

INDIA PACKAGE MEET - 2009

Latest Trends in Secondary And Transport Packaging

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General Introduction

- *Established in 1965*
- *Employing approx 320 people (June 2006)*
- *Headquartered in Deurne, The Netherlands*
- *Manufacturing plant in Deurne, The Netherlands*
- *Manufacturing Plant in USA-Racine, WI*

General Introduction

Our Vision...

Despite the development of modern technology, physical products will remain in need of (global) transport from A to B. This need will continue to grow at the pace of world economical growth.

Our Mission...

To support customers in moving their products safely and damage-free by supplying the right product for the right application at an acceptable price

Geographical Coverage

Our sales network allows you to have our products delivered anywhere in the world (where you need it) within 48 hours from order.

Within India we can deliver within 2 working days from any of our 3 locations.

Our Main Locations

The Netherlands

Ireland

France

Italy

Latvia

USA

Singapore

South Africa

United Kingdom

Germany

Belgium

Spain

Poland

Canada

Malaysia

United Arab Emirates

Geographical Coverage

Worldwide distributor network:

- Former Eastern-European countries:
 - Hungary, Czech Republic, Bulgaria, Slovenia, Russia
- Other European countries
 - Switzerland, Austria, Portugal, Greece, Turkey
- Scandinavia / Baltic States
- Australia / New Zealand
- South America:
 - Argentina, Chile, Brazil, Venezuela
- Asia:
 - Singapore, Japan, Korea, Taiwan, Thailand, India, Sri Lanka, Indonesia
- Middle East
 - Saudi Arabia, Bahrain, Kuwait, Egypt, Oman, Qatar, Kuwait

Our products in :- Strapping... usually for bundling and palletizing



Steels Coils In Container



Steel Products Secured With Polyester Strap



Glass Secured With Polyester Strap



Drums lashed In Containers with Polyester Strap



Cordstrap corded polyester strapping

- ◆ Stronger than steel strapping, size for size
- ◆ Safe to use
- ◆ Lightweight
- ◆ Easy, low volume disposal
- ◆ Conforms to product
- ◆ Does not damage finished products
- ◆ Does not rust or rot
- ◆ Completely weatherproof
- ◆ Uses simple, inexpensive, hand held tools
- ◆ High elongation recovery

Cordstrap corded polyester strapping

- ◆ High retained tension
- ◆ Self locking buckle
- ◆ Re-tensionable
- ◆ Flexible
- ◆ No sharp edges



CORDSTRAP VS THE COMPETITION

The information supplied to you in the following sheets are based on our experiences in the field. Some of our sister companies are selling steel-strap and PET-strap for fully automatic strapping applications and they supplied us with additional comparison-data.

Not only our customers have made the switch from other strapping products but also some of our sales-people have been selling other strapping materials. Also they have been a source for the requested comparison.

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

WITH CORDSTRAP CC BANDING:

◆ **QUALITY JOINTS ARE PRODUCED AUTOMATICALLY BY TENSIONING THE STRAP THROUGH THE BUCKLE.**

◆ **PLASTIC PEELING IN THE BUCKLE PROVIDES A POSITIVE INDICATION TO THE OPERATOR THAT A SAFE JOINT HAS BEEN ACHIEVED.**

◆ **A FULLPROOF SYSTEM!**

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

EXTRUDED PET BAND USES

TWO SEALING SYSTEMS

- ◆ **FRICTION WELD**
- ◆ **SERRATED or GRIT SEALS**



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

EXTRUDED PET BAND

**FRICITION WELDED JOINTS WILL
BE COMPROMISED BY:**

- ◆ PET FORMULATION
- ◆ WAX/NO WAX COATING
- ◆ BATTERY CHARGE
- ◆ AMBIENT TEMPERATURE
- ◆ STRAP GUAGE CONSISTENCY



CORDSTRAP VS THE COMPETITION

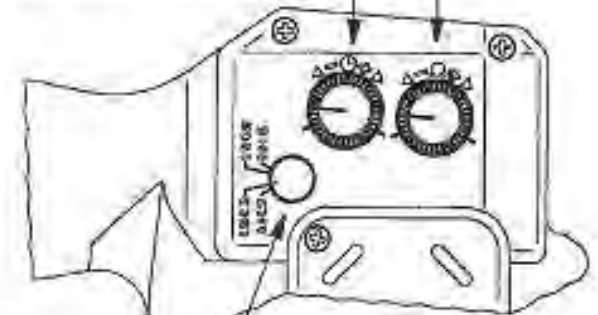
JOINT EFFICIENCY EXTRUDED PET BAND

FRICITION WELD JOINTS WILL BE COMPROMISED BY:

