



1. PRODUCT OVERVIEW

KIP-TAB Series Iron Alloying Tablets are precisely compacted, high-purity iron powder briquettes engineered for rapid dissolution in molten metals. Designed specifically for the aluminum smelting industry and ferrous foundries, these tablets provide an incredibly efficient method for making precise iron additions to a melt without the drawbacks of scrap steel or master alloys.

⚙️ CUSTOM ENGINEERED FORMULATIONS

We understand that every foundry has unique melting parameters. KRN Alloys manufactures tablets to your exact specifications. **Iron content (75% to 100%), flux/binder types, and tablet weight (50g to 1000g) are all fully customizable** upon request.

2. METALLURGICAL ADVANTAGES

- **Rapid Dissolution:** Sponge-like powder morphology allows the tablet to dissolve rapidly, saving energy and furnace time.
- **High Recovery Rate:** Achieves >95% to 100% Iron recovery, significantly outperforming standard scrap steel additions.
- **Zero Dusting:** Compacted form eliminates the airborne dust associated with loose powders, ensuring a clean foundry floor.
- **Precise Alloying:** Exact tablet weights eliminate the need for weighing on the furnace floor—simply count the tablets.
- **Density Controlled:** Engineered to penetrate the surface dross and sink directly into the melt, avoiding oxidation loss.

3. PHYSICAL SPECIFICATIONS

Parameter	Available Range
Tablet Weight	50g, 100g, 250g, 500g, 1000g
Shape	Cylindrical / Puck
Color	Metallic Grey
Structural Integrity	High crush strength

4. COMPOSITION RANGES (%)

Component	Typical Concentration
Fe (Iron Powder)	75%, 80%, 85%, 90%, 100%
Flux / Binder	Balance
Al (Aluminum Powder)	Added upon request
Trace Impurities	Strictly controlled

5. CORE APPLICATIONS

- **Aluminum Smelting:** Direct alloying into molten aluminum for high-strength Al-Fe alloys.
- **Ferrous Foundries:** Fine-tuning chemistry of cast iron or steel melts immediately prior to pouring.
- **Master Alloy Production:** Used as a highly reactive precursor for complex alloy manufacturing.

6. USAGE & PACKAGING

- **Usage:** Ensure melt temperature is optimal. Skim the dross, drop tablets directly into the melt, and stir.
- **Packaging:**
 - Wrapped in moisture-proof aluminum foil.
 - Packed in 20kg / 25kg corrugated cartons.
 - Palletized and shrink-wrapped.

7. DISCLAIMER

As this product is customizable, exact metallurgical values will be provided via a specific Certificate of Analysis (CoA) matching your requested formulation. This information is intended as a general guide. Tablets must be stored in a dry environment to prevent moisture absorption prior to immersion in molten metal.