


**PERFIL I ESTANDAR EUROPEO - IPN**

PERFILES IPN	DIMENSIONES Y PROPIEDADES PARA EL DISEÑO																		
	DIMENSIONES								AREA	PESO	PROPIEDADES ELASTICAS						MODULO PLASTICO		CONS TORS
	ALTURA		ALA		DISTANCIAS						EJE X-X			EJE Y-Y			Zx	Zy	Jt
DESIGNACION	h	s	b	t	r1	r2	d	cm2	kg/mt	Ix	Sx	rx	Iy	Sy	ry	cm3	cm3	cm4	
IPN 80	80	3.90	42.00	5.90	3.90	2.30	59.00	7.57	5.94	77.80	19.50	3.20	6.29	3.00	0.91	22.80	4.99	0.87	
IPN 100	100	4.50	50.00	6.80	4.50	2.70	75.00	10.60	8.34	171.00	34.20	4.01	12.20	4.88	1.07	39.80	8.09	1.60	
IPN 120	120	5.10	58.00	7.70	5.10	3.10	92.00	14.20	11.10	328.00	54.70	4.81	21.50	7.41	1.23	63.60	12.30	2.71	
IPN 140	140	5.70	66.00	8.60	5.70	3.40	109.00	18.20	14.30	573.00	81.90	5.61	35.20	10.70	1.40	95.40	17.90	4.32	
IPN 160	160	6.30	74.00	9.50	6.30	3.80	125.00	22.80	17.90	935.00	117.00	6.40	54.70	14.80	1.55	136.00	24.90	6.57	
IPN 180	180	6.90	82.00	10.40	6.90	4.10	142.00	27.90	21.90	1450.00	161.00	7.20	81.30	19.80	1.71	187.00	33.20	9.58	
IPN 200	200	7.50	90.00	11.30	7.50	4.50	159.00	33.40	26.20	2140.00	214.00	8.00	117.00	26.00	1.87	250.00	43.50	13.50	
IPN 220	220	8.10	98.00	12.20	8.10	4.90	176.00	39.50	31.10	3060.00	278.00	8.80	162.00	33.10	2.02	324.00	55.70	18.60	
IPN 240	240	8.70	106.00	13.10	8.70	5.20	192.00	46.10	36.20	4250.00	354.00	9.59	221.00	41.70	2.20	412.00	70.00	25.00	
IPN 260	260	9.40	113.00	14.10	9.40	5.60	208.00	53.30	41.90	5740.00	442.00	10.40	288.00	51.00	2.32	514.00	85.90	33.50	
IPN 280	280	10.10	119.00	15.20	10.10	6.10	225.00	61.00	47.90	7590.00	542.00	11.10	364.00	61.20	2.45	632.00	103.00	44.20	
IPN 300	300	10.80	125.00	16.20	10.80	6.50	241.00	69.00	54.20	9800.00	653.00	11.90	451.00	72.20	2.56	762.00	121.00	56.80	
IPN 320	320	11.50	131.00	17.30	11.50	6.90	258.00	77.70	61.00	12510.00	782.00	12.70	555.00	84.70	2.67	914.00	143.00	72.50	
IPN 340	340	12.20	137.00	18.30	12.20	7.30	274.00	86.70	68.00	15700.00	923.00	13.50	674.00	98.40	2.80	1080.00	166.00	90.40	
IPN 360	360	13.00	143.00	19.50	13.00	7.80	290.00	97.00	76.10	19610.00	1090.00	14.20	818.00	114.00	2.90	1276.00	194.00	115.00	
IPN 380	380	13.70	149.00	20.50	13.70	8.20	306.00	107.00	84.00	24010.00	1260.00	15.00	975.00	131.00	3.02	1482.00	221.00	141.00	
IPN 400	400	14.40	155.00	21.60	14.40	8.60	323.00	118.00	92.40	29210.00	1460.00	15.70	1160.00	149.00	3.13	1714.00	253.00	170.00	
IPN 450	450	16.20	170.00	24.30	16.20	9.70	363.00	147.00	115.00	45850.00	2040.00	17.70	1730.00	203.00	3.43	2400.00	345.00	267.00	
IPN 500	500	18.00	185.00	27.00	18.00	10.80	404.00	179.00	141.00	68740.00	2750.00	19.60	2480.00	268.00	3.72	3240.00	456.00	402.00	
IPN 550	550	19.00	200.00	30.00	19.00	11.90	445.00	212.00	166.00	99180.00	3610.00	21.60	3490.00	349.00	4.02	4240.00	592.00	544.00	
IPN 600	600	21.60	215.00	32.40	21.60	13.00	485.00	254.00	199.00	139000.00	4630.00	23.40	4670.00	434.00	4.30	—	—	—	