


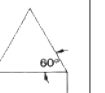

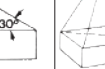
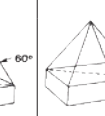
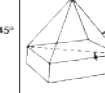



# NORTHERN STRANDS

## CHAIN SLINGS

### GRADE 80 CHAIN SLINGS




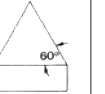

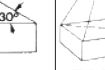
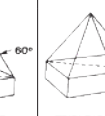
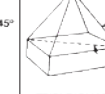
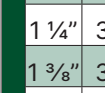
#### WORKING LOAD LIMITS IN POUNDS\*

SIZE OF CHAIN	TYPES OR C							
		CHOKER	60° ANGLE	45° ANGLE	30° ANGLE	TRIPLE/QUAD 60° ANGLE	TRIPLE/QUAD 45° ANGLE	TRIPLE/QUAD 45° ANGLE
								
INCHES	MM.	POUNDS LIFT WHEN USED SINGLE	POUNDS LIFT WHEN USED AT 60° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE	POUNDS LIFT WHEN USED AT 30° ANGLE	POUNDS LIFT WHEN USED AT 60° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE
9/32"	7.0	3,500	2,645	6,100	4,900	3,500	9,100	7,400
5/16"	8.0	4,500	3,527	7,800	6,400	4,500	11,700	9,500
3/8"	10.0	7,100	5,511	12,300	10,000	7,100	18,400	15,100
1/2"	13.0	12,000	9,369	20,800	17,000	12,000	31,200	25,500
5/8"	16.0	18,100	14,109	31,300	25,600	18,100	47,000	38,400
3/4"	20.0	28,300	19,841	49,000	40,000	28,300	73,500	60,000
7/8"	22.0	34,200	26,455	59,200	48,400	34,200	88,900	72,500
1"	26.0	47,700	37,478	82,600	67,400	47,700	123,900	101,200
1 1/4"	32.0	72,300	55,556	125,200	102,200	72,300	187,800	153,400

NOTE: DESIGN FACTOR = 4:1 WARNING: DO NOT EXCEED RATED CAPACITIES

### GRADE 100 CHAIN SLINGS

#### WORKING LOAD LIMITS IN POUNDS\*

SIZE OF CHAIN	TYPES OR C							
		CHOKER	60° ANGLE	45° ANGLE	30° ANGLE	TRIPLE/QUAD 60° ANGLE	TRIPLE/QUAD 45° ANGLE	TRIPLE/QUAD 45° ANGLE
								
INCHES	MM.	POUNDS LIFT WHEN USED SINGLE	POUNDS LIFT WHEN USED AT 60° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE	POUNDS LIFT WHEN USED AT 30° ANGLE	POUNDS LIFT WHEN USED AT 60° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE	POUNDS LIFT WHEN USED AT 45° ANGLE
9/32"	7.0	4,300	3,500	7,400	6,100	4,300	11,200	9,100
5/16"	8.0	5,700	4,500	9,900	8,100	5,700	14,800	12,100
3/8"	10.0	8,800	7,100	15,200	12,400	8,800	22,900	18,700
1/2"	13.0	15,000	12,000	26,000	21,200	15,000	39,000	31,800
5/8"	16.0	22,600	18,100	39,100	32,000	22,600	58,700	47,900
3/4"	20.0	35,300	28,200	61,100	49,900	35,300	91,700	74,900
7/8"	22.0	42,700	34,100	74,000	60,400	42,700	110,900	90,600
1"	26.0	59,700	47,700	103,400	84,400	59,700	155,100	126,000
1 1/4"	32.0	90,400	72,300	156,600	127,800	90,400	234,900	191,700

NOTE: DESIGN FACTOR = 4:1 WARNING: DO NOT EXCEED RATED CAPACITIES

#### USE, CARE & INSPECTION OF GRADE 80 AND GRADE 100 CHAIN SLINGS

THE LIFE AND STRENGTH OF GRADE 80 AND GRADE 100 SLINGS DEPEND ON PROPER USE, MAINTENANCE AND INSPECTION. REFER TO ASME B30.9 AND LOCAL REGULATIONS FOR ADDITIONAL INFORMATION. ALWAYS REFER TO ASME B30.9 FOR INSPECTION AND REJECTION CRITERIA FOR SLINGS.

#### USE

OBSERVING THE FOLLOWING PRECAUTIONS WHEN USING CHAIN SLINGS WILL HELP PROTECT BOTH OPERATORS AND MATERIALS.

1. INSPECT CHAIN SLINGS BEFORE USE AS INDICATED IN INSPECTION SECTION.
2. DO NOT EXCEED WORKING LOAD LIMIT AS INDICATED ON SLING IDENTIFICATION TAG.

