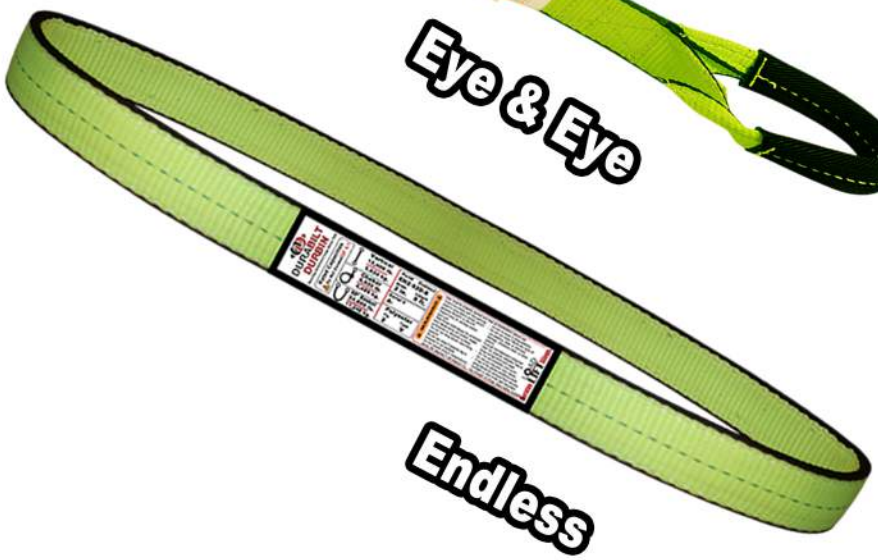
DURATEX

LOAD LIFT Slings™



DURABILT by DURBIN

Securing America's Cargo Since 1938

Corporate Headquarters Broadview, IL. 60155 USA **www.durabiltusa.com**

Dear Customer:

Durabilt by Durbin is one of the very few manufacturers to produce the basic fibers of webbing and bring them to their full potential of the woven product which are qualified enough to be called “Duratex” Load Lift Slings.

Our sling products are from a company that is recognized in the industry you are selling to and whose products conform to industry-specific standards. That company is Durabilt by Durbin Inc.

We assure you that all processes of our sling products are controlled to comply with applicable standards and specifications. Our certified equipment subjects samples to every known test: Abrasion, Extension, Chemical Exposure, Tenacity, Temperature, Load Performance Test, as well as Random Testing.

The Duratex Polyester strength is derived from our changed shape of the spinneret fiber. Polyester is a loomed material designed to deliver high end performance under harsh industry conditions.

Duratex Slings can be used in a variety of hitch types offering product solutions for any load lifting situation. This allows for less stretch and bounce which gives greater load control when compared to inferior nylon slings.

Our tradition continues by manufacturing the highest quality “world class” products available on the market. Today, Durabilt by Durbin provides an extensive line of Load Securement Systems, Tie-downs as well as a full line of other industry-related quality products. Our Quality comes from more than 100 years of experience that has served more than 10 industries around the world.

Warranty Information

All warranties, implied or expressed as to quality and performance for use is always based on the condition that the published rated capacities apply only to new, unused slings and assemblies; that the mechanical equipment on which such products are used is properly designed and maintained; that such products are properly stored, handled, used and maintained, and delligently inspected on a regular basis during the time of use.

Table of Contents

Seller shall not be liable under any circumstances for consequential or incidental damages or secondary charges including but not limited to personal injury, labor costs, or a loss of profits resulting from the use of said products or from said products being incorporated in or becoming a component of any other product.

DURATEX

The Core Standard of Load Bearing Yarns for Overhead Lifting. All Slings Manufactured meet or exceed OSHA and WSTDA standards and regulations.

DURATEX LOAD LIFT Slings™

Sling Types

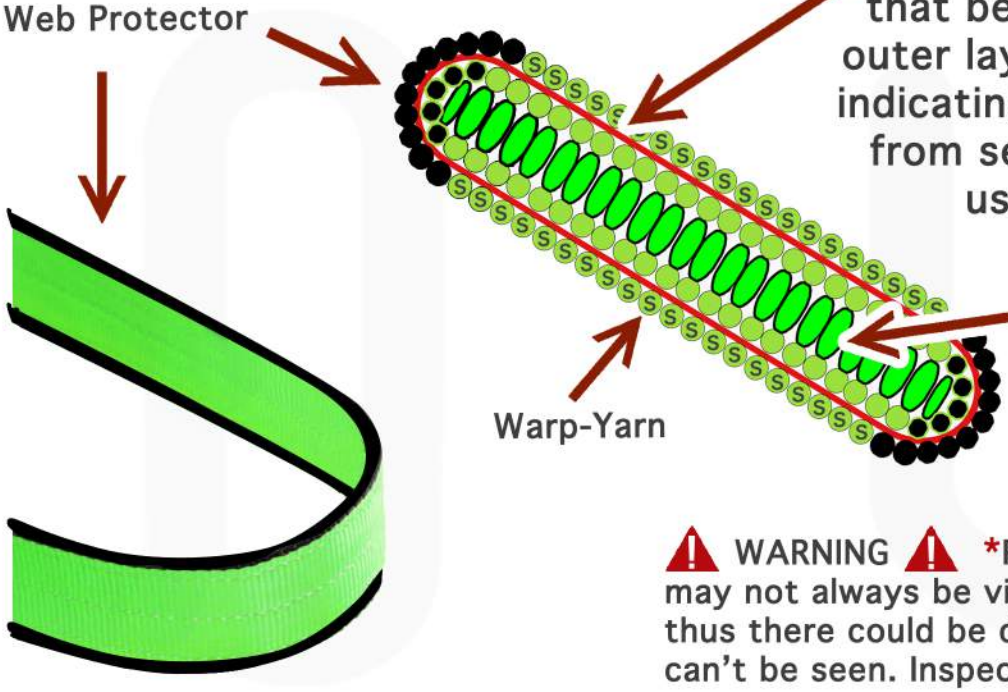
Eye and Eye
Type IV

Endless - Type V

RoundSlings

Dura-Edge™

Load Lift Sling Cross Section



Our web slings are manufactured with **Red Core Warning Yarns** that become visible when outer layers become worn, indicating to remove slings from service*. ⚠ Always use Sling Protection.

⚠ WARNING ⚠ *Red Core Warning Yarns may not always be visible due to dirt or oil, thus there could be damage in areas which can't be seen. Inspect all Slings before use.

A Quality

DURATEX LOAD LIFT Slings™

Select Your Hitch Type

Durabilt by Durbin takes responsibility for EVERY Sling. This is backed by a tag bound to each product, showing their rated capactities and W.L.L. This tag allows us to trace the source of every aspect of each product: when, how, who, and where it was made. (See Page 11).

Vertical

Vertical Hitch

A Vertical or Straight Hitch connects by simply using a hook to connect a load to a lifting device.

Note: To prevent the load from rotating use a Tagline.

When attaching two or more slings to one lifting hook, it becomes a lifting **bridle**. This distributes the load between the slings.

Note: The angle at which the slings attach affects the W.L.L. (See Page 6).

Choker

Choker Hitch

A Choker Hitch is used when the sling body cannot harm the load. Use a choker hitch if you want the sling to hug the load.

The diameter of the contour where the sling hits the load shall keep the point of choke against the sling body, not against the base of the eye or a splice. Chokes used at < 120°, require reduced W.L.L. (See Page 7).

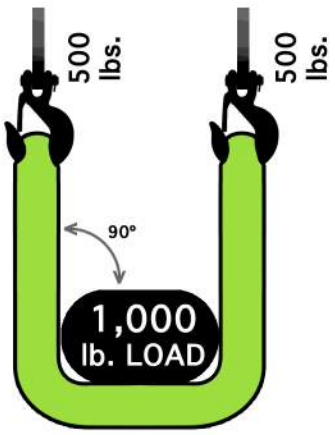
Always pull choker tight before lift, not during. Never use one choker when lifting loads that may shift or slide.

Basket

Basket Hitch

Basket Hitches distribute a load between the 2 legs of a given sling, within their limitations.

As the horizontal angle of the sling decreases, the load on each leg increases (illustration below & Page 6).



⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Sling Rated Capacity Parameters

DURATEX LOAD LIFT Slings

All Duratex Sling products are engineered to the same superior Durabilt by Durbin standards.

They differ in their hitch types and work load limits to cover all of your application needs.

Webbing Calculation Factors

Tensile Strength

All Durabilt by Durbin manufacturers meet or exceed nominal strengths.

All web material is composed of a specified nominal strength. The ' nominal strength ' being comprised of Pounds Per Sq. Inch (or PSI) of Width, in 1 of 2 grades. The slings rated capacity is derived from the webbings nominal strength.

Fabrication

The Fabrication Factor alters webbing strength by the quality of stitching and tapering. The larger the stitching the lower the webbing strength. The finer the stitching the less the web strength is degraded.

Hardware Strength

When the nominal strength of the hardware is lower than the nominal strength of the sling, the nominal strength of the hardware is used to calculate the slings Work Load Limit.

Design

Post nominal strength adjustments per the Fabrication Factor, it is considerer for each slings W.L.L. to be established by a Design Factor of 5 to 1(Specified by ANSI B30.9, Section 9 - 5.2). ANSI & OSHA require sling manufacturers to document published sling ratings and test data records.

Randomized Tests

Slings are tested at random to ensure all products meet or exceed all specifications and rated capacities (W.L.L.).

