

QUERSCHNITT: KESSELSTÜTZE

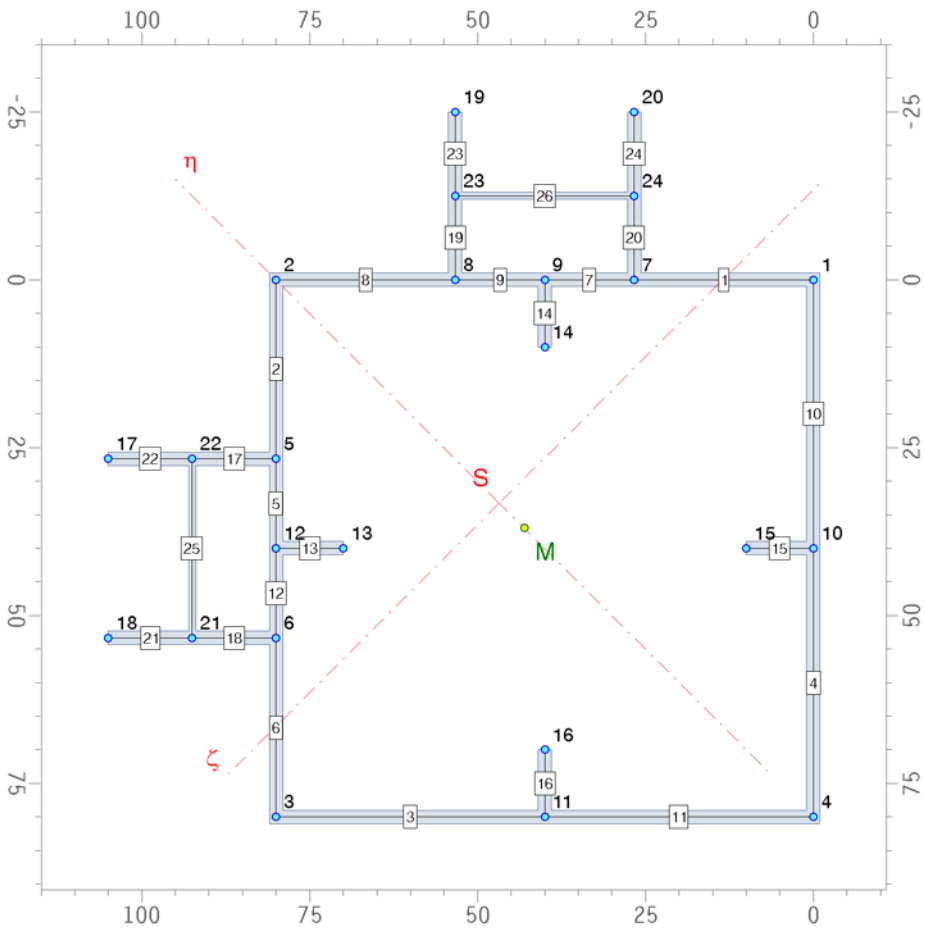
Knoten

Knoten	y	z	Knoten	y	z	Knoten	y	z
-	mm	mm	-	mm	mm	-	mm	mm
1	0.00	0.00	9	400.00	0.00	17	1050.00	266.67
2	800.00	0.00	10	0.00	400.00	18	1050.00	533.33
3	800.00	800.00	11	400.00	800.00	19	533.33	-250.00
4	0.00	800.00	12	800.00	400.00	20	266.67	-250.00
5	800.00	266.67	13	700.00	400.00	21	925.00	533.33
6	800.00	533.33	14	400.00	100.00	22	925.00	266.67
7	266.67	0.00	15	100.00	400.00	23	533.33	-125.00
8	533.33	0.00	16	400.00	700.00	24	266.67	-125.00