\* ANY OF THE FOLLOWING FACTORS CAN LOWER THE LOAD THE CHAIN WILL HOLD:

- RAPID LOAD APPLICATION CAN PRODUCE DANGEROUS OVERLOADING.
- VARIATION IN THE ANGLE OF THE LOAD TO THE SLING. AS THE ANGLE DECREASES, THE WORKING LOAD OF THE SLING WILL DECREASE. REFER TO WORKING LOAD LIMIT CHART.
- TWISTING, KNOTTING AND KINKING SUBJECTS LINKS TO UNDESIRABLE LOADING WHICH DECREASES THE WORKING LOAD LIMIT OF THE SLING.
- CONDITIONS OTHER THAN THAT FOR WHICH SLINGS ARE INTENDED CAN REDUCE THE WORKING LOAD LIMIT OF THE SLING. FOR EXAMPLE, USE AT ELEVATED TEMPERATURES WILL RESULT IN A REDUCTION IN WORKING LIMIT.
- 3. FREE ALL TWISTS, KNOTS AND KINKS.
- 4. CENTER LOAD IN HOOK(S). HOOK LATCHES MUST NOT SUPPORT LOAD.
- 5. AVOID SUDDEN JERKS WHEN LIFTING AND LOWERING.
- 6. BALANCE ALL LOADS, AVOID TIPPING OF LOADS.
- 7. USE PADS AROUND SHARP CORNERS.
- 8. DON'T DROP LOAD ON CHAINS.
- 9. SELECT ATTACHMENTS SUCH AS HOOKS OR RINGS FOR USE WITH CHAIN TO MATCH THE SIZE AND WORKING LOAD LIMIT OF THE CHAIN.
- 10. USE ONLY GR. 80 AND 100 ALLOY CHAIN.
- \* THE IDENTIFICATION TAG IS FOUND ON THE MASTER COUPLING LINK OF EACH CHAIN SLING AND CONTAINS THE FOLLOWING INFORMATION: • GRADE • SIZE • REACH • TYPE • WORKING LOAD LIMIT (AT A SPECIFIC ANGLE OF LIFT) • SERIAL NUMBER

#### CARE

CHAIN SLINGS REQUIRE PROPER CARE AS FOLLOWS:

1. STORE SLINGS IN A CLEAN, DRY PLACE.
2. AVOID CORROSION. OIL CHAINS BEFORE PROLONGED STORAGE.
3. NEVER ALTER THE THERMAL TREATMENT OF GR. 80 AND 100 CHAIN BY HEATING.
4. DO NOT PLATE OR CHANGE SURFACE FINISH OF SLING. CONTACT NORTHERN STRANDS FOR SPECIAL REQUIREMENTS.

#### INSPECTION

IT IS IMPORTANT TO INSPECT CHAIN SLINGS REGULARLY AND TO KEEP A RECORD OF EACH CHAIN INSPECTION. THE FOLLOWING IS A GUIDE FOR SUCH AN INSPECTION PROCEDURE. NORTHERN STRANDS WILL SUPPLY SLING RECORD CARDS OR SHEETS AS REQUESTED. BEFORE INSPECTING, CLEAN THE CHAIN SLING SO THAT MARKS, NICKS, WEAR AND OTHER DEFECTS CAN BE SEEN. USE A NON-ACID/NON-CAUSTIC SOLVENT. EACH CHAIN LINK AND SLING COMPONENT SHOULD BE INDIVIDUALLY INSPECTED FOR THE FOLLOWING CONDITIONS:










1. TWISTS OR BENDS.
2. NICKS OR GOUGES.
3. EXCESSIVE WEAR AT BEARING POINTS. REFER TO WEAR ALLOWANCE CHART.
4. STRETCH.
5. DISTORTED, WORN OR DAMAGED MASTER LINKS, COUPLING LINKS, OR ATTACHMENTS, ESPECIALLY SPREAD IN THROAT OPENING OF HOOKS. EACH LINK OR COMPONENT HAVING ANY CONDITION LISTED ABOVE IS TO BE MARKED WITH PAINT TO PLAINLY INDICATE REJECTION AND REMOVED FROM SERVICE UNTIL PROPERLY REPAIRED.

#### NOTE:

NORTHERN STRANDS ASSUMES NO RESPONSIBILITY FOR THE MISUSE OR MISAPPLICATION OF ANY OF ITS PRODUCTS. PRODUCTS ARE PROVIDED WITH THE EXPRESS UNDERSTANDING THAT THE PURCHASER AND/OR USER ARE THOROUGHLY FAMILIAR WITH THE CORRECT APPLICATION AND PROPER USE. WARNINGS AND DEFINITIONS ARE PROVIDED AS AN AID TO THE USER IN UNDERSTANDING CORRECT APPLICATION AND PROPER USE. WORKING LOAD LIMIT - REFERS TO THE MAXIMUM LOAD (RATED CAPACITY) THAT SHALL BE APPLIED TO THE CHAIN SLING. REFER TO WORKING LOAD LIMIT CHART. THE MANUFACTURER DOES NOT ACCEPT ANY LIABILITY FOR DAMAGES WHICH RESULT FROM THE SLING BEING USED IN EXCESS OF THE WORKING LOAD LIMIT OR FROM ABUSE.

