

TORBELAR
MOLDBASES

PORTA MOLDES
PORTA MATRICES
Y ELEMENTOS NORMALIZADOS

A detailed technical drawing of a mold assembly, likely for injection molding. The drawing shows a cross-section of the mold with various components labeled with lines. The mold is tilted at an angle. The word "Portamoldes" is overlaid on the drawing in a large, bold, black font.

Portamoldes

Los portamoldes standard de **Torbelar Moldbases** se entregan totalmente armados e incluyen los bujes, columnas, tornillos, topes y retractores, pudiendose entregar desarmado bajo pedido. Cada componente es fabricado según normas ISO 9001 version 2000.

El perfecto centrado de los agujeros de bujes y columnas, respecto de cualquiera de los laterales de las placas de trabajo, permite el inicio de los mecanizados desde cualquier posición.

Dado que las placas son totalmente intercambiables entre sí los clientes pueden obtener diferentes placas standard y armar su propio portamolde.

Nuestra gama de producción se amplía con la construcción de portamoldes especiales bajo plano.

Tolencias:

Centrado de columnas: ± 0.01 mm.

Planitud: 0.005 mm cada 100 mm.

Escuadrado: 0.01 mm cada 100 mm.

Entre centros de agujeros: ± 0.005 mm.

Tabla de Dimensiones Standard (mm)

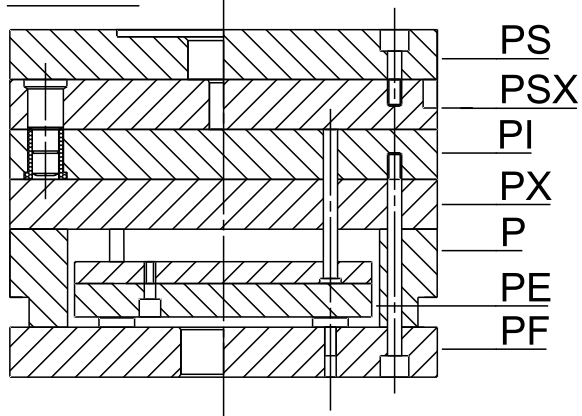
A	156	196	246	296	346	396	446	496	546	596
156	●	●	●							
196		●	●	●	●					
246			●	●	●	●				
296				●	●	●	●			
346					●	●	●	●		
396						●	●	●	●	
446							●	●	●	●

Recorrido de extracción y superficie útil máxima

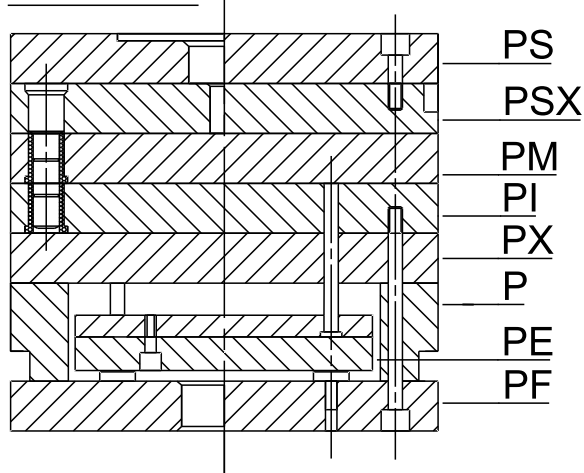
Serie	Largo	Paralelas	Extracción	Superficie útil aproximada	Serie	Largo	Paralelas	Extracción	Superficie útil aproximada	
156	156	57	22	96x156	346	346	77	34	246x346	
		77	42				97	54		
	196	57	22	96x196			117	74		
		77	42			396	77	34	246x396	
	246	57	22	96x246			97	54		
		77	42			117	74			
196	196	57	22	116x196		446	446	77	34	246x446
		77	42					97	54	
	246	57	22	116x246				117	74	
		77	42				496	77	34	246x496
	296	57	22	116x296				97	54	
		77	42				117	74		
	346	57	22	116x346	396	396	77	34	296x396	
		77	42				97	54		
	246	57	22	156x246			446	117		74
		77	42			496		77	34	296x446
	296	57	22	156x296			97	54		
		77	42			117	74			
346	57	22	156x346	546	496	77	34	296x496		
	77	42				97	54			
396	57	22	156x396			546	117		74	
	77	42			77		34	296x546		
296	296	57	22		196x296	446	446		97	49
		77	42					117	69	
		97	62	147				99		
	346	57	22	196x346	496		97	49	346x496	
		77	42				117	69		
		97	62				147	99		
	396	57	22	196x396	546		97	49	346x546	
		77	42				117	69		
		97	62				147	99		
	446	57	22	196x446	596		97	49	346x596	
		77	42				117	69		
		97	62				147	99		

