CLAIMS

1. A system comprising a container and a machine for preparing a beverage and/or foodstuff,

the container including:

a body portion with a storage portion for containing a precursor material;

a closing member to close the storage portion;

a machine-readable optical code storing preparation information, said code arranged on the closing member,

the machine including:

a code reading system to read the optical code of the container;

a processing unit for processing the precursor material of the container, and;

electrical circuitry to control the processing unit based on the preparation information read from the code,

wherein the code reading system includes a code reader,

characterized in that the code reading system includes a positioning mechanism to translate along an axis the container and code reader relative to each other from a holding position, in which the container is separated from a reading head of the code reader and the code is aligned along said axis with the code reader, to a reading position, in which the code of the container is in contact with the reading head,

the positioning mechanism is adapted to deform the body portion of the container from an undeformed configuration to a deformed configuration, in which the code is readable by the code reader, wherein in the deformed configuration the closing member is arranged to physically contact the code reader, and

wherein in the reading position the closing member presents a comparatively more uniform surface for reading of the code compared to the holding position wherein the closing member has a more even spatial arrangement to the undeformed configuration.

2. The system of claim 1, wherein the machine includes a guide portion, which is arranged to guide the container inserted into the guide portion via gravity from an inserted position to the holding position and to the processing unit.

3. The system of claim 2, wherein the processing unit includes a container holding portion and a closing portion which are movable between a container receiving position and a container processing position in a depth direction, wherein the closing portion includes a cavity that extends from the closing member in said depth direction.

4. The system of either of claims 2 or 3, wherein the reading head is arranged relative the guide portion to enable a container to travel through the guide portion to the holding position and/or from the holding position to the processing unit without touching the reading head.

5. The system of any preceding claim, wherein the positioning mechanism is configured to translate the container with the code reader stationary from the holding position to the reading position.

6. The system of claims 4, when dependent on either of claims 2 or 3, wherein the container is translated via a pressing force applied to a base of the storage portion of the container via a pressing element, which is independently actuatable from the guide portion.

7. The system of either of claims 5 or 6, wherein the body portion comprises a flange portion that interconnects the storage portion and the closing member of the container, and the guide portion of the machine is arranged to guide the flange portion,

   wherein the guide portion comprises a front face engaging portion to engage a front face of the flange and a rear face engaging portion to engage a rear face of the flange,

   the front face engaging portion and rear face engaging portion separated by a gap greater than a thickness of the flange, such that:

   the container can pass through the guide portion from the inserted position to the holding position and into the processing unit and;

   translate from the holding position to the reading position.

8. The system of any preceding claim, wherein the positioning mechanism includes a holding member, which is arrangeable in a closed position to retain the capsule in the holding position and is arrangeable in a transfer position to enable transfer of the capsule to the processing unit.

9. The system of any preceding claim comprising a plurality of containers with a storage portion of different depth, the positioning mechanism configured to transfer said containers from the holding position to the reading position and to read the code of each container.

10. The system of any preceding claim, wherein in the reading position the code reader is pressed into the closing member,

and the closing member is arranged as a flexible membrane and is arranged to deform to correspond in shape to a reading head of the code reader in the reading position,

wherein the code is arranged on a central region of the closing member and the central region of the closing member is arranged to displace by 2 – 6 mm when subject to a pressing force of 15 - 120 N by the reading head.

11. A machine for preparing a beverage and/or foodstuff, the machine comprising:

a code reading system to read the optical code of the container;

a processing unit for processing precursor material of the container, and;

electrical circuitry to control the processing unit based on preparation information read from the code,

wherein the code reading system includes a code reader, and a positioning mechanism to translate along an axis the container and code reader relative to each other from a holding position, in which the container is separated from a reading head of the code reader and the code is aligned along said axis with the code reader, to a reading position, in which the code of the container is in contact with the reading head,

wherein the positioning mechanism is adapted to deform the body portion of the container from an undeformed configuration to a deformed configuration, in which the code is readable by the code reader, wherein in the deformed configuration the closing member is arranged to physically contact the code reader, and

wherein in the reading position the closing member presents a comparatively more uniform surface for reading of the code compared to the holding position wherein the closing member has a more even spatial arrangement to the undeformed configuration.