

DISCFLO



*Introducing the all new*

# *DISCMIXER*

*Another Innovative Solution from  
Discflo.*

## THE FUTURE OF MIXER TECHNOLOGY

### **MIXES**

*highly abrasive, high solids,  
large or stringy solids and  
viscous slurries and sludge.*

### **DELIVERS**

*pulsation-free flow and non-  
contact mixing that protects  
suspended solids.*

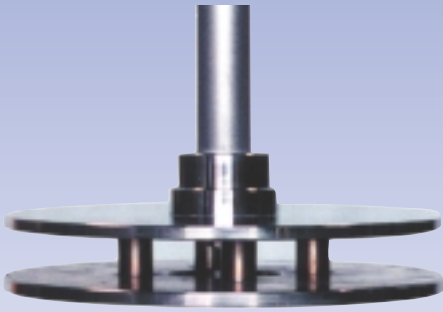
### **REDUCES**

*maintenance  
and downtime  
in most applications.*

*Like No Other Mixer  
on the Market Today!*



# OPERATING BENEFITS



**NON-CONTACT MIXING GREATLY REDUCES WEAR ON PARTS AND VIRTUALLY ELIMINATES DAMAGE TO DELICATE SOLIDS AND SHEAR SENSITIVE MATERIALS.**

- ***No Degradation of Delicate Solids***

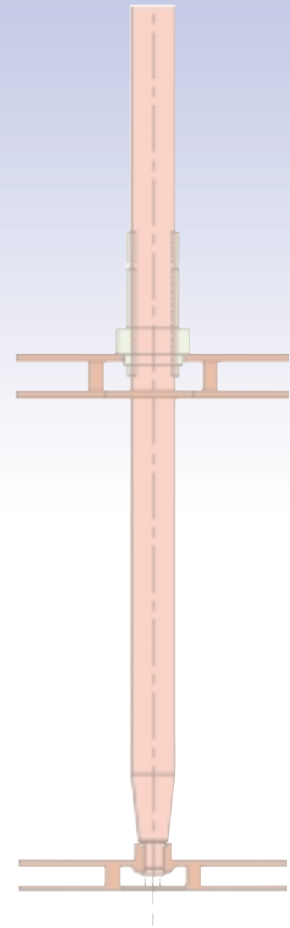
The Discmixer has no blades, no paddles, no veins, and non-impingement, pulsation-free flow so there is no degradation of delicate products or damage to shear sensitive fluids.

- ***Handles Large and Stringy Solids***

A unique open-ended design allows the Discmixer to handle large and stringy solids, as well as fluctuations in solids size and volume, without clogging.

- ***No Radial Loads***

There are no radial loads on the shaft during operation, ensuring longer seal, bearing and shaft life.



- ***Long Life Mixer Components***

The Discmixer will need very few spare parts over its lifetime. A heavy duty shaft which has close-to-zero axial loading (except for the weight of the rotor) and no radial loads dramatically extends the life of bearings and seals.

- ***Low Maintenance/Spare Parts Requirements***

Discmixer suffers little-to-no wear even in even severely abrasive service due to its non-impingement operation and pulsation-free flow. Less than 5% of Discflo's business comes from spare parts purchased for repair.

- ***High Uptime and Reliability - Breakdown is almost unknown!***

Discmixer is the most reliable mixer on the market today. Because there is minimal contact between the mixer and the material being pumped, wear on components is greatly reduced and breakdown is almost unknown. No close tolerances, pulsation-free flow and a non-contact mixing action all contribute to high uptime by preventing solids from clogging.

- ***Higher Yields and Improved Quality***

When mixing, blending, or suspending delicate and shear sensitive (e.g. dilatant or thixotropic) products, Discmixers can increase productivity and reduce product losses due to the non-contact mixing mechanism.

## VERSATILITY

***Discflo designs the Discmixer to meet your specific requirements.***

- Can be engineered to capacity requirements.
- Full-scale, pilot plant and laboratory models are available.
- Size, number, and arrangement of mixing elements are designed for your specific application.
- Suitable for both batch and continuous mixing.
- Motor sizes from fraction HP to 500 HP
- Variable and single-speed drives are available.
- Mixer elements are available in all alloys and various non-metallic materials
- Shaft is available in a range of non-corrosive stainless steel metallurgies.

