Hexcel is an advanced composites company that develop, manufacture and market Composite Materials (CM) and Engineered Products (EP) to Commercial Aerospace (~70% rev), Space & Defense (17%) and Industrials (13%) markets.

The company uses polyacrylonitrile (PAN) to produce carbon fibers, which can be sold or used internally for products like prepregs, fabrics and specialty reinforcements, which can be then sold or used to produce composite structure and components such as prepregs. Besides carbon fiber related products, the company also manufactures honeycombs that are used to enhance the strength and durability of the structure in engine nacelles, helicopter blades, etc. In short, products are lightweight, high-performance structural materials.

70% of the sales comes from Commercial Aerospace, where the revenue is driven by 1) deliveries of aircraft: driven by revenue passenger miles (RPM) and the replacement of older planes, and 2) the secular penetration of composites: driven by aircraft producers’ effort to increase fuel efficiency by replacing metal components. In 1950s, commercial airplanes did not have any composite materials (all metal, that is); in 2016, advanced composites make up 53% of the weight in planes like A330neo.

The backlog for airbus and Boeing is over 8 years based on 2018 deliveries.

Within the Commercial Aerospace market, Airbus and Boeing along with their subcontractors take up 87% of the sales, and the rest 17% comes from regional, other commercial, and business aircrafts. The company has strong relationship with Airbus, which makes up 41% of total net sales (25% for Boeing).

The Advanced Composites market is highly consolidated with only five players, and Hexcel is the only public pure-play company. The barrier to entry is prohibitively high as newcomers must meet the stringent quality that aerospace and regulatory agencies require; and within the Commercial Aerospace market where most of Hexcel’s sales from, new players have to develop relationship in this duopolistic industry (Airbus and Boeing).

The Space and Defense market demands advanced composites to produce new or replace old helicopter blades.

The company also has long-term contracts with one of the biggest wind-turbine manufacturer, Vestas, to supply parts used in the wind blades. Automotive and Recreational also contribute sales.

Value Creation:

Medical equipment applications.