

# QUERSCHNITT: KINDMANN S.228

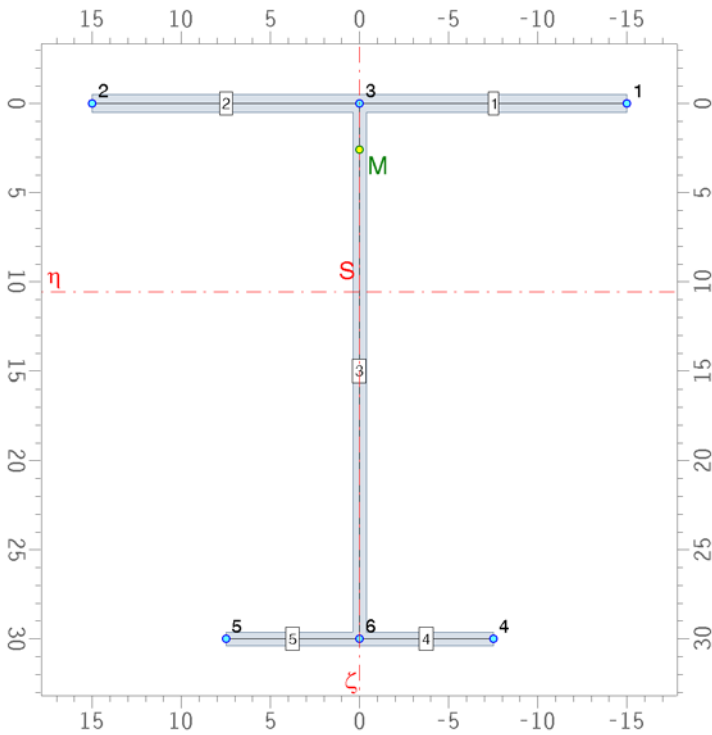
## Knoten

Knoten	y	z	Knoten	y	z
-	cm	cm	-	cm	cm
1	-15.00	0.00	4	-7.50	30.00
2	15.00	0.00	5	7.50	30.00
3	0.00	0.00	6	0.00	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	3	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
2	2	3	1.00	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
3	3	6	0.75	0.75	0.000	0.00	0.00	0.00	0.00	0.00	0.00
4	4	6	0.75	0.75	0.000	0.00	0.00	0.00	0.00	0.00	0.00
5	5	6	0.75	0.75	0.000	0.00	0.00	0.00	0.00	0.00	0.00

## grafische Darstellung



## Kennwerte

Fläche, Schwerpunkt und Hauptachseneckwinkel

A =	63.09 cm <sup>2</sup>	e <sub>y</sub> =	0.00 cm	e <sub>z</sub> =	10.56 cm	α =	0.00 °
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Ausdehnung

y <sub>max</sub> =	15.00 cm	y <sub>min</sub> =	-15.00 cm	b =	30.00 cm	U =	150.25 cm
Z <sub>max</sub> =	30.38 cm	Z <sub>min</sub> =	-0.50 cm	h =	30.88 cm		

Imn-System: Trägheits- und Widerstandsmomente, Randabstände und Trägheitsradien (Imn = ξηζ)

I <sub>m</sub> =	9586.90 cm <sup>4</sup>	W <sub>m+</sub> =	483.92 cm <sup>3</sup>	h <sub>m+</sub> =	15.00 cm	i <sub>m</sub> =	12.33 cm
I <sub>n</sub> =	2461.96 cm <sup>4</sup>	W <sub>m-</sub> =	866.50 cm <sup>3</sup>	h <sub>m-</sub> =	-15.00 cm	i <sub>n</sub> =	6.25 cm
I <sub>p</sub> =	12048.86 cm <sup>4</sup>	W <sub>n+</sub> =	164.13 cm <sup>3</sup>	h <sub>n+</sub> =	19.81 cm	i <sub>p</sub> =	13.82 cm
		W <sub>n-</sub> =	164.13 cm <sup>3</sup>	h <sub>n-</sub> =	-11.06 cm		

Schubmittelpunkt

y <sub>M</sub> =	0.00 cm	y <sub>SM</sub> =	0.00 cm	η <sub>M</sub> =	0.00 cm		
Z <sub>M</sub> =	2.57 cm	Z <sub>SM</sub> =	-7.99 cm	ζ <sub>M</sub> =	-7.99 cm		

Schubflächenbeiwerte

κ <sub>m</sub> =	2.18 -	A <sub>m</sub> =	28.92 cm <sup>2</sup>	κ <sub>η</sub> =	2.18 -	A <sub>η</sub> =	28.92 cm <sup>2</sup>
κ <sub>n</sub> =	3.10 -	A <sub>n</sub> =	20.38 cm <sup>2</sup>	κ <sub>ζ</sub> =	3.10 -	A <sub>ζ</sub> =	20.38 cm <sup>2</sup>

Torsion + Verwölbung

I <sub>T</sub> =	16.33 cm <sup>4</sup>	I <sub>W</sub> =	173571.43 cm <sup>6</sup>	R <sub>Sy</sub> =	0.00 cm <sup>5</sup>	R <sub>Sz</sub> =	19728.86 cm <sup>5</sup>
C <sub>s</sub> =	331733.89 cm <sup>6</sup>	I <sub>pM</sub> =	16079.35 cm <sup>4</sup>	i <sub>ωM</sub> =	3.29 cm		
ω <sub>M+</sub> =	205.71 cm <sup>2</sup>	ω <sub>M-</sub> =	-205.71 cm <sup>2</sup>	W <sub>ω+</sub> =	843.75 cm <sup>4</sup>	W <sub>ω-</sub> =	843.75 cm <sup>4</sup>

Querschnittsstrecken

i <sub>M</sub> =	15.96 cm	r <sub>η</sub> =	0.00 cm	r <sub>ζ</sub> =	21.24 cm	r <sub>ω</sub> =	0.00 cm
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plastische Kennwerte

W <sub>ply,max</sub> =	661.60 cm <sup>3</sup>	W <sub>plz,max</sub> =	271.07 cm <sup>3</sup>	W <sub>plη,max</sub> =	661.60 cm <sup>3</sup>	W <sub>plζ,max</sub> =	271.07 cm <sup>3</sup>
W <sub>ply,red</sub> =	661.60 cm <sup>3</sup>	W <sub>plz,red</sub> =	271.07 cm <sup>3</sup>	W <sub>plη,red</sub> =	661.60 cm <sup>3</sup>	W <sub>plζ,red</sub> =	271.07 cm <sup>3</sup>