

#54: HOW TO USE INFRARED EFFECTIVELY

As somewhat less commonly understood methods of temperature measurement, infrared methods have their own characteristics which lead to both good applications and difficult applications. The three simplified rules below will help you evaluate the potential use of infrared techniques, and estimate of the degree of difficulty involved. These rules apply to infrared physics in general, and are not a limitation imposed by the design of IRt/c's specifically.

1. Simple Applications

- All non-metallic surfaces
- Food, Paper, Plastics, Coated Metals, Stone, Clay, Glass, Liquids, Textiles, etc.

2. More Difficult Applications*

- Bare Metals**
- Shiny, unpainted, uncoated metal surfaces**

3. "In Between" Applications*

- Dull Metal Surfaces
- Thin "See-through" Plastics

** For temperatures in the correct range, the LoE models provide very good performance if emissivity variations are not too great.*

*** It is always repeatability that counts, and there are various "tricks" that can be used to improve repeatability in difficult applications, but experimentation is required.*