



# BIOBULL<sup>®</sup>

THE ENERGY-SAVING FERMENTER  
AGITATOR FROM THE STIRRING PROFESSIONALS

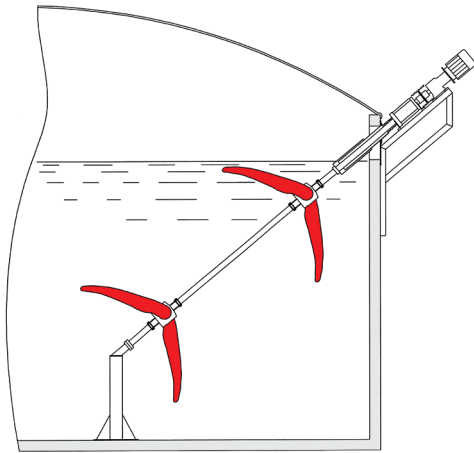
**APPLICATION RANGE:** THE BIOBULL<sup>®</sup> CAN BE INSTALLED IN FERMENTERS OF DIFFERENT SHAPE AND SIZE WITH VIRTUALLY CONSTANT LIQUID LEVELS: CONCRETE CONTAINERS WITH GAS-HOOD OR CONCRETE COVER, STEEL CONTAINERS, RING IN RING FERMENTERS AND OTHERS  
SUITABLE FOR SUBSTRATES WITH HIGHEST DRY SUBSTANCE CONCENTRATIONS

**CONSTANTLY HIGH STIRRING PERFORMANCE:** UNHINDERED SUBSTRATE INFLOW,  
NO SHADOWING EFFECT FROM INTERFERING FIXTURES.  
GREAT HYDRAULIC PERFORMANCE WITH HORIZONTAL AND VERTICAL FLOW COMPONENTS DUE TO DIAGONALLY INSTALLED STIRRING SHAFT.  
THE SPECIAL CONSTRUCTION OF THE IMPELLER, WITH ITS LARGE HUB DIAMETER AND EXTREMELY SMOOTH TRANSITION TO THE PROPELLER BLADE, VIRTUALLY ELIMINATES THE BUILD-UP OF LAYERS IN THIS CRITICAL AREA

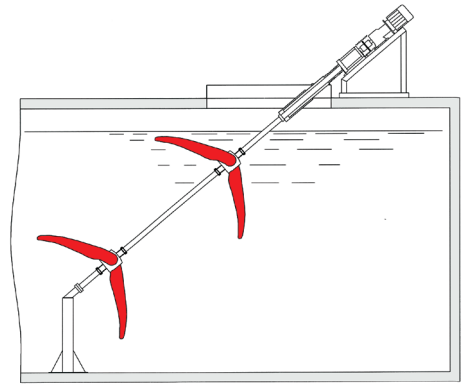
**LOWEST ENERGY CONSUMPTION:** HIGH CIRCULATION POWER.  
OUTSTANDING EFFICIENCY DUE TO THE LARGE DIAMETER OF THE PROPELLER AND ITS SLOW ROTATIONAL SPEED.  
BUOYANCY OF THE THREE-DIMENSIONALLY SHAPED PROPELLER BLADES REDUCES THE REQUIRED TORQUE.

**SERVICEABILITY:** IMPORTANT WEAR PARTS ARE OUTSIDE THE FERMENTER AND THUS FREELY ACCESSIBLE FOR MAINTENANCE AND SERVICE WORK, NO REGULAR OPENING OF THE TANK COVER.  
CONTACTLESS, WEAR-FREE SEALING BETWEEN STIRRING SHAFT AND SIDE WALL.  
SERVICE PLATFORM (OPTIONAL EXTRA)

**RELIABILITY/LIFE TIME:** FOR MORE THAN 15 YEARS, OUR BIOBULL<sup>®</sup> HAS BEEN ON THE MARKET AND THE FIRST MODELS ARE STILL IN USE. WE CAN REALLY PROVE ITS LONG LIFE!



streisal Biobull® for fermenters with gas-hood



streisal Biobull® for fermenters with concrete cover

#### TECHNICAL DATA:

Nominal Power [KW]	Nominal Voltage [V]	Frequency max. [Hz]	Nominal Current [A]	Nominal Speed [U/min]	Protection Class Motor	Circulation Power <sup>*)</sup> [m <sup>3</sup> /h] of 1 Propeller [Ø 2.650 mm]	Thrust [N]
11	400	50	approx. 23	ca. 38	IP 54	approx. 22.600	approx. 7.000

<sup>\*)</sup> Circulation power in water, determined for comparative purposes

#### SAFETY:

EXPLOSIVE ATMOSPHERES PROTECTION ACCORDING ATEX II 2 G (ZONE 1 AND 2)  
 FREQUENCY CONVERTER WITH PARAMETERIZED SECURITY SOFTWARE (TORQUE LIMITATION, DETECTION OF COUPLING BOLT BREAKAGE, ETC.)  
 SAFEGUARD (OPTIONAL EXTRA)  
 SHEAR BOLT COUPLING AS THE LAST PREDETERMINED BREAKING POINT

#### DIMENSIONS AND WEIGHTS:

DIAMETER OF PROPELLER: 2.650 mm OR 1.500 mm (OPTIONAL EXTRA)  
 REQUIRED WALL OPENING: SHAFT LINING 600 X 600 mm OR 500 mm DIAMETER  
 REQUIRED FLOOR OPENING FOR EXTRACTION OF STIRRING SHAFT: 2.200 X 650 mm  
 TOTAL WEIGHT: APPROX. 1.100 - 1.500 Kg DEPENDING ON REALISATION  
 HEIGHT OF BOTTOM BEARING SUPPORT AND LENGTH OF STIRRING SHAFT ACCORDING TO DIMENSIONS OF THE FERMENTER

#### MATERIALS:

PARTS IN THE MIXED ZONE GAS/MANURE: STAINLESS STEEL 1.4571 / AISI 316 TI (V4A)  
 PARTS OUTSIDE THE TANK: STEEL ZINC-PROTECTED OR PAINTED/COATED.  
 BOTTOM BEARING: SILICON CARBIDE SLIDE RING FITTING  
 PROPELLER (Ø 2.650 mm) HIGH STRENGTH POLYMER WITH STEEL CORE  
 PROPELLER (Ø 1.500 mm) STAINLESS STEEL 1.4301 / AISI 304 (V2A)

#### ACOUSTIC EMISSION:

56<sup>+/-5</sup> dB(A) OR 48<sup>+/-5</sup> dB(A) WITH SILENCED GEAR BOX (OPTIONAL EXTRA)  
 IN 10 M DISTANCE DEPENDING ON LOCALITY

(TECHNICAL CHANGES, ERRORS AND OMISSIONS EXCEPTED)

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