DURATEX LOAD LIFT Slings

Basket & Bridle Load Calculations

Examples describe Vertical Lifts ONLY.

3 Step Formula

Step 1

Divide Total Load by Number of Legs Used.

This will calculate load per leg when lift is vertical.
Center of gravity must be directly below the hook.
If not, other calculations required.

Step 2

Find Angle (a) Between Legs of Sling and Horizontal Plane.

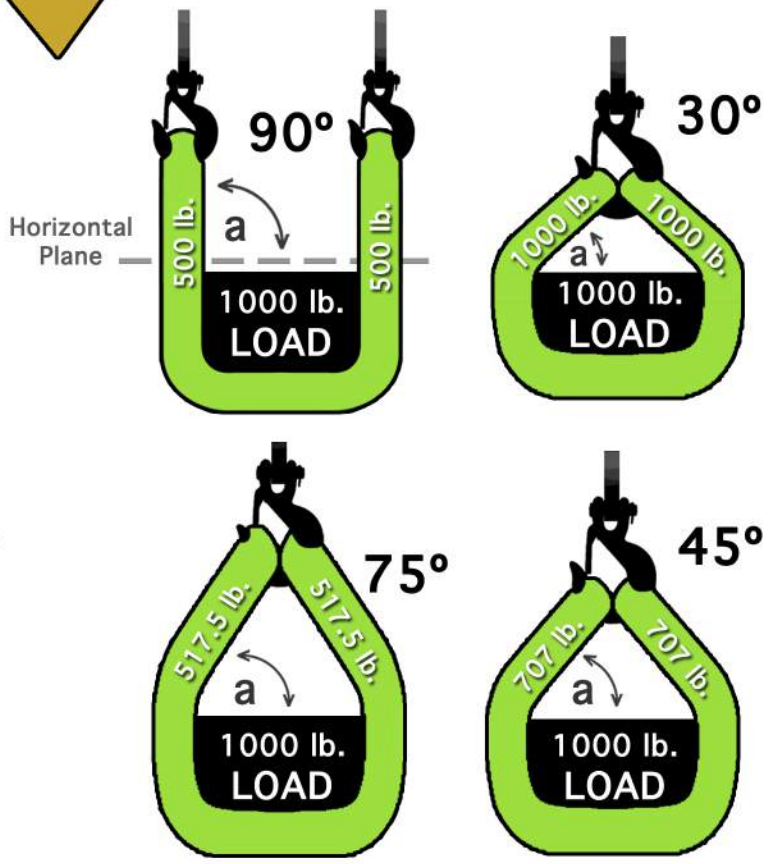
The horizontal plane is where the legs of the sling bend and travel upward to meet at the hook.

Step 3

Multiply the Load Per Leg. (From step 1).

Following Step 1, take the Load Factor from the leg angle you are using & multiply. (See conversion chart C on page 7).
This calculation will show the load on each leg angle to be added together for the total load being lifted.

WARNING. Sling Angles less than 30° should not be lifted.



Example w/ 75° — 517.5 lb. Load Per Leg

LOAD	÷	No. of Legs	X	LOAD Factor	=	
1000 Lb.	÷	2	X	1.035 (Leg Angle)	=	517.5 lbs.

Note: Add the load on each leg for the Actual Load.

Example w/ 45° — 707 lb. Load Per Leg

LOAD	÷	No. of Legs	X	LOAD Factor	=	
1000 Lb.	÷	2	X	1.414 (Leg Angle)	=	707 lbs.

Note: Add the load on each leg for the Actual Load.

C Conversion Chart

Choker Load Calculations
Rated Capacity as a Function of Angle of Choke

Bridle Angle to Load Factor

Leg Angle to Horizontal Plane	Input Number Load Factor
90°	1.000
85°	1.004
80°	1.015
75°	1.035
70°	1.064
65°	1.104
60°	1.155
55°	1.221
50°	1.305
45°	1.414
40°	1.555
35°	1.742
30°	2.000

The horizontal angle of bridles with three or more legs are measured the same as hitches with two legs.

If a bridle is composed of different leg lengths, it may yeild different horizontal angles.

Typically the leg with the smallest horizontal angle carries the heaviest load. Therefore the smallest horizontal angle should be used when calculating a leg load and W.L.L.

In severe angular circumstances, an engineering analysis should be done.

Angle of Choke (degrees) = or > <	Angle of Choke Reduction Factor
120° - 180°	1.00
105° - 120°	0.82
90° - 115°	0.71
60° - 90°	0.58
0° - 60°	0.50

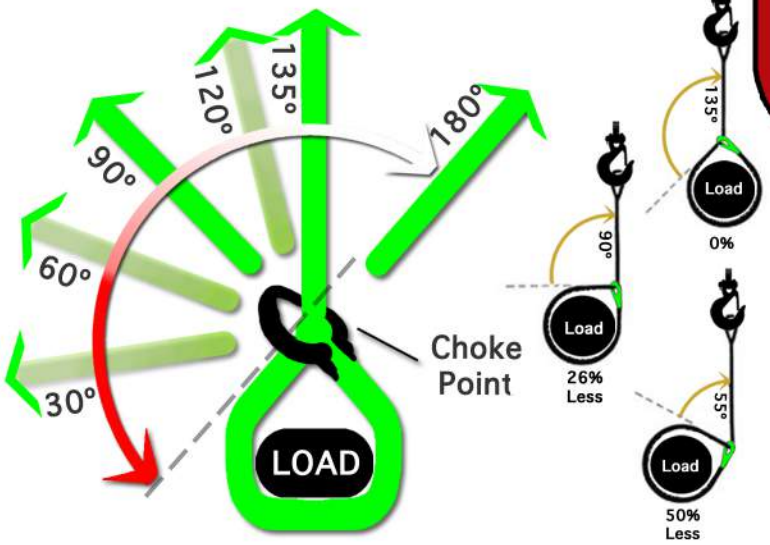
A Choker that is tight at an angle of less than 120°, requires a decrease of the hitches W.L.L. to allow for loss as the chart indicates.

At less than 120° the sling body will always fail in the point of choke when set to its maximum.

ALWAYS allow for this anytime a choker hitch is intended to control, shift, or turn a load, or in a multi-leg lift when the pull is against the choke.

To Determine Actual Sling Capacity at a given angle of choke use the corresponding reduction factor and:

Multiply the Choker Hitch Capacity Rating X Reduction Factor Number



⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Duracare™ Sling Inspection

Each Durabilt by Durbin web sling is designed for long life through extreme conditions and uses. However, every product inevitably reaches a breaking point; it is extremely important that you inspect your slings on a routine basis.

Inspecting Your Slings

Durabilt by Durbin recommends an inspection process derived from ANSI B30.9 that prescribes caution and provides the best results from your slings.

- Routine Inspection
- Respect Your Slings
- Keep Sound Records
- Remember Common Sense

Inspection Factors

1. Sling Use - The more you use, the more you inspect.
2. Work Environment - The more severe the conditions, the more you inspect.
3. Service Life - Based on your expertise with sling use.

OSHA requirements state:
"Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Addtional inspections shall be performed during sling use, where service conditions warrant."

In addition, inspections should occur annually by a qualified person who should document and keep all records.

When to Replace

As stated in ANSI B30.9, remove any sling from use subject to:

Acid or caustic burns, melting / charring, holes, tears, cuts, snags, broken or worn stitching in load-bearing splices, abrasive or excessive wear, knots in any location, pitting, corrosion, cracked or distorted or broken fittings, any visible damage, missing or illegible sling identiifaction.

Web Slings should also be removed for:

1. Exposure of our Red Core Safety Yarns.
2. Distortion of a sling.
3. ANYTIME a sling exceeds it's W.L.L.

Note: Most of the preceeding standards are specific, however, many situations may occur that require your judgment. It is vital to pay attention to critical areas such as wear to the sling body, the edge of webbing, and eye wear.

Repair Guidelines

Slings repaired by a manufacturer are to be proof tested to twice their rated capacities designated on their tags prior to re-use. This must be backed by a certificate of proof-testing.

Do Not perform temporary repairs.

Our Quality Benchmark

Durabilt by Durbin sling products meet or exceed industry's leading standards for Superior Quality and Workmanship.

All of our slings additionally conform to standards established by the national safety institutions listed below:

- American National Standards Institute (ANSI) B30.9 Safety Standards.
- Occupational Safety and Health Administration (OSHA) 1910.184.

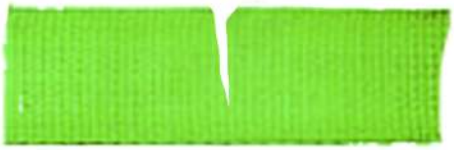
Wear and Abuse, No Tolerance

Some of the most common types of sling damage are shown below. Whether it be from misuse or abuse, stop and inspect slings immediately if you see any of the issues below. Replace the sling right away, never attempt to fix or use such slings.

Tensile Break

A valid sign of a tensile break, is a fraying of the sling webbing. This most often happens due to a sling being loaded above it's rated W.L.L. The image here shows a sling stretched past its' W.L.L. in testing. Never overload your sling to avoid a tensile break.

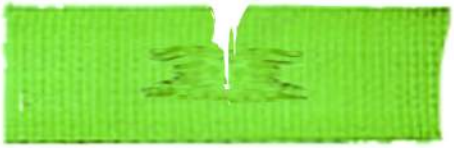
Cut



A clean break in webbing fibers denotes a cut. This ocurs when a sling makes contact with an exposed edge of a load or sharp object.
This may happen anywhere on the sling body or at the eyes. When the Red Core Yarn is exposed, you have a cut and must stop immediately.

