

 <p>GeniE V7.9-04</p>	<p>Report: 052400BZCZ00001_PRDE</p>	<p>Report: Annex C: Structural Checks – Monopile – Horizontal Configuration – Trunnions Check</p>	<p>Date: 05/08/2019</p>
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1 Trunnions Check : Frame Code Check

Description : Capacity Manager

1.1 ver_tr.run(1) : Frame Code Check

Description : ISO19902 2007

General options

Code	ISO 19902
CapendIncluded	true
UseCommentaryA13	true
Resistance Factor, Tension	1.05
Resistance Factor, Compression	1.18
Resistance Factor, Bending	1.05
Resistance Factor, Shear	1.05
Resistance Factor, Pipe Exposed To External Pressure	1.25
Resistance Factor, Joint, Yield Stress	1.05
Resistance Factor, Joint	1.05
Resistance Factor, Joint, Brace utilization	1.17
Y-Joint Axial Force Factor C1	25
X-Joint Axial Force Factor C1	20
K-Joint Axial Force Factor C1	14
All Joints Moment Factor C1	25
Y-Joint Axial Force Factor C2	11
X-Joint Axial Force Factor C2	22
K-Joint Axial Force Factor C2	43
All Joints Moment Factor C2	43
Brace Utilization, Cut-off value	0
X-Joint in Tension, Qu formula	ISO 19902
Azimuthal Tolerance Angle	5
Ind. Brace Can Distance	false
Joint Geometric Limits	Not checked

General options

Code	EN 1993-1-1
GammaM0	1
GammaM1	1
Method1	true
NationalAnnex	Standard

1.1.1 ver_tr.run(1) : Member Result Full

1.1.1.1 ver_tr.run(1) : EN199311 Member Result

Empty table - no objects of this type



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1.1.1.2 ver_tr.run(1) : ISO 19902 Member Result

ver_tr.run(1) : ISO 19902 Member Result

- Sorted by Member (Ascending)
- Then sorted by LoadCase (Ascending)
- Run : ver_tr.run(1)
- Selected LoadCase per Member
- Selected SubCheck per Member
- All Positions along Member

Member	LoadCase	Phase	Position	Status	UfTot	Formula	GeomCheck	SubCheck	Run
	(13.2-2)	(13.2-4)	Euler	(13.2-12)	(13.2-17)	(13.2-19)	(13.3-2)	(13.3-2ax)	(13.3-2mo)
	(13.3-7)	(13.3-7ax)	(13.3-7mo)	(13.3-8)	(13.3-8ax)	(13.3-8mo)	(13.2-31)	(13.4-12)	(13.4-12ax)
	(13.4-12mo)	(13.4-19)	(13.4-19ax)	(13.4-19mo)	(13.4-20)	(13.4-20ax)	(13.4-20mo)	(13.4-21)	D/t
	thk(m)	relpos	D	t	fy	E	Nx	My	Mz
	V	Mv,t	oa	ot	ft	oc	fc	fyc	fxe
	ob,y	ob,z	ob,yS	ob,zS	fb	taub	taut	p	oh
	fh	fhe	KLy	KLz	Cm,y	Cm,z	Lr	fe,y	fe,z
	ot,c	oc,c	ox	ft,h	fb,h	fc,h			
Bm1	LC1_HIGH	0.0	0.00	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.236	0.509	0.000	0.000	0.000	0.000
	0.236	0.000	0.236	0.236	0.000	0.236	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	1e-05	0.61	0.0191	345000	2.1e+08	-1.92165e-35	3.14529e-14	-513.665
	1711.14	0	-5.41972e-34	0	345000	5.41972e-34	344967	345000	3.94525e+06
	6.19258e-12	-101132	6.19258e-12	-101132	450718	96520.2	0	0	0
	345000	2.89183e+06	0.3	0.3	1	1	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm1	LC1_HIGH	0.0	0.25	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.177	0.509	0.000	0.000	0.000	0.000
	0.177	0.000	0.177	0.177	0.000	0.177	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.25	0.61	0.0191	345000	2.1e+08	-1.92165e-35	2.35935e-14	-385.311
	1711.69	0	-5.41972e-34	0	345000	5.41972e-34	344967	345000	3.94525e+06
	4.64519e-12	-75861.8	6.19258e-12	-101132	450718	96551	0	0	0
	345000	2.89183e+06	0.3	0.3	1	1	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm1	LC1_HIGH	0.0	0.50	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.118	0.509	0.000	0.000	0.000	0.000
	0.118	0.000	0.118	0.118	0.000	0.118	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.5	0.61	0.0191	345000	2.1e+08	-1.92165e-35	1.57316e-14	-256.917
	1712.23	0	-5.41972e-34	0	345000	5.41972e-34	344967	345000	3.94525e+06
	3.09731e-12	-50582.9	6.19258e-12	-101132	450718	96581.9	0	0	0
	345000	2.89183e+06	0.3	0.3	1	1	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm1	LC1_HIGH	0.0	0.75	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.059	0.509	0.000	0.000	0.000	0.000
	0.059	0.000	0.059	0.059	0.000	0.059	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.75	0.61	0.0191	345000	2.1e+08	-1.92165e-35	7.86692e-15	-128.477
	1712.78	0	-5.41972e-34	0	345000	5.41972e-34	344967	345000	3.94525e+06
	1.54887e-12	-25295	6.19258e-12	-101132	450718	96612.7	0	0	0
	345000	2.89183e+06	0.3	0.3	1	1	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm1	LC1_HIGH	0.0	1.00	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.000	0.509	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