Combinaciones posibles de placas

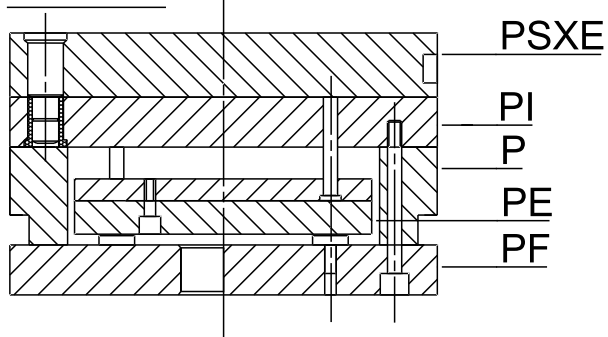
TIPO X



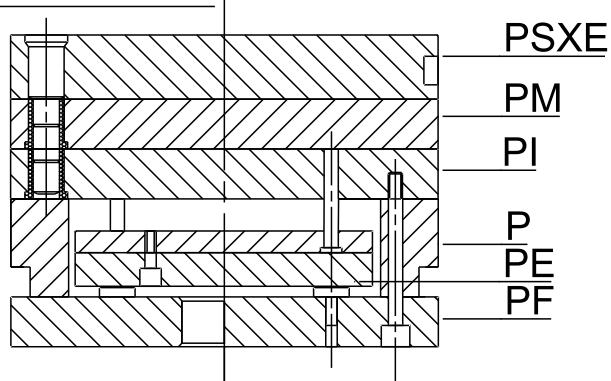
TIPO X+M



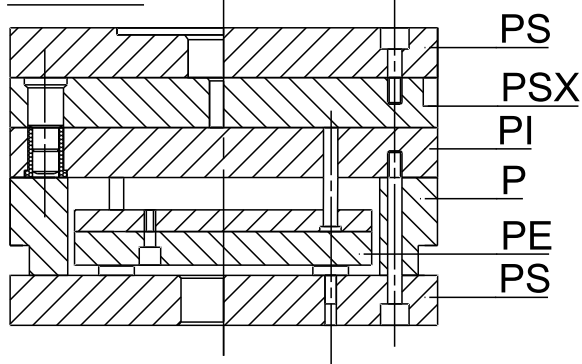
TIPO XE



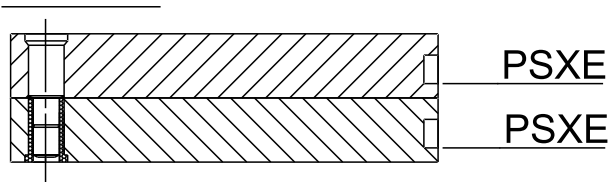
TIPO XE+M



TIPO O



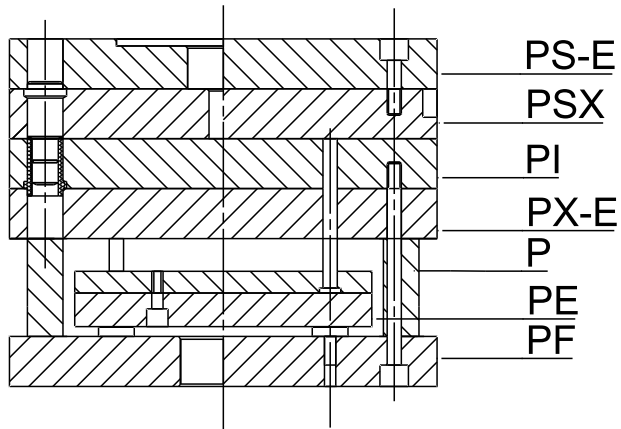
TIPO XP



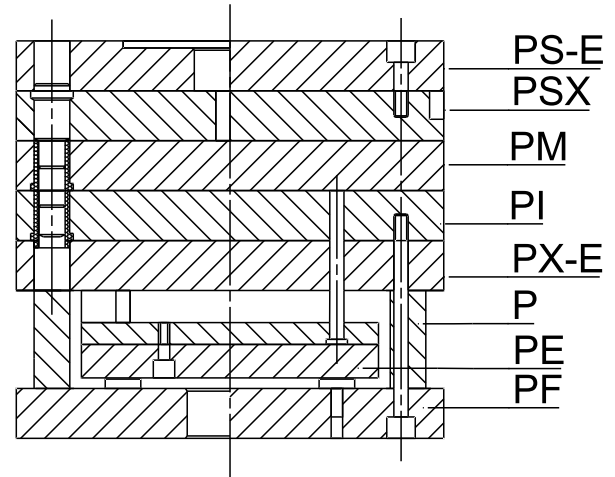
Linea S (tipos X-S y XM-S)

Esta linea lleva ECO-1S y EBU-1S permitiendo así tener 4 placas o más perfectamente centradas sin necesidad de utilizar espinas.

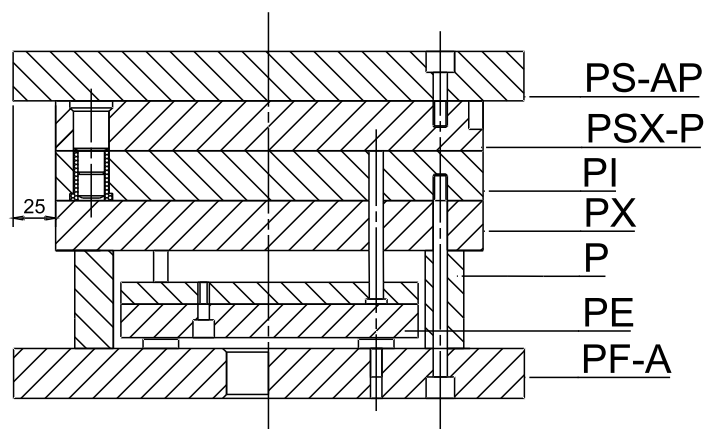
TIPO X-S



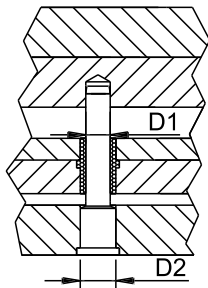
TIPO XM-S



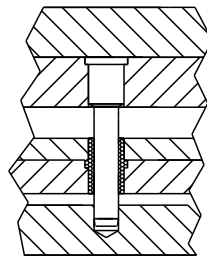
Portamoldes con tapas con aletas: TIPO X con aleta



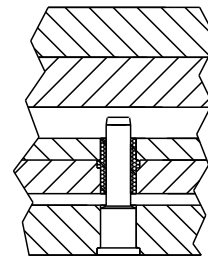
TIPO XF



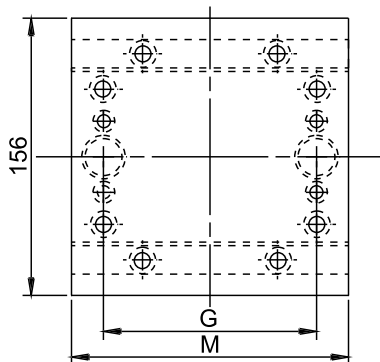
TIPO XG



TIPO ST

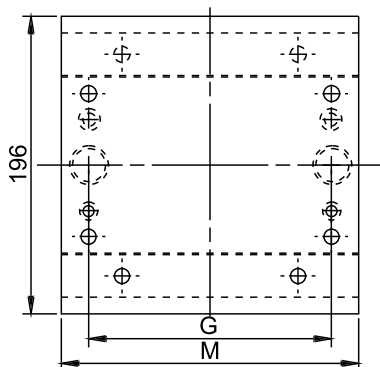


Serie 156



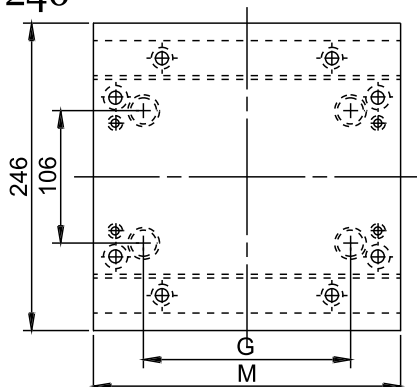
L X M	G	D 1	D 2
156 x 156	120	16	22
156 x 196	160	16	22
156 x 246	210	16	22

Serie 196



L X M	G	D 1	D 2
196 x 196	160	16	22
196 x 246	210	16	22
196 x 296	260	16	22
196 x 346	310	16	22

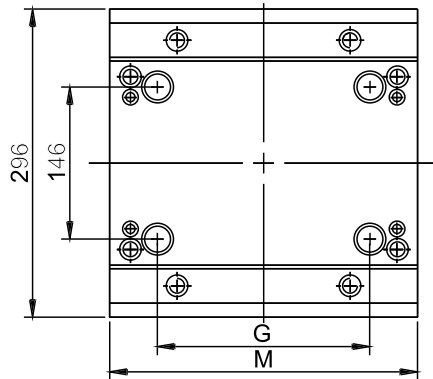
Serie 246



L X M	G	D 1	D 2
246 x 246	166	16	22
246 x 296	216	16	22
246 x 346	266	16	22
246 x 396	316	16	22