1. INCORRECT FRICTION CYCLE SETTING
2. INCORRECT STRAP GAUGE SETTING
3. POOR OPERATOR PRACTICE

Adjusting knob tensioning force / tensioning speed

Adjusting knob welding time



Adjusting pin
welding pressure

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

EXTRUDED PET BAND

SERRATED SEAL SYSTEM WEAKNESSES

- ◆ **CLIP CAN ONLY BITE OUTER STRAP SURFACES = INTERNAL SLIPPAGE = 50% JOINT EFFICIENCY AT BEST.**
- ◆ **TOOL MUST BE CORRECTLY ORIENTED TO THE CLIP LEGS OR STRAP SPLITTING AND REDUCED STRENGTH RESULT.**



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

EXTRUDED PET BAND

SERRATED SEAL SYSTEM WEAKNESSES CONT.

- ◆ STRAP GUAGE, CLIP DIMENSIONS, TOOL DIMENSIONS ALL FORM A SYSTEM THAT BREAKS DOWN WHEN COMPONENTS FROM MORE THAN ONE VENDOR ARE USED.
- ◆ STRAP SPLITTING
- ◆ TOOL MAINTENANCE – WORN TOOLS DO NOT FULLY CRIMP THE SERRATIONS INTO THE STRAP
- ◆ HIGH FORCE REQUIRED FOR CRIMPING = OPERATOR FATIGUE AND REPETITIVE STRESS INJURIES TO THE SHOULDERS ARE RISKS

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BANDING SYSTEMS



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BAND

TWO SEALING SYSTEMS:

- 1. NOTCHED SEAL JOINTS**
- 2. SEALLESS JOINTS**

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BANDING SYSTEMS

NOTCHED SEAL JOINTS WILL BE COMPROMISED BY:

- ◆ TOOL MAINTENANCE
- ◆ STRAP GAUGE & WIDTH, CLIP DIMENSIONS, TOOL DIMENSIONS
- ◆ ALL FORM A SYSTEM THAT BREAKS DOWN WHEN COMPONENTS FROM MORE THAN ONE VENDOR ARE USED, OR IF ANY ARE OUT OF SPEC.

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BANDING SYSTEMS

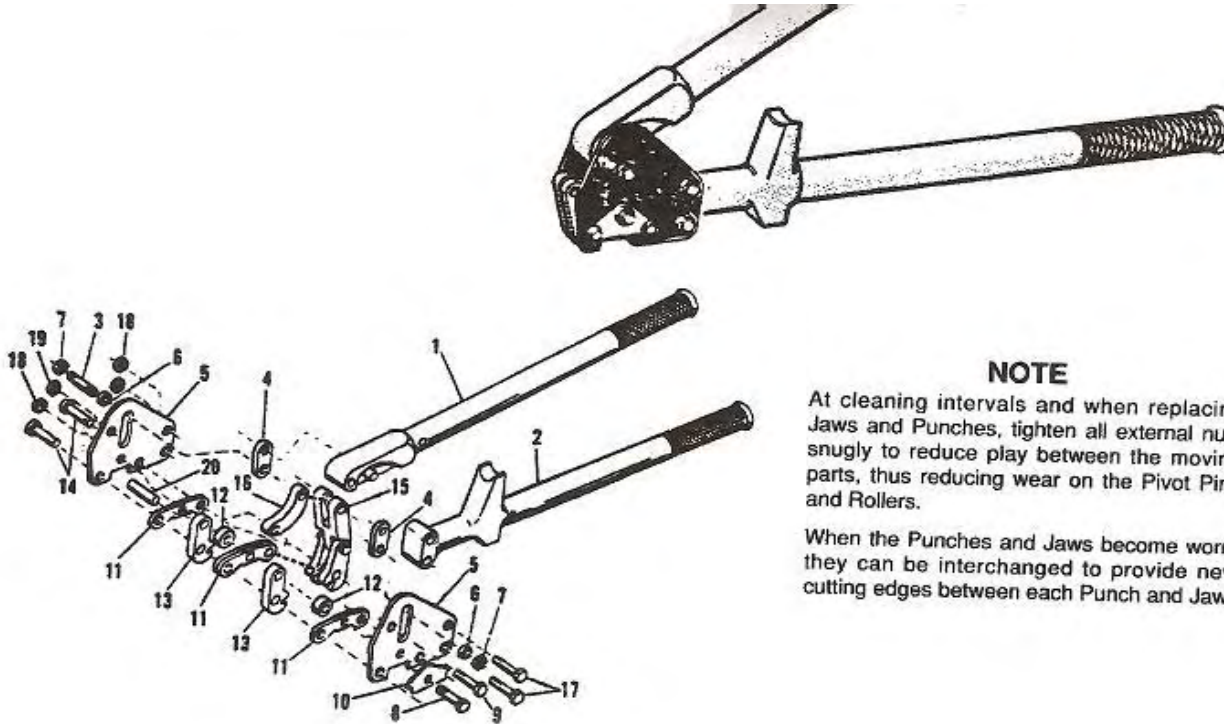
NOTCHED SEAL JOINTS WILL ALSO BE COMPROMISED BY OPERATOR ERROR:

