1.5 Technical Data

1.5.1 Performance and working conditions

Max width of glass	2300	mm	**90**	**in**
Min width of glass on the reference line	175	mm	**6.8**	**in**
Min length of glass on the reference line	350	mm	**13.7**	**in**
Glass thickness	1.5-19	mm	**.059-748in**	
Conveyor speed	3 - 13	m/min	**10-42**	**ft/min**
Noise rating at 1m (40in) from machine	80^{+2} dB (A)			
Reference line	Center			
Max working speed	Process Dependant			

1.5.2 Drying Performance (speeds are estimates only)

3mm Raw cut edge	12.5	m/min	**41 ft/min**
3mm Ground pencil edge	11.0	m/min	**36 ft/min**
3mm Ground flat edge	12.0	m/min	**39 ft/min**
4mm Raw cut edge	12.0	m/min	**39 ft/min**
4mm Ground pencil edge	10.0	m/min	**33 ft/min**
4mm Ground flat edge	11.0	m/min	**36 ft/min**
5mm Raw cut edge	11.0	m/min	**36 ft/min**
5mm Ground pencil edge	9.5	m/min	**31 ft/min**
5mm Ground flat edge	10.5	m/min	**34 ft/min**

1.5.3 Dimensions (without in feed or exit conveyors)

Roller diameter	75	mm	**3**	**in**
Bristle diameter	.3	mm	**.0118in**	
Diameter of brushes	150	mm	**6**	**in**
Length of pre spray section	370	mm	**14.5**	**in**
Length of washing section	1470	mm	**57.8**	**in**
Length of final spray section	740	mm	**29**	**in**
Length of air knife section	1180	mm	**46.5**	**in**
Conveyor height (+/- 25mm (1 in.)	915	mm	**36**	**in**
Max height without blower platform	1480	mm	**58.3**	**in**
Total length	**approx. 3760**	**mm**	**138in**	

1.5.4 Energy requrements

Conveyor drive	1.5 kW
Cylindrical brush drive	2 x 1.5 kW
Pumps for pre spray section	1 x 0.8 kW
Pumps of cylindrical brushes	3 x 0.8 kW
Pump for final spray section	1 x 0.8 kW
Return pump	1 x 0.8 kW
Heating of Tanks	8 x 12 kW
Height adjustment	0.75 kW

Blower drive	37 kW

1.5.5 Energy connections

Compressed air	6.0 bar
Line voltage	400 V; 50 Hz
Control voltage	24 V DC

1.6 Machine description

1.6.1 Washing Machine Utilization

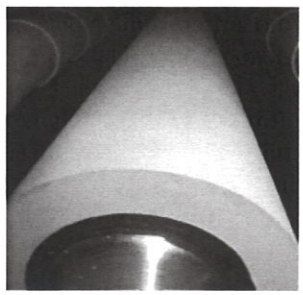
The washing machine is designed for the most effective washing and drying of glass sheets with an emphasis on quality, efficient energy usage and minimal maintenance. The machine is equipped with a SIEMENS S7 PLC which regulates the internal processes in the washer. The quality of washing and drying depends on the product as well as the quality of water in the system.

1.6.2 Machine frame

The frame is divided into two sections: a lower stationary section, and a height adjustable upper section. The longitudinal machine beams consist of anodized aluminum profiles that are rust resistant.

The steel frame is welded, sand blasted, hot galvanized, clear coated, and attached to the aluminum profiles.

1.6.3 Conveyor rollers



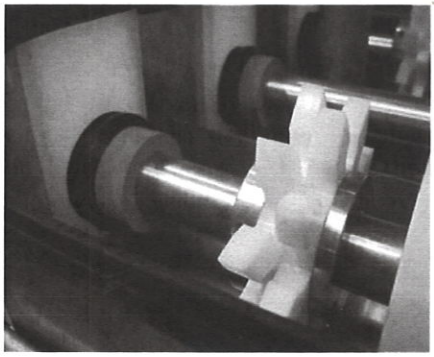
The conveyor rollers are protected against corrosion via the design and utilization of the proper materials. The rollers consist of seamless tubes with stainless steel end shafts. They are covered with a special EPDM material. EPDM is used to extend the life of the rollers as the material is low wear and extremely abrasion proof. This benefits the end user as EPDM protects against abrasion marks on the glass that are often present when using lesser quality roller materials as well as maximizing the lifespan of the rollers themselves.

