

Industrial Additive Manufacturing - a user perspective

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At Siemens Power and Gas we are utilizing the benefits of Additive Manufacturing to increase our customers satisfaction, enhance our products and optimize our processes along the entire value chain from R&D to services. Thereby we are using AM for our entire portfolio, from the compressor through the combustion to the turbine applications of our entire fleet. Based on these high-end applications and the connected requirements, we are driving the transfer of established industrial standards and certificates also to the AM technologies. Hence, we expect open and transparent AM systems, allowing us to access and influence all available data at all times online in real-time; just as in other established industries e.g. Pharma, F&B and semiconductor. These open systems shall be connected into production lines, with vertically and horizontally totally integrated automation solutions and also seamlessly integrated into one end-to-end PLM ecosystem. A holistically digitalized ecosystem, with one integrated CAx Plattform beyond the classical CAD-CAE-CAM mindset and with one data format. In AM all three disciplines consistently affect one another and hence must be considered and represented simultaneously to enable disruptive, generative, and more efficient topologies. Innovative Topologies increasing the overall efficiency of our turbines and therefore also enabling us to contribute to society, by fostering the global reduction of CO2 emission.