Ergonomic Handling Systems

The VRL-500-TA (tip assist) for hoist and crane service is an extremely fast, easy and cost-effective solution for lifting and turning rolls with weights to 250 kg while reducing the risk of costly operator injuries and fatigue.

The VRL-500-TA has been designed to operate as a hoist based mechanical lifting and positioning device and can be used to assist when tipping rolls up (Horizontal to Vertical) or laying them down (Vertical to Horizontal). The VRL-500-TA’s unique pivoting hoist arm design gives the operator the ability to tilt a vertical roll onto its side in a controlled manner simply by using the hoist’s lifting function. This feature eliminates the necessity of the operator to manually push the roll to tip it over and prevents unneeded strain. By grabbing the rolls by the core without contacting the rolled material, the VRL-500-TA’s design reduces the risk of material damage and operator injury associated with ‘manhandling’ heavy rolls.

The VRL-500-TA is most commonly used with the Toggle Handle Universal Mandrel in roll lifting and positioning applications. The fail-safe gripper design of the mandrels hold securely at all times and can only be released by the operator. Once the load is supported on a flat surface, simply push the toggle handle down to retract the grippers. A large, ergonomic handle is provided for positioning the hoisted roll or the empty lifter.

The stats don’t lie! Workplace safety is important!

‘Back Injuries’ are the nation’s number one workplace safety problem – it’s even an issue that spans internationally. According to the United States Department of Labor, it is reported that more than one million workers suffer a back injury in the country, each year. This costs the industry billions of dollars on top of the pain and suffering borne by employees. In Australia, Safe Work Australia reports that $61.8 billion dollars was spent on work related injuries and 90% of claims made were due to injury (December 2017). Our Ergonomic Handling Systems will minimise and eliminate the risk of operatory injury, to maximise productivity and profits.

**Specifications:**
- Maximum Load Capacity - 250 kg
- Machine Weight - 9.1 kg
- Shipping Weight - 11.34 kg
- Shipping Dimensions -
  - 300 mm (Width)
  - 660 mm (Length)
  - 254 mm (Height)

**Options & Accessories:**
- Expanding mandrels, 76 mm to 304.8 mm.
- Pneumatic mandrel retract with control.
- Core stops and extended mandrels for multiple rolls.
- Integrated hoist controls.
- Mounting brackets for hoist pendants and controls.
- Custom configurations available.

**Standard Features:**
- User friendly design.
- Fast and easy to use for all operators and skill levels.
- Turning rolls is nearly effortless.
- Ergonomic design with comfortable handles.
- Quick-change expanding mandrel holder.
- Change mandrel sizes in seconds without tools.
- Rugged steel construction with powder coated finish.
- Simple, low maintenance design.
- Made in U.S.A

*See our Mandrel information for gripping options and mandrel sizes.*
VRL-1000-TA, Vertical Roll Lifter / Tilter

The VRL-500-TA accepts interchangeable lifting accessories to handle a variety of products. See mandrel and tooling options page for details.

The VRL-500-TA is a vertical roll lifter with tilt assist to allow operator to tip rolls from horizontal to vertical and back and has a maximum load rating of 500lb (227kg). Specific machine capacity is determined using the roll weight and dimensions for each application and may limit capacity to less than maximum load rating.

*Engineering approval required for each application. Roll dimensions and weights must be provided prior to order.

Dimensions subject to change
- Custom configurations available

Ball detent locking pin
Swivel hoist hook
Tilt locking holes

Wire lanyard connects to locking pin

Approx. weight 18lb. (8.2 Kg)
*does not include lifting mandrel

Locking plate assembly secures lifting accessories into the VRL's housing.

Roll Tilling Example

Step #1 Vertical Insertion
Step #2 Lock Till Arm
in Horiz. Position
Step #3 Lift Roll
Roll Apex must be outside line of action
Sample roll shown with 3" mandrel See capacity chart for roll size tilting limitations.

Step #4 Lower to Horizontal
Line of Action

Roll Width

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG

CG
VRL-500-TA will fully tilt roll to lay horz. with specs under respective tilt arm curve