

# Specifications for Homogenizing Mill

Name: Gear-Drive Planetary Ball Mill

Type: Bench top design

Working Principle: Impact plus frictional force / Coriolis forces

Grinding mode: Wet and Dry

Number of grinding stations: 2

Material of grinding jars: alumina ceramic with top lid

Capacity of each grinding station: 500 ml

Grinding balls Size, material and quantity according to the attached table

Minimum sample quantity: 10 ml

Maximum sample quantity: 400 ml

Final fineness:  $< 1 \mu\text{m}$

Rotational speed of main sun wheel: Adjustable from 50-400 rpm

Transmission ratio grinding bowl/planetary disk:  $i_{\text{relative}} = 1 : -2.19$

Continuous operating time: at least 48 hours

Control: rotational speed control, timer, Programmable grinding and break times and grinding sequences

Electrical requirements: 220 V / 50-60 Hz

Spares: 1 no spare motor belt, spare fuse, Rubber jar cushion, Jar clamping device, spare cap screws

Note: Country of origin U.S or Eu only Make: Fristich or equivalent

Table for grinding balls:

Sr. No	Material of Balls	Size of Balls Diameter $\phi$ (mm)	Quantity required
1	Hardened Stainless Steel	20	2 No
2	Hardened Stainless Steel	15	7 No
3	Hardened Stainless Steel	10	6 No
4	Hardened Stainless Steel	5	240 No
5	Hardened Stainless Steel	3	100 gm
6	Hardened Stainless Steel	1	100 gm
7	sintered corundum	20	3 No
8	sintered corundum	15	12 No
9	sintered corundum	10	15 No
10	tungsten carbide	5	100 No
11	tungsten carbide	3	100 gm
12	tungsten carbide	1.6	100 gm
13	tungsten carbide	0.6	100 gm