To protect against cuts - Durabilt by Durbin highly recommends ALWAYS using wear pads on your slings.

Cut & Tensile Break



Often Tensile Breaks and Cuts happen together, or a cut is much more prone to happen once a Tensile Break has occured. Never use a sling in any of these conditions.

Acid Damage

Polyester Fibers loose their structural integrity when exposed to strong acids or corrosive liquids, as do metal fittings.

The image here depicts how a multitude of acids may eat through and severely damage a sling, for example, Sulfuric Acid.

Acids can cause fibers to get soft, swollen, and horribly distorted. Acids can act over a period of weeks or almost instantly.

Do Not store or use slings around acids.

Abrasion Damage

Frayed Fibers on the surface of a sling exposing the cross fibers or " picks ", perpendicular to the tensile style type break, are refered to as abrasion damage.

This can often occur when a sling slips while under load, or when pulled from under a load. If Red Core Yarns are again exposed - end use of these slings. Using wear pads will help avoid abrasion damage.

Chemical Affects for Polyester

Chemical	Stability	Chemical	Stability
Acid	*a	Strong Alkalis	*b
Aldehydes	NO	Dry Cleaning Solvents	OK
Bleaches	OK	Halogenated Hydrocarbons	OK
Ethers	NO	Ketones	OK
Hydrocarbons	OK	Oil, Lubricating	OK
Oil, Crude	OK	Sea Water, Water	OK
Detergents, Soaps	OK		
Weak Alkalis	OK		
Alcohol	OK		

*a Disintegrations by concentratedtion of sulfuric acid.
*b Degrading by strong alkalis at raised temperatures.

Red-D-Sleeve - Wear Pads

B30.9 states that "slings in contact with edges, corners, protrusions, or abrasive surfaces shall be protected with a material of sufficient strength, thickness, and construction to prevent damage." Additional and appropriate wear protection is required for all synthetic web and roundslings.

Material Choices: Polyester.

WEB & ROUND Red-D-Sleeve Pads are polyester. These sling covers have stitched velcro added liners for quick and easy attachement protection of slings from edges & abrasive damage. They may be relocated any where on the sling as needed.

Sleeves cover both sides of the sling and can be moved on the sling for optimal use where needed.

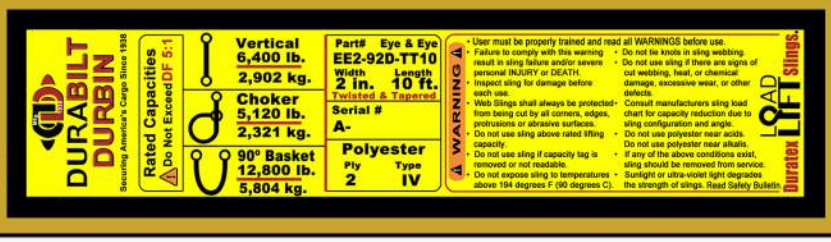
Eye & Eye and Endless RED-D-SLEEVE Pads

Product Code Number	Sleeve Width	Sleeve Length	Use for 2-Ply Web Width	Thickness (inches)	BOX Qty.
EE-EN-1PAD-12	3"	12"	1"	3/16	10 EA
EE-EN-2PAD-12	4"	12"	2"	3/16	10 EA
EE-EN-2PAD-18	4"	18"	2"	3/16	10 EA
EE-EN-2PAD-24	4"	24"	2"	3/16	10 EA
EE-EN-3PAD-12	5"	12"	3"	3/16	10 EA
EE-EN-3PAD-18	5"	18"	3"	3/16	10 EA
EE-EN-3PAD-24	5"	24"	3"	3/16	10 EA
EE-EN-4PAD-12	6"	12"	4"	3/16	10 EA
EE-EN-4PAD-18	6"	18"	4"	3/16	10 EA
EE-EN-4PAD-24	6"	24"	4"	3/16	10 EA

Roundsling RED-D-SLEEVE Pads

Product Code Number	Sleeve Width	Sleeve Length	Rd.Sling #	Thickness (inches)	BOX Qty.
ENRD-2PAD-12	8"	12"	#1 or #2	3/16	10 EA
ENRD-2PAD-18	8"	18"	#1 or #2	3/16	10 EA
ENRD-3PAD-12	8"	12"	#3	3/16	10 EA
ENRD-3PAD-18	8"	18"	#3	3/16	10 EA
ENRD-5PAD-12	10"	12"	#5	3/16	10 EA
ENRD-5PAD-18	10"	18"	#5	3/16	10 EA
ENRD-5PAD-24	10"	24"	#5	3/16	10 EA
ENRD-7PAD-18	10"	18"	#7	3/16	10 EA
ENRD-7PAD-24	10"	24"	#7	3/16	10 EA
ENRD-9PAD-18	12"	18"	#9	3/16	10 EA
ENRD-9PAD-24	12"	24"	#9	3/16	10 EA

Eye & Eye
Type IV

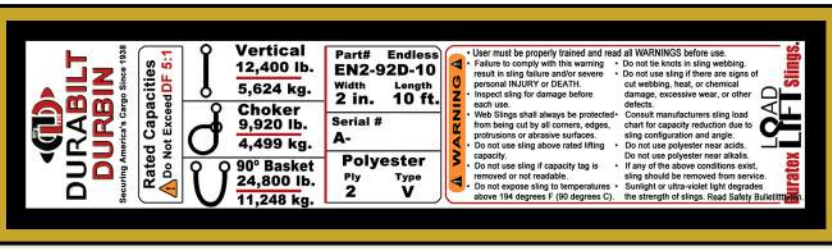


How to Order by Part Number:

EE2-9 1 D-T or TT 4

EE	2	9	1	D	T or TT	4'
EE = Type IV EYE - EYE	Number of Plies 2	Web Strength 9 = 9,800 lb.	Sling Width 1 - 4 (in.)	DURATEX™ Engineered Polyester	Eye Treatment (T) Twisted (TT) Twisted & Tapered Full Lined Eyes.	Sling Length (feet). Bearing to Bearing (See Minimum).

Endless - Type V



DURATEX LOAD LIFT Slings™

EN2-9 1 D - 6

EN	2	9	1	D	6'
EN = Type V Endless	Number of Plies 2	Web Strength 9 = 9,800 lb.	Sling Width 1 - 4 (in.)	DURATEX™ Engineered Polyester	Sling Length (feet). Bearing to Bearing

To Order by Length -

Measure Bearing to Bearing for All Sling Types

How to Order

D

RoundSlings

Endless

ENRD1-
ENRD2-
ENRD3-
ENRD5-
ENRD7-
ENRD9-
ENRD11-

ENRD3-10

ENR	D	3	10
Endless RoundSling	DURATEX™ Engineered Polyester	Designates Rated Capacity by Color Code and Number.	Sling Length (feet). 10

Rated Capacities are Color Coded and Numbered.

DURATEX LOAD LIFT Slings

Eye & Eye Type IV Polyester

Rated Capacities

Product Code #	PLY	Web Width (In.)	Length (Ft.)	Weight per Foot lb.	Vertical lb.	Choker lb.	Basket 90° lb.	45° lb.	30° lb.	Eye Length (In.)	Eye Width (In.)
EE2-91D-T6	2	1	6'	0.13	3,200	2,560	6,400	4,524	3,200	10	1.22
EE2-91D-T8	2	1	8'	0.13	3,200	2,560	6,400	4,524	3,200	10	1.22
EE2-91D-T10	2	1	10'	0.13	3,200	2,560	6,400	4,524	3,200	10	1.22
EE2-92D-TT6	2	2	6'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT8	2	2	8'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT10	2	2	10'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT12	2	2	12'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT16	2	2	16'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT20	2	2	20'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-92D-TT30	2	2	30'	0.25	6,400	5,120	12,800	9,049	6,400	10	1.25
EE2-93D-TT8	2	3	8'	0.38	9,300	7,440	18,600	13,149	9,300	12	1.69
EE2-93D-TT10	2	3	10'	0.38	9,300	7,440	18,600	13,149	9,300	12	1.69
EE2-93D-TT16	2	3	16'	0.38	9,300	7,440	18,600	13,149	9,300	12	1.69
EE2-93D-TT20	2	3	20'	0.38	9,300	7,440	18,600	13,149	9,300	12	1.69
EE2-94D-TT6	2	4	6'	0.50	11,500	9,200	23,000	16,260	11,500	12	2.20
EE2-94D-TT10	2	4	10'	0.50	11,500	9,200	23,000	16,260	11,500	12	2.20
EE2-94D-TT20	2	4	20'	0.50	11,500	9,200	23,000	16,260	11,500	12	2.20

- THE EYE & EYE SLING may be used on all hitches. It is recommended for choker style hitches because of the design.
- The contoured TWISTED & TAPERED EYES allow for better fitting in the cradle of the hook.
- DURATEX SUPERIOR TENSILE STRENGTH is the core standard of the load bearing yarns.
- Tags allow for clear identification of rated capacity, material type, & serial number designed to outlast the life of the sling as required by OSHA.
- DURA-EDGE web protecting structure provides optimal abrasion & cut resistance.
- FULL- WRAPPED & BUFFERED EYES aid in preventing damage to the sling. This is critical due to heavy loads, enabling a longer life of the sling.
- RED CORE WARNING YARNS provide a visual warning to remove slings from service immediately.
- DURATEX "VALUE ADDED QUALITY" is built into the longer life of the web slings.

