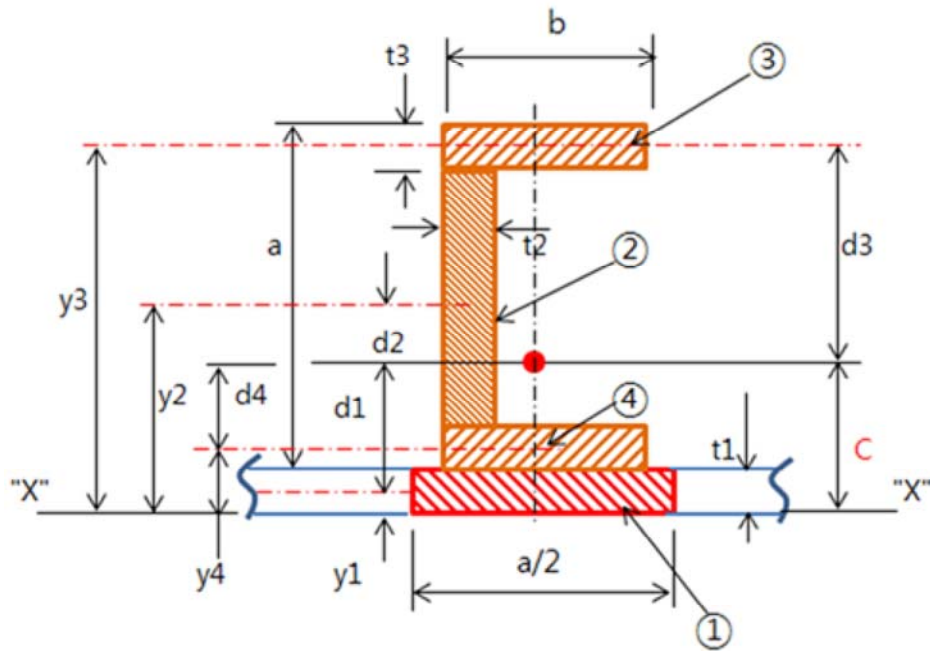


PROPERTIES OF STIFFENER

CHANNEL STIFFENER-SECTIONAL PROPERTIES

INPUT DATA 계산실행 V2.0 By Ryu-ChangMyong/P.E

* Item Name	E1004	* Description	PES
* Dim. t1	1.5 cm	* Dim. a	20 cm
* Dim. t2	0.7 cm		
* Dim. t3	1.0 cm	* Dim. b	7 cm



RESULT OF CALCULATION

* Actual moment of inertia

Mark	A(cm ²)	y(cm)	A*y(cm ³)	d(cm)	Ig1=b*h ³ /12 (cm ⁴)	Ig2=A*d ² (cm ⁴)
1	15.0	0.75	11.3	-6.57	2.8	647.7
2	12.6	10.50	132.3	3.18	340.2	127.3
3	7.0	21.00	147.0	13.68	0.6	1,309.8
4	7.0	2.00	14.0	-5.32	0.6	198.2
TOTAL	41.6		304.6		344.2	2,283.0
c = $\Sigma A*y / \Sigma A$	7.32				Sectional Modulus, Zx=Ig/c	358.9
					Actual Ig = (Ig1+Ig2)	2,627.2

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PROPERTIES OF STIFFENER

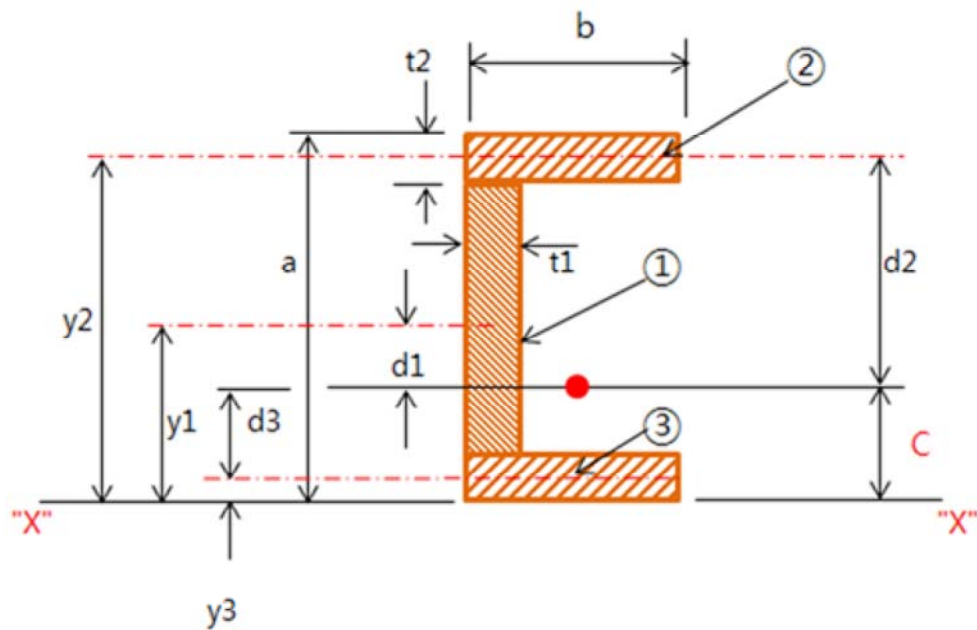
CHANNEL-SECTIONAL PROPERTIES

INPUT DATA

계산실행

V1.0 By Ryu-ChangMyong/P.E

* Item Name	E1004	* Description	PES
* Dim. t1	0.7 cm	* Dim. a	20 cm
* Dim. t2	1.0 cm	* Dim. b	7 cm



