INSTRUMENT TECHNOLOGY, INC.

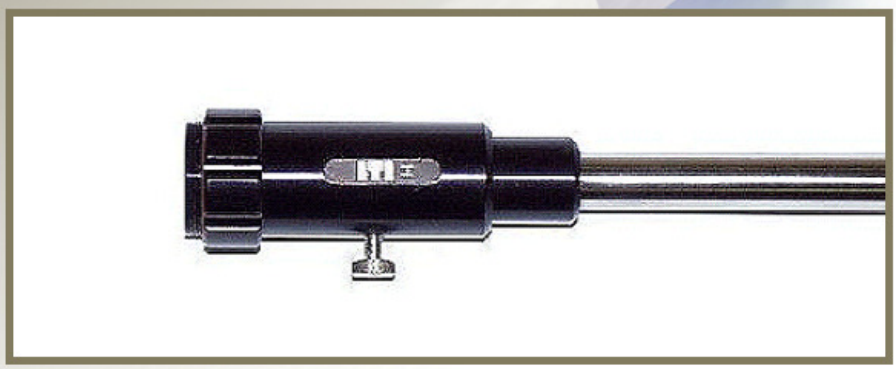
Small Diameter/High Temp Borescope

General Information

Customer:
Ford Glass Co.

Location:
Dearborn, MI

Business:
Automotive Glass



Problem

Certain sections of a high temperature glass-forming mill required remote monitoring via video. The customer wanted to re-use existing borescope cooling shrouds, but no off-the-shelf scope of the proper diameter and length could be obtained.

In this application, there was already sufficient light to monitor the process, so illumination fibers could be dispensed with. This is common among high temperature processes and greatly simplifies the design of high temperature borescopes.

ITI Solution

ITI constructed a video dedicated borescope to the exact length and diameter required by the customer to fit existing cooling gear. To maximize light throughput, while minimizing cost, ITI deleted the usual fiber optic illumination parts and freed up space for larger aperture optics. A custom-designed objective lens was chosen to provide just the area coverage the application needed. The result was a bright, 60° FOV borescope just under 3' in length, capable of supplying sharp images to the camera while precisely fitting into an existing cooling shroud.

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