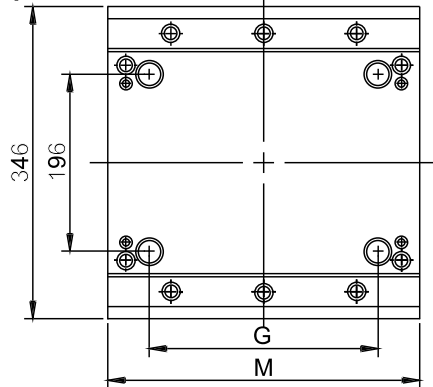
Guiados

Serie 296



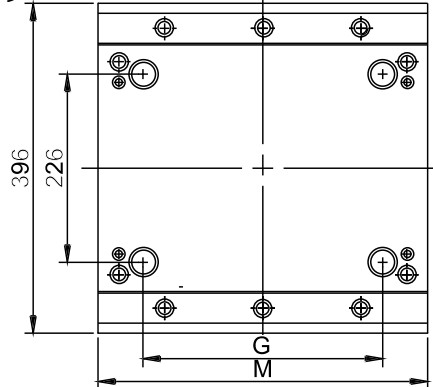
L X M	G	D 1	D 2
296 x 296	204	20	28
296 x 346	254	20	28
296 x 396	304	20	28
296 x 446	354	20	28

Serie 346



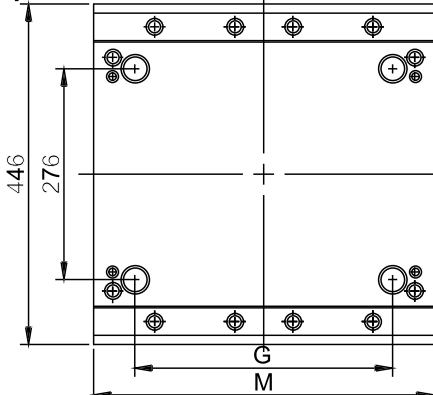
L X M	G	D 1	D 2
346 x 346	254	20	28
346 x 396	304	20	28
346 x 446	354	20	28
346 x 496	404	20	28

Serie 396



L X M	G	D 1	D 2
396 x 396	288	25	34
396 x 446	338	25	34
396 x 496	388	25	34
396 x 546	438	25	34

Serie 446

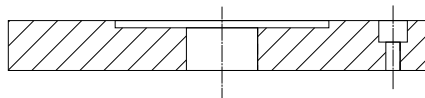


L X M	G	D 1	D 2
446 x 446	338	25	34
446 x 496	388	25	34
446 x 546	438	25	34
446 x 596	488	25	34

Denominación de placas intercambiables

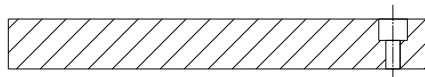
PS

Placa superior de fijación



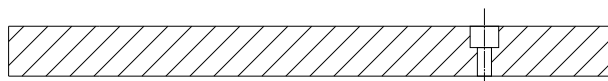
PS-P

Placa superior de fijación plus



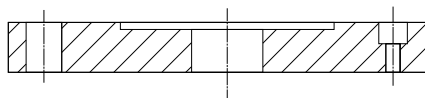
PS-AP

Placa superior de fijación con aleta tipo Plus(+ 25 mm a cada lado)



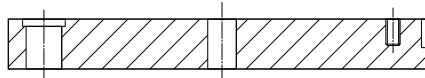
PS-E

Placa superior de fijación encolumnada



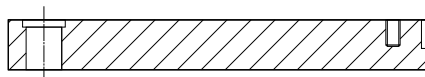
PSX

Placa superior de fijación porta cavidades



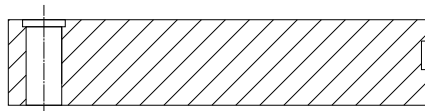
PSX-P

Placa superior de fijación porta cavidades plus



PSXE

Placa superior de fijación porta cavidades, molde de 2 placas



PM

Placa móvil



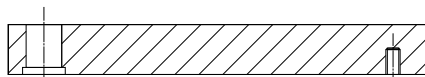
PI

Placa inferior porta cavidades



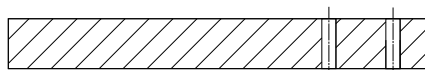
PI-P

Placa inferior porta cavidades plus



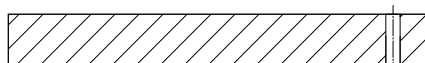
PX

Placa soporte o sufridera



PX-P

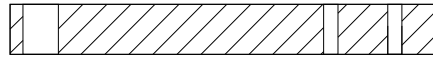
Placa soporte o sufridera plus



Denominación de placas intercambiables

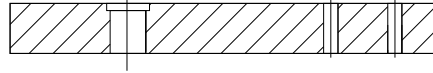
PX-E

Placa soporte o sufridera encolumnada



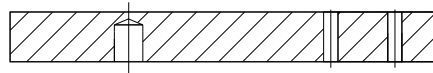
PX-G

Placa soporte o sufridera guiada



PX-C

Placa soporte o sufridera con clavado de columna guiado



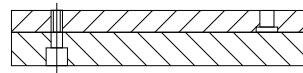
P

Paralelas



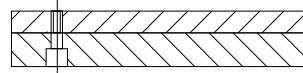
PE

Placas expulsoras



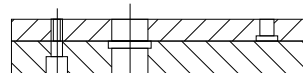
PE-P

Placas expulsora Plus



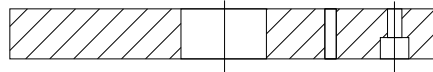
PE-G

Placas expulsora guiada



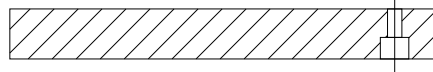
PF

Placa inferior de fijación



PF-P

Placa inferior de fijación Plus



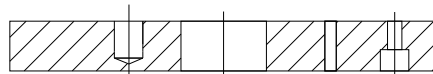
PF-A

Placa inferior de fijación con aleta (+ 25 mm a cada lado)