RESULT OF CALCULATION

* Actual moment of inertia

Mark	A(cm ²)	y(cm)	A*y(cm ³)	d(cm)	lg1=b*h ³ /12 (cm ⁴)	lg2=A*d ² (cm ⁴)
1	12.6	9.00	113.4	−0.53	340.2	3.5
2	7.0	19.50	136.5	9.97	0.6	696.3
3	7.0	0.50	3.5	−9.03	0.6	570.3
TOTAL	26.6		253.4		341.4	1,270.1
c =ΣA*y / ΣA	9.53		Sectional Modulus, Zx=lg/c	169.2	Actual lg = (lg1+lg2)	1,611.5

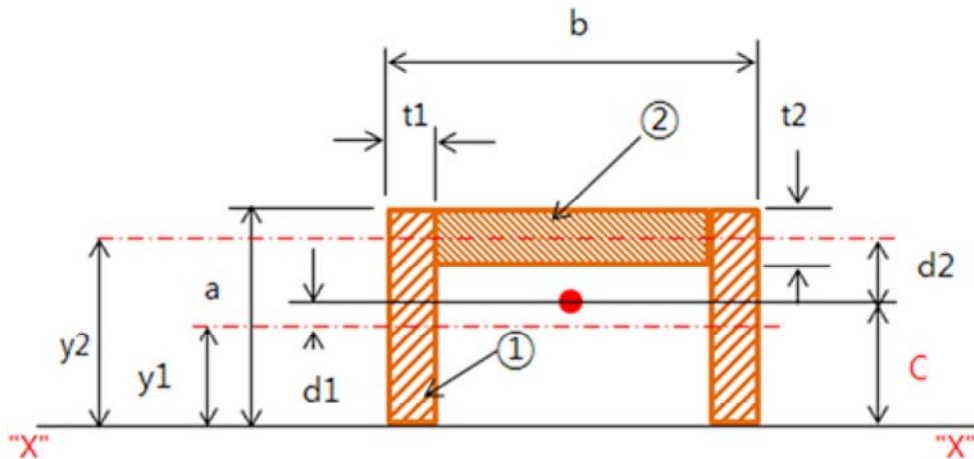
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PROPERTIES OF STIFFENER

CHANNEL-SECTIONAL PROPERTIES

INPUT DATA 계산실행 **V1.0** By Ryu-ChangMyong/P.E

* Item Name	E1004	* Description	PES
* Dim. t1	1.0 cm	* Dim. a	7 cm
* Dim. t2	0.7 cm	* Dim. b	20 cm



RESULT OF CALCULATION

* Actual moment of inertia

Mark	A(cm ²)	y(cm)	A*y(cm ³)	d(cm)	lg1=b*h ³ /12 (cm ⁴)	lg2=A*d ² (cm ⁴)
1	14.0	3.50	49.0	-1.49	57.2	31.2
2	12.6	6.65	83.8	1.66	0.5	34.6
TOTAL	26.6		132.8		57.7	65.8
c = $\Sigma A*y / \Sigma A$	4.99		Sectional Modulus, Zx=lg/c	24.7	Actual lg = (lg1+lg2)	123.5