- ◆ TOOL HANDLE NOT PULLED ALL THE WAY DOWN
- ◆ INTENTIONAL USE OF WORN TOOLS BECAUSE THEY ARE EASIER TO OPERATE

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY STEEL BAND

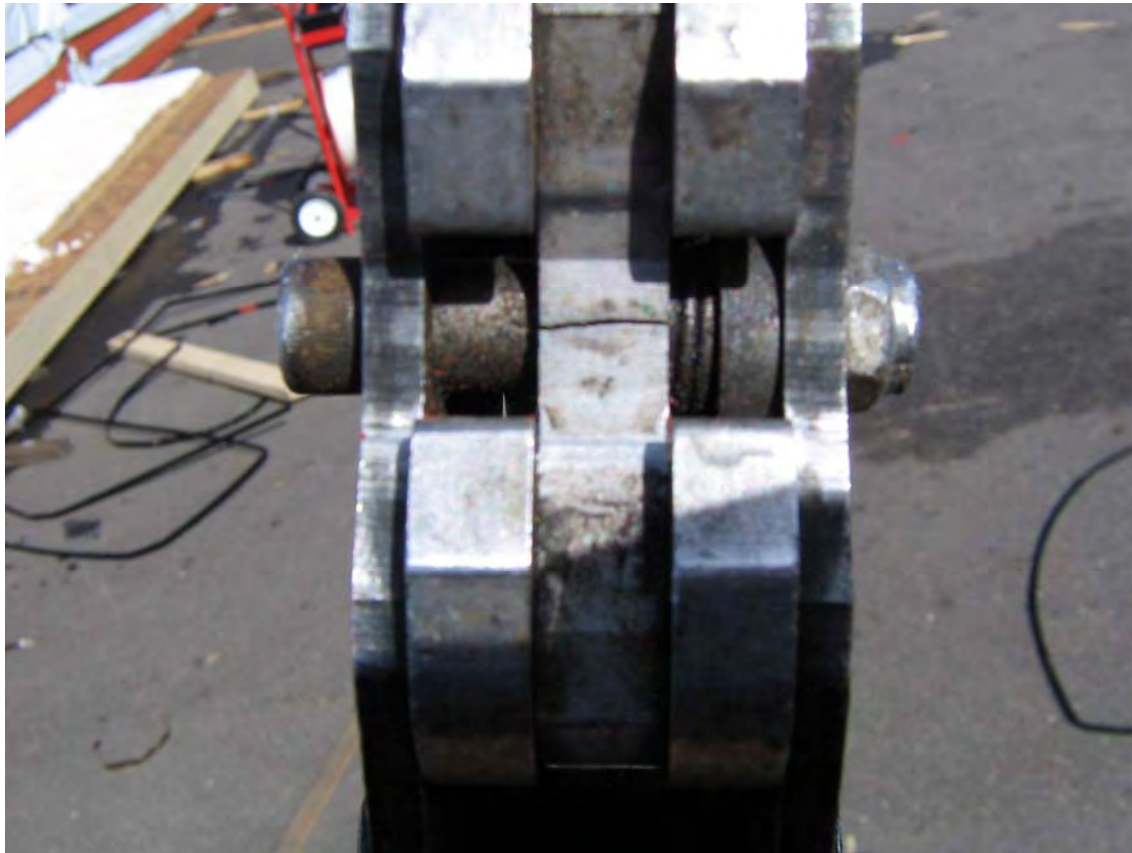
SO MANY PARTS TO WEAR OUT – AND THEY DO



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY STEEL BAND

SO MANY PARTS TO WEAR OUT – AND THEY DO



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY STEEL BAND

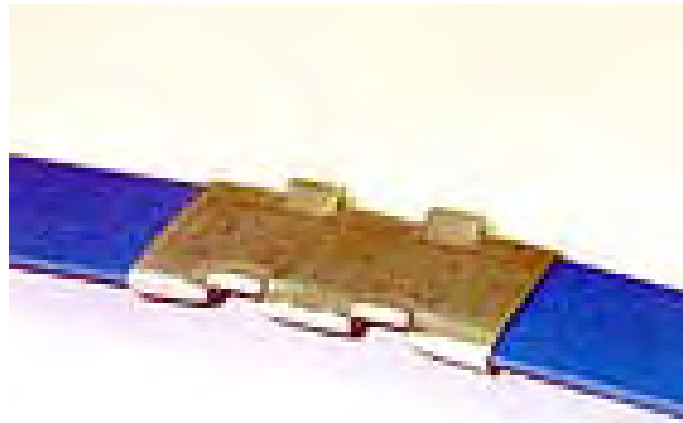
SO MANY PARTS TO WEAR OUT – AND THEY DO



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY STEEL BAND

VERY FEW NOTCHED SEALS LOOK LIKE THIS



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY STEEL BAND

DOUBLE SEALS ONLY = 5% ADDITIONAL JOINT STRENGTH



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BANDING SYSTEMS

SEALLESS JOINTS WILL BE COMPROMISED BY:

- ◆ POOR TOOL MAINTENANCE
- ◆ IMPROPER TOOL ADJUSTMENT
- ◆ LOSS OF TENSION ALLOWS RELEASE

CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY

STEEL BANDING SYSTEMS

SEALLESS TOOL ADJUSTMENT IS CRITICAL:

Correct seal

A correct seal must conform to the illustration. This means that the depth with which the upper strap hooks into the lower one must be 1 to 1,5 mm (0,039" — 0,059") and must not exceed 2 mm (0,078"). The upper strap must be sheared clean and the cutter must not leave scratch marks on the lower strap.



Incorrect seal (the sealing mechanism is adjusted too high)