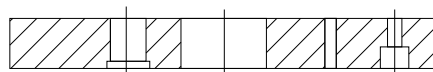
PF-C

Placa inferior con clavado de columna de guiado



PF-G

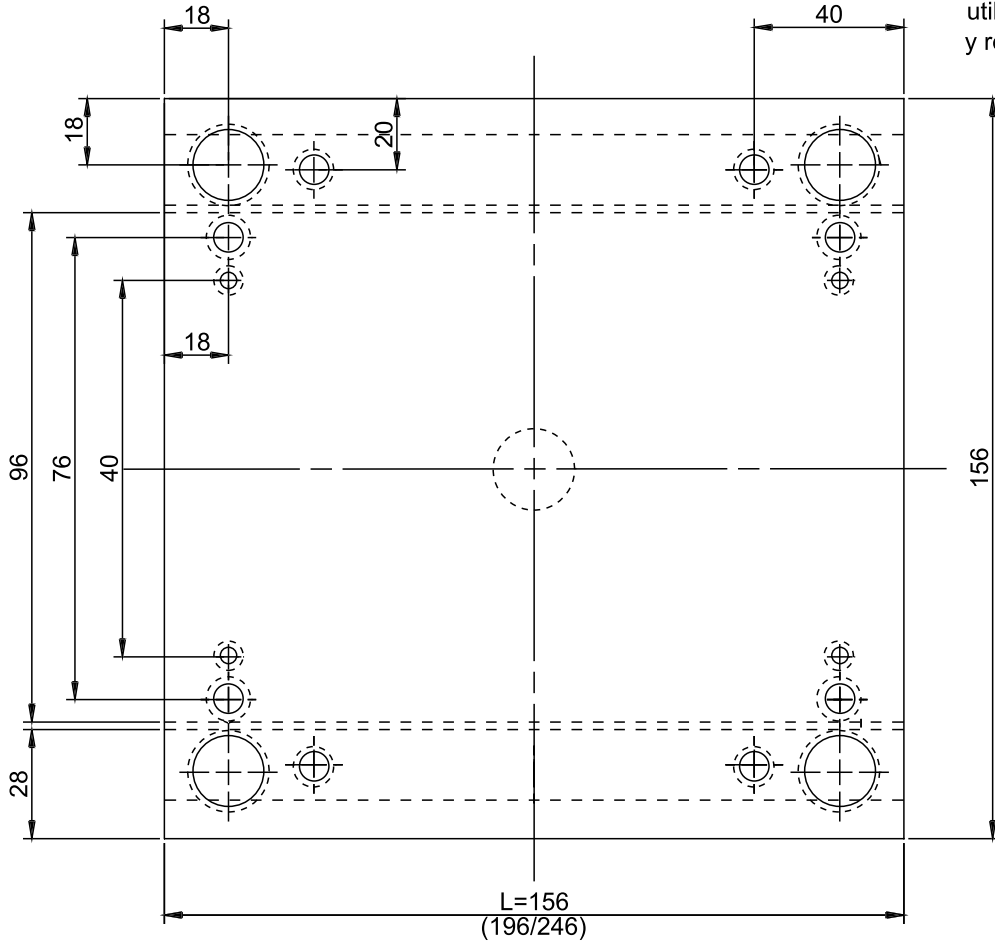
Placa inferior guiada



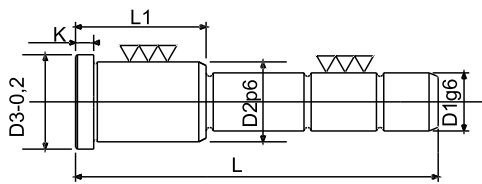
Portamoldes standard Serie 156



En esta serie se utilizan tornillos M10 y retractores Ø10

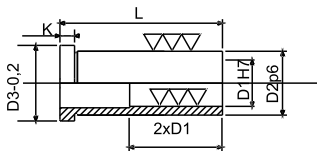


Columna ECO-1



					L										
D1	D2	D3	K	L1	40	45	50	60	70	80	90	100	120	140	160
				22	●	●	●	●	●	●					
				26		●	●	●	●	●	●	●	●		
16	22	26	5	36			●	●	●	●	●	●	●	●	
				46				●	●	●	●	●	●	●	●
				56					●	●	●	●	●	●	●
				66								●	●	●	●

Buje EBU-1



					L					
D1	D2	D3	K	L	22	26	36	46	56	66
16	22	26	5		●	●	●	●	●	●



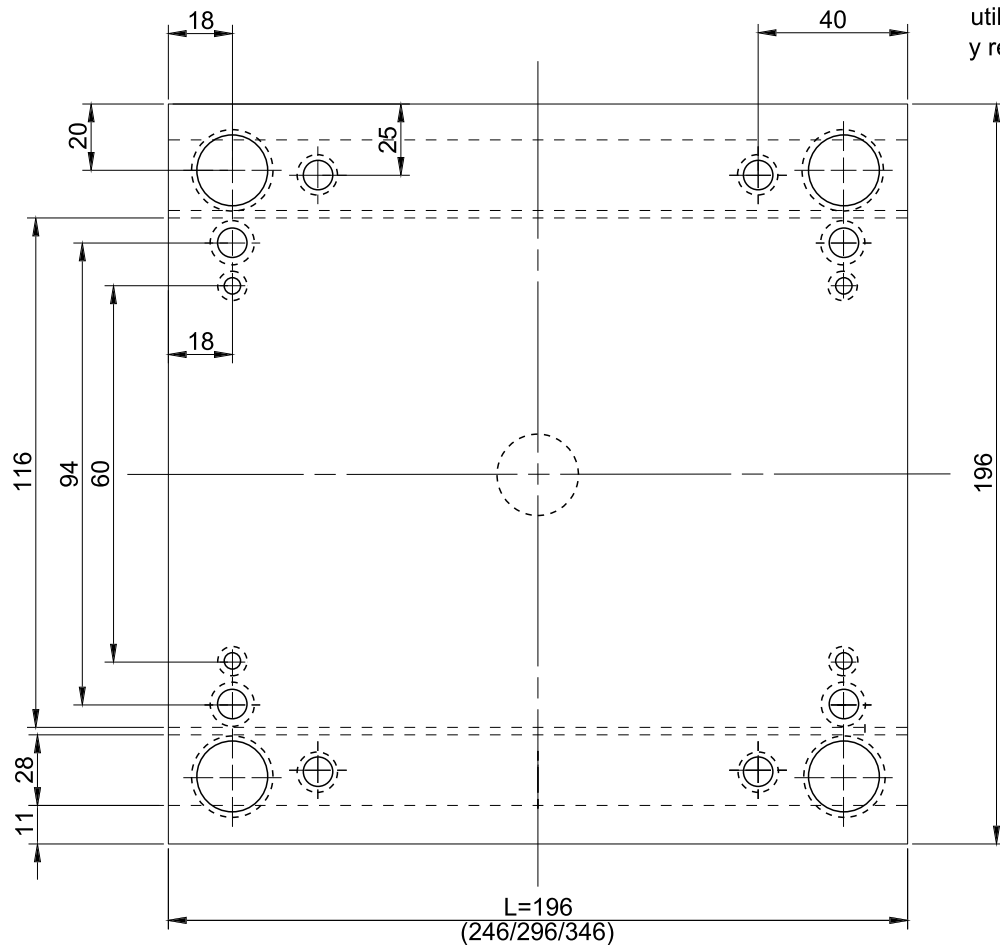
Serie 156

<p>PS</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>156</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>196</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>246</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	156	●							196	●							246	●						
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L \ S	22	26	36	46	56	66	76																											
156	●	●	●	●	●	●																												
196	●	●	●	●	●	●																												
246	●	●	●	●	●	●																												
<p>PX</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>156</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>196</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>246</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	156		●						196		●						246		●					
L \ S	22	26	36	46	56	66	76																											
156		●																																
196		●																																
246		●																																
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L \ S	22	26	36	46	56	66	76																											
156		●																																
196		●																																
246		●																																
<p>P</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>57</th> <th>77</th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>156</td> <td>●</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>196</td> <td>●</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>246</td> <td>●</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	57	77						156	●	●						196	●	●						246	●	●					
L \ S	57	77																																
156	●	●																																
196	●	●																																
246	●	●																																
<p>PE</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>18/12</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>156</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>196</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>246</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	18/12							156	●							196	●							246	●						
L \ S	18/12																																	
156	●																																	
196	●																																	
246	●																																	
<p>PF</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>156</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>196</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>246</td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	156	●							196	●							246	●						
L \ S	22	26	36	46	56	66	76																											
156	●																																	
196	●																																	
246	●																																	