Linien

Linie	von	nach	Dicke(A)	Dicke(E)	Bogenst	r _{ar}	r _{al}	r _{er}	r _{el}	Φ _a	Φ _e
-	-	-	mm	mm	mm	mm	mm	mm	mm	°	°
1	1	7	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
2	2	5	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
3	3	11	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
4	4	10	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
5	5	12	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
6	6	3	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
7	7	9	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
8	8	2	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
9	9	8	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
10	10	1	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
11	11	4	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
12	12	6	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
13	12	13	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
14	9	14	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
15	10	15	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
16	11	16	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
17	5	22	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
18	6	21	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
19	8	23	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
20	7	24	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
21	21	18	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
22	22	17	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
23	23	19	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
24	24	20	20.00	20.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
25	21	22	10.00	10.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
26	23	24	10.00	10.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00

grafische Darstellung



Kennwerte

Fläche, Schwerpunkt und Hauptachseneckwinkel

A =	953.33 cm ²	e _y =	46.70 cm	e _z =	33.30 cm	α =	-45.00 °
-----	------------------------	------------------	----------	------------------	----------	-----	----------

Ausdehnung

y _{max} =	105.00 cm	y _{min} =	-1.00 cm	b =	106.00 cm	U _a =	472.00 cm
Z _{max} =	81.00 cm	Z _{min} =	-25.00 cm	h =	106.00 cm	U _i =	526.67 cm
						U =	998.67 cm

Imn-System: Trägheits- und Widerstandsmomente, Randabstände und Trägheitsradien

I _m =	1044071.16 cm ⁴	W _{m+} =	21890.37 cm ³	h _{m+} =	58.30 cm	i _m =	33.09 cm
I _n =	1044071.16 cm ⁴	W _{m-} =	17907.20 cm ³	h _{m-} =	-47.70 cm	i _n =	33.09 cm
I _{mn} =	42737.09 cm ⁴	W _{n+} =	17907.20 cm ³	h _{n+} =	47.70 cm		
		W _{n-} =	21890.37 cm ³	h _{n-} =	-58.30 cm		

ξηζ-System: Trägheits- und Widerstandsmomente, Randabstände und Trägheitsradien

I _η =	1086808.24 cm ⁴	W _{η+} =	18743.65 cm ³	h _{η+} =	48.51 cm	i _η =	33.76 cm
I _ζ =	1001334.07 cm ⁴	W _{η-} =	18743.65 cm ³	h _{η-} =	-67.45 cm	i _ζ =	32.41 cm
I _p =	2088142.32 cm ⁴	W _{ζ+} =	20640.13 cm ³	h _{ζ+} =	57.98 cm	i _p =	46.80 cm
		W _{ζ-} =	14845.23 cm ³	h _{ζ-} =	-57.98 cm		

Schubmittelpunkt

y _M =	43.06 cm	y _{SM} =	-3.64 cm	η _M =	-5.14 cm		
Z _M =	36.94 cm	Z _{SM} =	3.64 cm	ζ _M =	0.00 cm		

Schubflächenbeiwerte

κ _m =	3.39 -	A _m =	280.87 cm ²	κ _η =	3.35 -	A _η =	284.28 cm ²
κ _n =	3.39 -	A _n =	280.87 cm ²	κ _ζ =	3.43 -	A _ζ =	277.55 cm ²

Torsion + Verwölbung

I _T =	1144758.25 cm ⁴	I _w =	8403827.58 cm ⁶	R _{Sy} =	-4172940.86 cm ⁵	R _{Sz} =	-4172940.86 cm ⁵
C _s =	39901650.79 cm ⁶	I _{pM} =	2113367.68 cm ⁴	i _{ωM} =	1.99 cm		
ω _{M+} =	245.19 cm ²	ω _{M-} =	-245.19 cm ²	W _{ω+} =	34274.57 cm ⁴	W _{ω-} =	34274.57 cm ⁴

Querschnittsstrecken

i _M =	47.08 cm	r _η =	-1.57 cm	r _ζ =	0.00 cm	r _ω =	0.00 cm
------------------	----------	------------------	----------	------------------	---------	------------------	---------

plastische Kennwerte

W _{ply,max} =	27893.05 cm ³	W _{plz,max} =	27893.05 cm ³	W _{plη,max} =	28878.63 cm ³	W _{plζ,max} =	26311.70 cm ³
W _{ply,red} =	27870.03 cm ³	W _{plz,red} =	27870.03 cm ³	W _{plη,red} =	28878.63 cm ³	W _{plζ,red} =	26311.70 cm ³