

A heater for heating an advancing thermoplastic yarn comprising a heating tube having opposite ends and comprising an outer surface having a curvilinear cross-section normal to the longitudinal axis of said tube, the outer surface of said tube defining a heating surface; means for heating the outer surface of said tube; a plurality of ring segments mounted on said outer surface and extending at least partially around the circumference of said tube, the ring segments defining outer ridge portions with outer diameters; a yarn guide mounted at each of said ends of said tube, said yarn guides being offset in relation to each other in the direction of the circumference of said tube, said yarn guides cooperating with each other to guide the advancing thermoplastic yarn helically along said tube such that the thermoplastic yarn contacts the outer ridge portions of said ring segments at the outer diameter without contacting the outer surface of said tube.