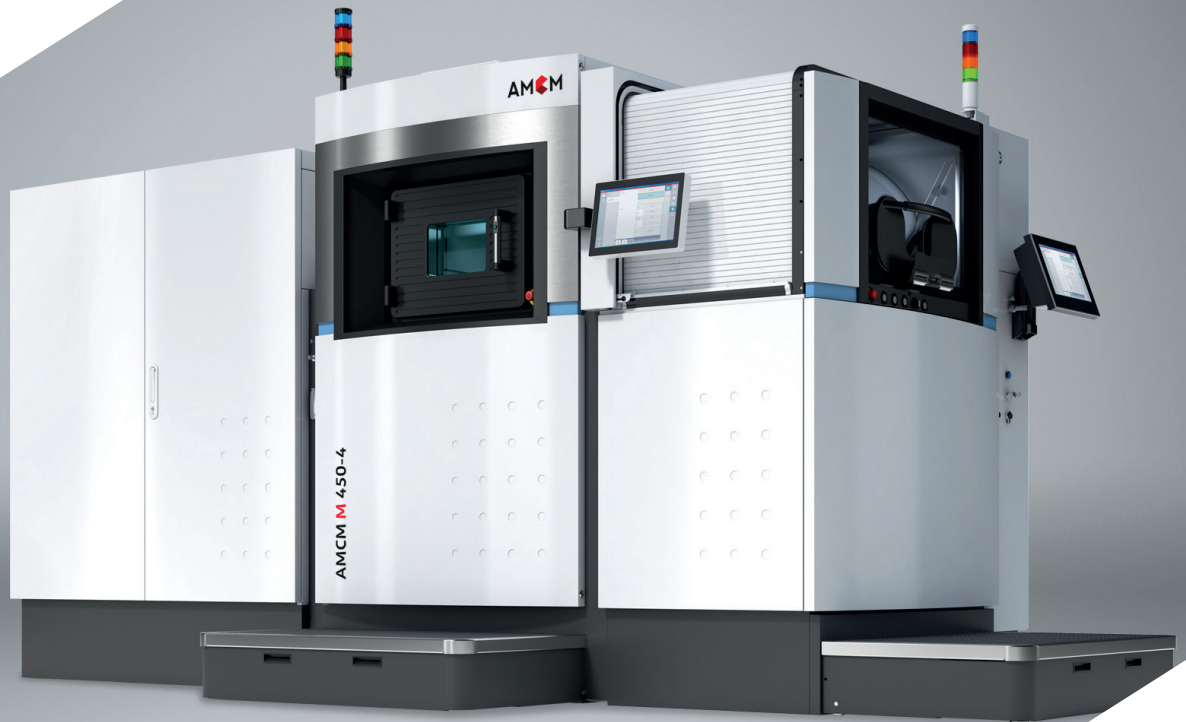




Additive Manufacturing
Customized Machines



AMCM M 450

25 % more building volume compared to EOS M 400.

Expand your applications.

AMCM M 450

BENEFITS

- Compatible with legacy EOS M 400 process parameter sets (same focus, beam quality, etc.) ⁽¹⁾
- Larger building envelope of 450 x 450 x 400 mm ⁽²⁾
- Upgrade on site: available for EOS M 400-1 to AMCM M 450-1
- As new system: new optical setup for AMCM M 450-4 now covering full 450 x 450 mm area
- Calibration and overlap adjustment with SmartCAL
- Optimized gas flow nozzle for larger build volume
- Consumables and options available for M 450 (building plates, recoater blades or soft recoater, etc.)
- Open software for process optimization
- Automatic refill of dispenser with open loop powder handling

TECHNICAL DATA

| | AMCM M 450-4 | AMCM M 450-1 1kW |
|---------------------------------------|---|------------------|
| Building volume | 450 x 450 x 360 mm (400 mm without heating) 17.72 x 17.72 x 14.17 in (15.75 in without heating) | |
| Laser type | Yb Fiber laser | |
| Nominal power | 4 x 400 W | 1 x 1 kW |
| Wave length | 1070 nm | |
| Precision optics | F-theta-lens | |
| Scanner | high-speed scanner with active cooling | |
| Scanning speed | up to 7.0 m/s 23 ft./sec | |
| Focus diameter | approx. 85 µm 0.003 in | |
| Power supply | 63 A / 400 V | |
| Power consumption | 23 kW | 19 kW |
| Inert gas supply | 7,000 hPa; 20 m³/h 102 psi; 706 ft³/h | |
| Dimensions (W x D x H) | 4,880 x 2,440 x 3,308 mm 192.1 x 96.1 x 130.2 in | |
| Recommended installation space | min. 6,500 x 6,000 x 4,173 mm 256 x 236 x 164 in | |
| Weight | approx. 5,980 kg 13,184 lb | |

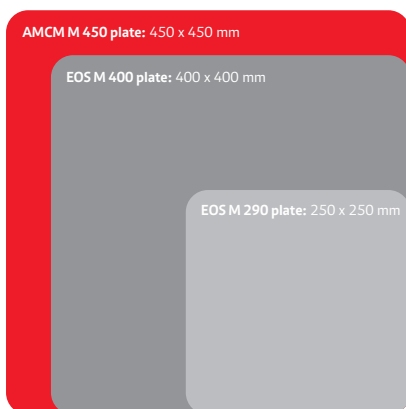


Fig 1: Building size ratio of EOS M 290, EOS M 400 and AMCM M 450.

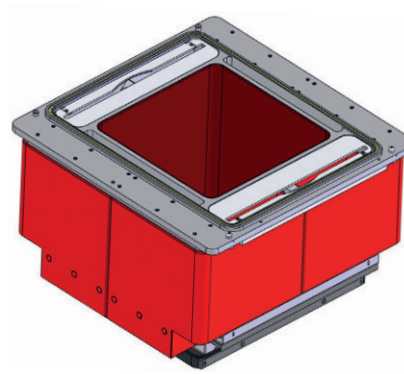


Fig 2: AMCM M 450 exchangeable frame design with extended overflow bin volume of 92 l.

⁽¹⁾ Processes must all be re-qualified by customer.
Consulting for parameter set transfer, e.g. from EOS M 400-4 to AMCM M 450-4 on request.
⁽²⁾ Building height incl. build plate.