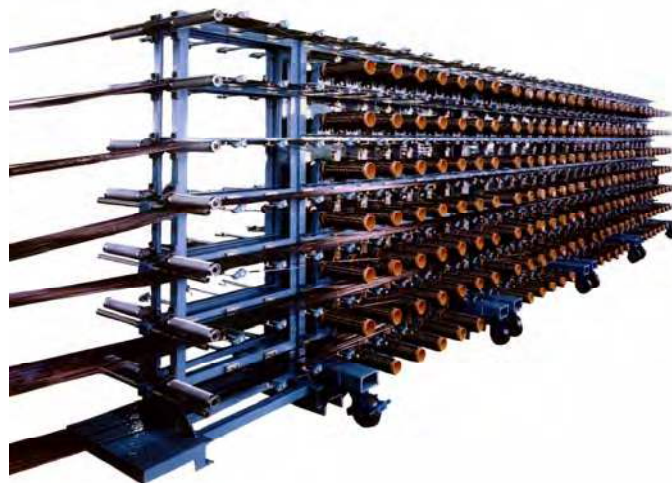


# ST Series Tensioning Creel System

## Features

- Unwinding type mechanical tension control
- Unique compensation mechanism maintains constant and stable unwinding tension regardless of the package diameter
- NO contact with the fiber = NO damage to fiber
- Maintenance free mechanical system
- Supplied as complete creel, or tensioning component only to mount to an existing frame
- Easy creel and doff bobbin holders



## Applications and Fiber Types

- For unwinding type pay-off
- Pre-preg, Tow-preg, Pultrusion, UD tape process, Lab Systems, Tow spreading lines
- Carbon fiber (PAN and pitch), aramid fibers, glass fibers (on cores), optical fibers, monofilaments

## Specifications

Tension Range * See next page for details	Model ST-5N: Adjustable between 150 - 500 (grams) Model ST-2N: Adjustable between 60 - 200 (grams) Model ST-1N: Adjustable between 30- 100 (grams)
Speed Range	0 (m/min) to 50 (m/min)
Compatible Package Sizes	74mm (3") ID core x 150mm (6") to 250mm (10") traverse 94mm ID core x 150mm (6") to 250mm (10") traverse Other sizes available upon request
Max Package Diameter	250mm
Creel Framework	Type-1: Steel welded construction: Maximum cost effectiveness Type-2: Steel bolted construction: For compact shipping Type-3: Aluminum extrusion construction: For maximum adjustment flexibility and compact shipping Standard and custom configurations available
Optional Items	Fiber breakage sensors Ceramic eyelet or pigtail guides Mobile creel on casters Creel outlet combs and redirect rollers
Mounting	ST tensioning component can be purchased for mounting to existing framework. See next page for mounting dimensions and requirements.