The conveyor rollers operate via sealed roller bearings with lifetime lubrication. The bearings are housed in a galvanized U shaped bracket.

By removing four bolts, the rollers can be lifted out of the washer with no dismantling of drive elements or rolling bearings. This ensures extremely low operating expenses and repairs. Due to the fact that drive elements are outside of the sealed working environment of the washer, further protection from water and heat is obtained.

The roller bearings are sealed from water via Perbunan V-rings. The upper and lower sections of the washer are sealed when in the working position to further aid in the containment of water reaching the drive system.

1.6.4 Pressure rollers



The design of the pressure rollers is similar to the conveyor rollers, with the following differences:

The pressure rollers are driven by a specially designed Delrin gear with two stainless steel retaining rings. These gears allow the lower conveyor roller to drive the upper roller producing precise synchronization. The result is

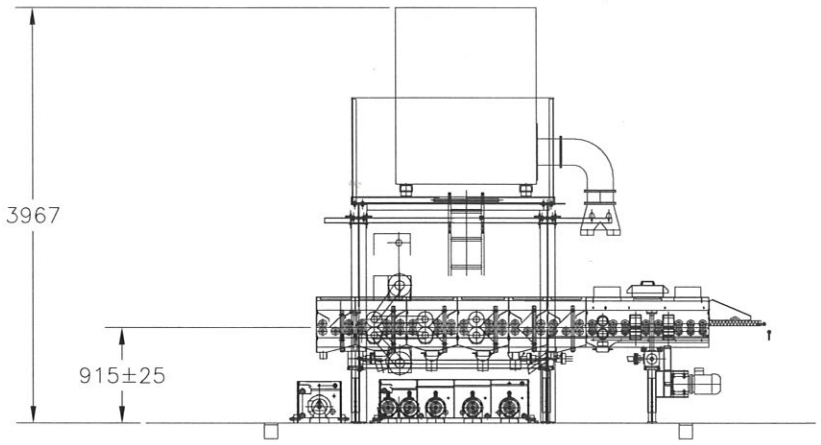


Figure 4-13. Pre-Deposition Washer - Dimensions

4.3.2 Electrical

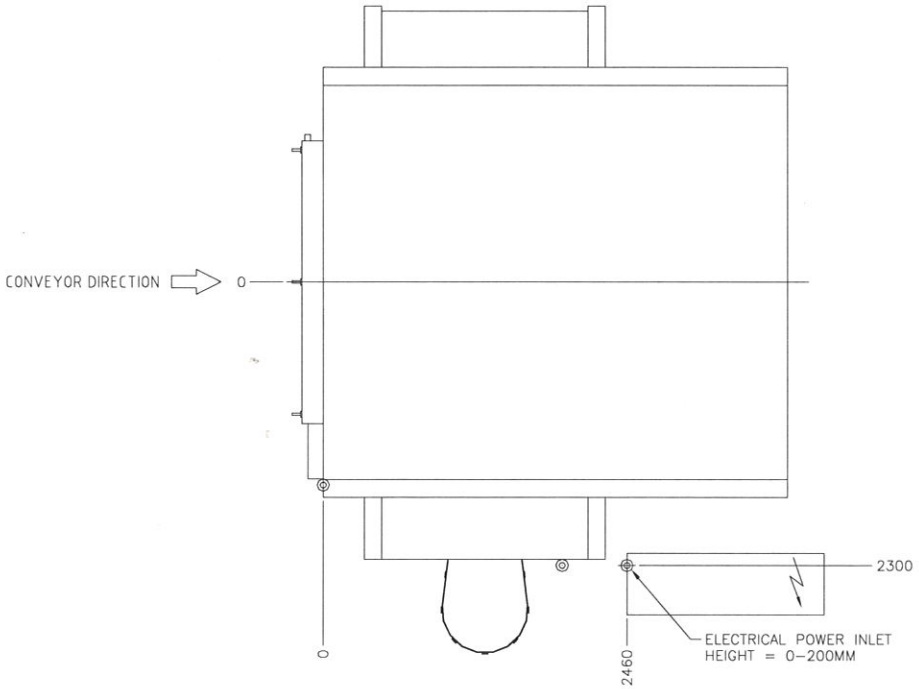


Figure 4-14. Pre-Deposition Washer - Electrical Connections (Top View)