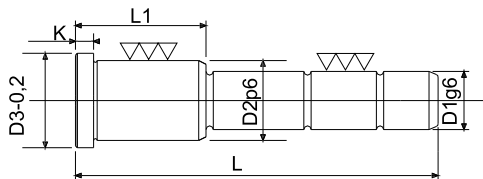
Portamoldes standard Serie 196



En esta serie se utilizan tornillos M10 y retractores Ø10

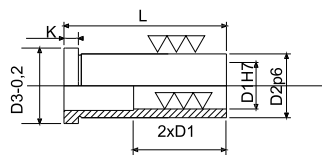


Columna ECO-1



				L											
D1	D2	D3	K	L1	45	50	60	70	80	90	100	120	140	160	180
				22	●	●	●	●	●						
				26	●	●	●	●	●	●	●	●			
				36			●	●	●	●	●	●			
16	22	26	5	46				●	●	●	●	●	●		
				56					●	●	●	●	●		
				66							●	●	●	●	
				76								●	●	●	●

Buje EBU-1



				L						
D1	D2	D3	K	22	26	36	46	56	66	76
16	22	26	5	●	●	●	●	●	●	●



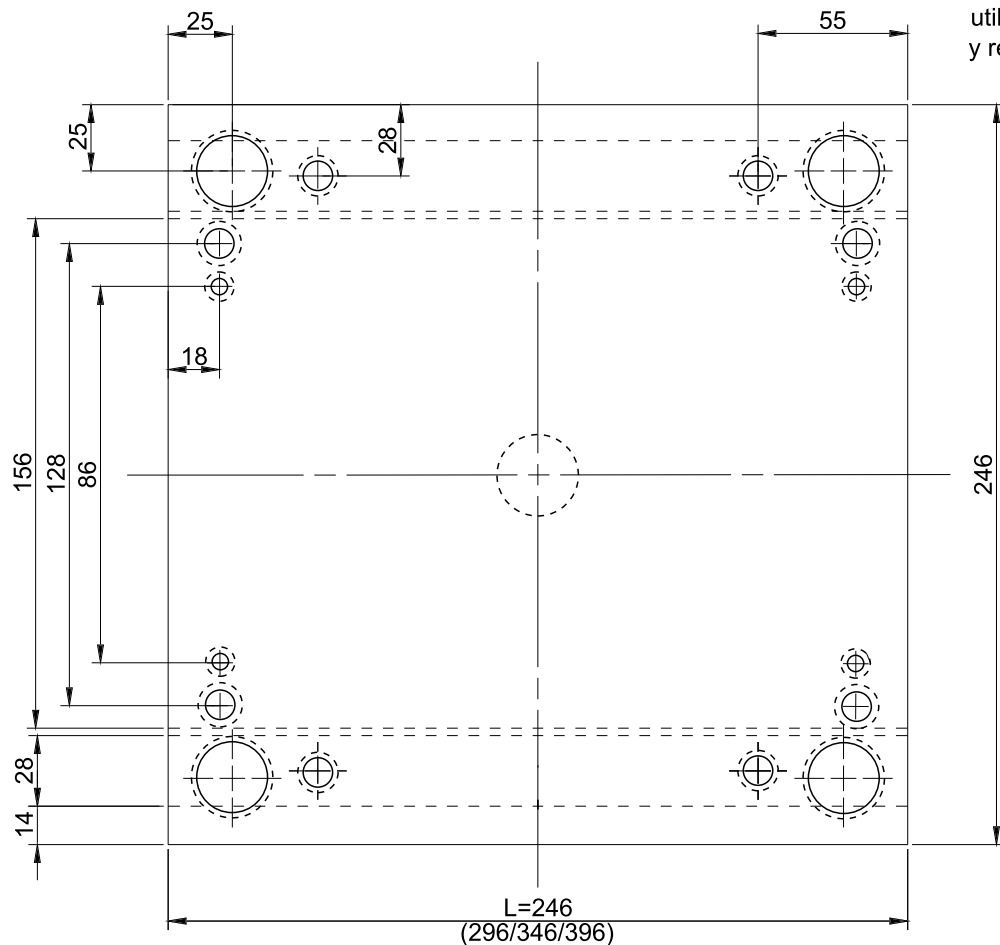
Serie 196

PS 		L \ S	22	26	36	46	56	66	76	
		196	●							
		246	●							
		296	●							
		346	●							
PSE-P 		L \ S	22	26	36	46	56	66	76	
		196	●							
		246	●							
		296	●							
		346	●							
PSX 		L \ S	22	26	36	46	56	66	76	
		196		●	●	●	●			
		246		●	●	●	●			
		296		●	●	●	●			
		346		●	●	●	●			
PSXE 		L \ S	22	26	36	46	56	66	76	
		196					●	●	●	●
		246					●	●	●	●
		296					●	●	●	●
		346					●	●	●	●
PM 		L \ S	22	26	36	46	56	66	76	
		196	●	●	●					
		246	●	●	●					
		296	●	●	●					
		346	●	●	●	●				
PI 		L \ S	22	26	36	46	56	66	76	
		196		●	●	●	●	●	●	●
		246		●	●	●	●	●	●	●
		296		●	●	●	●	●	●	●
		346		●	●	●	●	●	●	●
PX 		L \ S	22	26	36	46	56	66	76	
		196		●						
		246		●						
		296		●						
		346		●						
PXE 		L \ S	22	26	36	46	56	66	76	
		196		●						
		246		●						
		296		●						
		346		●						
P 		L \ S	57	77						
		196	●	●						
		246	●	●						
		296	●	●						
		346	●	●						
PE 		L \ S	18/12							
		196	●							
		246	●							
		296	●							
		346	●							
PF 		L \ S	22	26	36	46	56	66	76	
		196	●							
		246	●							
		296	●							
		346	●							