This stamped seal is not deep enough and the upper strap is not sheared. The tensile strength of this seal is insufficient and the strapping must be removed from the package. The tool must be readjusted immediately (see SEAL ADJUSTMENT).



Incorrect seal (the sealing mechanism is adjusted too low)

This stamped seal is too deep and the lower strap is nicked by the cutter. Although the tensile strength of this seal is sufficient the strapping must be removed from the package because of the scratched lower strap. The tool must be readjusted immediately (see SEAL ADJUSTMENT).



CORDSTRAP VS THE COMPETITION

JOINT EFFICIENCY SUMMARY

CORDSTRAP CC	EXTRUDED PET SYSTEMS	STEEL BANDING SYSTEMS
<p>◆ QUALITY JOINTS ARE PRODUCED AUTOMATICALLY BY THE TENSIONING PROCESS</p> <p>◆ BUCKLE AND THE BANDING PRODUCE JOINT STRENGTH, INDEPENDENT OF THE TOOL</p>	<p>◆ QUALITY JOINTS WILL NOT BE PRODUCED UNLESS ALL COMPONENTS OF THE COMPLEX SYSTEM ARE PROPERLY CONFIGURED AND MAINTAINED</p>	<p>◆ QUALITY JOINTS WILL NOT BE PRODUCED UNLESS ALL COMPONENTS OF THE COMPLEX SYSTEM ARE PROPERLY CONFIGURED AND MAINTAINED</p>

CORDSTRAP VS THE COMPETITION

ELONGATION AT BREAK

(The lengthening of strapping until breakage)

Don't confuse elongation with "Creep". Creep is when a strap loses tension as a result of continuous permanent elongation. Cordstrap has virtually no creep but Elongation Recovery. Elongation Recovery means that the strap will bounce back to its original length after it is tensioned. Extremely important for the retained tension around lumber packs.

