

Full Version  
Now free of charge!!

# Sling Design program

Van Beest is sponsoring SlingPro, a sling design program, developed by EngineeringSpreadsheets.

**No longer is sling design time consuming, code dependant and costly!  
The complete program can now be downloaded for free.**

This program produces a report quality design sheet and specification sheet for a 4 leg lifting sling in accordance with each of the commonly used international sling design codes:

- \* DNV Rules for Marine Operations (1996),
- \* DNV Certification note 2.7-1 (offshore containers) and EN12079 (2006),
- \* EN 13414 Steel Wire Rope Slings (2003)

This program has been downloaded over 10.000 times since 2005, by users around the world. You can download it at:

[http://www.engineeringsspreadsheets.co.uk/sling\\_pro.htm](http://www.engineeringsspreadsheets.co.uk/sling_pro.htm)



(click on logo)

	<b>SlingPro ver3-1.20</b> <b>01-03-2010</b>	Client	Name of Client	Made by	Checked	Approved
	Full Version	License d to	Company Name	Project	Name of Project	Date    Date    Date
	Address	Street Address Town, Postcode	Descript	Description of the Design Item	Job no.	Revision
				111	222	3

  

### SLING DESIGN

DNV : Offshore Containers

Design of a 4 leg sling, in accordance with DNV certification Note 2.7-1 : Offshore containers, April 2006. ( & EN 12079-2 : 2006 )  
This code is recognised as complying with the EEC Machinery Directive, and the sling can be CE marked.

**Units**  
 Metric - m , Tn  
 American - ft , ton

### INPUT

**Input factors**

Weight of item - W (To) -	4,00
Top leg length (m) -	1,50
Sling apex angle - E° -	90

The sling apex angle should normally be 90° - 90°

Plan of the centre of gravity, and the 4 podover

Print

  

### OUTPUT

**Sling geometry**

Height of 4 leg - H (m) -	1,77
Diagonal plan length - d (m) -	3,53

**Leg geometry**

Leg	Plan length (m)	True length (m)
H	1,77	2,50

**Sling, required WLL**

Weight of item - W (To) -	4,00
Enhancement Factor -	2,207
WLLmin - (To) -	8,83

**Sling leg, and shackle, required WLL**

Leg angle to the vertical - E°/2 - P° -	45,0
WLLr - (To) -	4,16

  

### SLING COMPONENT SELECTION

**Top Master Link**

WLLmin, req - (To) - **8,83**

**Green Pin**

P-6855 [pr-4]	WLL (To)
Φ <sub>fix</sub> (mm) :-	<b>10,60</b>
22	
25	

**Top Leg**

WLLmin, req - (To) - **8,83**

**Usha Martin, Hyflex**

6x19, type :-	WLL (To)
SC 1770 MBL [HBL/3.55]	
SC 1831 (To) (To)	<b>10,05</b>
Φ <sub>app</sub> (mm) 55,00	
25	
28	

**Master Link Assembly**

WLLmin, req - (To) - **8,83**

**Green Pin**

P-6855 [pr-4]	WLL (To)
Φ <sub>fix</sub> (mm) :-	<b>10,00</b>
25	
28	

FatSreq 4,00  
FatSprav 4,53

**Sling Leg**

WLLr, req - (To) - **4,16**

**Usha Martin, Hyf**

6x19, type :-	WLL (To)
MBL [HBL/3.55]	
Φ <sub>app</sub> (mm) 23,10	<b>4,16</b>
18	
19	

FatSreq 5,55  
FatSprav 5,55

**Shackle**

WLLr, req - (To) - **4,16**

**Green Pin**

G-4163 [pr-4]	WLL (To)
Φ <sub>fix</sub> (mm) :-	<b>4,75</b>
22 mlt	
25	

FatSreq 6,00  
FatSprav 6,85

The above are 'dynamic factor', assuming that only 3 of the 4 sling legs are working (and equally loaded)

The above are 'static factor', assuming that all 4 sling legs are working (and equally loaded)

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VAN BEEST B.V. Manufacturer and Supplier of wire rope and chain fittings. Reg. trade marks 'Green Pin' and 'Excel'



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