Full Wrapped Eyes - Twisted & Tapered.

Dura-Edge Web Protector ™

⚠ WARNING ⚠ As the Sling to Load Angle Decreases, So will the rating of the Sling Capacity.

⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Endless Type V Polyester

DURATEX LOAD LIFT Slings

Rated Capacities

Product Code #	PLY	Web Width In.	Vertical lb.	Choker lb.	Basket 90° lb.	60° lb.	45° lb.	30° lb.	Length Ft.	Weight per Ft. Lbs.
EN2-91D-8	2	1	6,200	4,960	12,400	10, 738	8,766	6,200	8'	0.25
EN2-91D-10	2	1	6,200	4,960	12,400	10, 738	8,766	6,200	10'	0.25
EN2-92D-6	2	2	12,400	9,920	24,800	21,452	17,484	12,400	6'	0.50
EN2-92D-8	2	2	12,400	9,920	24,800	21,452	17,484	12,400	8'	0.50
EN2-92D-10	2	2	12,400	9,920	24,800	21,452	17,484	12,400	10'	0.50
EN2-92D-12	2	2	12,400	9,920	24,800	21,452	17,484	12,400	12'	0.50
EN2-92D-16	2	2	12,400	9,920	24,800	21,452	17,484	12,400	16'	0.50
EN2-92D-20	2	2	12,400	9,920	24,800	21,452	17,484	12,400	20'	0.50
EN2-93D-8	2	3	17,600	14,080	35,200	30,448	24,816	17,600	8'	0.75
EN2-93D-10	2	3	17,600	14,080	35,200	30,448	24,816	17,600	10'	0.75
EN2-93D-16	2	3	17,600	14,080	35,200	30,448	24,816	17,600	16'	0.75
EN2-93D-20	2	3	17,600	14,080	35,200	30,448	24,816	17,600	20'	0.75
EN2-94D-8	2	4	22,000	17,600	44,000	38,060	31,020	22,000	8'	1.00
EN2-94D-12	2	4	22,000	17,600	44,000	38,060	31,020	22,000	12'	1.00
EN2-94D-16	2	4	22,000	17,600	44,000	38,060	31,020	22,000	16'	1.00
EN2-94D-20	2	4	22,000	17,600	44,000	38,060	31,020	22,000	20'	1.00

- **Duratex Endless Type V Slings** are one of the most versatile & widely used because of their adaptability to countless applications.
- **Hitch Types; Vertical, Choker, & Basket.**
- **Duratex Value Added Quality** weaved into every web sling to produce the Superior Tensile Strength which is the core standard of load bearing yarns.
- **Design Factor** (DF) 5 to 1.
- **Dura-Edge** web protecting structure provides optimal abrasion & cut resistance.
- **Red Core Warning Yarns** provide a visual warning to remove sling from service.
- **Superior protect ID Tag** allows for clear identification of rated capacity, material type and serial number - trace codes, designed to outlast the life of the slings as required by OSHA.
- **Extended Sling Life** is achieved by the rotation of the wear surfaces.
- **Individually Shrink Wrapped for Longer Shelf Life.**
- **100% Proof Tested**

WARNING DO NOT EXCEED RATED CAPACITY

Endless Type V D

RoundSlings Endless

Rated Capacities

PRODUCT CODE #	Color Code	Vertical lb.	Choker lb.	Basket 90° lb.	45° lb.	Min. Length Ft.	Approx. Weight per Ft.	Approx. Diam. (No Load) In.	Min. Hardware Diam.
ENRD1-	Purple	2,600	2,080	5,200	3,692	4’	0.19 lb.	1-1/8	0.50
ENRD2-	Green	5,300	4,240	10,600	7,500	4’	0.28 lb.	1-1/8	0.62
ENRD3-	Yellow	8,400	6,720	16,800	11,900	6’	0.32 lb.	1-1/2	0.75
ENRD5-	Red	13,200	10,560	26,400	18,700	8’	0.76 lb.	1-1/2	1.00
ENRD7-	Blue	21,200	16,960	42,400	30,000	8’	0.86 lb.	2	1.25
ENRD9-	Orange	31,000	24,800	62,000	43,800	16’	1.06 lb.	3-1/4	1.50
ENRD11-	Orange	53,000	42,400	106,000	74,900	10’	1.77 lb.	3-1/4	1.88

>>> When Ordering Add the Length Below to the Product # above. i.e. “ ENRD1-6 ”

Bearing to Bearing Length (FEET) >	4’	6’	8’	10’	12’	14’	16’	18’	20’	30’	40’
ENRD1-	■	■	■								
ENRD2-	■	■	■	■							
ENRD3-		■	■	■	■				■		
ENRD5-			■	■	■				■		
ENRD7-			■		■				■		
ENRD9-							■		■		
ENRD11-				■					■		

DURATEX RoundSling Features:

- All RoundSlings are manufactured to **WSTDA specs.**
- **Color-coded** for positive sling rated capacity identification.
- **Double-wall,** woven seamless polyester cover for longer sling life.
- **Design Factor** (DF) is 5 to 1.
- Blue/Green Core **Spiral Warning Yarns** provide positive indication for sling replacement.
- **Low elongation** (approx. 3% at rated capacity).
- **Resistant** to U.V., mold, mildew and rot.
- **Soft and light weight** for easy rigging, handling and storage.
- **No loss** of strength if abrasion occurs.
- **Easily conforms** to the shape of the load.
- **Sling life** can be **extended** by rotating bearing points (340°).
- **Superior Life-Long** ID Tag w/ Serial No. and Rated Capacity in pounds and kilograms.
- All RoundSlings supplied with WSTDA Safety / Warning Bulletin. READ BEFORE USING SLING.
- Individually shrink wrapped for shelf protection.

DURATEX LOAD LIFT Slings

⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Web & RoundSling Shackles

All Forged Alloy

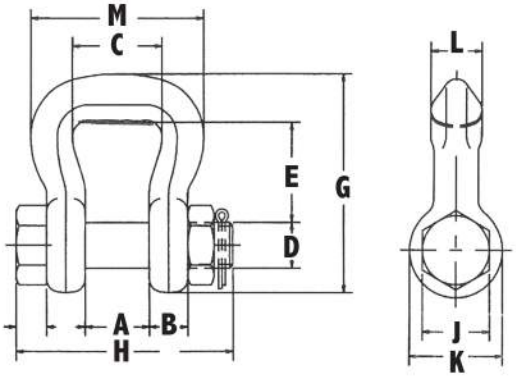
BOLT TYPE D252

SCREW PIN TYPE D253

- Shackles available from 3-1/4 to 35 Ton Capacity.
- Design Factor 5 to 1 / All Alloy Forging
- Shackles available in Screw Pin and Bolt Type.
- Forged Size and WLL / Capacity on each shackle.
- Meets or Exceeds requirements of ASME B30.26
- Finish: enamel painted after hot dip galvanizing.

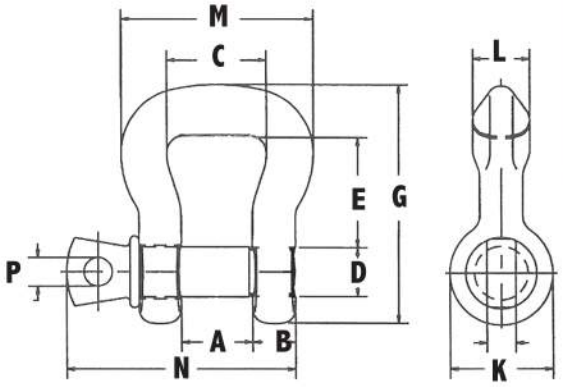
- Increased Body Radius allows for a wider sling bearing surface which results in an increased area for load distribution increasing sling efficiency.
- This enables the slings full WLL / Capacity to be achieved due to better load distribution across the shackle.

D252 Bolt Type Product Code Number	Weight Each Lbs.	Web Sling Eye Width Inches	Round Sling Size No.	D253 Screw Pin Type Product Code Number	Weight Each Lbs.	Pcs. Per Box
Shackle-3.25T-D252	1.4	1	1 & 2	Shackle 3.25T-D253	1.2	20
Shackle-6.5T-D252	2.4	1.5	3 & 4	Shackle 6.25T-D253	2.0	20
Shackle-8.75T-D252	4.4	2	5 & 6	Shackle 8.75T-D253	3.8	20
Shackle-12.5T-D252	8	3	7 & 8	Shackle 12.5T-D253	7.3	6
n/a		4	9 & 10	Shackle 20.5T-D253	15.0	4
n/a		5	11 & 12	Shackle 35T-D253	30.0	2



BOLT TYPE - D252

Shackle Specification Chart



SCREW PIN TYPE - D253

DIMENSIONS

	Work Load Limit Tons	A	B	C	D	E	G	H	J	K	L	M	D253 N	D253 P
See Above for Prod. Code #	3.25 T	.925	.62	1.33	.78	1.51	3.38	3.62	1.10	1.51	.74	2.69	3.14	.27
	6.5 T	1.25	.75	1.69	.86	1.88	4.15	4.21	1.29	1.81	1.0	3.38	3.97	.31
	8.75 T	1.38	.87	2.20	.98	2.79	5.47	4.72	1.37	2.12	1.14	4.21	4.52	.35
	12.5 T	1.67	1.12	3.22	1.25	3.07	6.37	6.29	1.85	2.59	1.37	5.66	5.82	.47
	20.5 T	2.15	1.37	4.50	1.49	5.43	9.37			3.12	1.75	7.48	7.08	.51
	35 T	2.50	1.73	5.47	1.96	6.41	11.49			4.36	2.32	9.21	8.46	.70

DO NOT Allow Screw Pin Type to be rotated by a live line.

⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Select Your Anchor Shackles

See Dimensions Next Page

- ALL Shackles are Type Approved
- Size and Work Load Limit permanently shown on shackle forging
- ALL forged steel w/alloy pin
- ALL Shackles Batch Coded for quality traceability with requested certificate
- ALL 100% crack detection during manufacturing
- ALL cycle fatigue rated to 1.5 times Work Load Limit

D2140
Forged Alloy Steel with Alloy Bolt

Design Factor 5 to 1

D2140

Bolt Type Anchor Shackles - All Forged Alloy

Product Code Number	Nominal Size Inches	Work Load Limit TONS	Weight Lbs.	Pcs. Per Box
SHACKLE-1/2-D2140	1/2	3.4	0.9	20
SHACKLE-5/8-D2140	5/8	5	1.5	20
SHACKLE-3/4-D2140	3/4	7	2.2	20
SHACKLE-7/8-D2140	7/8	9.5	3.7	10
SHACKLE-1-D2140	1	12.5	5.5	10

D209
Forged Carbon Steel with Alloy Screw Pin

Design Factor 5 to 1

D209

Screw Pin Type Anchor Shackles - Alloy Forged Pin

SHACKLE-5/16-D209	5/16	0.75	0.2	20
SHACKLE-3/8-D209	3/8	1	0.2	20
SHACKLE-1/2-D209	1/2	2	0.7	20
SHACKLE-5/8-D209	5/8	3.25	1.3	20
SHACKLE-3/4-D209	3/4	4.75	2.4	10
SHACKLE-7/8-D209	7/8	6.5	3.5	10
SHACKLE-1-D209	1	8.5	5.7	10

D209A
Forged Alloy Steel with Alloy Screw Pin

Design Factor 5 to 1

D209A

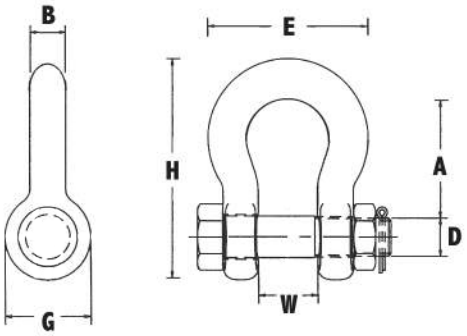
Screw Pin Type Anchor Shackles - All Forged Alloy

SHACKLE-5/16-D209A	5/16	1.2	0.2	20
SHACKLE-3/8-D209A	3/8	2	0.2	20
SHACKLE-7/16-D209A	7/16	2.6	0.4	20
SHACKLE-1/2-D209A	1/2	3.4	0.7	20
SHACKLE-5/8-D209A	5/8	5	1.3	20
SHACKLE-3/4-D209A	3/4	7	2.2	20
SHACKLE-7/8-D209A	7/8	9.5	3.3	20
SHACKLE-1-D209A	1	12.5	5.1	10
SHACKLE-1-1/8-D209A	1-1/8	15	7.1	6
SHANKLE-1-1/4-D209A	1-1/4	18	9.7	6

DO NOT Allow Screw Pin Type to be rotated by a live line.

⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Anchor Shackle Specifications

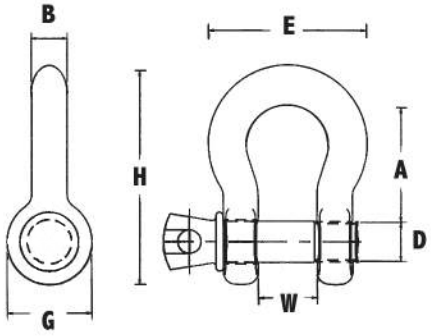


D2140
BOLT TYPE

Product Number	A	B	D	E	G	H	W
SHACKLE-1/2-D2140	1.85	0.52	0.63	1.30	1.18	3.34	0.79
SHACKLE-5/8-D2140	2.4	0.63	0.75	1.77	1.53	4.21	1.06
SHACKLE-3/4-D2140	2.83	0.75	0.87	1.97	1.81	5.04	1.30
SHACKLE-7/8-D2140	3.39	0.87	1.02	2.28	2.09	5.91	1.50
SHACKLE-1-D2140	3.78	1.02	1.10	2.68	2.36	6.57	1.73

Bolt Type Anchor Shackles meet the performance of Federal Specification RR-C-271D, Type 4A, Grade B, Class3.

D209 and D209A
SCREW PIN TYPE



Product Size	A	B	D	E	G	H	W
SHACKLE-5/16	1.22	0.31	0.37	0.83	0.75	2.13	0.47
SHACKLE-3/8	1.42	0.39	0.43	1.02	0.91	2.56	0.63
SHACKLE-7/16	1.7	0.43	0.51	1.18	1.06	2.95	0.75
SHACKLE-1/2	1.85	0.52	0.63	1.3	1.18	3.34	0.79
SHACKLE-5/8	2.4	0.63	0.75	1.77	1.53	4.21	1.06
SHACKLE-3/4	2.83	0.75	0.87	1.97	1.81	4.96	1.3
SHACKLE-7/8	3.39	0.87	1.02	2.28	2.09	5.82	1.5
SHACKLE-1	3.78	1.02	1.10	2.68	2.36	6.53	1.73
SHACKLE-1-1/8	4.37	1.10	1.26	2.91	2.68	7.48	1.81
SHACKLE-1-1/4	4.76	1.26	1.42	3.22	2.99	8.26	2.12

D209

Screw Pin Type Anchor Shackles meet the performance of Federal Specification RR-C-271D, Type 4A, Grade A, Class2.

D209A

Screw Pin Type Anchor Shackles meet the performance of Federal Specification RR-C-271D, Type 4A, Grade B, Class2.

Grade 80 CHAIN

G80 Lashing Product Code Number	Chain Size Inches	Chain Length Feet	Work Load Limit Lbs.	Breaking Strength Lbs.	Weight Per Drum. Lbs.	Pieces Per Drum Lbs.
Alloy Drum Chain					With Black Finish.	
DBC-38-400-G8 BULK	3/8	400	7,100	28,400	590	1-Unit
DBC-12-200-G8 BULK	1/2	200	12,000	48,000	534	1-Unit
Alloy Binder Chain					With Black Finish and Clevis Grab Hooks.	
DBC-38x20-G8-CGH	3/8	20	7,100	28,400	630	20
DBC-12x20-G8-CGH	1/2	20	12,000	48,000	570	10

(Not for overhead lifting - for lashing only)

DO NOT Allow Screw Pin Type to be rotated by a live line.

WARNING DO NOT EXCEED RATED CAPACITY

Grade 80 Sling & Chain Attachments

Dura-Link
G-80

Web Sling Connector
G-80

Clevis Grab
G-80

Product Code Number	Description (All Hooks Forged)	Size Inches	Grade	Work Load Limit Lbs.	Product Finish	Weight Lbs. Ea.	Fak Pak Box
DDL-516 DURA-LINK	Connector Link, Alloy, Load Rated	5/16	G-80	**4,400**	Red	0.31	10
DDL-38 DURA-LINK	Connector Link, Alloy, Load Rated	3/8	G-80	**7,100**	Red	0.65	10
DDL-12 DURA-LINK	Connector Link, Alloy, Load Rated	1/2	G-80	**12,000**	Red	1.5	10
DDL-58 DURA-LINK	Connector Link, Alloy, Load Rated	5/8	G-80	**18,100**	Red	2.5	10
WSC-732-G80	Web Sling Connector	7/32	G-80	**2,500**	Yellow	0.4	10
WSC-516-G80	Web Sling Connector	5/16-1/4	G-80	**4,400**	Yellow	0.7	10
WSC-38-G80	Web Sling Connector	3/8	G-80	**7,000**	Yellow	1.3	10
HKCG-38G8	Clevis Grab Hook	3/8	G-80	**7,100**	Red	1.4	10
HKCG-12G8	Clevis Grab Hook	1/2	G-80	**12,000**	Red	2.8	10

Eye Sling
G-80

Eye Swivel
G-80

Eye Sling Self Locking
G-80

Clevis Sling Self Locking
G-80

HKE-SLG-38G80	Eye Sling Hook (W/ Latch)	3/8	G-80	**7,100**	Red	2.28	10
HK-ESW-38G80	Eye Swivel Hook (W/ Latch)	3/8	G-80	**7,100**	Yellow	3.3	10
HK-ESW-12G80	Eye Swivel Hook (W/ Latch)	1/2	G-80	**12,000**	Yellow	6.6	10
HKE-SL-38-G8	Eye Self Locking	3/8	G-80	**7,100**	Enamel Yellow	3	2
HKE-SL-12-G8	Eye Self Locking	1/2	G-80	**12,000**	Enamel Yellow	6.1	2
HKC-SL-38-G8	Clevis Self Locking	3/8	G-80	**7,100**	Enamel Yellow	3.3	2
HKC-SL-12-G8	Clevis Self Locking	1/2	G-80	**12,000**	Enamel Yellow	6.6	2

DURALIFT™ - Lever Hoist Features

ISO9001: 2000
4004Q11533ROM

- Meets: ANSI/ ASME B30.21 & B30.10 design performance testing standard - OSHA compliant
- Grade 80 alloy hoist chain
- Impact resistant steel casing, gear & frame Meets: ASME B30.21/HST-3M design performance testing standard
- Alloy steel forged hooks designed to bend slowly as a warning sign in the event of overload
- 360 degree swivel-rotation on top hooks, bottom hooks and handle
- High strength steel stamped cold-formed casing, frame and lever handle
- Positive load control & braking action - Weston style load brake, 4 braking surfaces, 2 moisture resistant brake pads, double brake pawl system - fully enclosed (except 1/4 ton unit)
- Powder coated finish to assist against potential corrosion
- Individual serial number and test certificate issued for operational testing to 150% of rated capacity
- All hoists have "free-chaining" feature for quick slack take-up.
- Load chain roller-guide system for efficient multi-position lifting, pulling, stretching & positioning.

