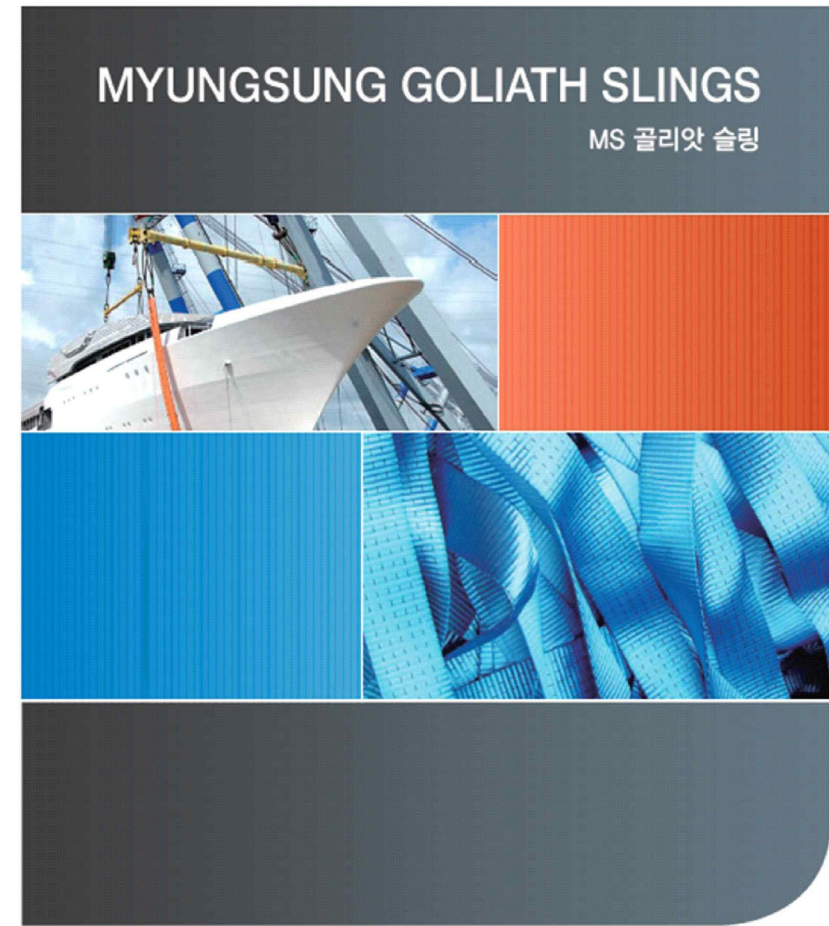


FLAT WOVEN WEBBING SLINGS

MS POLYESTER WEB SLINGS CATALOG

명성 벨트슬링 안내서



www.slings.co.kr

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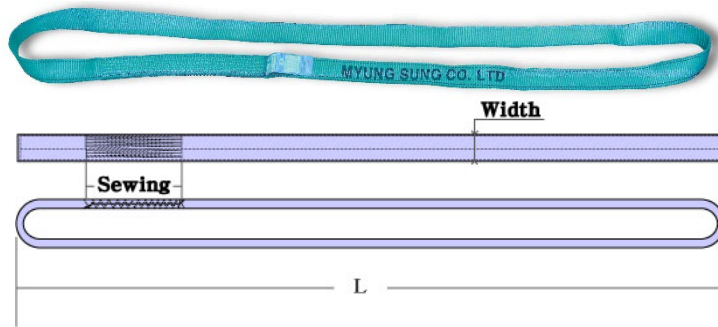
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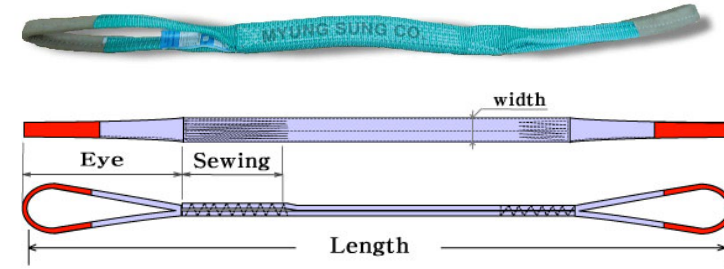
※ 명성의 모든 제품은 한국산업안전보건공단 및 유럽 기준과 규격에 적합하게 제작되었습니다.

All MyungSung slings meet KOSHA and EN 1492-1 standards and regulations.

벨트슬링 타입(Web Slings Type)



엔드레스 타입(Endless type)



아이 엔 아이 타입(Eye and Eye type)

MS 벨트슬링은 산업현장에서 사용시 강도 유지, 내마모성 향상을 위해 100% "AA" 등급의 원사를 사용해서 당사만의 특별한 제직 방법으로 만들어 집니다.