CORDSTRAP VS THE COMPETITION

ELONGATION

	CORDSTRAP CC BANDING	POLYPROPYLENE BANDING	EXTRUDED PET BANDING	STEEL BANDING
ELONGATION	8%	18-22%	16 – 18 %	1%
ELONGATION RECOVERY	EXCELLENT	POOR AFTER 24 HOURS	EXCELLENT	NONE
NOTES	8 % IS JUST RIGHT FOR LUMBER APPLICATIONS	RELAXES: LOOSES 50% OF APPLIED TENSION AFTER 24 HOURS	TOO MUCH STRETCH FOR HIGH MASS, HIGH SHOCK APPLICATIONS	BANDS LOOSEN WHEN LOADS ARE COMPRESSED OR SHRINK

Comparing CC-strap and Woven Polyester strap

Cordstrap manufactures both CC-strap and Woven strap. But both straps have different characteristics. For lumber and truss applications we recommend our CC strap for the following reasons:

- CC-strap has a higher joint efficiency. Due to the mechanical joint created by the CC coating the risk of slippage is eliminated. (80-90% for CC strap vs 50-70% for woven)
- Woven straps require or a glue-coating to increase friction in the buckle or a buckle with a phosphated coating to increase joint efficiency. Not all weaving companies do coat their straps.
- In an outdoors environment woven strap will absorb moisture which makes it unpleasant to work with
- Uncoated woven strap will leave fiber-residue in the gripper-foot of the tensioning tool which will cause the tensioner to slip on the strap while tensioning.
- Due to the higher elongation of woven strap it will take longer before maximum tension is reached. The perception is often that you reach higher tensions with woven strap but it simply takes more work to reach the same amount of tension. Also the retained tension of CC-strap is higher compared to woven strap.
- Due to the rigidity of CC-strap it is easier to feed through narrow voids or underneath a bundle.
- Woven strap is easier to pull hand-tight, this is an advantage in some applications
- Printing on CC-strap reach a much higher quality than to printing on Woven strap.

CORDSTRAP VS THE COMPETITION

TOOLING



CORDSTRAP VS THE COMPETITION

TOOLING – STEEL

FROMM A338

INTERNET PRICE: \$1300

92 PARTS

\$600 REBUILD COST REQUIRED

1X PER YEAR (MIN)

(DIES, PUNCH, CUTTER, FEED ROLLER; GRIPPER)

MODEL A338
STEEL HAND TOOL



SIGNODE 2036

PRICE: \$4100

Requires excessive maintenance once the alloy body wears out of tolerance



Acme AB-OH Drum Tensioner

Rebadged MIP = heap build quality

\$529

REQUIRES PRE-CUT STRAP
LEAVES SHARP PIG-TAIL



CORDSTRAP VS THE COMPETITION

TOOLING – EXTRUDED PET

FROMM P-SERIES

STREET PRICE: \$2600

A HUGE AMOUNT OF PARTS

A 4' DROP TO CONCRETE:

- ◆ **USUALLY REQUIRES THAT THE TOOL BE SENT IN FOR SERVICE TO REPLACE THE MICROSWITCHES = \$600+**
- ◆ **OFTEN RESULTS IN A FRACTURED HOUSING = \$700 PLUS LABOR**



FROMM P-SERIES BATTERY LIFE:

100 CYCLES / NEW BATTERY

70 CYCLES / 6 MONTH OLD BATTERY

40 CYCLES / 8 MONTH OLD BATTERY

SUB-FREEZING TEMPS WILL REDUCE THESE CYCLE COUNTS BY 15 – 20%.

NEW BATTERY COST IS \$90.

CHARGERS COST \$190 AND LAST LESS THAN 14 MONTHS

CORDSTRAP VS THE COMPETITION

TOOLING- CORDSTRAP



Cordstrap tools are available in different sizes:

- CT-20, Tool for straps up to ¾”
- CT-25, Tool for straps up to 1”
- CT-40, Tool for strap up to 1 ¼”



Major Benefits of Cordstrap-Tooling:

- Steel tool on non-metallic strap, no wear on gripper-foot
- Minimal moving parts
- 1-tool operation
- Lightweight
- Swiss-Quality
- Economical, CT-20 \$180,-- CT-25 \$275,-- CT-40 \$525,--
(standard prizes, volume discounts are available)



CORDSTRAP VS THE COMPETITION

TOOLING- CORDSTRAP



Practical Cordstrap Solutions

To save time in your yard you can choose for a forklift-mounted dispenser. This will eliminate waiting in line at your strapping station after picking the order.

