

The key to a successful start-up is really *getting started*: you have a quality product, a dazzling marketing campaign—all your ducks are in a row. The next step is to take that quality product and turn it into a consistent, commercial product that's ready for the market. For start-up coffee roasters, one of your initial challenges is going to be developing a consistency with your roast quality that can make your brand distinctive. When customers return for another bag, you want them to be able to expect the exact darkness of roast and depth of flavor that they experienced the first time. A spectrophotometer is a small, portable investment that can help transition your start-up coffee roasting venture into a commercially viable product by keeping your roast quality consistent.



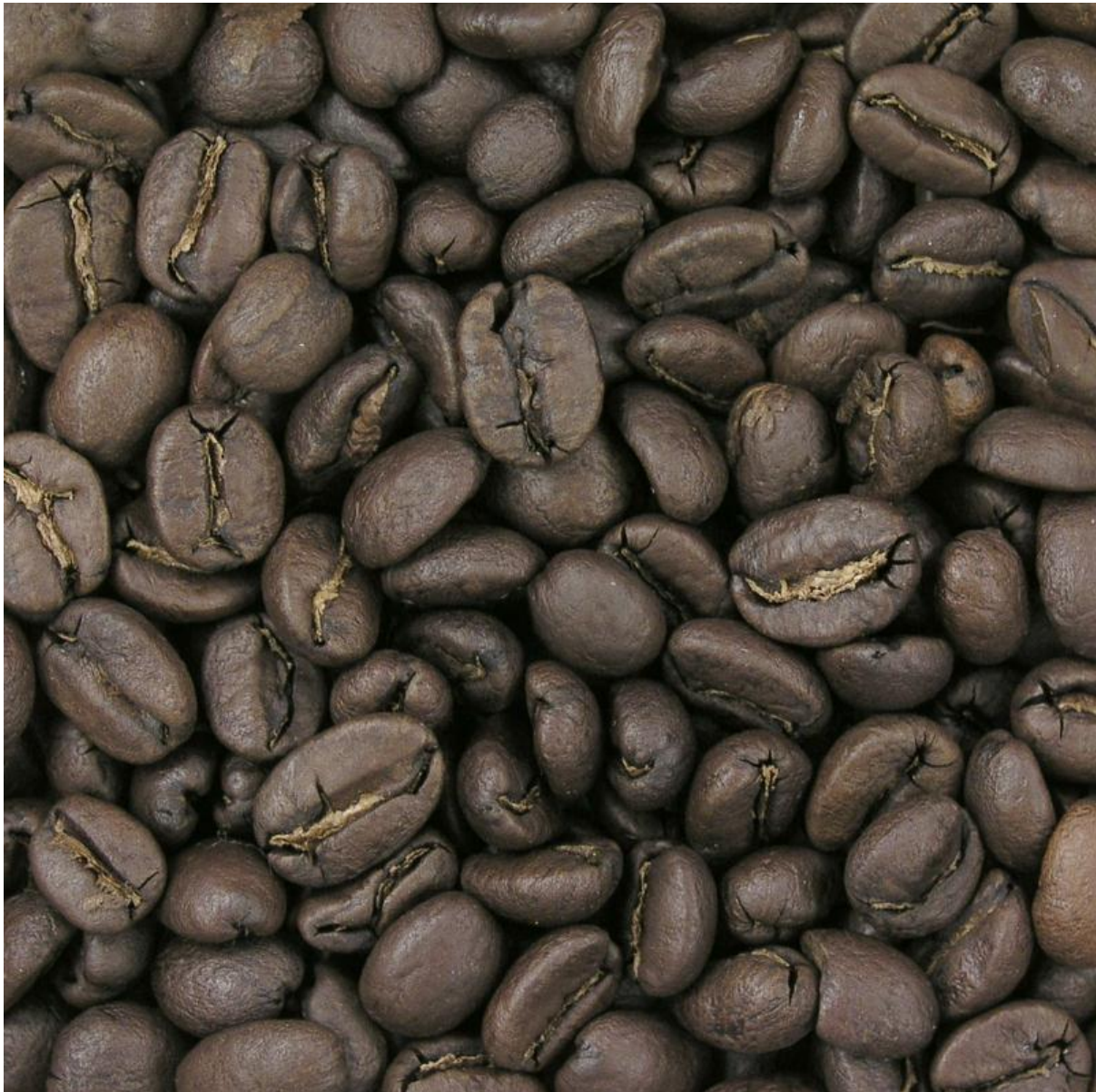
The savvy consumer is going to expect a consistent flavor profile with each batch of coffee. Keeping tabs on the consistency of your roast with a spectrophotometer can keep your company competitive in a saturated market.

