

# SDM Series Attritors Designed For Small Media 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 small media mill.

### The Advantages of a Batch Attritor . . .

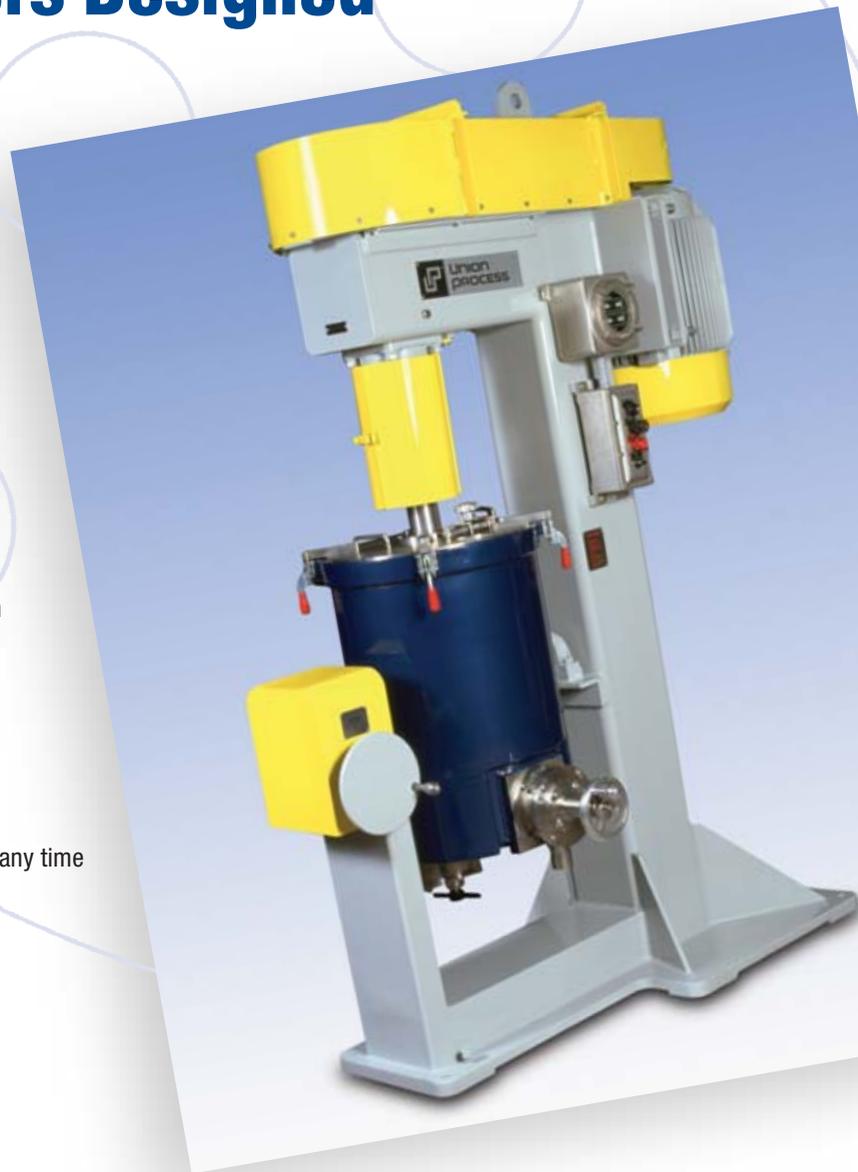
SDM Attritors share many of the same advantages of batch Attritors including:

- 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 Small Media Milling

Additional advantages of the SDM design are:

- Specially designed shaft and Delta Discs configured to accommodate small media milling (using mini media from 0.25 to 3 mm)
- High shaft speed (from 400 to 4000 RPM) to energize small media



Model 10-SDM



## Laboratory Models



01-HDDM

### 01-HDDM

- Designed for small media from .10mm to 2mm
- Features a mechanical drive or an electronic variable speed drive system
- Runs at RPMs from 1000 to 4200
- Optional side discharge valve and/or bottom plug valve (both available for stainless steel tanks only)
- Can be purchased as a combination model with 01-HD (referred to as 01-HD/HDDM)

### 05-SDM and 1-SDM

- Designed for small media from .25mm to 3mm
- Features a mechanical drive or an electronic variable speed drive system
- Runs at RPMs from 300 to 2000
- Includes discharge valve and media retaining screen



1-SDM  
05-SDM (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— 01-HDDM lab model only)

#### Agitator Disc Options

- Hardened tool steel, hardened stainless steel, plastic, zirconium oxide

#### Torque Meter

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

## ENGINEERING DATA

| ATTRITOR MODEL            | 01-HDDM<br>750cc | 01-HDDM<br>1400cc | 05-SDM    | 1-SDM       | 5-SDM     | 10-SDM    | 15-SDM    | 20-SDM    | 30-SDM    |
|---------------------------|------------------|-------------------|-----------|-------------|-----------|-----------|-----------|-----------|-----------|
| 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 grinding for small media applications. Please request our comprehensive Grinding Media data sheet.



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