**The Discflo Discmixer allows you to achieve an unheard-of level of productivity, versatility and low Life Cycle Costs.**

**THE BIGGEST INNOVATION IN MIXING TECHNOLOGY IN OVER 80 YEARS.**

# THE DISCMIXER PRINCIPLE

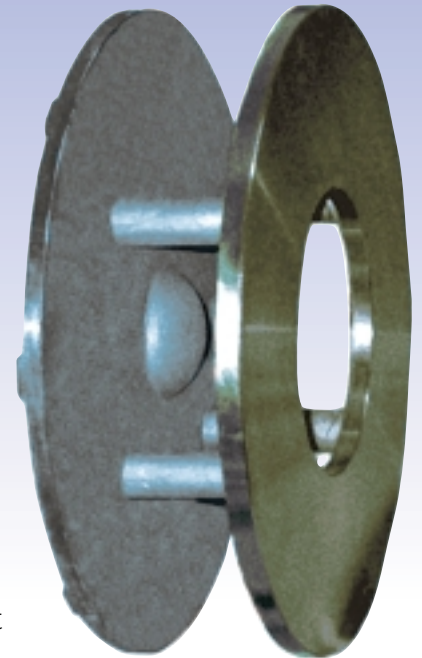
*THE DISCMIXER MIXER is based on Discflo's innovative 'disc' technology. It is ideal for mixing shear sensitive fluids, as well as abrasive slurries and fluids with a high solids content.*

- When a fluid enters the Discmixer, its molecules adhere to the surfaces of the Discpac, a series of parallel discs which are the heart of the mixer. This creates a boundary layer. As the discs rotate, energy is transferred to successive layers of molecules in the fluid between the discs through viscous drag, generating velocity and pressure. This creates a powerful dynamic force field that "pulls" the product through in a smooth, pulsation-free flow.



Discpac (mixing head) in sizes from 8" to 20".

- The fluid being pumped moves parallel to the discs, and the boundary layer creates a molecular buffer between the disc surfaces and the fluid so there is no impingement of the fluid on the moving parts of the mixer. This distinguishes the Discmixer from all other mixers on the market.
- By minimizing contact between the mixer and the material being pumped, wear on the Discmixer components is greatly reduced, breakdown is almost unknown and, in the case of delicate and shear sensitive materials, damage to the product is virtually eliminated.
- The Discmixer's problem-solving ability in difficult applications is unparalleled.
- Discmixer is truly the future of mixer technology.



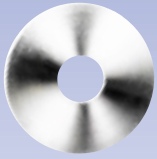
**SUITABLE FOR BATCH OR CONTINUOUS MIXING.**

**DISCMIXER USES A BOUNDARY-LAYER ADHESION AND VISCOUS DRAG THAT PRODUCES PULSATION-FREE FLOW**

**NO RADIAL LOADS ALLOWS LONGER SHAFT LENGTH AND VIRTUALLY NO MAINTENANCE.**

**EXTREMELY EFFICIENT MIXING IN CORNERS. NO DEAD SPOTS!**

**GENTLER HANDLING FOR EVEN THE MOST SHEAR-SENSITIVE PRODUCTS!**



# DISCMIXER

## The Future of Pump Technology

... AVAILABLE NOW!!

*Find out what Discmixer from Discflo  
can do for you today!*

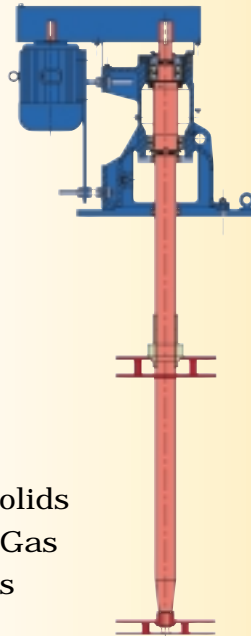
**Discmixer is Uniquely Designed to Handle the Most Demanding Jobs . . .**

- Pulp and Paper
- Paint
- Oil Refining and Drilling
- Metal and Mining
- Chemical and Petrochemical
- Food and Agriculture
- Pharmaceutical

### The Toughest Products . . .

- Highly Viscous Fluids
- Slurries with a High Solids Content
- Severely Abrasive Fluids
- Fluids Containing Large and/or Stringy Solids
- Fluids with High Volumes of Entrained Air/Gas
- Corrosive Fluids and Hazardous Materials
- Fluids with Varying Conditions

**Without Clogging, Product Breakdown,  
or Vapor-Lock.**



#### DISCFLO'S MISSION

*is to become the number one  
manufacturer of mixers for  
for difficult applications in industry  
worldwide.*

*We plan to achieve this through  
continuous innovation in  
design and technology, attention  
to quality in our manufacturing  
process and dedication to  
excellent customer service.*

*In reaching our goal, we can help  
you reach yours — to solve your  
operating and maintenance problems  
and produce a superior end-product.*

Distributed By:

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Discmixer is available both from Discflo Corporation direct and through your local Discflo pump distributor. For information about the use of this innovative pump technology and your nearest distributor, contact us direct, or visit as on the web at [www.discflo.com](http://www.discflo.com).

*The Unique Discpac technology, Disc Pumps and Discmixer are covered by United States and foreign patents. (Patent Nos. 4,940,385; 4,514,139; 4,773,819; 4,758,920 and*