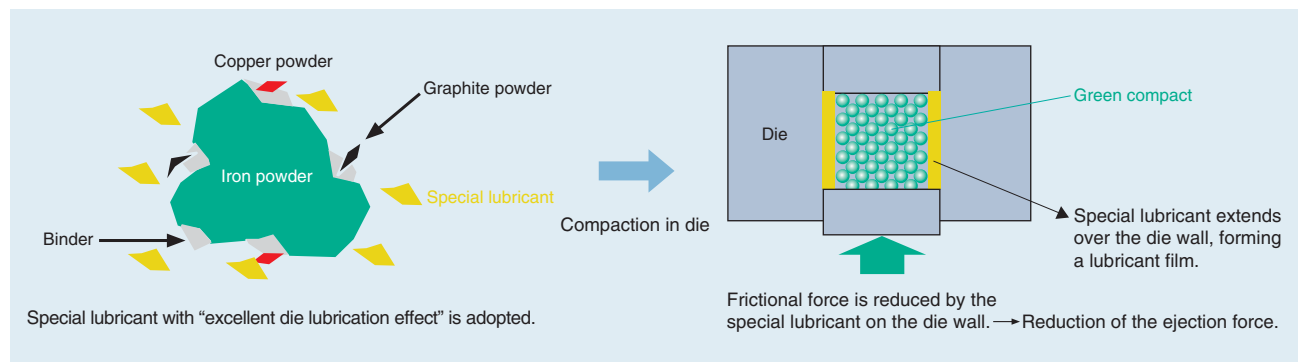
<http://www.jfe-steel.co.jp/en/>



JIP Clean-Mix-LEX

A special lubricant protects the die and green compact. By greatly reducing ejection force, JIP Clean-Mix-LEX enables compaction of large, complex shaped parts and long products.

Design of Clean-Mix-LEX



Features

1 Improved flowability and die filling property

In comparison with a conventional powder (zinc stearate-added powder), JIP Clean-Mix-LEX has excellent flowability and the same apparent density (Table 1).

- Allows reduction of die filling time.
- Realizes uniform filling in dies with complex shapes.

2 Low ejection force

In comparison with the conventional material, improves the ejection property during compaction (Fig. 1).

- Reduces cracking of green compacts during ejection.
- Contributes to longer die life.

Table 1 Apparent density and flowability

	Conventional material	JIP LEX
Apparent density (Mg/m ³)	3.28	3.21
Flowability (sec/50g)	31.0	24.9

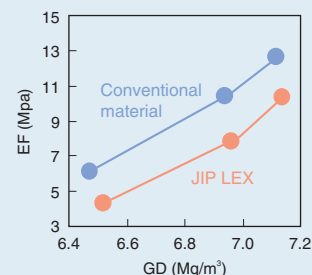


Fig. 1 Green density and ejection force

Mix composition: Fe+2.0%Cu+0.8%Gr+0.8%Lub⁽⁺⁾
(+) Conventional material: Zinc stearate
JIP LEX: Binder + Special lubricant

Applicable Automobile Parts

