

QUERSCHNITT: ALU_1

Polgonzüge

[y,z]: Knotenkoordinaten [s]: Kreisbogenstich der Linie zum Nachfolgeknoten (nach links positiv)

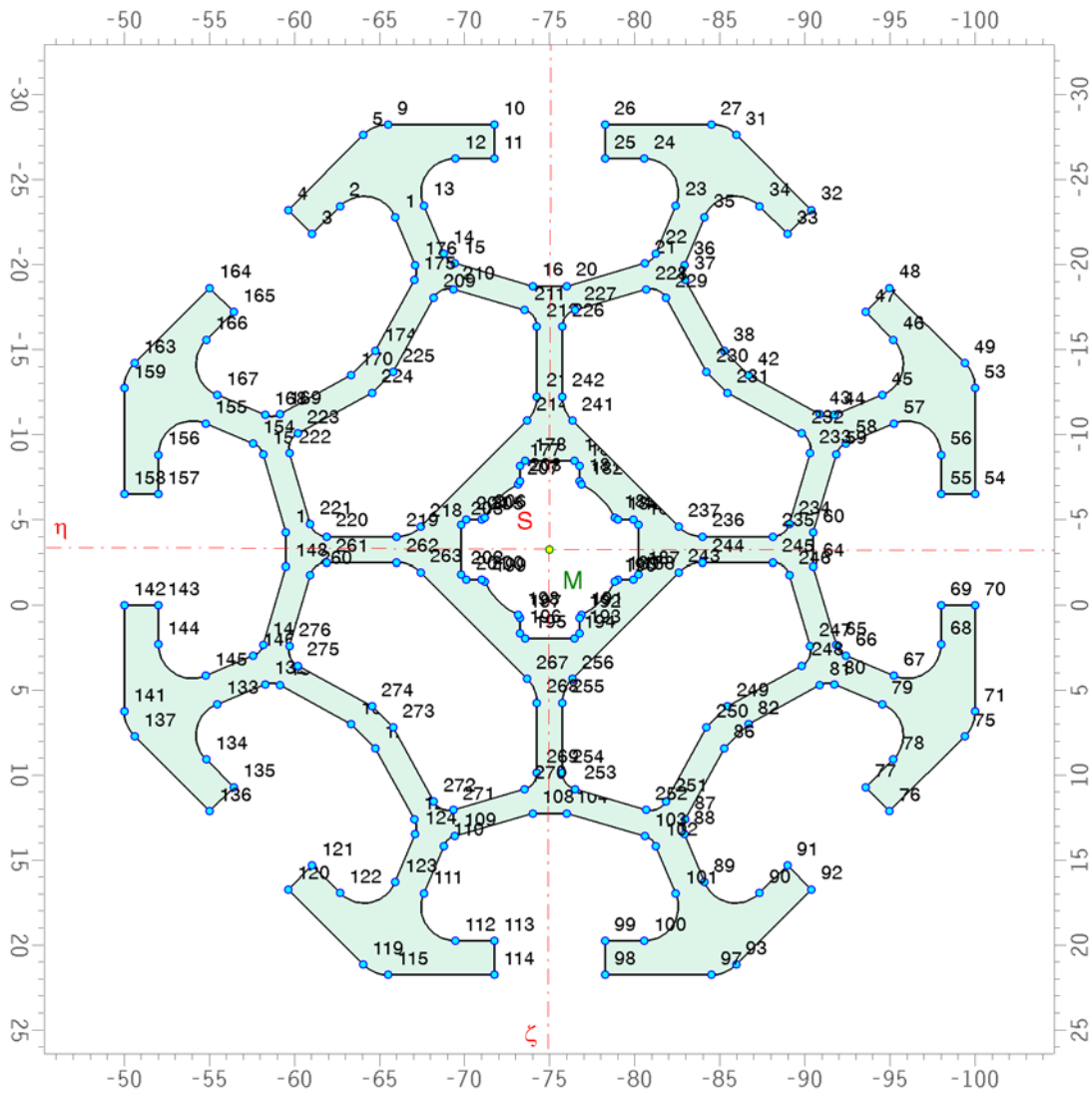
Knoten	y	z	s	Knoten	y	z	s
-	mm	mm	mm	-	mm	mm	mm
1. manuell erzeugt (+)				82	-866.69	70.05	0.000
1	-659.33	-227.92	-8.839	86	-852.55	84.19	0.000
2	-626.72	-234.41	0.000	87	-829.53	126.16	-0.999
3	-610.39	-218.08	0.000	88	-829.05	134.80	0.000
4	-596.24	-232.23	0.000	89	-840.72	162.97	-8.839
5	-640.43	-276.41	1.572	90	-873.33	169.46	0.000
9	-655.02	-282.47	0.000	91	-889.66	153.13	0.000
10	-717.52	-282.47	0.000	92	-903.81	167.28	0.000
11	-717.52	-262.47	0.000	93	-859.62	211.46	1.572
12	-694.44	-262.47	-8.843	97	-845.03	217.52	0.000
13	-675.96	-234.81	0.000	98	-782.53	217.52	0.000
14	-687.63	-206.64	-0.998	99	-782.53	197.52	0.000
15	-694.07	-200.87	0.000	100	-805.61	197.52	-8.843
16	-740.03	-187.46	0.000	101	-824.09	169.86	0.000
20	-760.02	-187.46	0.000	102	-812.42	141.69	-0.998
21	-805.98	-200.87	-0.998	103	-805.98	135.92	0.000
22	-812.42	-206.64	0.000	104	-760.02	122.51	0.000
23	-824.09	-234.81	-8.843	108	-740.03	122.51	0.000
24	-805.61	-262.47	0.000	109	-694.07	135.92	-0.998
25	-782.53	-262.47	0.000	110	-687.63	141.69	0.000
26	-782.53	-282.47	0.000	111	-675.96	169.86	-8.843
27	-845.03	-282.47	1.752	112	-694.44	197.52	0.000
31	-859.62	-276.41	0.000	113	-717.52	197.52	0.000
32	-903.81	-232.23	0.000	114	-717.52	217.52	0.000
33	-889.66	-218.08	0.000	115	-655.02	217.52	1.572
34	-873.33	-234.41	-8.839	119	-640.43	211.46	0.000
35	-840.72	-227.92	0.000	120	-596.24	167.28	0.000
36	-829.05	-199.75	-0.999	121	-610.39	153.13	0.000