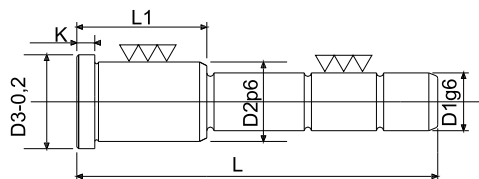
Portamoldes standard Serie 246



En esta serie se utilizan tornillos M12 y retractores Ø12

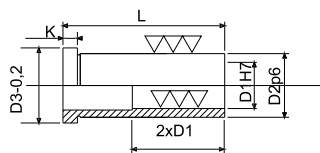


Columna ECO-1



D1	D2	D3	K	L1	L												
					50	60	70	80	90	100	120	140	160	180	200		
				26	●	●	●	●	●	●	●	●	●	●	●		
				36		●	●	●	●	●	●	●	●	●	●		
20	28	32	6	46			●	●	●	●	●	●	●	●	●		
				56				●	●	●	●	●	●	●	●	●	●
				66					●	●	●	●	●	●	●	●	●
				76						●	●	●	●	●	●	●	●

Buje EBU-1



D1	D2	D3	K	L							
				26	36	46	56	66	76	96	
20	28	32	6	●	●	●	●	●	●	●	●



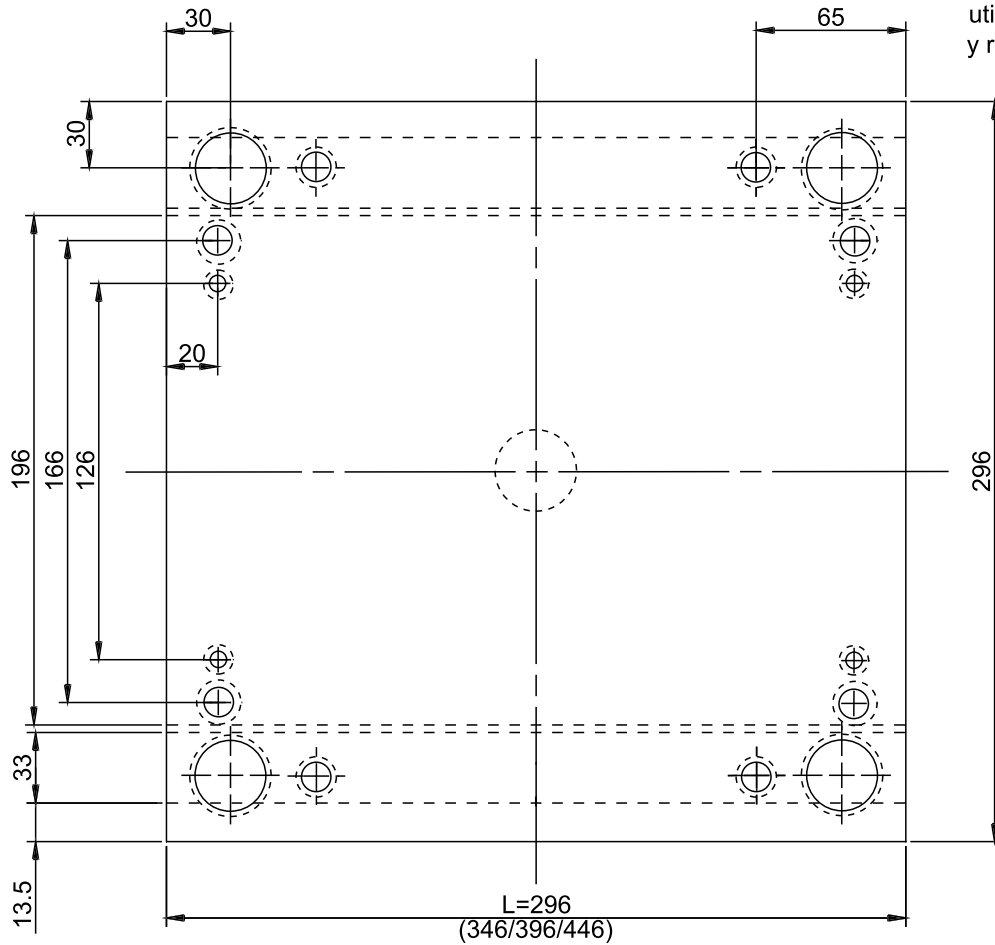
Serie 246

PS 		L \ S	22	26	36	46	56	66	76
		246		●					
		296		●					
		346		●					
		396		●					
PSE-P 		L \ S	22	26	36	46	56	66	76
		246		●					
		296		●					
		346		●					
		396		●					
PSX 		L \ S	22	26	36	46	56	66	76
		246		●	●	●	●		
		296		●	●	●	●		
		346		●	●	●	●		
		396		●	●	●	●		
PSXE 		L \ S	22	26	36	46	56	66	76
		246				●	●	●	●
		296				●	●	●	●
		346				●	●	●	●
		396				●	●	●	●
PM 		L \ S	22	26	36	46	56	66	76
		246		●	●	●			
		296		●	●	●			
		346		●	●	●	●		
		396		●	●	●	●		
PI 		L \ S	22	26	36	46	56	66	76
		246		●	●	●	●	●	●
		296		●	●	●	●	●	●
		346		●	●	●	●	●	●
		396		●	●	●	●	●	●
PX 		L \ S	22	26	36	46	56	66	76
		246			●				
		296			●				
		346			●				
		396			●				
PXE 		L \ S	22	26	36	46	56	66	76
		246			●				
		296			●				
		346			●				
		396			●				
P 		L \ S	57	77					
		246		●	●				
		296		●	●				
		346		●	●				
		396		●	●				
PE 		L \ S	18/12						
		246		●					
		296		●					
		346		●					
		396		●					
PF 		L \ S	22	26	36	46	56	66	76
		246		●					
		296		●					
		346		●					
		396		●					

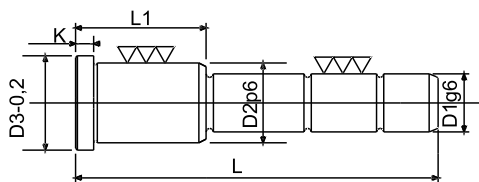
Portamoldes standard Serie 296



En esta serie se utilizan tornillos M14 y retractores Ø14

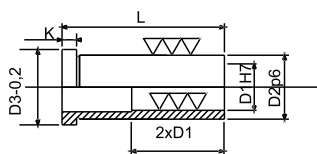


Columna ECO-1



D1	D2	D3	K	L1	L													
					70	80	90	100	120	140	160	180	200	220	240	260	280	
				26		●	●	●	●									
				36	●	●	●	●	●	●	●	●						
				46		●	●	●	●	●	●	●	●					
25	34	38	7	56			●	●	●	●	●	●	●	●				
				66				●	●	●	●	●	●	●	●			
				76					●	●	●	●	●	●	●	●		
				86						●	●	●	●	●	●	●	●	●
				96						●	●	●	●	●	●	●	●	●

