

# Alfa Laval AS-H Belt Press G2

# Sludge dewatering machine

## Introduction

The Alfa Laval AS-H Belt Press G2 is designed for use in municipal, industrial or specialized applications where removal of a liquid (usually water) from a solid-liquid suspension/sludge is required

The Belt Press G2 is designed for low polymer consumption, high throughput rates and high cake solids content and is available in tough, corrosion resistant coatings in three standard sizes.

#### Application

The Alfa Laval AS-H Belt Press G2 is a sludge dewatering machine suitable for all municipal wastewater sludge types and a wide variety of industrial solid/liquid separation applications, such as paper, petrochemical, mineral, food processing, pharmaceutical and chemical. The G2 belt press incorporates variable energy mixing, flocculation, gravity drainage and pressure filtration within a single mechanical framework.

### **Benefits**

- Thorough uniform mixing of polymer into sludge
- Higher volumetric throughput and solids loading
- Lower polymer consumption Less power consumption as there is no requirement for an additional flocculation tank/mixer
- Enclosed design available ensures any odours, aerosols and spillages are contained
- Higher cake dry solids
- Better filtrate quality
- Better process performance
- Easy to operate and maintain
- Low air pressure and airflow requirements ensure system is inherently safe

#### Features

- Variable speed drive
- Optimized frame design in galvanized carbon steel
- Radial grid and perforated roller to accelerate dewatering
- Full pressure dewatering zone
- Highly durable chicanes easy to operate and maintain
- High performance dewatering belts
- Pre-installed pneumatic system for automatic belt tensioning and steering



# Features description

# Bearings

- Extended lubrication cycle (monthly)
- Positioned for easy installation

## Wedge zone

• Wedge dewatering zone initiates the application of pressure to the dewatering process.

# Belt alignment

- Belt alignment
- Belt alignment system ensures continuous, smooth guidance control without the need for operator intervention.

# Belt tensioning

- Operator specified belt tensioning is automatically maintained, recognizing subtle condition variations such as belt stretching or process changes
- Easy to operate and maintain
- Low air pressure and airflow requirements ensure system is inherently safe

#### **Dewatering zones**

- Better process performance
- No additional flocculator tank and mixer required
- Full-Pressure Dewatering Zone pressure is gently increased as the sludge passes through 8 pressure rollers

#### **Roller design**

• The strength of the rollers is optimized through the use of specialized forged-end construction. The drive roller is coated with Buna N and the pressure rollers are epoxy coated for corrosion resistance.

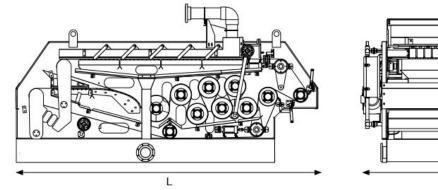
### Chicanes

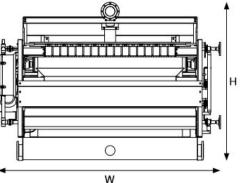
#### Dimensions

 Chicanes in polyethylene material ensure long-life operation. They are easy to operate and maintain, and an entire row of chicanes lift simultaneously for easy cleaning.

#### Working principle

Its operating principle is to condition the feed sludge with a poly-electrolyte and drain the flocculated sludge over an endless, horizontal porous filter belt. The thickened sludge is then sandwiched by a second filter belt before further dewatering by a series of decreasing diameter rollers. Final moisture removal is achieved by shear rollers arranged to give minimum 180 degree belt wrap in order to optimize dewatering.





Model	Length		Width		Height	
	(mm)	(inches)	(mm)	(inches)	mm	inches
Belt Press 100	4,588	180	2,400	94	2,404	95
Belt Press 150	4,588	180	2,900	114	2,404	95
Belt Press 200	4,588	180	3,400	134	2,404	95

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