

# Chewing Gum Testing DRT



Test equipment to masticate chewing gums, especially medicated ones, for the in vitro release of substances from the samples into a surrounding liquid medium. Up and down strokes (vertical) of the lower jaw in combination with a revolving movement of the upper jaw which provides mastication of the chewing gum and at the same time an agitation of the test medium.

For manual sampling, emptying and cleaning process the lower jaw with the test cell can be lowered into the down position and the chewing process stops. The test cell, the upper and lower jaw can be easily removed. The temperature of the water in the test cell is controlled by a water circulation system. The test apparatus is used to chew gum and then analyzes the speed at which various substances leave a gum (release). The apparatus is also very helpful to develop candy chewing gums. Also a few odd applications are possible such as testing of snuff bags etc. and in a special design, controlled mort development of tablets.

*As the DRT offers a modular design, any number of chewing gum can be tested at the same time, with the DRT-6 with 6 test stations the most commonly used. The cells can be equipped with accessories for measuring the pressure of chewing gum, torque at shear force (twisting motion), pH, temperature, etc. All measurements are logged into a data logger and can be printed.*

## Technical Details

Chewing gum tester DRT with 1 to 6 test stations (DRT-1 to DRT-6)

### Revolving device for upper jaw:

Pneumatic drive unit, compressed air 6-8 bar, compressed air to be supplied by customer

The angle of the revolving movement can be adjusted between 10° – 180°

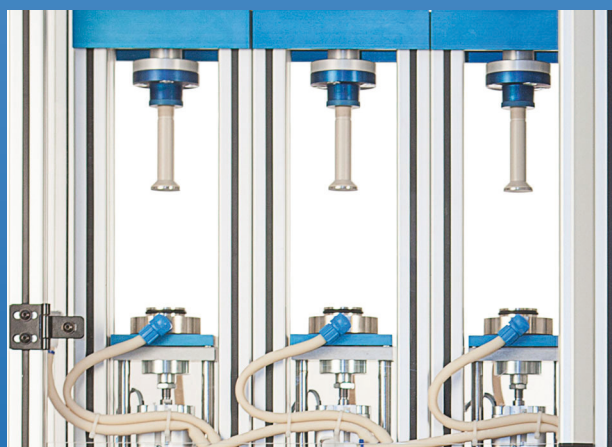
### Test cell

Double-walled and made of glass which allows visual inspection during the test

Volume for dissolution medium 20-70 ml

Temperature controlled by a water circulation system

In- and outlet nozzle for the water circulation system, Test Cell can be easily removed for cleaning or changing



### Upper Jaw

Revolving according to the revolving device, no up and down movements and mounted on a heat insulated holder

Can be easily removed for cleaning or changing (recommended after each test)

Distance of upper and lower jaw in closed position adjustable between 0-10 mm

Acid proofed stainless steel with blasted surface for a better grip

### Lower Jaw

Lifting according to the device for up and down movements

No sliding of the sample during mastication due to the design of the jaw and due to separate nets between the jaws

Metal in contact with lower jaw tempered by the circulated water

Acid proofed stainless steel with blasted surface for a better grip

Can be easily removed for cleaning or changing

### General

Device for movements: Vertical pneumatic cylinder, compressed air 6-8 bar, compressed air supplied by the customer

Movement frequency adjustable between 20 - 60 cycles per minute

Temperature controlled water bath can be regulated between 25 – 45 °C. One water bath for up to 6 test cells, volume 25 litres, made of PMMA acrylic glass. Electronic pump for continuous circulation of the heated water

Mobile carrier for easy transport of the whole equipment. Two level carrier with rubber wheels. Made of aluminium

Electronic control of each test cell individually

Control of movement frequencies, operation time, temperature and warming up period, no product memory, parallel and serial interface available currently

Technical specifications for the products described are stated without warranty and subject to change at any time without further notice.

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