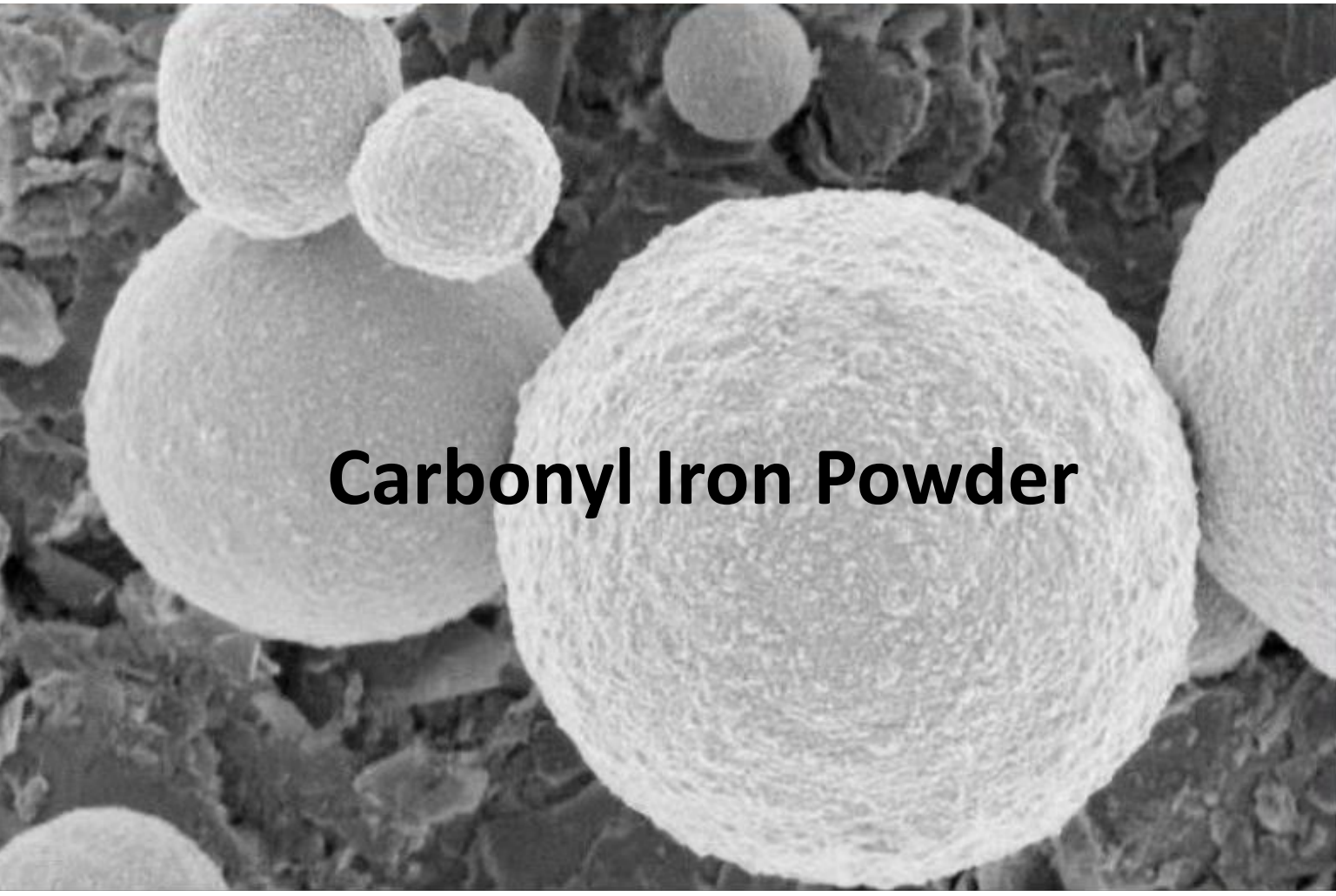
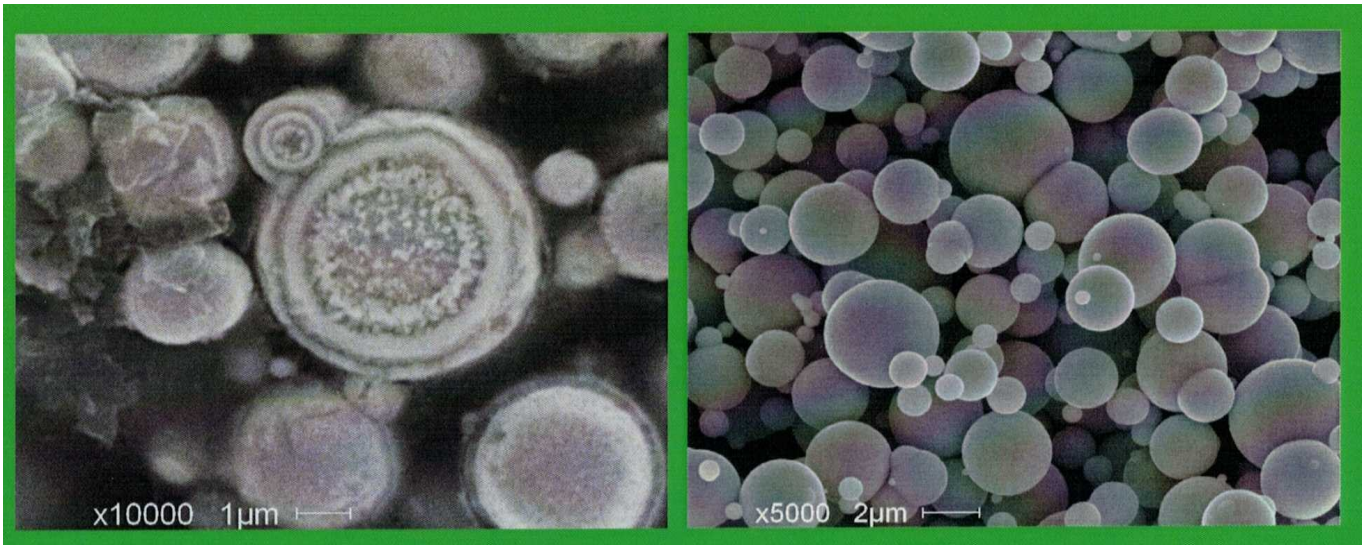


