

# **NGS Series Beltroll Sizer**



Fast and accurate sizing of citrus fruit for high volume applications

FRUIT AND VEGETABLE PROCESSING

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## Overview

The JBT NGS Series Beltroll Sizer is one of the fastest, most accurate citrus sizing systems available. The sizer is constructed of stainless steel and built for extreme durability, sizing accuracy, speed and versatility. The sizer module's movable frame with its sizing rollers can be raised or lowered easily with an electric, motor driven adjustment mechanism.

## Features

- Rugged, stainless steel construction of channel frame
- Stainless steel size adjustment screws and intake chute
- · Anti-friction ball bearings on all sizing rollers
- Wing diverter to prevent fruit "piggy backing"
- · Electric size adjustment which can be controlled remotely
- Idle drums constructed of wear resistant UHMW
- Drive drums constructed of stainless steel with "V" groove
- Vulcanized "V" guided 3-1/2" belt
- Replaceable UHMW wear tracks for belts
- 16 gauge stainless steel sizing rollers
- Worm gear adjusting mechanism for positive adjustment of sizing modules
- 8" fruit clearance throughout the sizer
- 5/8" stainless steel sizing roller support plate
- 96" main sizing module
- 42" sizing module can be easily attached for three-size separation

## Benefits

- Better sizing accuracy
- Increased capacity
- Easier, truer adjustability
- Increased mechanical reliability
- Improved belt tracking

AVAILABLE CONFIGURATIONS		
MODEL	RUNS	DROP
NGS6L1D	6	1
NGS6L2D	6	2
NGS8L1D	8	1
NGS8L2D	8	2
NGS10L1D	10	1
NGS10D2L	10	2

# Unique action adds to accuracy

The sizer continuously rotates the fruit as it travels through the sizer in order to assure optimum sizing accuracy. Two wing diverters attached to each pair of belts prevent fruit from stacking or "piggy backing", thus increasing efficiency and accuracy.

Stainless steel feed chutes direct fruit into the 96" sizing lanes with 2-3/8" diameter rollers which can be vertically adjusted to desired fruit size. Feed ends of roller are designed for smooth, gentle flow to avoid injuring fruit as it enters the sizing lanes. The first part of the roller length settles fruit and gives proper rotation and alignment. The entire roller performs the first sizing operation. A moving 3-1/2" belt for each lane inclined approximately 30 degrees, transports the fruit through the module and, in rapid succession, to the additional module. The additional sizing module, if needed, is only 42" long, since the fruit is already aligned for sizing.

# Quick, easy size adjustment

Size adjustment is accomplished with an electric motor-driven adjustment mechanism controlled either at the sizer or in the control room. Each module is supported by four stainless steel



corrosion-resistant adjustment screws. This enables the module's movable frame, with its sizing rollers, to be raised or lowered easily. A calibrated scale readily permits direct reading of the size for which the module is set. The accuracy of this control, combined with precision fabrication of the modules, gives a sizing reliability unmatched by any other sizer.

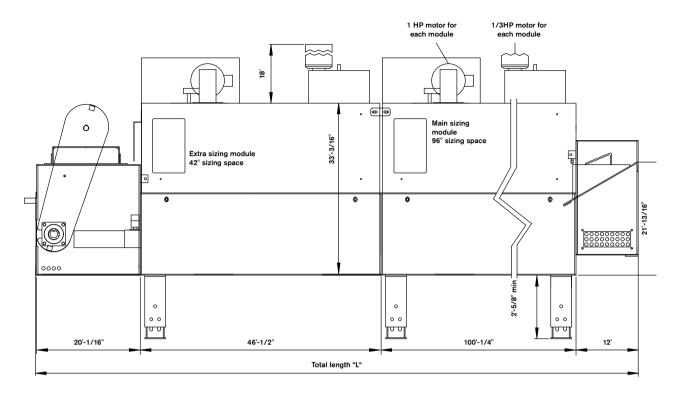
Oversize fruit not ejected through a sizing module goes to the end of the sizing roller and then drops through the drive module.

The size to be dropped by each module is easily controlled by

an electric motor. The mother operates a shaft connecting two front raising screws which are connected to the rear shaft by a vertical mounted stainless steel chain. The shafts are connected to raising screws by a worm gear mechanism to provide positive drive. The roller drive motor (which moves up and own with the adjusting module) drives the individual stub shafts with one #50 chain. The chain is continuously taken up by a rotary chain tensioner. Power is transmitted to the lower stub shaft by heavy duty #50 roller chain. A gear on the lower sub shaft transmits power to the rollers through a matching gear that is carefully positioned in the sizing roller.

	6 RUNS OR LANES	8 RUNS OR LANES	10 RUNS OR LANES
Overall width	72'-1/4"	88'-1/4"	104'-1/4"
Structural width	62'-1/4"	78'-1/4"	94'-1/4"
Input width	58'-1/4"	74'-1/4v	90v-1/4"
ONE DROP OUT - TWO SIZE SEPARATIONS			
Total length "L"	132'-3/8"	132'-3/8"	132'-3/8"
Weight		3,370 Lbs	
Belt motor	(1) 2 HP	(1) 2 HP	(1) 3 HP
Roller motor	(1) 1 HP	(1) 1 HP	(1) 1 HP
Sizer adjust motor	(1) 1/3 HP	(1) 1/3 HP	(1) 1/3 HP
TWO DROP OUT - THREE SIZE SEPARATIONS			
Total length "L"	178'-7/8"	178'-7/8"	178'-7/8"
Weight			
Belt motor	(1) 2 HP	(1) 3 HP	(1) 3 HP
Roller motor	(2) 1 HP	(2) 1 HP	(2) 1 HP
Sizer adjust motor	(2) 1/3 HP	(2) 1/3 HP	(2) 1/3 HP
SPEEDS			
Roller	90 RPM	90 RPM	90 RPM
Belt	250 FPM	250 FPM	250 FPM

# NGS Series Beltroll Sizer - Approximate Specifications



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