## WIRE ROPE SLINGS

### RATED CAPACITY IN POUNDS

	BASKET AND 2 LEG BRIDLES			3 LEGGED BRIDLES			EYE DIMENSIONS (APPROXIMATE)	
	VERTICAL	CHOKER HITCH	VERTICAL BASKET	30°	45°	60°	30°	45°
								
1/4"	1,300	960	2,600	1,300	1,820	2,200	1,940	2,800
5/16"	2,000	1,480	4,000	2,000	2,800	3,400	3,000	4,200
3/8"	2,800	2,200	5,800	2,800	4,000	5,000	4,400	6,000
7/16"	3,800	2,800	7,800	3,800	5,400	6,800	5,800	8,200
1/2"	5,000	3,800	10,200	5,000	7,200	8,800	7,600	10,800
9/16"	6,400	4,800	12,800	6,400	9,000	11,000	9,600	13,600
5/8"	7,800	5,800	15,600	7,800	11,000	13,600	11,800	16,600
3/4"	11,200	8,200	22,000	11,200	15,800	19,400	16,800	24,000
7/8"	15,200	11,200	30,000	15,200	22,000	26,000	22,000	32,000
1"	19,600	14,400	40,000	19,600	28,000	34,000	30,000	42,000
1 1/8"	24,000	18,200	48,000	24,000	34,000	42,000	36,000	52,000
1 1/4"	30,000	22,000	60,000	30,000	42,000	52,000	44,000	62,000
1 3/8"	36,000	26,000	72,000	36,000	50,000	62,000	54,000	76,000
1 1/2"	42,000	32,000	84,000	42,000	60,000	74,000	64,000	90,000
1 5/8"	48,000	36,000	98,000	48,000	70,000	84,000	74,000	104,000
1 3/4"	56,000	42,000	114,000	56,000	80,000	98,000	84,000	120,000
2"	74,000	56,000	146,000	74,000	104,000	126,000	110,000	156,000
2 1/4"	88,000	70,000	178,000	88,000	126,000	154,000	134,000	188,000
2 1/2"	108,000	84,000	218,000	108,000	154,000	188,000	164,000	230,000
2 3/4"	130,000	102,000	260,000	130,000	184,000	226,000	194,000	276,000
3"	154,000	120,000	306,000	154,000	216,000	266,000	230,000	324,000

NOTE: DESIGN FACTOR = 5:1 WARNING: DO NOT EXCEED RATED CAPACITIES

RATED CAPACITIES BASKET HITCH BASED ON D/D RATIO OF 25/1.

RATED CAPACITIES BASED ON PIN DIAMETER NO LARGER THAN 1/2 NATURAL EYE WIDTH OR LESS THAN THE NOMINAL SLING DIAMETER.

HORIZONTAL SLING ANGLES LESS THAN 30 DEGREES SHALL NOT BE USED.

RATED CAPACITIES SHOWN APPLY ONLY TO 6 X 19 AND 6 X 37 EXTRA IMPROVED PLOW STEEL (EIPS) IWRC CLASSIFICATION WIRE ROPE.

ALWAYS REFER TO ASME B30.9 USE IN REGARDS TO PROPER INSPECTION AND REJECTION CRITERIA FOR SLINGS.

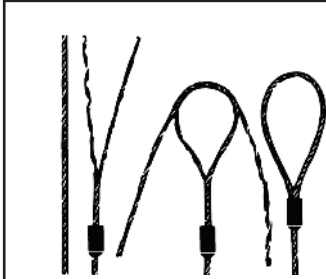
#### WARNING!

WIRE ROPE WILL FAIL IF WORN-OUT, OVERLOADED, MISUSED, DAMAGED, IMPROPERLY MAINTAINED OR ABUSED. WIRE ROPE FAILURE MAY CAUSE SERIOUS INJURY OR DEATH! PROTECT YOURSELF AND OTHERS. ALWAYS INSPECT WIRE ROPE FOR WEAR, DAMAGE OR ABUSE BEFORE USE. NEVER USE WIRE ROPE THAT IS WORN-OUT, DAMAGED OR ABUSED, NEVER OVERLOAD A WIRE ROPE.