# Carbonyl Iron Powder

**TEC Co., Ltd.**

주식회사 티이씨

# Electron Microscope Photos (미세입자 현미경 사진)




| Carbonyl Iron Powder grades and implementation standars | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Grade | Chemical composition | | | | Physical properties | | | | |
| | Fe% | C% | N% | O% | Bulk Density | Tap Density | Laser granularity | | |
| | | | | | | | D10 | D50 | D90 |
| TEC1-1 | ≥98 | ≤0.80 | ≤0.80 | ≤0.40 | ≥2.2 | ≥4.0 | ≥0.5 | ≤2.0 | ≤5.0 |
| TEC1-2 | ≥98 | ≤0.80 | ≤0.80 | ≤0.40 | ≥2.5 | ≥3.9 | ≥0.6 | 2.0~3.0 | ≤8.0 |
| TEC1-3 | ≥98 | ≤0.80 | ≤0.80 | ≤0.40 | ≥2.5 | ≥3.8 | ≥1.0 | 3.0~5.0 | ≤12.0 |
| TEC1-4 | ≥98 | ≤0.90 | ≤0.90 | ≤0.40 | ≥2.2 | ≥3.5 | ≥1.5 | 5.0~6.0 | ≤17.0 |
| TEC1-5 | ≥98 | ≤0.90 | ≤0.90 | ≤0.40 | ≥2.2 | ≥3.5 | ≥2.0 | ≥6.0 | ≤21.0 |
| TEC1-6 | ≥98 | ≤0.80 | ≤0.80 | ≤0.40 | ≥2.5 | ≥4.0 | ≥1.5 | 3.0~4.0 | ≤8.5 |
| TEC1-7 | ≥98 | ≤0.90 | ≤0.90 | ≤0.40 | ≥2.5 | ≥4.0 | ≥2.0 | 4.0~5.0 | ≤11.0 |
| TEC1-8 | ≥98 | ≤0.90 | ≤0.90 | ≤0.40 | ≥2.2 | ≥3.5 | ≥2.5 | 5.0~6.0 | ≤14.5 |
| 주요용도: Used in diamond tools, diamond catalyst, powder metallurgy and other fields | | | | | | | | | |

| Carbonyl Iron Powder grades and implementation standars | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Grade | Chemical composition | | | | Physical properties | | | | |
| | Fe% | C% | N% | O% | Bulk Density | Tap Density | Laser granularity | | |
| | | | | | | | D10 | D50 | D90 |
| TEC2-1 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.30 | ≥2.5 | ≥3.8 | ≥0.5 | ≤3.0 | ≤9.0 |
| TEC2-2 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.25 | ≥2.5 | ≥3.8 | ≥1.0 | 3.0~5.0 | ≤15.0 |
| TEC2-3 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.25 | ≥2.5 | ≥3.6 | ≥1.5 | 5.0~8.0 | ≤24.0 |
| TEC2-4 | ≥99.0 | ≤0.05 | ≤0.05 | ≤0.25 | ≥2.5 | ≥3.6 | ≥1.0 | 3.0~8.0 | ≤24.0 |
| TEC2-5 | ≥98.5 | ≤0.05 | ≤0.40 | ≤0.30 | ≥2.5 | ≥3.6 | ≥1.0 | 3.0~8.0 | ≤24.0 |
| TEC2-6 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.25 | ≥2.5 | ≥3.8 | ≥0.5 | ≤2.0 | ≤5.0 |
| TEC2-7 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.25 | ≥2.5 | ≥3.8 | ≥1.5 | 3.0~5.0 | ≤11.0 |
| TEC2-8 | ≥99.5 | ≤0.05 | ≤0.01 | ≤0.25 | ≥2.5 | ≥3.6 | ≥2.0 | 5.0~8.0 | ≤17.5 |
| 주요용도: Used in powder metallurgy and other fields | | | | | | | | | |

