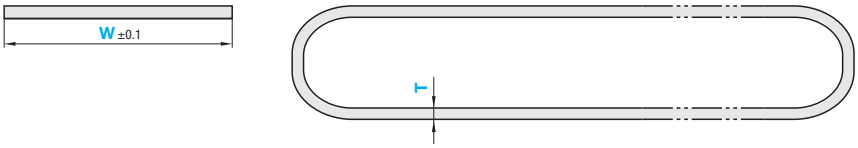
Stainless Steel Belt

Features: Stainless steel belt with superior flatness, heat resistance, and electrical conductivity.

Stainless Steel Belt

RoHS 10

Type	Material	Thickness mm	Specific Gravity	Allowable Tension kg/cm	Min. Pulley Dia. Ømm	Continuous Use Temperature °C	Electrical Resistance of Surface Ω	Friction Coefficient (Ref. Against Polished Steel)	Surface Hardness HV	Young's Modulus kgf/mm²	Heat Expansion Coefficient x10⁻⁶/°C
STHBLT	SUS304H	0.1	0.8	4	50	-80~110	0.2	0.2	370 or over	19700	17.3
		0.15	1.2	6	75	-80~120	0.3				
		0.2	1.6	8	100	-80~130	0.5				



Belt thickness tolerance is ±10% of the thickness.

Part Number Type	Belt Thickness T (mm)	Belt Width W (mm) 1mm Increment	Belt Length L (m) 0.01mm Increment	Body Price/m	Belt Jointing Charge (Body Price +)
STHBLT	0.1 0.15 0.2	10~20	0.50~10.00		
		21~30	0.80~10.00		
		31~40			
		41~50			
		51~60			
		61~70			
		71~80			
		81~90			
		91~100			
		101~120			
		121~140			
		141~150			

For belt selections, see P2252 Technical Data.
For a conveyer example with this belt, see P.1263

Ordering Example

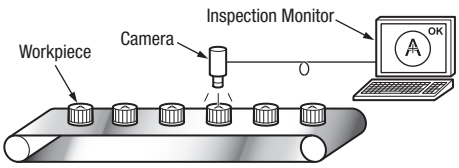
Part Number	-	Belt Width (mm)	-	Belt Length L (m)
Type (Belt Thickness)				
STHBLT 0.15	-	25	-	2.24

Cautionary Points on Usages

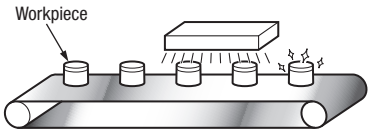
- Belts with 0.1 and 0.15 thickness are not suitable for accumulating transfer applications.
- Avoid causing impacts in through-thickness direction as it is very thin.
- The belt life will be reduced if dented.
- When loading items on the belt, use sliding chutes to avoid shock loads.
- Do not continue to use with foreign matter trapped between the belt and belt supports, workpiece guides, etc.
- The product surfaces coming in contact with the belt should be softer than the belt.
- Use dedicated pulleys and idlers.
- Belts cannot be tensioned from the back side.

Example

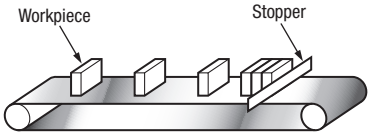
Image Inspection



Sterilization by UV and Alcohol

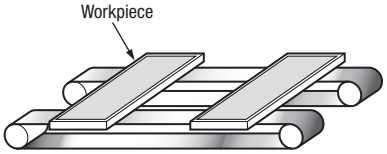


Accumulation Transfer



Belts with 0.1 and 0.15 thickness are not suitable for accumulating transfer applications.

Transfer of LED and Solar panels



Chemical Resistance

Chemical Name	Stainless Steel Belt STHBLT
Isopropyl Alcohol	○
Ethanol	○
Potassium Chloride	○
Calcium Chloride	○
Hydrochloric Acid (Gas)	×
Hydrochloric Acid (5% or less)	×
Hydrochloric Acid (5 ~ 36%)	×
Caustic Soda	○
Caustic Soda Solution (50%)	○
Volatile Oil	○
Strong Alkali	○
Strong Acid	×
Light Oil	○
Ethyl Acetate	△
Sodium Hypochlorite (Undiluted Solution)	×
Sodium Hypochlorite (600ppm)	×
Weak Alkali	○
Weak Acid	○
Soap	○
Machining Oil	○
Diesel Oil	○
Toluene	○
Naphthalene	○
Paraffin Oil	○
Phenol	○
Antirust Oil	○
Machine Oil	○
Methanol	○
Sulfuric Acid (10%)	×
Sulfuric Acid (50%)	×
Sulfuric Acid (70%)	×
Sulfuric Acid (98%)	×

Resistance Against Foods

Food	Stainless Steel Belt STHBLT
Yeast	○
Tea Leaf	○
Olive Oil	○
Fruit	○
Cashew Nuts	○
Cream	○
Spice	○
Grain	○
Coffee Beans	○
Flour	○
Rice Grain	○
Fish	○
Sugar	○
Salt	○
Salt Water	○
Fat	○
Cooking Oil	○
Syrup	○
Soy Sauce	○
Vinegar	○
Sauce	○
Molasses	○
Meat	○
Butter	○
Bread	○
Peanut Oil	○
Beer	○
Margarine	○
Mayonnaise	○
Water	○
Lard	○

○Not affected at all △: Slightly affected ×: Severely affected
The above table shows adequacy in the condition where materials including chemicals and oil are loaded on belt surface and carried at a room temperature. Actual conditions may differ in cases where belts are completely submerged in materials or used in higher temperature than room temperature.
Care must be taken for rusts resulting by chlorides and acids.