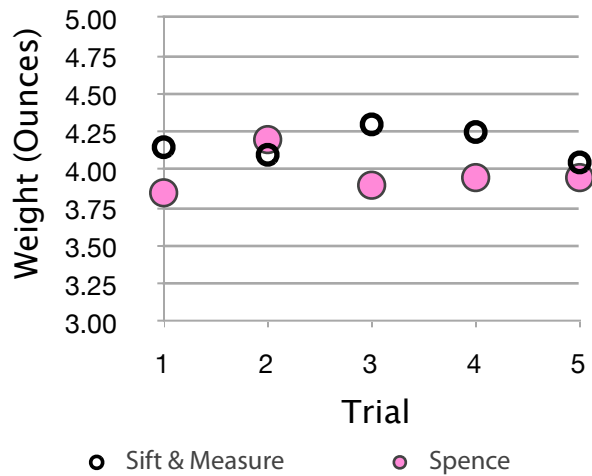


Spence's Performance



Traditional Techniques

The three most common methods for measuring flour are dipping a cup in then scraping off excess, spooning flour into a cup then level off the excess, and sifting then measuring the sifted flour.

Each of these techniques results in a different range of weights, as outlined below.

A Comparison by Weight

- Dip and scrape method: 5.1-5.35 oz.
- Spoon and level method: 4.1-4.5 oz.
- Sifting then measuring: 4.1-4.3 oz.
- Spence: 3.85-4.2 oz.

Spence's Team:



Ade Ogunniyi, Anna Haas, Ben Williams, Bonnie Blackburn, Carmen Graves, Dan Kubaczyk, Danielle Whited, Elvine Pineda, Joanna Faulk, Jon Reimer, Josh Ramos, Julie Henion, Julie Hui, Kim Zalatan, Noah Caplan, Omar Carrasquillo, Parhys Napier, Pete Lu, William Pickeral.

Contact Information:

spencedispenser@mit.edu

Spence



The Sensible Dispenser

Spence Can...

- Store flour
- Dispense cup fractions
- Fit kitchen dimensions
- Disassemble
- Fit large bowls

Spence is a storage canister that measures and dispenses flour for the home baker.

Where Spence Lives

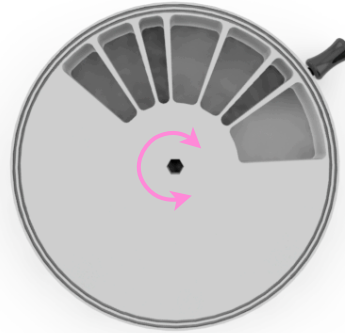
Spence sits on the kitchen counter, replacing decorative canisters. His stand attaches at two heights, one for daily use and the second for storing him away.



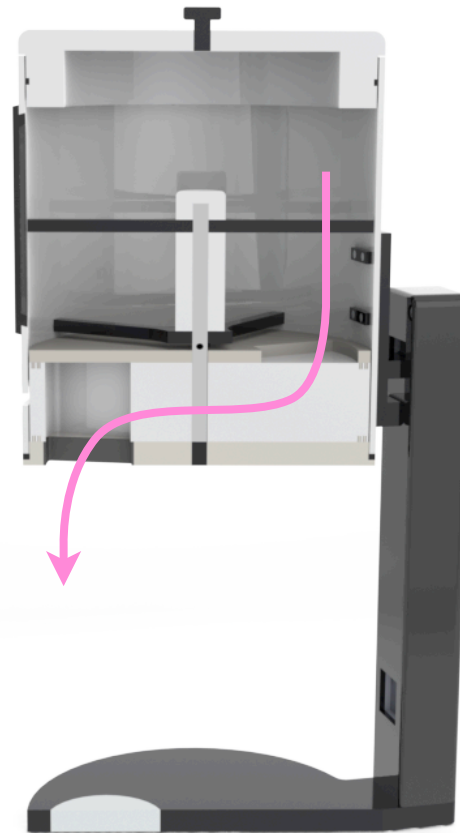
How Spence Works

Additive Bins

Rotation of the measure layer allows flour to fill into bins representing fractional portions of one cup.

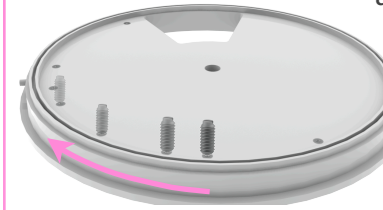


Path of Flour



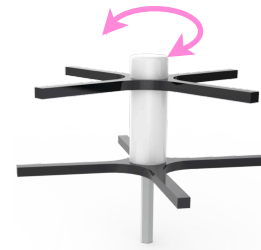
Feedback System

Spring detents for tactile and auditory feedback to ensure accurate measuring



Flour Aeration

Agitators will loosen the flour in the canister, thus avoiding packing and reducing measurement variation.



Sealing

Labyrinth seals
Lid
Bottom plug