Carbonyl Iron Powder grades and implementation standards

| Grade | Chemical composition | | | | Physical properties | | | |
|---|---|---|---|---|---|---|---|---|
| | Fe% | C% | N% | O% | 합금원소 | Bulk Density | Tap Density | Laser granularity |
| TEC3-1 | 잔여량 | ≤0.90 | ≤0.70 | ≤0.40 | Ni | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-2 | 잔여량 | ≤0.80 | ≤0.70 | ≤0.40 | Ni,Mo | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-3 | 잔여량 | ≤0.80 | ≤0.70 | ≤0.40 | Ni,Mo,Cr | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-4 | 잔여량 | ≤0.80 | ≤0.70 | ≤0.50 | Si | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-5 | 잔여량 | ≤0.40 | ≤0.40 | ≤0.40 | Ni | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-6 | 잔여량 | ≤0.40 | ≤0.40 | ≤0.40 | Ni,Mo | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-7 | 잔여량 | ≤0.10 | ≤0.10 | | Ni,Mo | ≥2.5 | ≥3.8 | 3.0~8.0 |
| TEC3-X | According to user requirements, pre-alloyed powders of various metal or non-metal powders can be added | | | | | | | |

주요용도: Used in the field of powder metallurgy

Carbonyl Iron Powder grades and implementation standards

| Grade | Chemical composition | | | | | | | Physical properties | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fe% | C% | N% | O% | Si% | Permeability | Q value | Bulk Density | Tap Density | Laser granularity | | |
| | | | | | | | | | | D10 | D50 | D90 |
| TEC4-1 | ≥98 | ≤0.80 | ≤0.60 | ≤0.40 | | 10~12 | 130~150 | ≥2.5 | ≥4.0 | ≥0.8 | 2.0~3.0 | ≤8.0 |
| TEC4-2 | ≥98 | ≤0.80 | ≤0.60 | ≤0.40 | | 11~14 | 120~140 | ≥2.5 | ≥3.9 | ≥1.0 | 3.0~5.0 | ≤12.0 |
| TEC4-3 | ≥98 | ≤0.90 | ≤0.60 | ≤0.40 | | 12~16 | 110~130 | ≥2.3 | ≥3.8 | ≥2.0 | 5.0~8.0 | ≤18.0 |
| TEC4-4 | 잔여량 | ≤0.05 | ≤0.01 | ≤0.60 | 0.70 | 28~31 | 110~130 | ≥2.5 | ≥3.8 | ≥1.0 | 3.0~5.0 | ≤12.0 |
| TEC4-5 | 잔여량 | ≤0.05 | ≤0.01 | ≤0.60 | 0.70 | 31~35 | 100~120 | ≥2.5 | ≥3.8 | ≥2.0 | 5.0~8.0 | ≤18.0 |
| TEC4-6 | 잔여량 | ≤0.05 | ≤0.01 | ≤0.60 | 0.70 | 34~40 | 90~100 | ≥2.5 | ≥3.6 | ≥3.0 | 8.0~12.0 | ≤20.0 |

주요용도: Used in soft magnetic field (iron core, chip inductor)

Carbonyl Iron Powder grades and implementation standards

| Grade | Chemical composition | | | | Physical properties | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Fe% | C% | N% | O% | Bulk Density | Tap Density | Laser granularity | | |
| | | | | | | | D10 | D50 | D90 |
| TEC5-1 | ≥98 | ≤0.80 | ≤0.70 | ≤0.40 | ≥2.0 | ≥3.9 | ≥0.5 | 2.0~3.0 | ≤8.0 |
| TEC5-2 | ≥98 | ≤0.90 | ≤0.70 | ≤0.40 | ≥2.5 | ≥3.8 | ≥1.0 | 3.0~5.0 | ≤12.0 |
| TEC5-3 | ≥98 | ≤0.90 | ≤0.60 | ≤1.0 | ≥1.5 | ≥2.5 | ≥1.0 | 3.5~4.5 | ≤11.0 |
| TEC5-4 | ≥98 | ≤0.90 | ≤0.60 | ≤1.0 | ≥1.5 | ≥2.5 | ≥1.5 | 4.5~5.5 | ≤13.0 |
| TEC5-5 | ≥98 | ≤0.10 | ≤0.10 | ≤0.5 | ≥1.5 | ≥2.5 | ≥1.5 | 3.5~4.5 | ≤11.0 |
| TEC5-6 | ≥98 | ≤0.10 | ≤0.10 | ≤0.5 | ≥1.5 | ≥2.5 | ≥1.5 | 4.5~5.5 | ≤13.0 |
| TEC5-X | The above products can add Si element according to customer requirements | | | | | | | | |

주요용도: Used in electromagnetic field, absorbing materials, etc.