

Customer Requirement:

Quickly and accurately detect multi-color registration marks on continuous webs of packaging material

Banner Solution:

R58 Expert™ Series

Why Banner?

The right sensor for the job—the high-speed R58 Expert sensor reads multiple colors on high-gloss and low-contrast material without requiring users to change out the sensor, giving Hamer a low-cost solution for their application

Customer Benefits:

- **Ease of use**—the R58 Expert is extremely easy to install, setup and maintain
- **Versatile and dependable**—Hamer standardized the R58 Expert and uses it throughout their product line



R58 Expert Features:

- Color contrast sensitivity—detects a variety of color combinations on different backgrounds
- Automatically chooses blue, red or green sensing LED based on the contrast between the registration mark and the background
- Single-color LED models with gain potentiometer adjustability also available

More on bannerengineering.com:

- [R58 Expert Series Overview](#)
- [Product Literature](#)

Hamer, LLC uses the R58 Expert to solve multi-color registration mark application



The R58 Expert accurately senses registration marks on a web of ice packaging as it passes through a high-speed, automated bagging machine.

Background

Hamer, LLC is a Minnesota-based manufacturer of automated packaging equipment for a wide variety of applications and world-wide customers. From pet food to pellet fuels, Hamer machinery packages products in a variety of weights and sizes at speeds up to 60 bags per minute. A vital component of Hamer's equipment is registration mark sensing—the ability to detect marks on packaging as it passes at high speeds. When a mark is detected, the equipment cuts the packaging at the designated location, eliminating waste and ensuring each bag is consistent.

Challenge

Many of Hamer's customers change out their rolls of packaging multiple times a day to suit different product lines. As packaging changes, so do registration marks—they can vary in size, shape, location, color and translucence. Hamer's previous sensor technology required customers to physically change out the sensor when they needed to detect different colored registration marks. Hamer turned to Banner to find a registration mark sensor that was easy and cost effective to install and less complicated for their customers to maintain.

Solution

Banner introduced Hamer to the R58 Expert—a high-speed registration mark sensor. The R58 Expert is designed to read multiple colors on high-gloss and low-contrast surfaces without changing the sensor—perfect for customers who rotate their packaging webs multiple times a day. With a simplified push-button or remote-switch TEACH mode, the R58 Expert automatically selects the correct LED color to optimize contrast. Perhaps the best aspect of the Banner sensor is that it's easy to install, set up and teach, integrating seamlessly with Hamer's equipment. Because it is so simple to install and maintain, the R58 Expert has become Hamer's standard registration mark sensor for their automated packaging product line.