With other strapping products in the market it is virtually impossible to do small bundles because you don't have a surface to put your tool on. Cordstrap in combination with our CT tensioner makes it very easy to strap smaller units. In stead of nailing your specialty trusses together you can easily use Cordstrap to strap a small unit for safe transportation.



CORDSTRAP VS THE COMPETITION

TOOLING VALUE COMPARISON

CORDSTRAP CC TOOL	EXTRUDED PET TOOLING	STEEL BANDING TOOLING
<ul style="list-style-type: none"> ◆ LOW PURCHASE PRICE ◆ LOW MAINTENANCE COSTS ◆ SOFT CC STRAP DOESN'T WEAR THE TOOL OUT ◆ TOOL WEAR HAS NO IMPACT ON JOINT EFFICIENCY 	<ul style="list-style-type: none"> ◆ VERY EXPENSIVE TO PURCHASE ◆ VERY FRAGILE IN INDUSTRIAL ENVIRONMENTS ◆ WORN OR IMPROPERLY USED TOOLS YIELD UNSAFE JOINT QUALITY 	<ul style="list-style-type: none"> ◆ EXPENSIVE TO BUY AND TO MAINTAIN ◆ STEEL STRAP IS HARD ON PARTS ◆ WORN OR IMPROPERLY USED TOOLS YIELD UNSAFE JOINT QUALITY

CORDSTRAP VS THE COMPETITION

SAFETY



CORDSTRAP SAFETY

HOW MANY TIMES HAVE YOU HEARD:

**“IF IT ISN’T BROKEN,
WHY FIX IT.....”**

CORDSTRAP SAFETY

BUT.....
STANDARDS CHANGE

PREVENTABLE INJURY HAZARDS ARE NO LONGER ACCEPTABLE FOR MANY COMPANIES



It happens everywhere!!!!



REFUSE TO ACCEPT HAZARDS THAT WERE FORMERLY TOLERABLE....



Steel strap not only causes dangerous situations but also causes damage to your forklift tires

CORDSTRAP SAFETY

**MORE AND MORE COMPANIES SEE
THE SAFETY ADVANTAGES OF
CORDSTRAP'S CC BANDING**



CORDSTRAP VS THE COMPETITION

SAFETY COMPARISON

CORDSTRAP CC	EXTRUDED PET	STEEL BANDING
◆ CAN'T CUT OR PUNCTURE	◆ RIGID, SHARP ENDS = HAZARD	◆ SHARP EDGES, SEVERE RISK OF CUTS - OR WORSE
◆ EASY & SAFE DISPOSAL	◆ RIGID SPRINGY STRAP + SHARP CUT ENDS = HAZARD	◆ EXTREMELY DANGEROUS TO HANDLE IN SHORTER LENGTHS
◆ SPLITTING DOES NOT COMPROMISE STRAP STRENGTH	◆ SPLITTING IS FATAL TO PACKAGE CONTAINMENT	◆ USING STEEL STRAP CAUSES SPLIT ENDS
◆ VISUAL SIGNAL THAT STRAP IS BEING OVERTENSIONED	◆ NO VISUAL CUE THAT STRAP IS BEING OVERTENSIONED	◆ MANY STEEL INJURIES OCCUR WHILE OVERTENSIONING WITH 1/2" BAND
◆ CC STRAP POSES MINIMAL INJURY RISK WHILE CUTTING	◆ SIGNIFICANT BOUNCE BACK WHEN CUT	◆ SEVERE "FLY BACK" PROPERTIES AND INJURY HAZARD
◆ 25 LB COIL LIFT	◆ 60 LB COIL LIFT	◆ 100 LB COIL LIFT IS PROHIBITED IN SOME WORK ENVIRONMENTS

Conclusion

Constant quality and outstanding Customer Service are our Pride and Joy. We know there are many people selling strap out there. But we would like to prove to you that over 45,000 Cordstrap users buy Cordstrap because they love our Pride and Joy.

THANK YOU