MS web Slings are all made of AA grade polyester yarn for maintain strength, more wear-resistant and longer service life when used in the field.



보호대(Wear Protection)

벨트슬링 사용시 슬링의 끊어짐이나 손상을 방지하기 위해 운반물의 모서리나 돌출부에는 반드시 적합한 보호대를 사용하십시오.

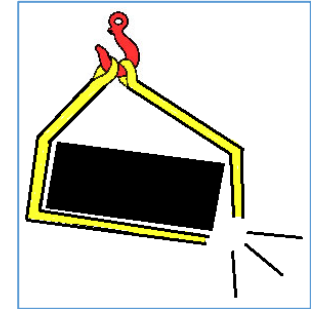
※ 경고: 슬링 사용전에 필히 육안검사를 진행 하십시오.

교육을 받은 경우에만 사용하고 안전사용하중 제한을 준수하고 초과하지 마십시오.
부적절한 사용 또는 보수는 안전사고 또는 부상이 발생할 수 있습니다.

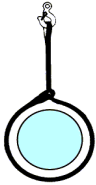
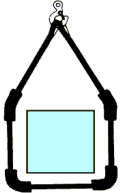
Always protect web slings using sufficient protector from being cut or damaged by corners, edges and protrusions.

Warning : *Can fail if damaged, misused or overloaded. Inspect before use.*

Use only if trained. Observe and do not exceed working load limit. DEATH or INJURY can occur from improper use or maintenance.



벨트슬링 메는 방법(Web Sling Hitches)

Choker Hitch	Vertical Hitch	Basket Hitch
		
Max 80% of Vertical		Max 200% of Vertical

슬링과 하물과의 각도(Sling-To-Load Angle)

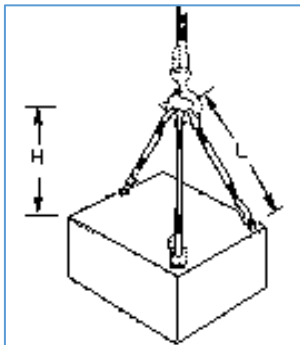


손실계수 (Loss Factor)			
A의 각도	손실계수	A의 각도	손실계수
90°	1.0000	55°	0.8192
85°	0.9962	50°	0.7660
80°	0.9848	45°	0.7071
75°	0.9659	40°	0.6428
70°	0.9397	35°	0.5736
65°	0.9063	30°	0.5000
60°	0.8660	25°	0.4226

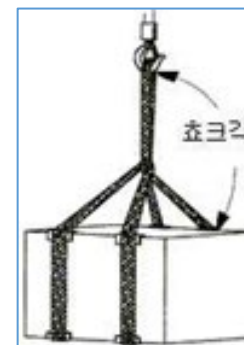
슬링 장력 (Sling Tension)

여러개의 슬링으로 하물을 운반 시 각각의 슬링에 받는 장력을 계산하여 적합한 슬링을 선택하기 위한 계산방법 입니다.

Calculating the Actual tension that will be imposed on the sling or individual legs of multi -part sling.



$$\begin{aligned}
 \text{Actual Tension(AT)} &= (L / H) \times \text{Load Weight} / \text{Number of Legs} \\
 6\text{ton} &= (6\text{m}/4\text{m}) \times 12\text{ton} / 3\text{legs} \\
 &= 1.5(\text{Load factor}) \times 4\text{ton}(\text{Share of the Load})
 \end{aligned}$$



쇼크 각(Angle)	손실계수 (Loss Factor)
120°~180°	1.000
90°~119°	0.820
60°~89°	0.710
30°~59°	0.600
0°~29°	0.480



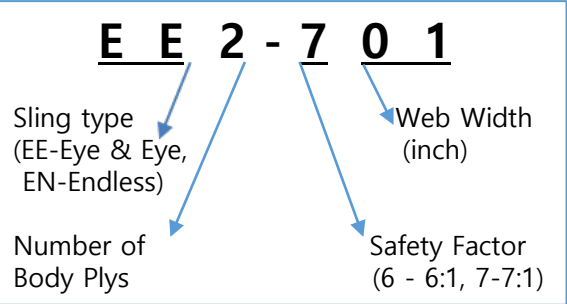
안전사용하중(Work Load Limit)

MS 벨트슬링은 안전하고 경제적이며 작업시간을 절약할 수 있습니다.

MS web Sings promote Safety, saves Money and Times.