⚠ WARNING ⚠ DO NOT EXCEED RATED CAPACITY

Select Your Duralift Lever Operated Hoist

"Mini-Max" 1/4 Ton

*3/4, *1.5, *3 Ton

*Free Chain Pull Out

*6 Ton

Dura lift Lever Hoists

Product Code Number	Rated Capacity			Standard Lift		Effort for Max Load		Lever Length		Hook Throat Opening		Minimum Distance between Hooks		Approx. Weight		Pcs. Per Box
1/4 Ton Hoists	ton	lb.	kg.	ft.	m	lb.	kg.	in.	mm	in.	mm	in.	mm	lb.	kg.	
DLH-1/4- TON-5L	0.25	550	250	5	1.5	58.4	24.72	6.3	160	0.83	21.08	8.57	210	4.08	1.84	6
DLH-1/4-TON-10L	0.25	550	250	10	3.0	58.4	24.72	6.3	160	0.83	21.08	8.57	210	5.08	2.3	6
3/4 Ton Hoists																
DLH-3/4-Ton-5L	0.75	1650	750	5	1.5	24.2	11	10.6	269.2	1.1	28.5	12.6	321	14.4	6.6	1
DLH-3/4-Ton-10L	0.75	1650	750	10	3.0	24.2	11	10.6	269.2	1.1	28.5	12.6	321	16.8	7.6	1
DLH-3/4-Ton-15L	0.75	1650	750	15	4.6	24.2	11	10.6	269.2	1.1	28.5	12.6	321	19.1	8.7	1
DLH-3/4-Ton-20L	0.75	1650	750	20	6.0	24.2	11	10.6	269.2	1.1	28.5	12.6	321	23.8	10.8	1
1.5 Ton Hoists																
DLH-1.5-Ton-5L	1.5	3300	1500	5	1.5	55	25	16	403.9	1.25	31.8	14.8	376	26.2	11.9	1
DLH-1.5-Ton-10L	1.5	3300	1500	10	3.0	55	25	16	403.9	1.25	31.8	14.8	376	30.0	13.6	1
DLH-1.5-Ton-15L	1.5	3300	1500	15	4.6	55	25	16	403.9	1.25	31.8	14.8	376	33.6	15.3	1
DLH-1.5-Ton-20L	1.5	3300	1500	20	6.0	55	25	16	403.9	1.25	31.8	14.8	376	38.2	17.3	1
3 Ton Hoists																
DLH-3-Ton-5L	3.0	6600	3000	5	1.5	66	30	16	403.9	1.56	39.7	18.7	475	43.4	19.74	1
DLH-3-Ton-10L	3.0	6600	3000	10	3.0	66	30	16	403.9	1.56	39.7	18.7	475	49.4	22.44	1
DLH-3-Ton-15L	3.0	6600	3000	15	4.6	66	30	16	403.9	1.56	39.7	18.7	475	55.3	25.14	1
DLH-3-Ton-20L	3.0	6600	3000	20	6.0	66	30	16	403.9	1.56	39.7	18.7	475	68.9	31.25	1
6 Ton Hoists																
DLH-6-Ton-10L	6.0	13200	6000	10	3.0	81	36.8	16.3	403.9	3.07	78	22.25	565	71.2	32.29	1
DLH-6-Ton-15L	6.0	13200	6000	15	4.6	81	36.8	16.3	403.9	3.07	78	22.25	565	83.1	37.69	1

Web Sling WARNINGS

The following six points briefly summarize some important safety issues:

1. **All users must be trained** in sling selection, use and inspection, cautions to personnel, environmental effects and rigging practices.
2. **Inspect sling for damage** regularly, if the sling is damaged, remove it from service.
3. **Protect sling from damage.** ALWAYS protect slings in contact with edges, corners, protrusions, abrasive surfaces with materials of sufficient strength, thickness and construction to prevent damage.
4. **Do not exceed a sling's rated capacity.** Always consider the effect of sling angle and tension on the sling's rated capacity.
5. **Do not stand on, under or near a load** with the sling under tension. All personnel should be alert to danger of falling and/or uncontrolled load, sling tension and the potential for snagging.
6. **Maintain and store roundslings properly.** Slings should be protected from mechanical, chemical and environmental damage.

Warnings @ Web Sling

WARNING

Read and follow all use and safety information provided with this sling. Failure to do so may result in severe **INJURY** or **DEATH** due to sling failure and/or loss of load.

The following six points briefly summarize some important safety issues:

1 **All users must be trained** in sling selection, use and inspection, cautions to personnel, environmental effects and rigging practices.

2 **Inspect sling for damage regularly**. A sling shall be removed from service if you see any of the conditions listed on the back of this label. If you have ANY doubts about the condition of a sling, do not use or repair it.

3 **Protect sling from damage.** ALWAYS protect slings in contact with edges, corners, protrusions or abrasive surfaces with materials of sufficient strength, thickness and construction to prevent damage.

4 **Do not exceed a sling's rated capacity**. Always consider the effect of sling angle and tension on the sling's rated capacity.

5 **Do not stand on, under or near a load** with the sling under tension. All personnel should be alert to dangers of falling or uncontrolled loads, sling tension and the potential for snagging.

6 **Maintain and store slings properly**. Slings should be protected from mechanical, chemical and environmental damage.

1 Sling Users Must be Trained

This warning label **DOES NOT** contain all the information you need about sling safety. All sling users must be:

- Trained in sling selection and inspection, hazards to personnel, environmental effects and rigging practices.
- Knowledgeable about the safe and proper use and application of slings.
- Thoroughly familiar with the manufacturer's recommendations and safety materials provided with each product.
- Aware of their responsibilities as outlined in all applicable standards and regulations.

2 Inspect Sling For Damage

The entire web sling must be **inspected before each shift or day in Normal service and before each use in Severe service applications.** It shall be **removed from service** if ANY of the following are detected:

- If sling identification tag is missing or not readable.
- Holes, tears, cuts, snags or embedded materials.
- Broken or worn stitches in the load bearing splices.
- Knots in any part of the sling webbing.
- Acid or alkali burns.
- Melting, charring or weld spatters on any part of the web sling.
- Excessive abrasive wear or crushed webbing.
- Signs of ultraviolet (UV) light degradation.
- Distortion, excessive pitting, corrosion or other damage to fitting(s).
- If provided, exposed red core yarn. However if damage is present and red yarns are not exposed DO NOT USE the sling.
- Any conditions which cause doubt as to the strength of the web sling.

To detect possible damage, perform a visual inspection and also feel along the entire length of the sling. Even damage that looks or feels "minor" can significantly degrade sling performance. If you have ANY doubts about the condition of a sling, **DO NOT USE IT**. Never attempt to repair a damaged sling (e.g., tie knots in the webbing, etc.).

3 Prevent Sling Damage

Synthetic slings can fail if damaged, abused, misused, overused or improperly maintained. Avoid any action that could cause the types of damage listed in the previous section and take steps to prevent sling damage, including:

- **Web slings must ALWAYS be protected from being cut or damaged by corners, edges, protrusions or abrasive surfaces with protection sufficient for the intended purpose.**
- Do not drop or drag slings on the ground, floor or over abrasive surfaces.
- Do not pull slings from under loads when the load is resting on the sling—place blocks under load if feasible.
- Web slings shall not be twisted, shortened, lengthened, tied into knots or joined by knotting.
- Avoid twisting or kinking sling legs.
- Avoid exposing slings to damaging acids or alkalis.
- Never use or allow exposure to temperatures above 194°F (90°C) or below -40°F (-40°C).
- Center sling in the base or "bowl" of a hook to prevent "tip loading."
- Avoid using hooks, shackles or other hardware that have edges or surfaces that could damage sling.
- Do not run/drive over slings with vehicles or other equipment.

4 Use Sling Safely

A competent and qualified sling user must consider all risk factors prior to lifting a load. User must:

- Determine the weight of the load and its center-of-gravity (CG).
- Select a sling and hardware having suitable characteristics for the type, size and weight of the load, the type of hitch and the environment.
- Consult the manufacturer's rated capacity tag and/or other materials to determine the reduction in capacity due to sling configuration and angle.
- Avoid accelerating or decelerating the load too quickly (i.e., "shock loading").
- Control the lift and load to prevent slipping, sliding and/or loss of the load.

Use this sling for lifting loads only.

- NEVER use a sling for towing purposes.
- NEVER use a sling to pull on stuck objects.