Buje EBU-1



D1	D2	D3	K	L						
				26	36	46	56	66	76	96
25	34	38	7	●	●	●	●	●	●	●

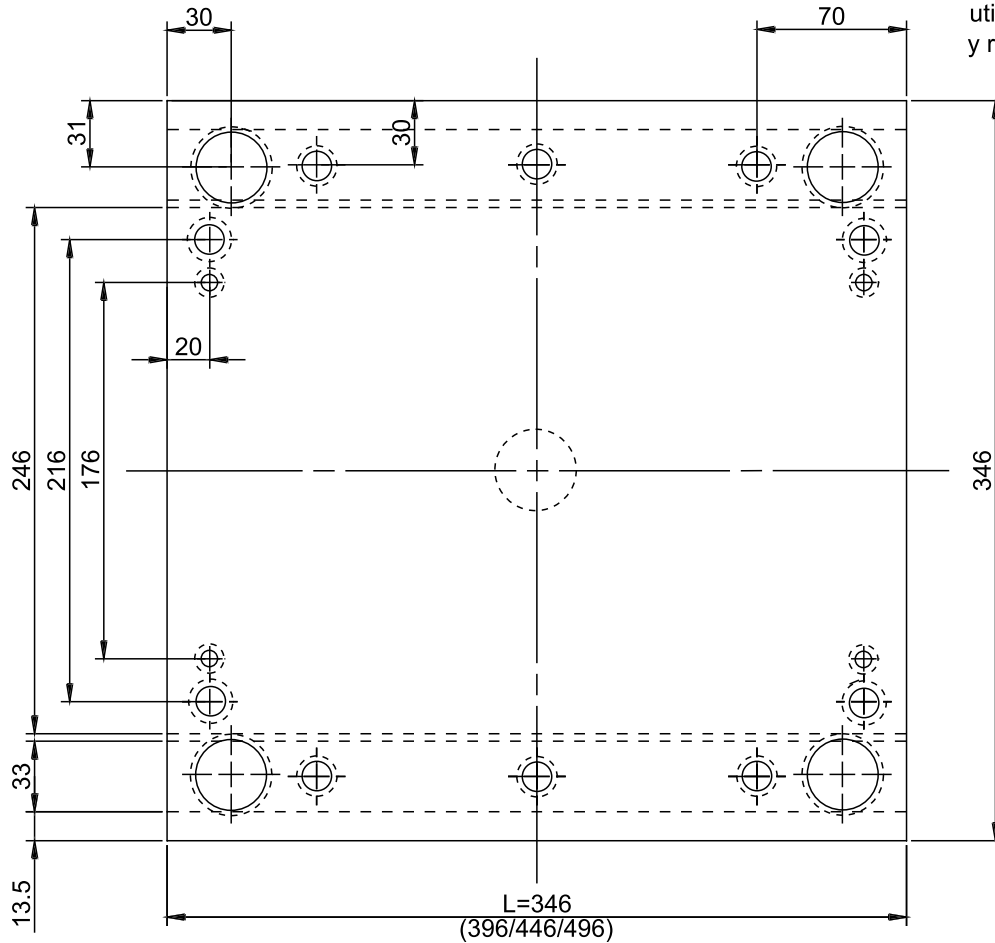


PS			L \ S	22	26	36	46	56	66	76	
			296		●						
			346		●						
			396		●						
			446		●						
PSE-P			L \ S	22	26	36	46	56	66	76	
			296		●						
			346		●						
			396		●						
			446		●						
PSX			L \ S	26	36	46	56	66	76	96	
			296	●	●	●	●	●	●	●	
			346	●	●	●	●	●	●	●	
			396	●	●	●	●	●	●	●	
			446	●	●	●	●	●	●	●	
PSXE			L \ S	26	36	46	56	66	76	96	
			296			●	●	●	●		
			346			●	●	●	●		
			396			●	●	●	●	●	
			446			●	●	●	●	●	
PM			L \ S	26	36	46	56	66	76	96	
			296	●	●	●	●				
			346	●	●	●	●				
			396	●	●	●	●				
			446	●	●	●	●				
PI			L \ S	26	36	46	56	66	76	96	
			296		●	●	●	●	●		
			346		●	●	●	●	●		
			396		●	●	●	●	●		
			446		●	●	●	●	●	●	
PX			L \ S	22	26	36	46	56	66	76	
			296			●					
			346			●					
			396			●					
			446			●					
PXE			L \ S	22	26	36	46	56	66	76	
			296			●					
			346			●					
			396			●					
			446			●					
P			L \ S	57	77	97					
			296	●	●						
			346	●	●						
			396	●	●	●					
			446	●	●	●					
PE			L \ S	18/12							
			296	●							
			346	●							
			396	●							
			446	●							
PF			L \ S	22	26	36	46	56	66	76	
			296		●						
			346		●						
			396		●						
			446		●						

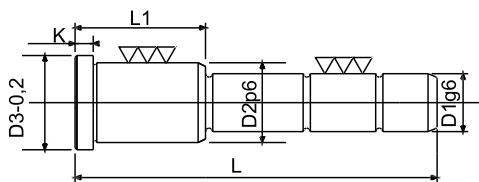
Portamoldes standard Serie 346



En esta serie se utilizan tornillos M14 y retractoros Ø14

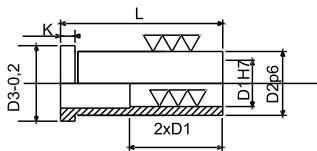


Columna ECO-1



D1	D2	D3	K	L1	L																		
					70	80	90	100	120	140	160	180	200	220	240	260	280						
				26		●	●	●	●														
				36	●	●	●	●	●	●	●	●	●										
				46		●	●	●	●	●	●	●	●	●									
25	34	38	7	56			●	●	●	●	●	●	●	●	●	●							
				66				●	●	●	●	●	●	●	●	●	●						
				76					●	●	●	●	●	●	●	●	●	●					
				86						●	●	●	●	●	●	●	●	●	●	●			
				96							●	●	●	●	●	●	●	●	●	●	●	●	●

