

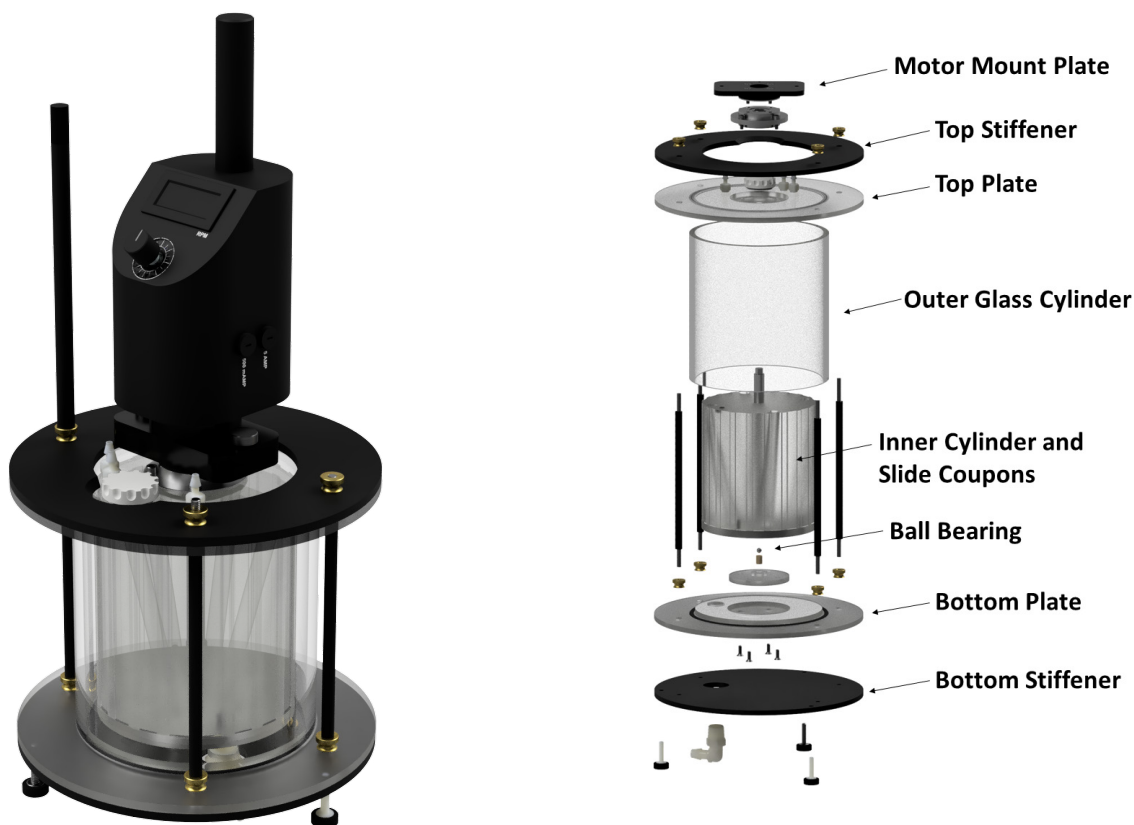
# BioSurface Technologies Corporation

## Model 1420 Biofilm Annular Reactor

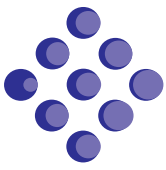
Evaluation of surface-associated biological reactions require surface specific evaluations. By matching surface shear and transport conditions within the Biofilm Annular Reactor to your process conditions, relevant evaluations of your water treatment processes are possible.

The BST Model 1420 Biofilm Annular Reactor consists of a stationary outer cylinder and a rotating inner cylinder. Process fluid is circulated in the annulus between the two cylinders. This model operates with a variable speed motor. The rotational speed of the inner cylinder is set to provide liquid-surface shear similar to the pipe flow shear of the process water system you are evaluating.

The Biofilm Annular Reactor (Model 1420 LS) is manufactured using an inner, slotted polycarbonate cylinder and a glass outer cylinder. Twenty (20) slides are flush-mounted on the rotating inner cylinder. The slides are available in a variety of metals and plastics, and can also be custom fabricated from most common manufacturing materials upon request. The reactor unit is fully autoclavable to 121°C. A jacketed version of the laboratory unit described above is also available (Model 1420 LJ) for evaluations which require temperature control. The Model 1420 Biofilm Annular Reactors are CE certified and accept 100 to 240 VAC power input.



**Model 1420 LS Biofilm Annular Reactor**



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## Model 1420 Biofilm Annular Reactor

### Model 1420 LS Standard Laboratory Annular Reactor \$7,260.00

Includes standard reactor vessel (polycarbonate, stainless steel, glass, viton and butyl seals, nylon/Kevlar bushings, anodized aluminum compression plates, nylon fittings; working volume 1.0L), variable speed motor and controller (max. speed 500 rpm; operational range 30-500, CE Certified), 20 polycarbonate slides, effluent tubing, bacterial air vent, flow break, slide removal tool, six (6) month limited warranty. Operator's Manual available for digital download.

