

# EXTRUDER INTERFACE TECHNOLOGY

## 1. Overview

Extremely accurate, high speed cuts (15 cuts per minute, with 21-degree cuts and a width of 200 mm) are made possible by applying a highly reliable AC servomotor and highly accurate ball screw to the shear cutter developed through Nakata Engineering's cutting-edge technology and many years of experience. A newly designed mechanism also realized low noise. Through the use of an AC servomotor and high-accuracy ball screw in the joint apparatus as well, and the inclusion of a double zipper unit, this cutter is capable of high-speed, wide (up to 400mm) steel breaker cuts and joints. In addition to steel breakers, Nakata is also designing and producing auto joint and steel ply cutters, and supplying numerous cutters to the tire industry.



Steel Breaker Cutter with Auto Splicer



## 2. Double zipper for wide joints

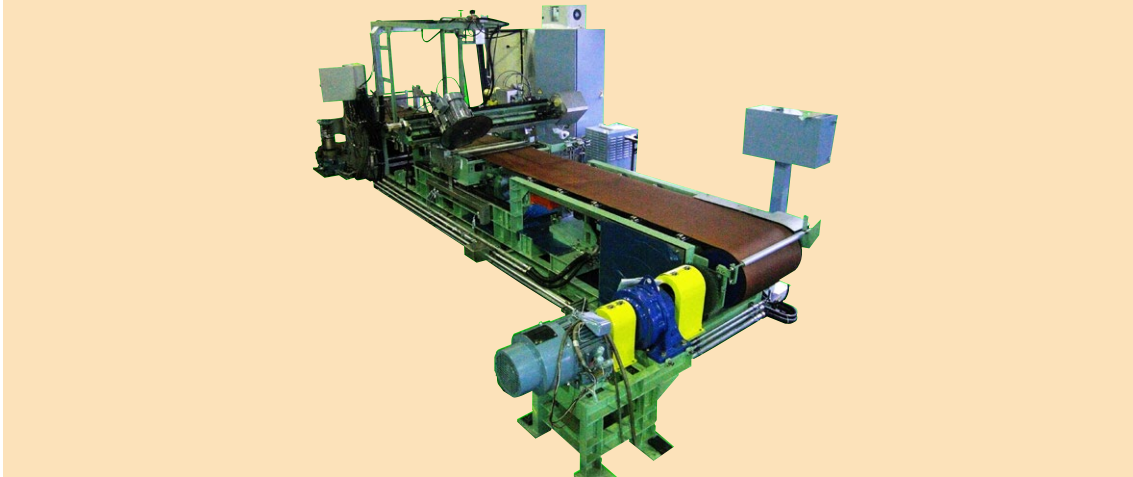


## 3. Specifications

Main specifications of new steel breaker cutter		Main specifications of conventional model
Cut cycle	Max. 15 cuts/minute (Width 200mm, 21 degrees)	Max 12 cuts/minute
Cut accuracy	±0.5mm	±0.5mm
Cut width	From 90 to 400 mm	From 90 to 320 mm
Cut angle adjustment range	From 21 to 30 degrees	From 21 to 30 degrees
Feeder movement	AC servomotor	AC servomotor
Cutter action	AC motor + clutch · brake	Hydraulic action shear cutter
<b>(Joint apparatus)</b>		
Joint cycle	Max 15 joints/minute (200mm / 21 degrees)	Max 12 joints/minute
Joint apparatus	Double zipper format	Single zipper format
Zipper movement	AC servomotors (2)	Air cylinder
Winder	Wide / narrow - 2 types - reel winder	Narrow reel only
Let off stand	Double let off stand	Double let off stand

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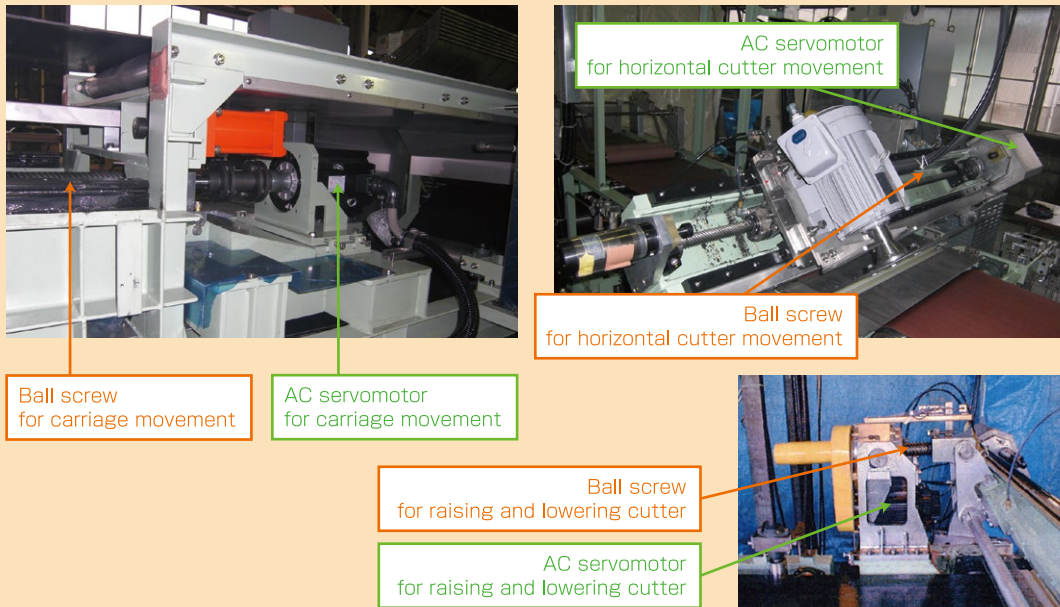
## High Speed Tread Skiver



### 1. Overview

With Nakata Engineering's cutting-edge technology, 30 cut per minute performance at a set length (a 50% improvement on standard equipment), without stopping the conveyor, is made possible through use of a highly reliable AC servomotor and highly accurate ball screw. In addition, this skiver combines high speed cutting with high accuracy, as well as eliminating the hydraulic unit for quiet, space-saving, energy-saving operation that's easy on the environment and contributes to overall improvement in production line performance.

### 2. High speed, high accuracy AC servo drive employed



### 3. Specifications

Main specifications of high speed tread skiver		Main specifications of conventional model
Cut cycle	Max. 30 cuts/minute (Cut length 1500mm)	Max 20 cuts/minute
Line speed	Max. 45M/minute (Cut length 1500mm)	Max 30M/minute
Cut accuracy	±2mm	±2mm
Cut length	From 1250 to 3500 mm	From 1250 to 3500 mm
Cut angle adjustment range	From 15 to 30 degrees	From 15 to 30 degrees
Knife	510mm x 6mm disc	510mm x 6mm disc
<b>(Control)</b>		
Carriage movement	AC servomotor	DC servomotor
Cutter movement	AC servomotor	Hydraulic cylinder
Raising and lowering cutter	AC servomotor	Air cylinder