MS Polyester web Slings(SF7:1) -EE2, EN1							
WLL(TON)	Color/width(mm)		Work Load Limit(Kg)				
			Vertical	Choker	Basket	Basket 45°	Basket 45°~60°
							
1	Purple	25	1,000	800	2,000	1,400	1,000
2	Green	50	2,000	1,600	4,000	2,800	2,000
3	Yellow	75	3,000	2,400	6,000	4,200	3,000
4	Grey	100	4,000	3,200	8,000	5,600	4,000
5	Red	125	5,000	4,000	10,000	7,000	5,000
6	Brown	150	6,000	4,800	12,000	8,400	6,000
8	Blue	200	8,000	6,400	16,000	11,200	8,000
10	Orange	250	10,000	8,000	20,000	14,000	10,000
12	Orange	300	12,000	9,600	24,000	16,800	12,000

주문 방법(How to Order)



벨트슬링 검사기준(Web Slings Inspection Criteria)

폴리에스테르 벨트 슬링(EN 1492-1) – 벨트 슬링은 다음과 같은 조건이 발생하는 경우 사용을 중지해야 합니다.

1. 슬링 라벨이 없어졌거나 지워졌을 때.
2. 산 또는 부식에 의한 눌음.
3. 열 손상의 흔적.
4. 구멍, 찢김, 절단, 마모 또는 걸림으로 인한 슬링 표면 및 고리부분의 손상.
5. 슬링의 모든 힘을 견디는 메인 패턴봉재 부분의 실이 느슨하거나 끊어졌을 때.
6. 용접 불똥이 튀었을 때
7. 슬링이 매듭지어 있을 때.
8. 슬링의 어느 부분이 화학적 또는 자외선에 의해 변색되고 부서지기 쉽거나 뻣뻣한 부분이 있을 때.
9. 후크 나 금구에 끼임, 부식, 균열, 구부러짐, 뒤틀림, 구멍 또는 부서짐이 있는 경우.
10. 후크의 경우 후크 제조회사에서 명시된 폐기 기준을 따르십시오.
11. 슬링의 장기간 사용에 따른 육안으로 보이는 손상을 포함한 의심이 가는 기타 조건이 발생시 .

Polyester Web Slings (EN 1492-1) – A Web sling shall be removed from service if conditions such as the following are present:

1. *Missing or illegible sling identification.*
2. *Acid or caustic burns.*
3. *Evidence of heat damage.*
4. *Holes, tears, cuts, abrasive wear, or snags of sling surface or eye that expose the inside yarn of sling.*
5. *Loos or broken thread in the main stitch patterns.*
6. *Weld splatter.*
7. *slings that are knotted.*
8. *Discoloration and brittle or stiff areas on any part of the slings, which may mean chemical or ultraviolet/sunlight damage.*
9. *Fittings that are pitted, corroded, cracked, bent twisted, gouged, or broken.*
10. *For hooks, removal criteria as stated in ASME B30.10*
11. *Other conditions, including visible damage, that cause doubt as to the continued use of the sling.*



Melting or Charring



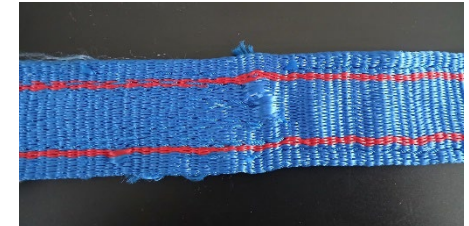
Knots



Illegible Tag



Abrasions or Cuts



Snags Or Punctures

Environmental Consideration

Exposure to sunlight and other environmental factors can result in accelerated deterioration of web slings. The rate of this deterioration varies with the level of exposure and with the thickness of the sling material.

Visible indication of such environmental deterioration can include the following:

- Fading of webbing color.
- Uneven or disoriented surface yarn of the webbing.
- Shortening of the sling length.
- Reduction in elasticity of the sling.
- Accelerated abrasive damage to the surface yarns of the sling.
- Breakage or damage to yarn fibers is often evident by a fuzzy appearance on the web.
- Stiffening of the web.

Sunlight / UV Exposure Service Life

Polyester web slings possess a limited useful service life due to the degradation caused by exposure to sunlight or other measurable sources of UV radiation.

Polyester web slings shall be permanently removed from service when the cumulative UV or outdoor exposure has reached these limits:

- 2 years: 1-Ply and 2-Ply web slings
- 3 years: 3-Ply and 4-Ply web slings

Temperature

The acceptable temperature exposure range is -40°C ~ 80°C.

Chemical

Polyester is not significantly affected by most compounds of the following classes: alcohols, dry cleaning solvents, halogenated hydrocarbons, ketones, soaps and synthetic detergents or water(include see water). Polyester also has good to excellent resistance to aqueous solutions of most weak acids at the boil, and to most acids at room temperature, but is disintegrated by concentrated **sulfuric acid** at room temperature. Polyester products also have good resistance to most aqueous solutions of weak alkali at room temperature but are degraded by the same solution at the boil or strong **alkali**.