37	-829.53	-191.11	0.000	122	-626.72	169.46	-8.839
38	-852.55	-149.14	0.000	123	-659.33	162.97	0.000
42	-866.69	-135.00	0.000	124	-671.00	134.80	-0.999
43	-908.66	-111.98	-0.999	125	-670.52	126.16	0.000
44	-917.30	-111.50	0.000	126	-647.50	84.19	0.000
45	-945.47	-123.17	-8.839	130	-633.36	70.05	0.000
46	-951.96	-155.78	0.000	131	-591.39	47.03	-0.999
47	-935.63	-172.11	0.000	132	-582.75	46.55	0.000
48	-949.78	-186.26	0.000	133	-554.58	58.22	-8.928
49	-993.96	-142.07	1.572	134	-548.09	90.83	0.000
53	-1000.02	-127.48	0.000	135	-564.42	107.16	0.000
54	-1000.02	-64.98	0.000	136	-550.27	121.31	0.000
55	-980.02	-64.98	0.000	137	-506.09	77.12	1.572
56	-980.02	-88.06	-8.843	141	-500.03	62.53	0.000
57	-952.36	-106.54	0.000	142	-500.03	0.03	0.000
58	-924.19	-94.87	-0.998	143	-520.03	0.03	0.000
59	-918.42	-88.43	0.000	144	-520.03	23.11	-8.843
60	-905.01	-42.47	0.000	145	-547.69	41.59	0.000
64	-905.01	-22.48	0.000	146	-575.86	29.92	-0.998
65	-918.42	23.48	-0.998	147	-581.63	23.48	0.000
66	-924.19	29.92	0.000	148	-595.04	-22.48	0.000
67	-952.36	41.59	-8.843	152	-595.04	-42.47	0.000
68	-980.02	23.11	0.000	153	-581.63	-88.43	-0.998
69	-980.02	0.03	0.000	154	-575.86	-94.87	0.000
70	-1000.02	0.03	0.000	155	-547.69	-106.54	-8.843
71	-1000.02	62.53	1.572	156	-520.03	-88.06	0.000
75	-993.96	77.12	0.000	157	-520.03	-64.98	0.000
76	-949.78	121.31	0.000	158	-500.03	-64.98	0.000
77	-935.63	107.16	0.000	159	-500.03	-127.48	1.572
78	-951.96	90.83	-8.839	163	-506.09	-142.07	0.000
79	-945.47	58.22	0.000	164	-550.27	-186.26	0.000
80	-917.30	46.55	-0.999	165	-564.42	-172.11	0.000
81	-908.66	47.03	0.000	166	-548.09	-155.78	-8.839

