

# QUERSCHNITT: PETERSEN:1318

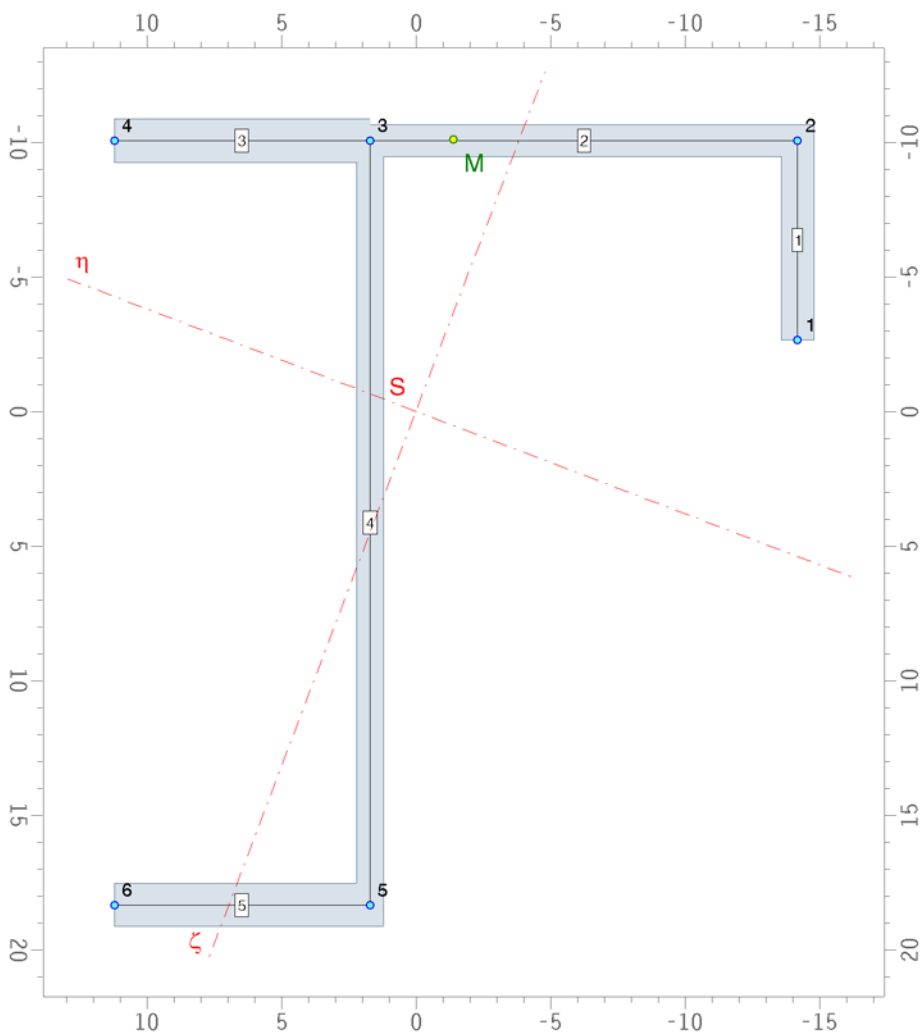
## Knoten

Knoten	y	z	Knoten	y	z
-	cm	cm	-	cm	cm
1	-14.17	-2.68	4	11.23	-10.08
2	-14.17	-10.08	5	1.73	18.32
3	1.73	-10.08	6	11.23	18.32

## Linien

Linie	von	nach	Dicke(A)	Dicke(E)	Bogenstich	r <sub>ar</sub>	r <sub>al</sub>	r <sub>er</sub>	r <sub>el</sub>	Φ <sub>a</sub>	Φ <sub>e</sub>
-	-	-	cm	cm	cm	cm	cm	cm	cm	°	°
1	1	2	1.20	1.20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
2	2	3	1.20	1.20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
3	4	3	1.60	1.60	0.000	0.00	0.00	0.00	0.00	0.00	0.00
4	3	5	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
5	6	5	1.60	1.60	0.000	0.00	0.00	0.00	0.00	0.00	0.00

## grafische Darstellung



## Kennwerte

Fläche, Schwerpunkt und Hauptachseneckwinkel

A =	86.06 cm <sup>2</sup>	e <sub>y</sub> =	0.00 cm	e <sub>z</sub> =	0.00 cm	α =	-20.81 °
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Ausdehnung

y <sub>max</sub> =	11.23 cm	y <sub>min</sub> =	-14.77 cm	b =	26.00 cm	U =	143.40 cm
Z <sub>max</sub> =	19.12 cm	Z <sub>min</sub> =	-10.88 cm	h =	30.00 cm		

