

Introduction

PowderRange metal Additive Manufacturing powders from Carpenter Additive are developed with the needs of the busy AM facility in mind.

- ▶ Easy ordering
- ▶ Standard specifications
- ▶ 24-hour shipment
- ▶ Sold in easy-to-handle multiples of 10 kgs
- ▶ Easy repeat orders to optimize inventory management

This leaves you free to concentrate on the design and build of your AM parts, confident that PowderRange metal AM powders from Carpenter Additive will add reliability and consistency to your AM built parts.

Chemical composition

| Element | | Minimum wt% | Maximum wt% |
|---------|------------|-------------|-------------|
| Al | Aluminium | 5.4 | 5.8 |
| B | Boron | 0.01 | 0.02 |
| C | Carbon | 0.04 | 0.08 |
| Cr | Chromium | 8.0 | 8.5 |
| Co | Cobalt | 9.0 | 9.5 |
| Hf | Hafnium | 1.2 | 1.6 |
| Mo | Molybdenum | 0.4 | 0.6 |
| Ni | Nickel | Balance | |
| Nb | Niobium | 0 | 0.1 |
| N | Nitrogen | 0 | 0.02 |
| O | Oxygen | 0 | 0.03 |
| P | Phosphorus | 0 | 0.01 |
| Si | Silicon | 0 | 0.5 |
| S | Sulfur | 0 | 0.01 |
| Ta | Tantalum | 3.1 | 3.4 |
| Ti | Titanium | 0.6 | 0.9 |
| W | Tungsten | 9.3 | 9.7 |
| Zr | Zirconium | 0.005 | 0.015 |

Particle size distribution – CT PowderRange 247LC F

| Size | Value | Method |
|--------|--------------|------------------------|
| -15 µm | 5 Volume % | Laser Size Diffraction |
| +45 µm | 3 Weight % | Sieve Analysis |
| D10 | 18-24 µm | Laser Size Diffraction |
| D50 | 32.5-34.4 µm | Laser Size Diffraction |

Ordering information

PowderRange 247LC F is available from stock and dispatched within 24 hours of receipt of order. Our PowderRange metal AM powders are sold in multiples of 10 kgs giving you the flexibility to order just the volume you need to maintain efficient material stock levels.

All our PowderRange materials are supplied with a full metal powder certification to Carpenter Additive's standard material specification, reporting size distribution, flow, chemistry and morphology.

| Code | Description | Unit volumes |
|------------------------|------------------------------------------------------------------------------------------------------------|--------------|
| CT PowderRange 247LC F | Flexible material developed to be suitable for a wide range of powder bed fusion machines and applications | 10 kgs |

Further information

To make an enquiry, please contact powderrange@carpenteradditive.com. Alternatively, for EU/Row, call +44 (0)1928 240 530 and for USA call +1-412-788-2856. You can visit us at www.carpenteradditive.com.