Polgonzüge

[y,z]: Knotenkoordinaten [s]: Kreisbogenstich der Linie zum Nachfolgeknoten (nach links positiv)

Knoten	y	z	s	Knoten	y	z	s
-	mm	mm	mm	-	mm	mm	mm
167	-554.58	-123.17	0.000	221	-609.29	-47.18	0.000
168	-582.75	-111.50	-0.999	222	-597.08	-89.05	2.126
169	-591.39	-111.98	0.000	223	-601.86	-100.62	0.000
170	-633.36	-135.00	0.000	224	-645.58	-124.59	0.000
174	-647.50	-149.14	0.000	225	-657.91	-136.92	0.000
175	-670.52	-191.11	-0.999	4. manuell erzeugt (-)			
176	-671.00	-199.75	0.000	226	-757.52	-163.61	1.995
2. manuell erzeugt (-)				227	-764.73	-173.21	0.000
177	-732.52	-81.47	0.000	228	-806.59	-185.42	2.126
178	-735.52	-84.48	0.000	229	-818.17	-180.64	0.000
179	-764.53	-84.48	0.000	230	-842.14	-136.92	0.000
180	-767.53	-81.47	0.000	231	-854.47	-124.59	0.000
181	-767.53	-72.47	0.000	232	-898.18	-100.62	2.126
182	-768.65	-70.68	2.304	233	-902.97	-89.05	0.000
183	-788.23	-51.10	0.000	234	-890.76	-47.18	1.972
184	-790.02	-49.98	0.000	235	-881.15	-39.97	0.000
185	-799.02	-49.98	0.000	236	-839.90	-39.97	1.523
186	-802.02	-46.98	0.000	237	-825.76	-45.83	0.000
187	-802.02	-17.97	0.000	241	-763.38	-108.21	1.523
188	-799.02	-14.97	0.000	242	-757.52	-122.36	0.000
189	-790.02	-14.97	0.000	5. manuell erzeugt (-)			
190	-788.23	-13.85	2.288	243	-825.76	-19.12	1.523
191	-768.65	5.73	0.000	244	-839.90	-24.98	0.000
192	-767.53	7.51	0.000	245	-881.15	-24.98	2.023
193	-767.53	16.52	0.000	246	-890.76	-17.77	0.000
194	-764.53	19.52	0.000	247	-902.97	24.09	2.126
195	-735.52	19.52	0.000	248	-898.18	35.67	0.000
196	-732.52	16.52	0.000	249	-854.47	59.64	0.000
197	-732.52	7.51	0.000	250	-842.14	71.97	0.000
198	-731.40	5.73	2.359	251	-818.17	115.68	2.126
199	-711.82	-13.85	0.000	252	-806.59	120.47	0.000
200	-710.03	-14.97	0.000	253	-764.73	108.26	2.044
201	-701.03	-14.97	0.000	254	-757.52	98.65	0.000
202	-698.02	-17.97	0.000	255	-757.52	57.40	1.523
203	-698.02	-46.98	0.000	256	-763.38	43.26	0.000
204	-701.03	-49.98	0.000	6. manuell erzeugt (-)			
205	-710.03	-49.98	0.000	260	-609.29	-17.77	1.919
206	-711.82	-51.10	2.310	261	-618.89	-24.98	0.000
207	-731.40	-70.68	0.000	262	-660.14	-24.98	1.523
208	-732.52	-72.47	0.000	263	-674.29	-19.12	0.000
3. manuell erzeugt (-)				267	-736.67	43.26	1.523
209	-681.88	-180.64	2.126	268	-742.53	57.40	0.000
210	-693.45	-185.42	0.000	269	-742.53	98.65	2.020
211	-735.32	-173.21	2.032	270	-735.32	108.26	0.000
212	-742.53	-163.61	0.000	271	-693.45	120.47	2.126
213	-742.53	-122.36	1.523	272	-681.88	115.68	0.000
214	-736.67	-108.21	0.000	273	-657.91	71.97	0.000
218	-674.29	-45.83	1.523	274	-645.58	59.64	0.000
219	-660.14	-39.97	0.000	275	-601.86	35.67	2.126
220	-618.89	-39.97	1.922	276	-597.08	24.09	0.000

