CLAIMS

What is claimed is:

1. A volumetric standard cassette for calibration of a cassette based pumping system, the volumetric standard cassette comprising:

a rigid body having a midbody, walls extending away from the midbody, and a number of solid pump chambers regions each having a predefined geometry defining a known volume of the pump chamber region, the rigid body being flow path and orifice free.

2. The volumetric standard cassette of claim 1, wherein the volumetric standard cassette is metal.

3. The volumetric standard cassette of claim 1, wherein the volumetric standard cassette is machined.

4. The volumetric standard cassette of claim 1, wherein the volumetric standard cassette is made from a list of materials consisting of aluminum, steel, and plastic.

5. The volumetric standard cassette of claim 1, wherein the volumetric standard cassette is constructed via a material additive process.

6. The volumetric standard cassette of claim 1, wherein the midbody has a thickness equivalent to at least half that of the thickest portion of the rigid body.

7. The volumetric standard cassette of claim 1, wherein the midbody has a thickness equivalent to at least 60% that of the thickest portion of the rigid body.

8. The volumetric standard cassette of claim 1, wherein the midbody has a thickness equivalent to a range of one half to three fourths that of the thickest portion of the rigid body.

9. The volumetric standard cassette of claim 1, wherein the volumetric standard cassette includes no cassette sheeting.