#### INFORM YOURSELF:

READ AND UNDERSTAND MANUFACTURER'S LITERATURE. REFER TO APPLICABLE CODES, STANDARDS AND REGULATIONS FOR INSPECTION REQUIREMENTS AND REMOVAL CRITERIA.

\* FOR ADDITIONAL INFORMATION OR THE BULLETIN, ASK YOUR EMPLOYER OR WIRE ROPE SUPPLIER.



FLEMISH EYE SPLICE

## CALL TO INQUIRE ABOUT OUR CHAIN SLING INSPECTION SERVICE

**SASKATOON**  
802 60th Street East  
Saskatoon, SK S7K 8G8  
(306) 242-7073  
sales@northernstrands.com

**REGINA**  
125 Henderson Drive  
Regina, SK S4N 5W4  
(306) 352-7073  
regina@northernstrands.com




**ESTERHAZY**  
816 Park Ave  
Esterhazy, SK S0A 0X0  
(306) 745-4640  
esterhazy@northernstrands.com

**WINNIPEG**  
1137 Keewatin Street  
Winnipeg, MB R2X 2Z3  
(204) 632-4133  
winnipeg@northernstrands.com

ANNUAL INSPECTIONS OF CHAIN SLINGS ARE REQUIRED BY ASME

## SYNTHETIC SLINGS



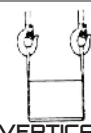


### WEB SLINGS

	WEB WIDTH	Single PLY Sling NO.	RATED CAPACITIES IN LBS.			WEB WIDTH	DOUBLE PLY Sling NO.	RATED CAPACITIES IN LBS.		
			VERTICAL	CHOKER	BASKET			VERTICAL	CHOKER	BASKET
	1"	EE1 901	1,600	1,280	3,200	1"	EE2 901	3,100	2,480	6,200
	2"	EE1 902	3,100	2,480	6,200	2"	EE2 902	6,200	4,960	12,400
	3"	EE1 903	4,700	3,760	9,400	3"	EE2 903	8,800	7,040	17,600
	4"	EE1 904	6,200	4,960	12,400	4"	EE2 904	11,000	8,800	22,000
	5"	EE1 905	7,800	6,240	15,600	5"	EE2 905	13,700	10,960	27,400
	6"	EE1 906	9,300	7,440	18,600	6"	EE2 906	16,500	13,200	33,000
	8"	EE1 908	11,800	9,400	23,500	8"	EE2 908	22,750	18,200	45,500
	10"	EE1 910	14,700	11,760	29,400	10"	EE2 910	28,400	22,720	56,800
	12"	EE1 912	17,650	14,120	35,300	12"	EE2 912	34,100	27,280	68,200
	1"	EN1 901	3,200	2,550	6,400	1"	EN2 901	6,200	4,950	12,400
	2"	EN1 902	6,200	4,950	12,400	2"	EN2 902	12,400	9,900	24,800
	3"	EN1 903	9,400	7,500	18,800	3"	EN2 903	17,600	14,050	35,200
	4"	EN1 904	12,400	9,900	24,800	4"	EN2 904	22,000	17,600	44,000
	5"	EN1 905	15,600	12,450	31,200	5"	EN2 905	27,400	21,900	54,800
	6"	EN1 906	18,600	14,850	37,200	6"	EN2 906	33,000	26,400	66,000

NOTE: DESIGN FACTOR = 5:1 WARNING: DO NOT EXCEED RATED CAPACITIES

### POLYESTER ROUND SLINGS

#### TABLE 1: RATED CAPACITY FOR POLYESTER ROUND SLINGS

Round Slings Size / #						
		VERTICAL	CHOKER	VERTICAL BASKET	60° BASKET	45° BASKET
	COLOR*	POUNDS	POUNDS	POUNDS	POUNDS	POUNDS
SL3	Purple	3,000	2,400	6,000	5,200	4,200
SL4	Black	4,000	3,200	8,000	6,900	5,600
SL6	Green	6,000	4,800	12,000	10,300	8,400
SL9	Yellow	9,000	7,200	18,000	15,500	12,600
SL12	Tan	12,000	9,600	24,000	20,600	16,800
SL14	Red	14,000	11,200	28,000	24,100	19,600
SL17	Orange	17,000	13,600	34,000	29,300	23,800
SL23	Blue	23,000	18,400	46,000	39,500	32,200
SL26	Orange	26,000	20,800	52,000	44,700	36,400
SL32	Grey	32,000	25,600	64,000	55,000	44,800
SL40	Orange	40,000	32,000	80,000	68,800	56,000
SL54	Brown	54,000	43,200	108,000	92,900	75,600
SL68	Olive	68,000	54,400	136,000	117,000	95,200
SL90	Black	90,000	72,000	180,000	155,000	126,000