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PROPERTIES OF STIFFENER

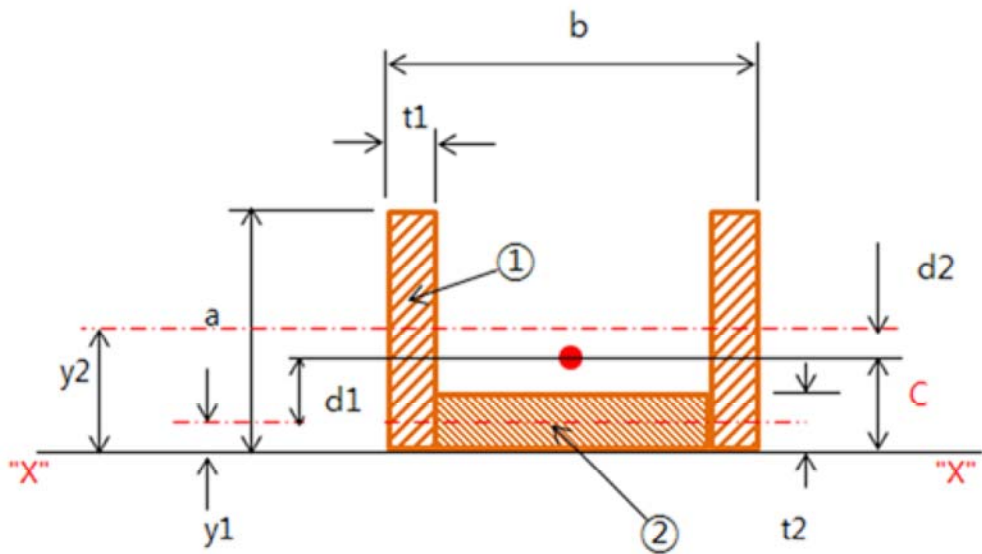
CHANNEL-SECTIONAL PROPERTIES

INPUT DATA

계산실행

V1.0 By Ryu-ChangMyong/P.E

* Item Name	E1004	* Description	PES
* Dim. t1	1.0 cm	* Dim. a	7 cm
* Dim. t2	0.7 cm	* Dim. b	20 cm



RESULT OF CALCULATION

* Actual moment of inertia

Mark	A(cm ²)	y(cm)	A*y(cm ³)	d(cm)	lg1=b*h ³ /12 (cm ⁴)	lg2=A*d ² (cm ⁴)	
1	14.0	0.35	4.9	-1.49	57.2	31.2	
2	12.6	3.50	44.1	1.66	0.5	34.6	
TOTAL	26.6		49.0		57.7	65.8	
c =ΣA*y / ΣA		1.84	Sectional Modulus, Zx=lg/c		67.0	Actual lg = (lg1+lg2)	123.5

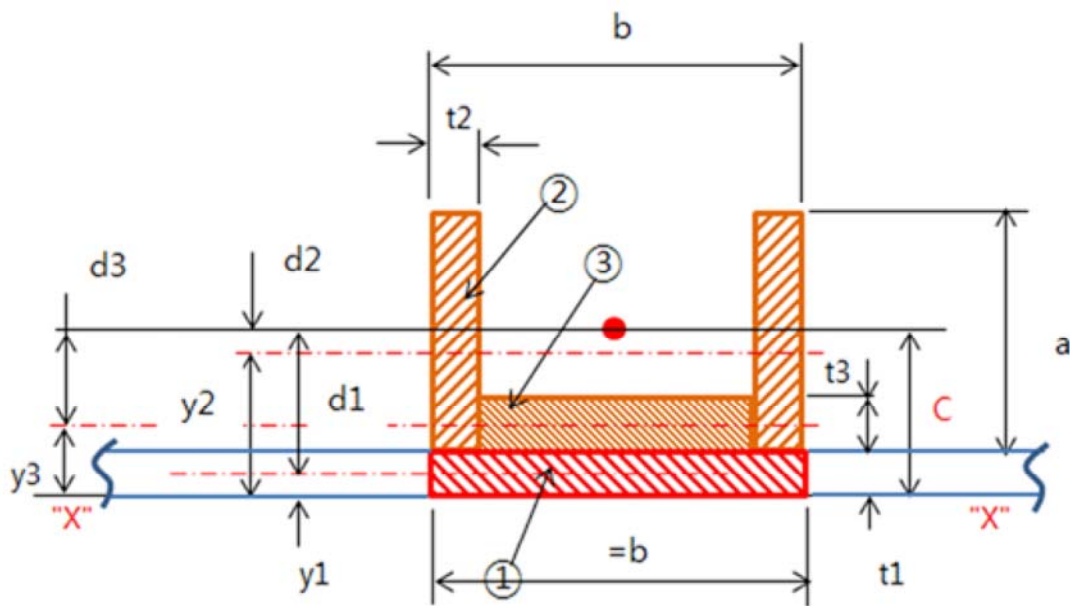
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PROPERTIES OF STIFFENER

CHANNEL STIFFENER-SECTIONAL PROPERTIES

INPUT DATA 계산실행 **V1.0** By Ryu-ChangMyong/P.E

* Item Name	E1004	* Description	PES
* Dim. t1	1.0 cm	* Dim. a	7 cm
* Dim. t2	1.0 cm	* Dim. b	20 cm
* Dim. t3	0.7 cm		



RESULT OF CALCULATION

* Actual moment of inertia

Mark	A(cm ²)	y(cm)	A*y(cm ³)	d(cm)	lg1=b*h ³ /12 (cm ⁴)	lg2=A*d ² (cm ⁴)
1	20.0	0.50	10.0	-1.43	1.7	41.0
2	14.0	4.50	63.0	2.57	57.2	92.4
3	12.6	1.35	17.0	-0.58	0.5	4.3
TOTAL	46.6		90.0		59.3	137.6
c = $\Sigma A*y / \Sigma A$	1.93	Sectional Modulus, $Z_x = I_g / c$		102.0	Actual I _g = (lg1+lg2)	197.0

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