Please contact Izumi International, Inc. for special requirements

## Tension Characteristics

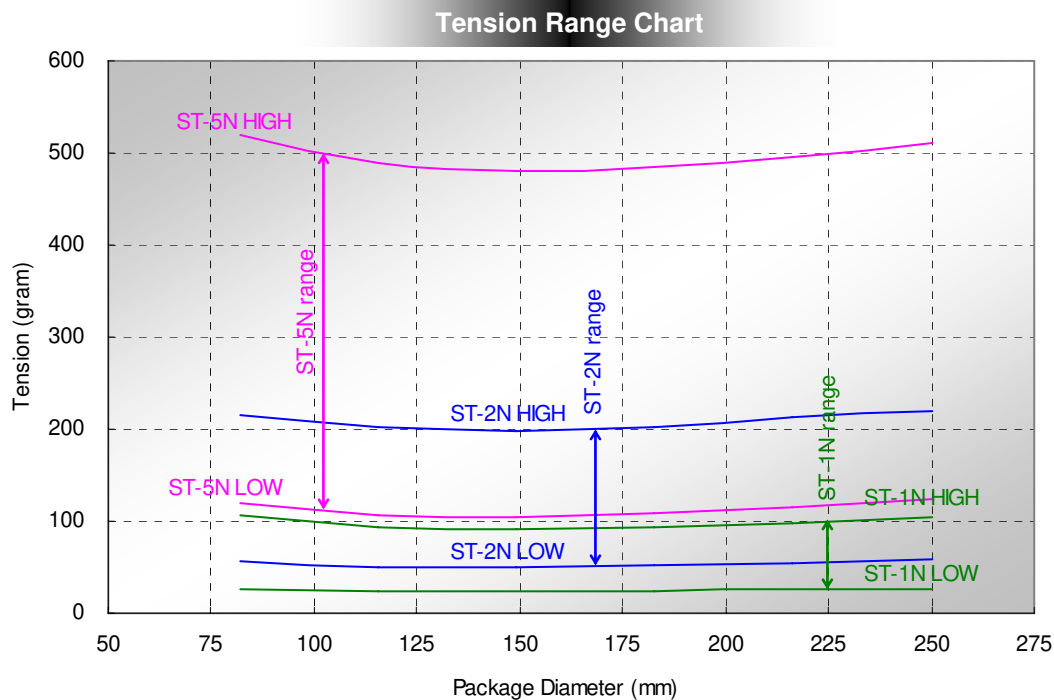
Chart shows tension adjustability ranges (HIGH and LOW) for each type. Each model is adjustable for any range in between HIGH/LOW.

ST-5N: PINK  
ST-2N: BLUE  
ST-1N: GREEN

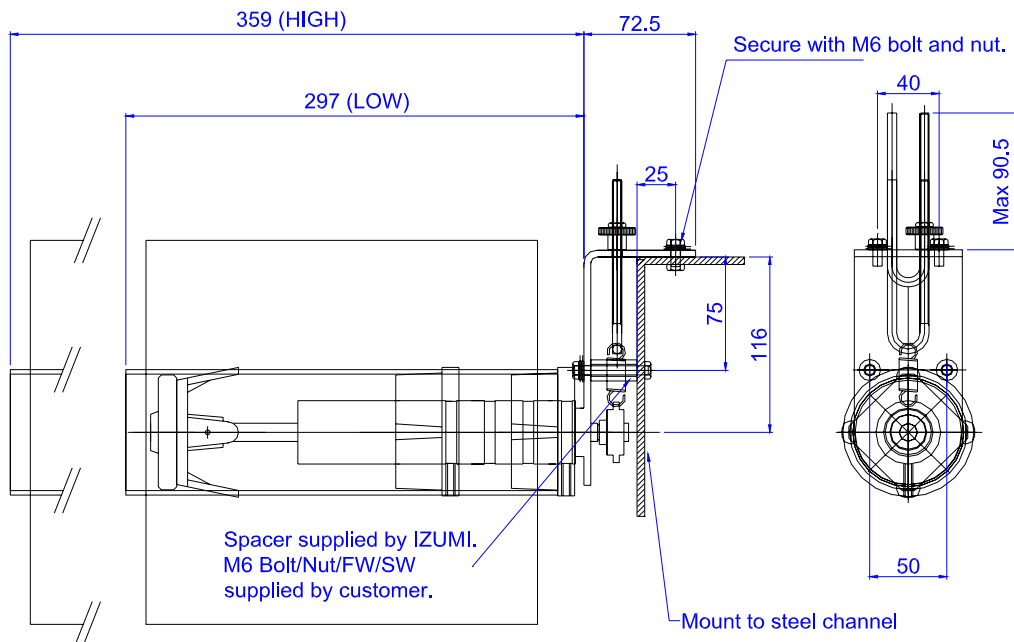
Once set at desired level, tension is maintained throughout the diameter of the package.

Tension characteristics shown are based on the following:

- Package density 1.0 gram/cm<sup>3</sup>
- 10" traverse package



## Mounting Dimensions



Model ST-5N, 2N, 1N have identical mounting dimensions.

UNITS: mm

Drawing above shows mounting details for ST type tensioning device. This unit can be purchased independently, to mount to existing framework. Mounting spacers supplied by IZUMI, bolts and fasteners to be supplied by customer. Drawing above shows dimensions with 250mm (10") traverse package.