



NEWS LETTER

Volume: 3rd: April 2017

Date: 1/Chaitra/5119

Dear Customer / Partner

Wish you a VERY PADVA / YUGADI. We are pleased to share our third volume of our bi-annual newsletter at this pious start of the New Year. We will be discussing about Stretch levelers, which will be a continuation to our previous topic of flatness. Today or tomorrow, the need for stress free material is definitely the need of the customer. Stress free material – more specifically stress free sheet can be produced by two ways. One is annealing (which is a lengthy and uneconomical process), second is by Stretching the material (sheet) beyond its yield point.

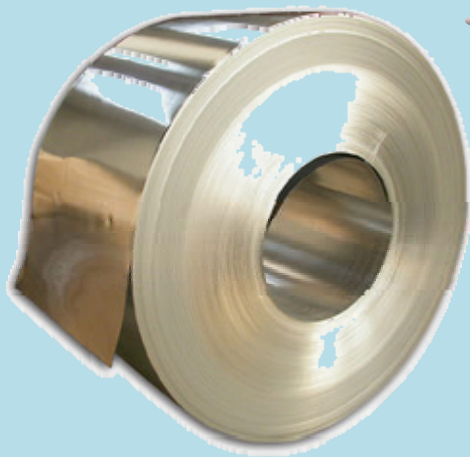
THE STRETCH LEVELER

Stretcher levelers eliminate random trapped internal stresses that cause spring back by stretching steel beyond its yield point. As a result, stretcher-leveled material remains flat during subsequent processes such as laser cutting, punching, notching, shearing or fabricating. This process can eliminate shape defects such as edge wave, center buckle, quarter buckle, camber, crossbow, mandrel or coil breaks, some types of chatter, herringbone/mill chop, and twist.

Specially designed clamping pads are required, that allows the machine to grip and stretch the material with tremendous force without marking or damaging it. The clamp force and the stretch force are independent, because the amount of stretch force required does not depend on the clamping force. The pad material is such that it wears on the use, which in turn helps to prevent slippage. The pads allow the machine to get a good grip on even oily material.

All shape defects come down to a difference in length. This difference can be a surface-to-surface length differential, which causes coil set and cross bow, or it can be a difference in length across the width of the strip, which causes edge wave and center buckle. There are special type of absolute sensors which determine the length to be stretched and the also at the same time measure the load required to reach the yield point.

Because stretch leveling exceeds the yield in all of the material top to bottom and side to side, the process produces flat material that is significantly more stable than any other product. Stretch Levelers are also much easier to operate than other types of Levelers. The operator simply has to stretch the material until it is flat. The end result is flat material with the following properties.



**I Remember
EVERY THING!!!**

- Produces flat material that stays flat –
ERAZES THE MEMORY of the material !
- Equalized stresses eliminate spring back
- Typically produces 0 to 1 I-units of flatness
- Process is not sensitive to incoming shape
 - Reduces percentage of scrap loss
- Process will not change mechanical properties

Thanks for Reading!