grafische Darstellung



Brutto-Kennwerte

Fläche, Schwerpunkt und Hauptachseneckwinkel

A =	630.94 cm ²	e _y =	-75.00 cm	e _z =	-3.25 cm	α =	-0.21 °
-----	------------------------	------------------	-----------	------------------	----------	-----	---------

Ausdehnung

y _{max} =	-50.00 cm	y _{min} =	-100.00 cm	b =	50.00 cm	U _a =	400.39 cm
z _{max} =	21.75 cm	z _{min} =	-28.25 cm	h =	50.00 cm	U _i =	218.86 cm
						U =	619.25 cm

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

I _m =	122953.01 cm ⁴	W _{m+} =	4918.04 cm ³	h _{m+} =	25.00 cm	i _m =	13.96 cm
I _n =	122940.03 cm ⁴	W _{m-} =	4918.24 cm ³	h _{m-} =	-25.00 cm	i _n =	13.96 cm
I _{mn} =	0.05 cm ⁴	W _{n+} =	4917.60 cm ³	h _{n+} =	25.00 cm		
		W _{n-} =	4917.94 cm ³	h _{n-} =	-25.00 cm		

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

I _η =	122953.01 cm ⁴	W _{η+} =	4911.32 cm ³	h _{η+} =	25.03 cm	i _η =	13.96 cm
I _ζ =	122940.03 cm ⁴	W _{η-} =	4911.42 cm ³	h _{η-} =	-25.03 cm	i _ζ =	13.96 cm
I _p =	245893.04 cm ⁴	W _{ζ+} =	4910.88 cm ³	h _{ζ+} =	25.03 cm	i _p =	19.74 cm
		W _{ζ-} =	4911.21 cm ³	h _{ζ-} =	-25.03 cm		

Schubmittelpunkt

y _M =	-75.00 cm	y _{SM} =	0.00 cm	η _M =	0.00 cm		
z _M =	-3.25 cm	z _{SM} =	0.00 cm	ζ _M =	0.00 cm		

Schubflächenbeiwerte

κ _m =	3.13 -	A _m =	201.88 cm ²	κ _η =	3.13 -	A _η =	201.88 cm ²
κ _n =	3.13 -	A _n =	201.87 cm ²	κ _ζ =	3.13 -	A _ζ =	201.87 cm ²

Torsion + Verwölbung

I _T =	39229.18 cm ⁴	I _W =	1775909.50 cm ⁶	R _{Sy} =	171.89 cm ⁵	R _{Sz} =	-157.54 cm ⁵
C _s =	1775909.94 cm ⁶	I _{pM} =	245893.04 cm ⁴	i _{ωM} =	2.69 cm		
ω _{M+} =	161.42 cm ²	ω _{M-} =	-161.37 cm ²	W _{ω+} =	11001.70 cm ⁴	W _{ω-} =	11005.35 cm ⁴

Querschnittsstrecken

i _m =	19.74 cm	r _η =	0.00 cm	r _ζ =	0.00 cm	r _ω =	0.00 cm
------------------	----------	------------------	---------	------------------	---------	------------------	---------