### Model 1420 LJ Jacketed Annular Reactor \$8,030.00

Includes jacketed reactor vessel (polycarbonate, stainless steel, glass, viton and butyl seals, nylon/Kevlar bushings, anodized aluminum compression plates, nylon fittings; working volume 1.0L), variable speed motor and controller (max. speed 500 rpm; operational range 30-500, CE Certified), 20 polycarbonate slides, effluent tubing, bacterial air vent, flow break, slide removal tool, six (6) month limited warranty. Operator's Manual available for digital download.

### BAR 1420MC-1 Biofilm Annular Reactor Motor / Controller Box \$3,520.00

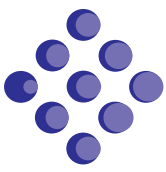
Includes variable speed motor and controller (max. speed 500 rpm; operational range 30-500, CE Certified), six (6) month limited warranty. Operator's Manual available for digital download.

## Biofilm Annular Reactor Components

| <u>Description</u>                     | <u>Part Number</u> | <u>Unit</u> | <u>Price</u> |
|--|--------------------|-------------|--------------|
| Ball Tower (replacement:polycarbonate) | BST 1107B          | each        | \$55.00      |
| Kevlar Nylon Bushing                   | BST 1111           | set of 2    | \$17.00      |
| Glass Cylinder                         | BST 511-2          | each        | \$612.00     |
| Glass Water Jacket                     | BST 521            | each        | \$884.00     |
| O-rings                                | BST 2-362N70       | set 2       | \$12.00      |
| O-rings                                | BST 2-369N70       | set 2       | \$18.00      |
| Hole Plug with O-ring                  | BST 115            | each        | \$42.00      |
| Seals                                  | BST 4935/2         | set 2       | \$88.00      |
| Bearing                                | BST R8ZZST         | each        | \$90.00      |
| Brass Finger Nuts                      | BST 92741          | set 2       | \$4.50       |
| Ball Bearing 1/4" 440 SS               | BST 9529           | set 2       | \$3.00       |
| Slide Removal Hook                     | BST 3842           | each        | \$13.00      |
| Bacterial Vents                        | BST 02915          | each        | \$22.00      |
| Zinc Hub-3/8" shaft                    | BST 6428K41        | each        | \$12.00      |
| Neoprene Sleeve                        | BST 6428K51        | each        | \$12.00      |
| Fuse Armature: 0.5 amp                 | BST 6978a          | set 2       | \$8.00       |
| Fuse Line: 5 amp                       | BST 6978b          | set 2       | \$8.00       |

ALL PRICING BASED ON PAYMENT TERMS OF NET 30 DAYS.

Pricing shown is for domestic US Market. Please contact BioSurface Technologies Corporation, or one of our international distributors for international pricing. International customers will incur additional charges associated with shipping, insurance, import duties, taxes, and fees that are not covered by BioSurface Technologies Corporation. Prices are subject to change without notice.



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## Biofilm Annular Reactor Slide Coupons

(fits 920, 1120, 1320, and 1420 Biofilm Annular Reactors)

| <b>Part number</b> | <b>Description</b>                                | <b>Price (ea)</b> |
|--------------------|---|-------------------|
| BST 503-303        | Stainless Steel Slides (A303)                     | \$17.00           |
| BST 503-304        | Stainless Steel Slides (A304)                     | \$17.00           |
| BST 503-316        | Stainless Steel Slides (A316)                     | \$18.00           |
| BST 503-ABS        | ABS Plastic Slide                                 | \$9.00            |
| BST 503-AI6X       | Stainless Steel (superaustenitic stainless steel) | \$26.00           |
| BST 503-Brz        | Bronze Slide                                      | \$29.00           |
| BST 503-CC         | Concrete Coated Slides                            | \$20.00           |
| BST 503-CI         | Cast Iron Slides                                  | \$40.00*          |
| BST 503-CS         | Mild (carbon) Steel Slides (A366)                 | \$17.00           |
| BST 503-Cu         | Copper Slides                                     | \$21.00           |
| BST 503-CuNi       | 90-10 Copper Nickel Slides                        | \$26.00           |
| BST 503-GL         | Borosilicate Glass Slide                          | \$35.00           |
| BST 503-NY         | Nylon Slide                                       | \$9.00            |
| BST 503-PC         | Polycarbonate Slides                              | \$9.00            |
| BST 503-HDPE       | High Density Polyethylene Slide Coupon            |                   |
| BST 503-PE         | HDPE Plastic Slide                                | \$9.00            |
| BST 503-PP         | Polypropylene Slide                               | \$9.00            |
| BST 503-PVC        | PVC Slides  | \$9.00            |

\*Note: Requires modification of the inner cylinder (rotating cylinder) to permit a thicker slide. A thicker slide material is required to prevent breakage as the cast iron material is quite brittle. In order to implement the cast iron slides, an additional cost is required for the machining of the reactor inner cylinder above and beyond the standard price (additional cost of \$702 per unit). Once this modification has been accomplished, the standard slides (all other materials) can still be used in the reactor.

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