

473d Development of a Co-Extrusion Process for Propellant Manufacture

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A co-extrusion process was developed for the manufacture of propellant strands. The rheological behavior of the two propellant formulations were characterized and used in the design of the die. To our knowledge this is the first attempt in generating net shapes of co-extruded strands, in the area of energetics manufacturing and should pave the way for additional shapes and configurations to be generated. The problems associated in the design and manufacture of the tools and the analysis of the rheological behavior and the processability calculations will be elucidated.