

# QUERSCHNITT: PETERSEN:1190

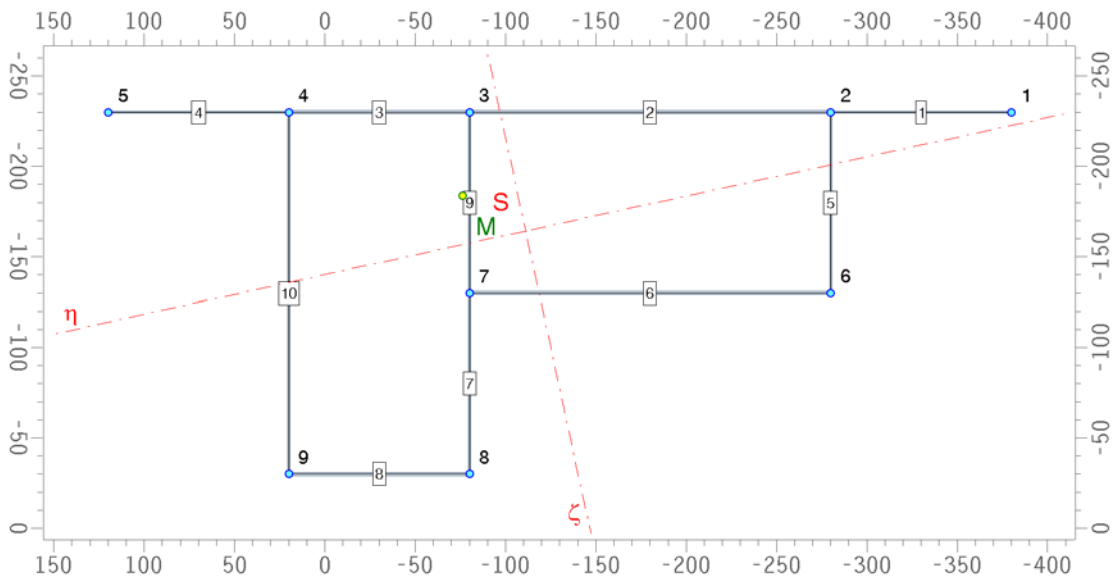
## Knoten

Knoten	y	z	Knoten	y	z	Knoten	y	z
-	cm	cm	-	cm	cm	-	cm	cm
1	-380.00	-230.00	4	20.00	-230.00	7	-80.00	-130.00
2	-280.00	-230.00	5	120.00	-230.00	8	-80.00	-30.00
3	-80.00	-230.00	6	-280.00	-130.00	9	20.00	-30.00

## 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	1.60	1.60	0.000	0.00	0.00	0.00	0.00	0.00	0.00
3	3	4	2.00	2.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
4	4	5	1.20	1.20	0.000	0.00	0.00	0.00	0.00	0.00	0.00
5	2	6	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
6	6	7	1.60	1.60	0.000	0.00	0.00	0.00	0.00	0.00	0.00
7	7	8	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
8	8	9	2.00	2.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
9	7	3	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
10	9	4	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00

## grafische Darstellung



## Kennwerte

Fläche, Schwerpunkt und Hauptachseneckwinkel

A =	1776.80 cm <sup>2</sup>	e <sub>y</sub> =	-111.48 cm	e <sub>z</sub> =	-164.20 cm	α =	12.23 °
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Ausdehnung

y <sub>max</sub> =	120.00 cm	y <sub>min</sub> =	-380.00 cm	b =	500.00 cm	U <sub>a</sub> =	1403.20 cm
Z <sub>max</sub> =	-29.00 cm	Z <sub>min</sub> =	-231.00 cm	h =	202.00 cm	U <sub>i</sub> =	1188.80 cm
						U =	2592.00 cm