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

I <sub>m</sub> =	11336.09 cm <sup>4</sup>	W <sub>m+</sub> =	592.96 cm <sup>3</sup>	h <sub>m+</sub> =	11.23 cm	i <sub>m</sub> =	11.48 cm
I <sub>n</sub> =	4519.91 cm <sup>4</sup>	W <sub>m-</sub> =	1041.71 cm <sup>3</sup>	h <sub>m-</sub> =	-14.77 cm	i <sub>n</sub> =	7.25 cm
I <sub>mn</sub> =	3027.23 cm <sup>4</sup>	W <sub>n+</sub> =	402.47 cm <sup>3</sup>	h <sub>n+</sub> =	19.12 cm		
		W <sub>n-</sub> =	306.03 cm <sup>3</sup>	h <sub>n-</sub> =	-10.88 cm		

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

I <sub>η</sub> =	12486.42 cm <sup>4</sup>	W <sub>η+</sub> =	571.19 cm <sup>3</sup>	h <sub>η+</sub> =	14.36 cm	i <sub>η</sub> =	12.05 cm
I <sub>ζ</sub> =	3369.58 cm <sup>4</sup>	W <sub>η-</sub> =	819.76 cm <sup>3</sup>	h <sub>η-</sub> =	-12.85 cm	i <sub>ζ</sub> =	6.26 cm
I <sub>p</sub> =	15855.99 cm <sup>4</sup>	W <sub>ζ+</sub> =	234.59 cm <sup>3</sup>	h <sub>ζ+</sub> =	21.86 cm	i <sub>p</sub> =	13.57 cm
		W <sub>ζ-</sub> =	262.15 cm <sup>3</sup>	h <sub>ζ-</sub> =	-15.23 cm		

Schubmittelpunkt

y <sub>M</sub> =	-1.37 cm	y <sub>SM</sub> =	-1.37 cm	η <sub>M</sub> =	2.32 cm		
Z <sub>M</sub> =	-10.14 cm	Z <sub>SM</sub> =	-10.14 cm	ζ <sub>M</sub> =	-9.96 cm		

Schubflächenbeiwerte

κ <sub>m</sub> =	3.02 -	A <sub>m</sub> =	28.47 cm <sup>2</sup>	κ <sub>η</sub> =	2.88 -	A <sub>η</sub> =	29.91 cm <sup>2</sup>
κ <sub>n</sub> =	3.21 -	A <sub>n</sub> =	26.84 cm <sup>2</sup>	κ <sub>ζ</sub> =	3.35 -	A <sub>ζ</sub> =	25.68 cm <sup>2</sup>

Torsion + Verwölbung

I <sub>T</sub> =	48.83 cm <sup>4</sup>	I <sub>w</sub> =	225340.14 cm <sup>6</sup>	R <sub>Sy</sub> =	14534.20 cm <sup>5</sup>	R <sub>Sz</sub> =	41217.33 cm <sup>5</sup>
C <sub>s</sub> =	619758.68 cm <sup>6</sup>	I <sub>pM</sub> =	24861.69 cm <sup>4</sup>	i <sub>ωM</sub> =	3.01 cm		
ω <sub>M+</sub> =	86.55 cm <sup>2</sup>	ω <sub>M-</sub> =	-183.78 cm <sup>2</sup>	W <sub>ω+</sub> =	2603.54 cm <sup>4</sup>	W <sub>ω-</sub> =	1226.16 cm <sup>4</sup>

Querschnittsstrecken

i <sub>m</sub> =	17.00 cm	r <sub>η</sub> =	-10.26 cm	r <sub>ζ</sub> =	24.94 cm	r <sub>ω</sub> =	-1.23 cm
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plastische Kennwerte

W <sub>ply,max</sub> =	827.73 cm <sup>3</sup>	W <sub>plz,max</sub> =	444.11 cm <sup>3</sup>	W <sub>plη,max</sub> =	861.73 cm <sup>3</sup>	W <sub>plζ,max</sub> =	423.97 cm <sup>3</sup>
W <sub>ply,red</sub> =	772.66 cm <sup>3</sup>	W <sub>plz,red</sub> =	424.90 cm <sup>3</sup>	W <sub>plη,red</sub> =	859.80 cm <sup>3</sup>	W <sub>plζ,red</sub> =	419.41 cm <sup>3</sup>