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Member	LoadCase	Phase	Position	Status	UffTot	Formula	GeomCheck	SubCheck	Run
	(13.2-2)	(13.2-4)	Euler	(13.2-12)	(13.2-17)	(13.2-19)	(13.3-2)	(13.3-2ax)	(13.3-2mo)
	(13.3-7)	(13.3-7ax)	(13.3-7mo)	(13.3-8)	(13.3-8ax)	(13.3-8mo)	(13.2-31)	(13.4-12)	(13.4-12ax)
	(13.4-12mo)	(13.4-19)	(13.4-19ax)	(13.4-19mo)	(13.4-20)	(13.4-20ax)	(13.4-20mo)	(13.4-21)	D/t
	thk(m)	relpos	D	t	fy	E	Nx	My	Mz
	V	Mv,t	oa	ot	ft	oc	fc	fyc	fxe
	ob,y	ob,z	ob,yS	ob,zS	fb	taub	taut	p	oh
	fh	fhe	KLy	KLz	Cm,y	Cm,z	Lr	fe,y	fe,z
	ot,c	oc,c	ox	ft,h	fb,h	fc,h			
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.99999	0.61	0.0191	345000	2.1e+08	-1.92165e-35	3.07936e-19	-0.00497507
	1713.33	0	-5.41972e-34	0	345000	5.41972e-34	344967	345000	3.94525e+06
	6.06277e-17	-0.979512	6.19258e-12	-101132	450718	96643.5	0	0	0
	345000	2.89183e+06	0.3	0.3	1	1	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm2	LC1_HIGH	0.0	0.00	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.000	0.509	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	1e-05	0.61	0.0191	345000	2.1e+08	1.92165e-35	3.19735e-19	-0.00522167
	1713.33	0	5.41971e-34	5.41971e-34	345000	0	344967	345000	3.94525e+06
	6.29508e-17	-1.02807	6.19258e-12	-101133	450718	96643.5	0	0	0
	345000	2.89183e+06	0.3	0.3	0	0	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm2	LC1_HIGH	0.0	0.25	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.059	0.509	0.000	0.059	0.000	0.059
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.25	0.61	0.0191	345000	2.1e+08	1.92165e-35	7.86693e-15	-128.477
	1712.78	0	5.41971e-34	5.41971e-34	345000	0	344967	345000	3.94525e+06
	1.54888e-12	-25295.1	6.19258e-12	-101133	450718	96612.7	0	0	0
	345000	2.89183e+06	0.3	0.3	0	0	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm2	LC1_HIGH	0.0	0.50	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.118	0.509	0.000	0.118	0.000	0.118
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.5	0.61	0.0191	345000	2.1e+08	1.92165e-35	1.57316e-14	-256.917
	1712.23	0	5.41971e-34	5.41971e-34	345000	0	344967	345000	3.94525e+06
	3.09731e-12	-50582.9	6.19258e-12	-101133	450718	96581.8	0	0	0
	345000	2.89183e+06	0.3	0.3	0	0	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm2	LC1_HIGH	0.0	0.75	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.177	0.509	0.000	0.177	0.000	0.177
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.75	0.61	0.0191	345000	2.1e+08	1.92165e-35	2.35935e-14	-385.312
	1711.69	0	5.41971e-34	5.41971e-34	345000	0	344967	345000	3.94525e+06
	4.6452e-12	-75861.8	6.19258e-12	-101133	450718	96551	0	0	0
	345000	2.89183e+06	0.3	0.3	0	0	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			
Bm2	LC1_HIGH	0.0	1.00	OK	0.51	(13.2-17)	Geom OK	ISO19902 member	ver_tr.run(1)
	0.000	0.000	0.000	0.236	0.509	0.000	0.236	0.000	0.236
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	31.9372
	0.0191	0.99999	0.61	0.0191	345000	2.1e+08	1.92165e-35	3.14529e-14	-513.665
	1711.14	0	5.41971e-34	5.41971e-34	345000	0	344967	345000	3.94525e+06
	6.19258e-12	-101133	6.19258e-12	-101133	450718	96520.2	0	0	0
	345000	2.89183e+06	0.3	0.3	0	0	0.3	1.00616e+09	1.00616e+09
	0	0	0	345000	450718	344967			