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

I <sub>m</sub> =	9165618.80 cm <sup>4</sup>	W <sub>m+</sub> =	67794.98 cm <sup>3</sup>	h <sub>m+</sub> =	231.48 cm	i <sub>m</sub> =	71.82 cm
I <sub>n</sub> =	24469667.39 cm <sup>4</sup>	W <sub>m-</sub> =	137201.91 cm <sup>3</sup>	h <sub>m-</sub> =	-268.52 cm	i <sub>n</sub> =	117.35 cm
I <sub>mn</sub> =	3481070.61 cm <sup>4</sup>	W <sub>n+</sub> =	105708.01 cm <sup>3</sup>	h <sub>n+</sub> =	135.20 cm		
		W <sub>n-</sub> =	91129.12 cm <sup>3</sup>	h <sub>n-</sub> =	-66.80 cm		

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

I <sub>η</sub> =	8411019.02 cm <sup>4</sup>	W <sub>η+</sub> =	66986.19 cm <sup>3</sup>	h <sub>η+</sub> =	212.42 cm	i <sub>η</sub> =	68.80 cm
I <sub>ζ</sub> =	25224267.17 cm <sup>4</sup>	W <sub>η-</sub> =	73821.75 cm <sup>3</sup>	h <sub>η-</sub> =	-276.49 cm	i <sub>ζ</sub> =	119.15 cm
I <sub>p</sub> =	33635286.19 cm <sup>4</sup>	W <sub>ζ+</sub> =	118749.53 cm <sup>3</sup>	h <sub>ζ+</sub> =	125.56 cm	i <sub>p</sub> =	137.59 cm
		W <sub>ζ-</sub> =	91230.51 cm <sup>3</sup>	h <sub>ζ-</sub> =	-113.94 cm		

Schubmittelpunkt

y <sub>M</sub> =	-76.32 cm	y <sub>SM</sub> =	35.17 cm	η <sub>M</sub> =	30.20 cm		
Z <sub>M</sub> =	-183.88 cm	Z <sub>SM</sub> =	-19.69 cm	ζ <sub>M</sub> =	-26.69 cm		

Schubflächenbeiwerte

κ <sub>m</sub> =	1.88 -	A <sub>m</sub> =	942.84 cm <sup>2</sup>	κ <sub>η</sub> =	1.94 -	A <sub>η</sub> =	914.83 cm <sup>2</sup>
κ <sub>n</sub> =	4.03 -	A <sub>n</sub> =	440.60 cm <sup>2</sup>	κ <sub>ζ</sub> =	3.98 -	A <sub>ζ</sub> =	446.99 cm <sup>2</sup>

Torsion + Verwölbung

I <sub>T</sub> =	8559500.87 cm <sup>4</sup>	I <sub>w</sub> =	13496531297.13 cm <sup>6</sup>	R <sub>Sy</sub> =	390767354.76 cm <sup>5</sup>	R <sub>Sz</sub> =	602973608.57 cm <sup>5</sup>
C <sub>s</sub> =	-39056572125.49 cm <sup>6</sup>	I <sub>pM</sub> =	36521414.66 cm <sup>4</sup>	i <sub>ωM</sub> =	19.22 cm		
ω <sub>M+</sub> =	7966.95 cm <sup>2</sup>	ω <sub>M-</sub> =	-5073.98 cm <sup>2</sup>	W <sub>ω+</sub> =	1694065.59 cm <sup>4</sup>	W <sub>ω-</sub> =	2659947.52 cm <sup>4</sup>

Querschnittsstrecken

i <sub>M</sub> =	143.37 cm	r <sub>η</sub> =	-82.93 cm	r <sub>ζ</sub> =	53.65 cm	r <sub>ω</sub> =	1.42 cm
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plastische Kennwerte

W <sub>ply,max</sub> =	111170.83 cm <sup>3</sup>	W <sub>plz,max</sub> =	171693.69 cm <sup>3</sup>	W <sub>plη,max</sub> =	106799.06 cm <sup>3</sup>	W <sub>plζ,max</sub> =	177109.62 cm <sup>3</sup>
W <sub>ply,red</sub> =	109002.79 cm <sup>3</sup>	W <sub>plz,red</sub> =	165639.83 cm <sup>3</sup>	W <sub>plη,red</sub> =	106677.16 cm <sup>3</sup>	W <sub>plζ,red</sub> =	175682.00 cm <sup>3</sup>