5 Be Alert When Lifting Loads

When using slings, all personnel must be alert to potential risks:

- Always stand clear of a lifted load and never be under, on or near a suspended load.
- No part of the body should be placed between the sling and load or between the sling and lifting hook.
- Personnel must be alert to the potential for the sling to become snagged during lifting—never use a web sling to pull on objects in a snagged or constrained condition.

6 Sling Care and Storage

When slings are not in use, they should be stored in a cool, dry and dark location. Slings should also be stored in an area free from environmental or mechanical sources of damage, such as: weld spatter, splinters from grinding/machining, heat sources, UV or chemical exposure, etc.

Slings should be kept clean and free of dirt, grime and foreign materials. Mild soap and water can be used to clean slings, but be sure to let the sling dry completely before placing back in storage or use. Do not machine wash slings. Machine washing results in significant loss of sling strength.

If you want more information about Roundsling safety, contact WSTDA to obtain copies of the Synthetic Roundsling Safety Bulletin — a companion document to this labeling. (Web Sling & Tie Down Safety Bulletins are also available)

www.wstda.com

RSWT-1 2010

DURATEX LOAD LIFT Slings™

WARNING DO NOT EXCEED RATED CAPACITY

RoundSling WARNINGS

WARNING

Read and follow all use and safety information provided with this sling. Failure to do so may result in severe **INJURY** or **DEATH** due to sling failure and/or loss of load.

The following six points briefly summarize some important safety issues:

1 All users must be trained in sling selection, use and inspection, cautions to personnel, environmental effects and rigging practices.

2 Inspect sling for damage regularly. A sling shall be removed from service if you see any of the conditions listed on the back of this label. If you have ANY doubts about the condition of a sling, do not use or repair it.

3 Protect sling from damage. ALWAYS protect slings in contact with edges, corners, protrusions or abrasive surfaces with materials of sufficient strength, thickness and construction to prevent damage.

4 Do not exceed a sling's rated capacity. Always consider the effect of sling angle and tension on the sling's capacity.

5 Do not stand on, under or near a load with the sling under tension. All personnel should be alert to dangers of falling or uncontrolled loads, sling tension and the potential for snagging.

6 Maintain and store slings properly. Slings should be protected from mechanical, chemical and environmental damage.

1 Sling Users Must be Trained

This warning label **DOES NOT** contain all the information you need about sling safety. All sling users must be:

- Trained in sling selection and inspection, hazards to personnel, environmental effects and rigging practices.
- Knowledgeable about the safe and proper use and application of slings.
- Thoroughly familiar with the manufacturer's recommendations and safety materials provided with each product.
- Aware of their responsibilities as outlined in all applicable standards and regulations.

2 Inspect Sling For Damage

The entire roundsling must be **inspected before each shift or day in Normal service and before each use in Severe service applications.** It shall be **removed from service** if ANY of the following are detected:

- If roundsling identification tag is missing or not readable.
- Holes, tears, cuts, embedded materials, excessive abrasive wear or snags that expose the core yarn of the roundsling.
- Broken or damaged core yarn.
- If roundsling has been tied into one or more knots.
- Acid or caustic burns of the roundsling.
- Melting, charring or weld spatter of any part of the roundsling.
- Distortion, excessive pitting, corrosion or other damage to fitting(s).
- Broken or worn stitching in the cover which exposes the core yarn.
- Any conditions which cause doubt as to the strength of the roundsling.

To detect possible damage, perform a visual inspection and also feel along the entire length of the sling.

Even damage that looks or feels "minor" can significantly degrade sling performance. If you have ANY doubts about the condition of a sling, **DO NOT USE IT.** Never attempt to repair a damaged sling (e.g., tie knots in the sling, etc.).

3 Prevent Sling Damage

Synthetic slings can fail if damaged, abused, misused, overused or improperly maintained. Avoid any action that could cause the types of damage listed in the previous section and take steps to prevent sling damage, including:

- **Roundslings must ALWAYS be protected from being cut or damaged by corners, protrusions or from contact with edges that are not smooth or well rounded with materials sufficient for the intended purpose. See Synthetic Roundsling Safety Bulletin (WSTDA-RSSB-1).** Roundslings should be protected from abrasive surfaces.
- Do not drop or drag slings on the ground, floor or over abrasive surfaces.
- Do not pull slings from under loads when the load is resting on the sling—place blocks under load if feasible.
- Roundslings shall not be twisted, shortened, lengthened, tied into knots or joined by knotting.
- Avoid twisting or kinking sling legs.
- Avoid exposing slings to damaging acids or alkalis.
- Never use or allow exposure to temperatures above 194°F (90°C) or below -40°F (-40°C).
- Center sling in the base or "bowl" of a hook to prevent "tip loading."
- Avoid using hooks, shackles or other hardware that have edges or surfaces that could damage sling
- Do not run/drive over slings with vehicles or other equipment.

4 Use Sling Safely

A competent and qualified sling user must consider all risk factors prior to lifting a load. Users must:

- Determine the weight of the load and its center-of-gravity (CG).
- Select a sling and hardware having suitable characteristics for the type, size and weight of the load, the type of hitch and the environment.
- Consult the manufacturer's rated capacity tag and/or other materials to determine the reduction in capacity due to sling configuration and angle.
- Avoid accelerating or decelerating the load too quickly (i.e., "shock loading").
- Control the lift and load to prevent slipping, sliding and/or loss of the load.

Use this sling for lifting loads only.

- NEVER use a sling for towing purposes.
- NEVER use a sling to pull on stuck objects.

5 Be Alert When Lifting Loads

When using slings, all personnel must be alert to potential risks:

- Always stand clear of a lifted load and never be under, on or near a suspended load.
- No part of the body should be placed between the sling and load or between the sling and lifting hook.
- Personnel must be alert to the potential for the sling to become snagged during lifting—never use a roundsling to pull on objects in a snagged or constrained condition.

6 Sling Care and Storage

When slings are not in use, they should be stored in a cool, dry and dark location. Slings should also be stored in an area free from environmental or mechanical sources of damage, such as: weld spatter, splinters from grinding/machining, heat sources, UV or chemical exposure, etc.

Slings should be kept clean and free of dirt, grime and foreign materials. Mild soap and water can be used to clean slings, but be sure to let the sling dry completely before placing back in storage or use. Do not machine wash slings. Machine washing results in significant loss of sling strength.

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RSWT-1 2010

DURATEX LOAD LIFT Slings™

Warnings Round Sling

WARNING DO NOT EXCEED RATED CAPACITY

SHACKLE WARNINGS & Limitations of Use

DISENGAGEMENT OF LOAD CAN CAUSE DEATH OR INJURY. DISENGAGEMENT RESULTS FROM DAMAGE, MISUSE, AND EXCESSIVE WEAR.

DO NOT use a shackle without training.
ALWAYS Ask your employer for Shackle Safety use instructions.
ALWAYS comply with applicable Federal and local regulations.
ALWAYS know shackle load.
Do Not use a shackle without a legible product identifier.
Do Not ride on shackle or load.
Do Not overload a shackle.
Do Not rig a shackle to a load improperly.
Do Not use a damaged or worn-out shackle.
Do Not use a shackle in extreme temperatures.
Do Not use a shackle in acidic conditions.

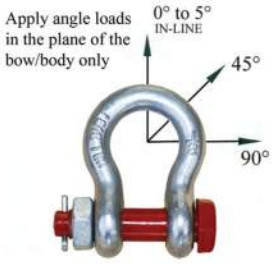
Do Not use a shackle without training. OSHA regulation requires responsible work practice. (SHA1926.20) & (ASME830.26-2004)

Always inform yourself. Ask your employer for shackle safe use instruction. OSHA1926.2.1

Shackle requirements depends on application. Always comply with applicable Federal and local regulations…Federal and local regulations govern worksite activity. Contact OSHA 800-321-6742

Understand all governing laws and safety standards before use of shackles. Always know shackle load.

"Fittings shall be…of a minimum breaking strength equal to that of the sling..." - OSHA 1910.184(i)(3)(i). Maximum lift system load applied to shackle must be known for proper shackle selection.



Side Loading Reduction Chart For Screw Pin and Bolt Type Shackles Only	
Angle of Side Load from In-Line Vertical of Shackle	Reduction of Working Load Limit
0° to 5° In-Line *	100% of Rated WLL
45° from In-Line *	70% of Rated WLL
90° from In-Line *	50% of Rated WLL

*In-Line load is applied perpendicular to pin.
WARNING: DO NOT SIDE LOAD ROUND PIN SHACKLE
DO NOT SIDE LOAD OVER 90° DEGREES

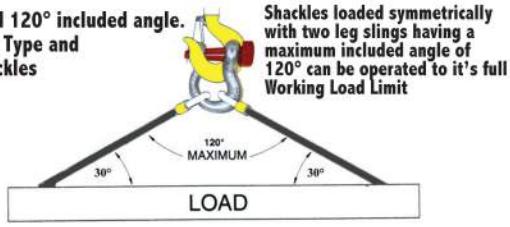
Do Not use a shackle without legible product identification.
Identification is required to insure proper application.
Shackle identification should be maintained by the user so as to be legible throughout the life of the shackle ."-ASME B26-1.5.3

Do Not ride on shackle or load.
Sling use regulation requires: "All employees shall be kept clear of loads about to lifted and of suspended loads"- OSHA 1910.184(c) (9). SEE ASME 830.26-1.9.2(a)

Do Not overload a shackle. Understand working load limits. Required strength depends on application. The rated load (WLL) of the shackle shall not be exceeded-ASMEB30.26-1.9.1(b). If the shackle is to be side-loaded then the rated load shall be reduced in accordance with figure.

