Advantages at a glance:

INNOVATIVE PUMPING CONCEPTION
- Excellent gas saturation
- Gas contents up to 30% are being automatically primed and handled in a reliable way
- Dynamic mixing
- Ideal dispersions with bubble sizes between 30 and 50μm
- Perfect micro bubbles (“white water”)

EASY INSTALLATION
- Compact block construction
- Low space requirements

RETOFITTING EXISTING SYSTEMS

TECHNICAL SUPERIORITY
- Especially designed impellers
- Direct gas entry into the suction line
- Energy efficient motors
- Low noise operation

LAYOUT
- Optimum pump selection by our specialized engineers

APPLICATIONS AND TARGET GROUPS:
- Water and wastewater treatment, flotation plants – see acc. to VDMA specification 24430
- Bioreactors: ventilation
- Fuel production: CO2 leaching
- Petro industry: crude oil separation
- Coolant lubricant circuits: oil water separation
- Cleaning agents treatment: boiling of oil residues and solids

Your application is not mentioned? Please get in contact with us!
Handling of liquids with gas contents up to 30%:
Multiphase Pumps revolutionize your processes!

MORE THAN PUMPS ONLY

EDUR-multiphase pumps are specially designed for integrated liquid-gas mixture supply and the generation of dispersions. The pump hydraulics differ considerably in design and operating mode compared to conventional centrifugal pumps and so allows the suction side throttle operation without the cavitation effect that would occur at standard centrifugal pumps. Gas contents up to 30% are being automatically primed and handled in a reliable way. At the same time a dynamic mixing effect and an excellent gas saturation does occur. Hereby fine micro bubbles are generated with a size between 30 and 50μm during the pressure release down to atmospheric pressure.

ENDLESS POTENTIAL SAVINGS

By using the EDUR multiphase pumps you will no longer require expensive compressor systems, pressure vessels, control systems, valves and the corresponding maintenance efforts. Gaseous media can be directly fed to the pump in the partial flow process. This is possible due to the special open and free of axial thrust impeller design. EDUR-multiphase pumps are convincing due to low wear even in case of slight impurities and stable operating conditions throughout the entire pump characteristic curves. The excellent efficiency of EDUR-multiphase pumps and the reduced investment costs do amortize the replacement of conventional inefficient multiphase plants in a short period of time.

YOUR PROCESS – OUR KNOW-HOW

Each application does have its own dynamics. Specialized EDUR engineers analyze your process flow and select the suitable pump type. Please contact us – we look forward to your answer.

FLOTATION SYSTEM WITH EDUR-MULTIPHASE PUMP

GAS SUPPLY

INFLOW RECYCLE FLOW

Cleaned water from the system

PRESSURE RELEASE VALVE

MICRO BUBBLES AFTER PRESSURE RELEASE

SOLUTION LINE

EDUR-Multiphase Pump
Gas Supply
Solution Line
Inflow Waste Water
Pressure Release Valve
Micro Bubbles after Pressure Release

EDUR-Multiphase Pump
Gas Supply
Solution Line
Inflow Waste Water
Pressure Release Valve
Micro Bubbles after Pressure Release

Flotate
Solids
Effluent
Partial Flow (Recycle Flow)
Tripper for Removing of Flotate

Properties:
Single-stage peripheral pump in block design, horizontal
Material:
stainless steel

Properties:
Multi-stage centrifugal pump in block design, horizontal
Grey cast iron, nodular cast iron, all-bronze, stainless steel, super duplexes

Technical data
Flow rate
up to 12 m³/h | 53 US gpm
Working pressure
up to 16 bar | 232 psi
Gas contents
up to 15%
Temperature
-20 to +140 °C | -4 to +284 °F

Technical data
Flow rate
up to 60 m³/h | 264 US gpm
Working pressure
up to 40 bar | 580 psi
Gas contents
up to 30%
Temperature
-20 to +140 °C | -4 to +284 °F

Simple, efficient and sustainable:
EDUR-multiphase technology enhances unused potentials