

SDM Series Attritors Designed For Bead Milling Applications

A Hybrid Design

The SDM line from Union Process is a hybrid design that couples the grinding features of a batch Attritor with the performance features of a bead mill.

The Advantages of a Batch Attritor . . .

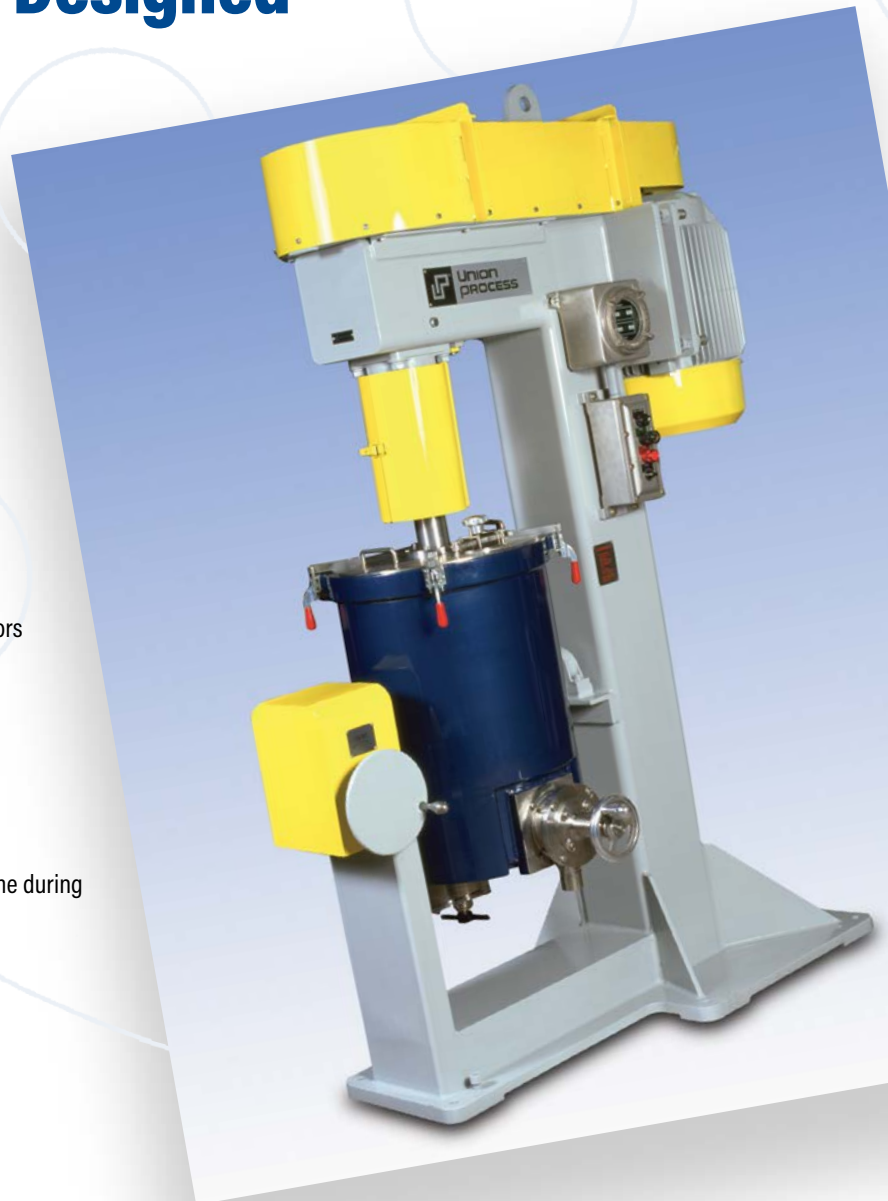
SDM Attritors share many of the same advantages of batch Attritors including:

- No expensive shaft seals to maintain
- Simple operation
- Energy efficient
- No premixing requirement
- Minimum maintenance required
- Rugged construction
- Material can be inspected and additions can be made at any time during the grinding cycle
- Compact design
- No special foundation needed

. . . with the Added Features Necessary to Accomplish Bead Milling

Additional advantages of the SDM design are:

- Specially designed shaft and Delta Discs or L Arms configured to accommodate bead milling (using mini media from 0.25 to 2 mm)
- High shaft speeds (from 500 to 2500 RPM) to energize small media



Model SDM-10

Laboratory Models



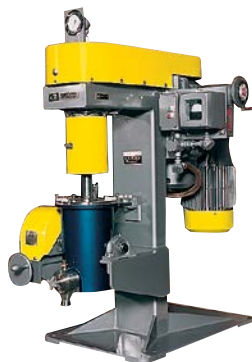
HDDM-01

HDDM-01

- Designed for small media from .25mm (or smaller) to 2mm
- Features an electronic variable speed drive system
- Runs at RPMs from 500 to 2500
- Optional side discharge valve and/or bottom plug valve
- Can be purchased as a combination model with HD-01 (referred to as HD/HDDM-01)

SDM-05 and SDM-1

- Designed for small media from .25mm to 2mm
- Features an electronic variable frequency drive system
- Runs at RPMs from 150 to 1500
- Includes discharge valve and media retaining screen



SDM-1
SDM-05 (not pictured)

Production Models

Standard Features

- Tank tilts for easy cleaning
- Includes side slurry discharge with media retaining screen
- Tank jacketed for efficient cooling
- Bottom media discharge valve

Accessories/Options

Tank Options

- Stainless Steel, Tefzel®-coated stainless steel, polyurethane, alumina (zirconium oxide, silicon nitride and silicon carbide—HDDM-01 lab model only)

Agitator Disc Options

- Hardened tool steel, hardened stainless steel, plastic, zirconium oxide or L Arms

Torque Meter

- Monitors precise energy consumption which is used for determining grinding time and for added quality control

ENGINEERING DATA

| ATTRITOR MODEL | HDDM-01 750cc | HDDM-01 1400cc | SDM-05 | SDM-1 | SDM-5 | SDM-10 | SDM-15 | SDM-20 | SDM-30 |
|---------------------------|------------------|-------------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|
| Tank Capacity | 750cc | 1400cc | 1.3 gal | 2.9 gal | 14 gal | 28 gal | 42 gal | 61 gal | 83 gal |
| Slurry Capacity | 125-175cc | 250-350cc | 0.37 gal | 0.6-0.8 gal | 4 gal | 8 gal | 12 gal | 16 gal | 24 gal |
| Media Volume | 280cc | 560cc | 0.60 gal | 1.3 gal | 6.5 gal | 13 gal | 19.5 gal | 26 gal | 39 gal |
| HP | 1/2 | 1/2 | 3 | 5 | 15 | 25 | 40 | 50 | 75 |
| Height | 39" | 39" | 46" | 60" | 88" | 91" | 97" | 104" | 110" |
| Floor Space (W x D) | 17" x 38" | 17" x 38" | 28" x 48" | 32" x 54" | 36" x 65" | 39" x 70" | 44" x 76" | 48" x 78" | 52" x 81" |
| Machine Wt (lbs) | 240 | 240 | 700 | 1600 | 2600 | 3700 | 4100 | 5000 | 6200 |
| Approx Operating Wt (lbs) | 250 | 260 | 750 | 1700 | 2950 | 4200 | 5050 | 6300 | 8100 |

- Lab Machines -

- Production Machines -

GRINDING MEDIA

Union Process stocks a full line of the highest quality media for bead mill and horizontal mill applications. Please request our comprehensive Grinding Media data sheet.



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