DO NOT Exceed 120° included angle. Only user Bolt Type and Screw Pin Shackles

Shackles loaded symmetrically with two leg slings having a maximum included angle of 120° can be operated to it's full Working Load Limit



Do Not rig a shackle to a load improperly.
To avoid dropped loads and shackle damage. Avoid side loading shackle when possible. The screw pin shall be fully engaged, with the shoulder in contact with the shackle body. The screw pin shackle shall not be rigged in a manner that would cause the pin to unscrew.

Do Not use a damaged or worn out shackle.
A visual inspection of the shackle shall be performed by a designated person each day before the shackle is used. A complete periodic inspection shall be performed by a designated person as prescribed in ASME B30.26-1.8.3

Shackles should be removed from service if damage such as the following is visible;

- missing or illegible manufacturer's name or rated load.
- indications of heat damage, weld spatter or arc strikes.
- excessive pitting or corrosion.
- bent, twisted, distorted, stretched, elongated, cracked, or broken load bearing components.
- excessive nicks or gouges.
- a 5% reduction of the original or catalog dimension at any point around the body or pin.
- incomplete pin engagement
- excessive thread damage
- evidence of unauthorized welding

The return to service should only be approved by a qualified person.

Do Not use a shackle in extreme temperatures.
WLL shall be reduced in accordance with the following chart when heated between 400°F and 750°F and should be permanently removed from service if heated above 750°F.

Shackle Temperature	Reduced Percentage of WLL	
	During Exposure	After Exposure
-40° F to 400° F	100%	100%
> 400° F to 600° F	90%	90%
> 600° F to 750° F	75%	75%

Do Not use a shackle in alkaline or acidic conditions.
Lifting shackles shall not be used in alkaline or acidic conditions. Resulting metal embrittlement and accelerated corrosion can cause sudden failure.

Important Information

DISTRIBUTOR AND END USER AWARENESS: READ AND UNDERSTAND ALL IMPORTANT TERMS & WARNINGS BEFORE OPERATION OF ANY DURABILT PRODUCT.

IMPORTANT TERMS

STATIC LOAD – The load resulting from a constantly applied force or load.

WORKING LOAD LIMIT – The maximum mass or force which the product is authorized to support in general service when the pull is applied in-line, unless noted otherwise, with respect to the centerline of the product. This term is used inter-changeably with the following terms:

1. W.L.L. (WORKING LOAD LIMIT) 2. S.W.L. (SAFE WORKING LOAD)

NEVER EXCEED ANY WORKING LOAD LIMIT (W.L.L.) of any DURABILT product, as you will be putting yourself and others at RISK which may result in SERIOUS INJURY or even DEATH.

PROOF LOAD – The average force applied in the performance of a proof test; the average force to which a product may be subjected before deformation occurs.

PROOF TEST – A test applied to a product solely to determine non-conforming material or manufacturing defects.

MINIMUM BREAK LOAD – the maximum load or force applied to the product at which point the product fails to support the load, also known as **MINIMUM BREAKING STRENGTH (MBS).**

SHOCK LOAD – A force that results from the rapid application of a force (such as impacting or jerking) or rapid movement of a static load. A shock load significantly adds to the static load.

DESIGN (SAFETY) FACTOR – Is a term denoting our product's theoretical reserve capability; usually computed by dividing the catalog minimum breaking load by the working load limit. Generally these products have a minimum ratio of 3 to 1.

SPECIAL NOTE: The Durapullers (DP-T2 & DP-T4) have a 2 to 1 ratio between the capacity and the working load limit.

BUSINESS INFORMATION

PRICES/FREIGHT:
Net price schedule is subject to change without notice and orders will be invoiced at prices current at time of shipment. Prices are listed fob our plant, Broadview IL. Minimum invoice billing for credit extended accounts is $150.00. Shipments of less than $150.00 will be invoiced with the minimum invoice billing value of $150.00. Freight is pre-paid in the continental U.S.A. only when the minimum order in Dollars ($) for your shipping region is reached.

FREIGHT POLICY:
Freight terms: Prepaid and allowed on $1,500.00 in the continental U.S.A. Minimum order is $150.00.

ORDERING:
Please specify the following information so that we may expedite your order correctly:

- Product ordering code (letters and numbers)
- Item description
- Quantity as packaged per carton.
- Email orders to: orders@durabiltusa.com

TERMS:
Net thirty (30) days from date of invoice. Past due accounts are subject to 2% per month charge on unpaid balance.

ESTABLISHING NEW ACCOUNT:
Durabilt Dyvex, Inc. requires your bank reference and four trade credit references. Please supply the following for account establishment:

- Trade Reference
- Name/Phone number with area code
- Complete address
- Supplier contact name and account number with phone number.

It is necessary to allow five (5) to seven (7) working days for account establishment.

CANCELLATION OF ORDERS:
Orders for products that are specifically designed for unique applications and not classified as standard product cannot be cancelled. If the order is already in production a fair charge will be invoiced for expenses incurred based on the point of production that the project is in at the time of cancellation. A minimum of 20% of the total order will be charged for all cancelled orders. Cancellations of orders are required in writing. Orders for standard product that are already packed and staged for shipment will be subject to a 20% restocking fee.

ORDER SHORTAGE:
Shortage claims must be made in writing within thirty (30) days from shipping receipt.

RETURNED GOODS:
Written authorization and instructions must be issued prior to the return of merchandise. Without this written authorization returned merchandise will be refused. A handling and restocking charge of 20% plus out-bound and in-bound freight will be applied when necessary on all authorized returns. Requests to return merchandise more than thirty (30) days old must be reviewed on an individual basis. Conditions and terms for the return will be provided at the time of return authorization.

DAMAGED GOODS/ORDER SHORTAGES:
If you receive a shipment that appears to be damaged, shorted, or opened by a third party, it is important that you accept the shipment and indicate "damaged" or indicate problem on the freight bill. Receiving and accepting the shipment without noting the "damage" on the freight bill is the acceptance of the shipment in good condition. When noting that damaged goods were received on the freight bill the customer claim is with the freight company and not with Durabilt Dyvex, Inc. It is the responsibility of the receiver only.

TOLERANCES:
Tolerances on forged parts will be in accordance with tolerance standards published by the Forging Industry Association, unless otherwise requested. All cast pressed or machine parts are per applicable industry standards.

FINISH:
"Self-Colored" refers to natural material color after forging process. "Zinc-plated" is a finish in bright zinc. This may be gold or silver in color. "Galvanized" zinc finish refers to hot-dip or mechanically cold processed heavy coating application. Durabilt Dyvex, Inc. products are shot blasted or "peened" before our standard dark red hard-coat enamel is applied to the surface of most products, except in the case of our Ratchet binders, where a Gold-Zinc plating may be found on the end fittings.

LIMITED WARRANTY
All Durabilt Dyvex, Inc. products are guaranteed against manufacturing defects for a period of one year from invoice date. Claims must be reported promptly to Durabilt Dyvex, Inc., in writing. Specify: type of product, defect, and date of purchase. Any products found to be defective by an authorized representative of Durabilt Dyvex, Inc. will be limited to replacement of product or refund of the original purchase price. Durabilt Dyvex, Inc. will not be responsible for consequential damages and labor charges. This warranty does NOT cover deterioration due to normal wear and tear, defects and damage due to alterations, negligence, and use beyond working load limit. Durabilt Dyvex, Inc.'s total liability in no event shall exceed the original purchase price of the product.

ALL LOAD BINDERS, STRAPS AND TIE-DOWNS:
Before the use of all lever and ratchet load binders please be familiar with State & Federal regulations and requirements. Be certain to use these load binders with the correct size and grade [GRADE 30 (Proof Coil), GRADE 40 (High Test) chain, GRADE 70 (Transport) chain, GRADE 80 (Alloy) or GRADE 100 (Alloy) chain] as they conform with the National Association of Chain Manufacturers (NACM) specifications and Federal specifications RR-C-271-C. Be sure to conform with the U.S. Department of Transportation Motor Carrier Safety regulations, Parts 392-393 (all) and the CVSA vehicle inspection criteria. The minimum breaking strength as shown should only be used for calculating the number of chain tie down assemblies required to secure a load in conformance with D.O.T. Regulations 393, 102 (b). AS A DISTRIBUTOR YOU MUST BE FULLY KNOWLEDGEABLE WITH THE WARNINGS AND INFORMATION IN THE PAGES OF THIS PRICE LIST PRIOR TO ANY SALE TO YOUR CUSTOMERS AND THEIR CUSTOMERS SO THE END-USER MAY BE AWARE OF THE CORRECT USAGES, WORK LOAD LIMITS AND WARNINGS ASSOCIATED WITH THESE AND ALL OTHER PRODUCTS OF DURABILT DYVEX, INC.

Dura-Fold | Titan | Truck-Tight | Pro-Bind | Light Pro-Bind | Dura-Lok | DurAlloy

Dura-Claw | Compression Spring | Utility-Light | Recoil-Less Cam

TowMaster Vehicle Recovery | Duralift

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Securing America's Cargo Since 1938

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Poultry Cage Securement | Roll-Off Straps | Slings | Vehicle Recovery Straps

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Please update your contact information regarding Durabilt by Durbin

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