Image: Wikimedia Commons user CoffeegEEK

#### Coffee's Depth of Color Presents Challenges for Visual Quality Control

The complexity and density of color in a coffee bean makes it extraordinarily difficult for the human eye to accurately judge its hue. Dark colors are especially difficult for the eye to ascertain because the cones in our eyes naturally absorb more information from the longer (warmer) light wavelengths such as reds, oranges, and yellows. In fact, two-thirds of the cones in our eyes process warm colors, not cool colors.

Additionally, the many facets of a coffee bean reflect light from different angles. That makes looking into a bucket of freshly roasted coffee beans an incredibly rich sensory experience, with its density of aroma and depth of color. However, your eye could be perceiving hundreds or thousands of different brown tones in that one bucket, depending on how the light is reflecting off each bean.



This city roast batch of Brazilian coffee contains myriad brown tones within each bean, making it difficult to accurately check the batch by color with the naked eye. A spectrophotometer offers a greater degree of accuracy for quality checks.

Image: Wikipedia Commons user Dan Bollinger

For coffee roasters, maintaining a consistent darkness with each roast can be vital to your success on the market, and to attracting a base of return customers. To accurately assess the final darkness of each batch of freshly roasted coffee and develop that consistency, you're going to need a tool that offers a greater degree of accuracy than the naked eye.



Maintaining a consistent flavor profile from lot-to-lot and batch-to-batch is vital for the commercial viability of your coffee company. Image: Wikipedia Commons user Visitor7

### Spectrophotometers Lead the Industry in Quality Control for Coffee Roasting

Spectrophotometers are used for a wide swath of commercial quality control applications, but they offer very specific benefits to the coffee roasting industry, which relies so heavily on color as a quality determinant. Tools like the [Hunterlab ColorFlex EZ Coffee](#) are designed to accurately measure the color of a batch of roasted grounds—it can even assess freeze-dried coffee and instant powders. The coffee color scales provided with the firmware of the ColorFlex EZ Coffee include the SCAA Roast Classification, the SCAA number, and the HunterLab Coffee Color Index. To excel at your craft and make a splash in the commercial market, you're going to need your coffee to consistently fit your parameters for lot-to-lot and batch-to-batch production quality, as well as fit smoothly into the SCAA classifications.

### Finding a Market Differentiator in a Competitive Field

Coffee roasting is a competitive market, with many amateur enthusiasts interested in transitioning their craft from a hobby to a start-up business. In this type of market, it's vital to find a market differentiator that your customers will recognize – a distinctive flavor profile that sets your coffee apart and delivers a consistent experience every time. If you're ready to add a splash of science to the art of coffee roasting, HunterLab can help you integrate a spectrophotometer into your roasting process. We're confident that it will become an invaluable tool in maintaining a consistent flavor profile with each of your roasts to help transition your coffee roasting venture into the commercial arena.

HunterLab has been pioneering spectrophotometry and its commercial applications for over 60 years now, and we'd be happy to assist you in finding the right products to suit your company's needs; we'll provide world-class customer support to make sure that your transition to

spectrophotometric quality control goes smoothly. [Contact us](#) to learn more about our color measurement technologies!