

ABSTRACT**Powder feed system and method for 3D printing by powder spraying**

A switching system (1) for a facility for 3D printing by spraying at least a first powder, comprising a body (10) defining:

- at least one first upstream gas conduit (G1) configured to receive a gas,
- at least one first upstream powder conduit (A) configured to receive the first powder,
- at least one first downstream discharge conduit (Ra) for discharging the first powder, and
- a downstream work conduit (T) configured in order to supply a nozzle designed for depositing at least the first powder.

The system further comprises a distributor (2) that is movable with respect to the body, preferably in rotation about an axis (D), between a rest position, in which the first upstream powder conduit is fluidly connected, via the distributor, to the first downstream discharge conduit, and at least a first supply position, in which the first upstream powder conduit is fluidly connected, via the distributor, to the downstream work conduit.

Figure 2