Buje EBU-1



D1	D2	D3	K	L							
				26	36	46	56	66	76	96	
25	34	38	7	●	●	●	●	●	●	●	



Serie 346



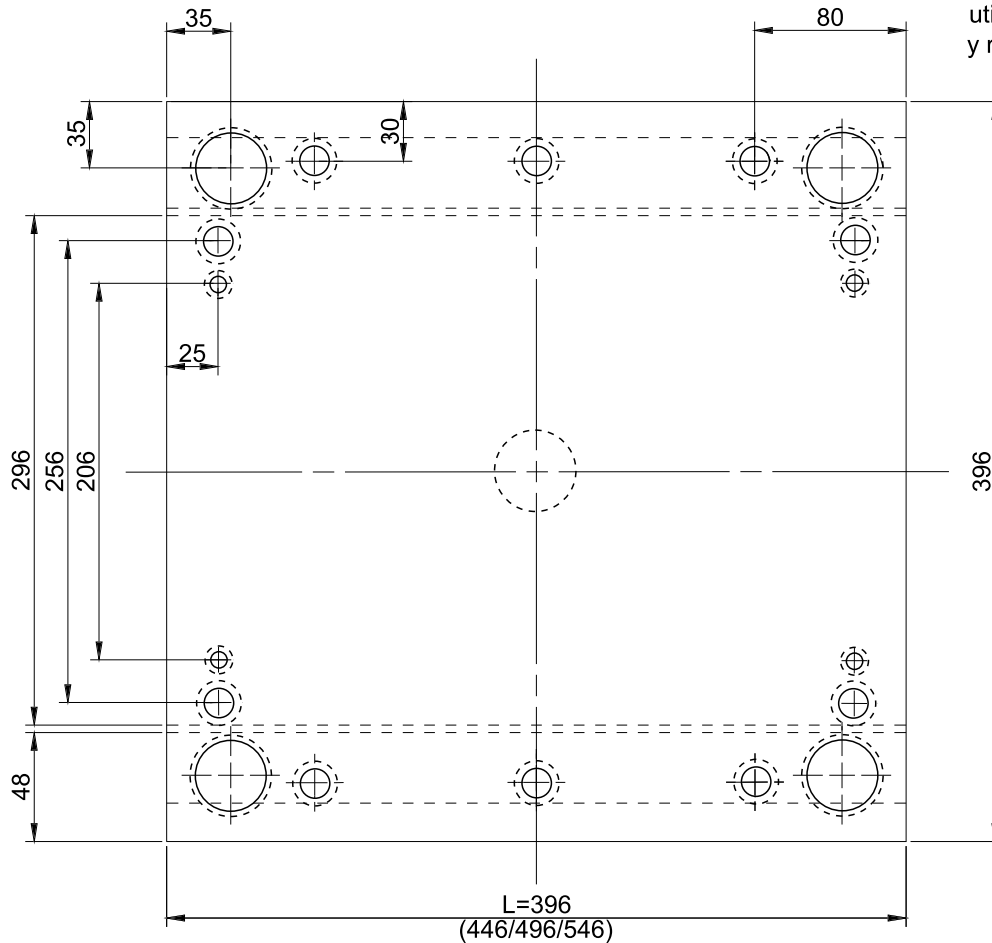
<p>PS</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>396</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>446</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>496</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	346		●						396		●						446		●						496		●					
L \ S	22	26	36	46	56	66	76																																			
346		●																																								
396		●																																								
446		●																																								
496		●																																								
<p>PSE-P</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>396</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>446</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>496</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	346		●						396		●						446		●						496		●					
L \ S	22	26	36	46	56	66	76																																			
346		●																																								
396		●																																								
446		●																																								
496		●																																								
<p>PSX</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> <th>96</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>396</td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>446</td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>496</td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	L \ S	26	36	46	56	66	76	96	346			●	●	●	●	●	396			●	●	●	●	●	446			●	●	●	●	●	496			●	●	●	●	●
L \ S	26	36	46	56	66	76	96																																			
346			●	●	●	●	●																																			
396			●	●	●	●	●																																			
446			●	●	●	●	●																																			
496			●	●	●	●	●																																			
<p>PSXE</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> <th>96</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>396</td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>446</td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>496</td> <td></td> <td></td> <td></td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	L \ S	26	36	46	56	66	76	96	346				●	●	●	●	396				●	●	●	●	446				●	●	●	●	496				●	●	●	●
L \ S	26	36	46	56	66	76	96																																			
346				●	●	●	●																																			
396				●	●	●	●																																			
446				●	●	●	●																																			
496				●	●	●	●																																			
<p>PM</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> <th>96</th> </tr> </thead> <tbody> <tr> <td>346</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>396</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>446</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>496</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	L \ S	26	36	46	56	66	76	96	346	●	●	●	●	●	●	●	396	●	●	●	●	●	●	●	446	●	●	●	●	●	●	●	496	●	●	●	●	●	●	●
L \ S	26	36	46	56	66	76	96																																			
346	●	●	●	●	●	●	●																																			
396	●	●	●	●	●	●	●																																			
446	●	●	●	●	●	●	●																																			
496	●	●	●	●	●	●	●																																			
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L \ S	26	36	46	56	66	76	96																																			
346			●	●	●	●	●																																			
396			●	●	●	●	●																																			
446			●	●	●	●	●																																			
496			●	●	●	●	●																																			
<p>PX</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>396</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>446</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>496</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	346				●				396				●				446				●				496				●			
L \ S	22	26	36	46	56	66	76																																			
346				●																																						
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<p>PXE</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>396</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>446</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> <tr> <td>496</td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	346				●				396				●				446				●				496				●			
L \ S	22	26	36	46	56	66	76																																			
346				●																																						
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<p>P</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>77</th> <th>97</th> <th>117</th> </tr> </thead> <tbody> <tr> <td>346</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>396</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>446</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td>496</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table>	L \ S	77	97	117	346	●	●	●	396	●	●	●	446	●	●	●	496	●	●	●																				
L \ S	77	97	117																																							
346	●	●	●																																							
396	●	●	●																																							
446	●	●	●																																							
496	●	●	●																																							
<p>PE</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22/16</th> </tr> </thead> <tbody> <tr> <td>346</td> <td>●</td> </tr> <tr> <td>396</td> <td>●</td> </tr> <tr> <td>446</td> <td>●</td> </tr> <tr> <td>496</td> <td>●</td> </tr> </tbody> </table>	L \ S	22/16	346	●	396	●	446	●	496	●																														
L \ S	22/16																																									
346	●																																									
396	●																																									
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<p>PF</p>		<table border="1"> <thead> <tr> <th>L \ S</th> <th>22</th> <th>26</th> <th>36</th> <th>46</th> <th>56</th> <th>66</th> <th>76</th> </tr> </thead> <tbody> <tr> <td>346</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>396</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>446</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>496</td> <td></td> <td>●</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	L \ S	22	26	36	46	56	66	76	346		●						396		●						446		●						496		●					
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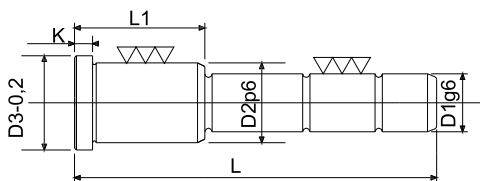
Portamoldes standard Serie 396



En esta serie se utilizan tornillos M16 y retractores Ø16

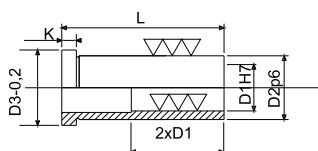


Columna ECO-1



D1	D2	D3	K	L1	L												
					90	100	120	140	160	180	200	220	240	260	280		
				36		●											
				46	●	●	●	●	●								
				56	●	●	●	●	●	●	●	●	●	●	●	●	●
				66			●	●	●	●	●	●	●	●	●	●	●
32	40	45	7	76			●	●	●	●	●	●	●	●	●	●	●
				86				●	●	●	●	●	●	●	●	●	●
				96					●	●	●	●	●	●	●	●	●
				106						●	●	●	●	●	●	●	●

Buje EBU-1



D1	D2	D3	K	L								
				36	46	56	66	76	86	96	106	
32	40	45	7	●	●	●	●	●	●	●	●	●



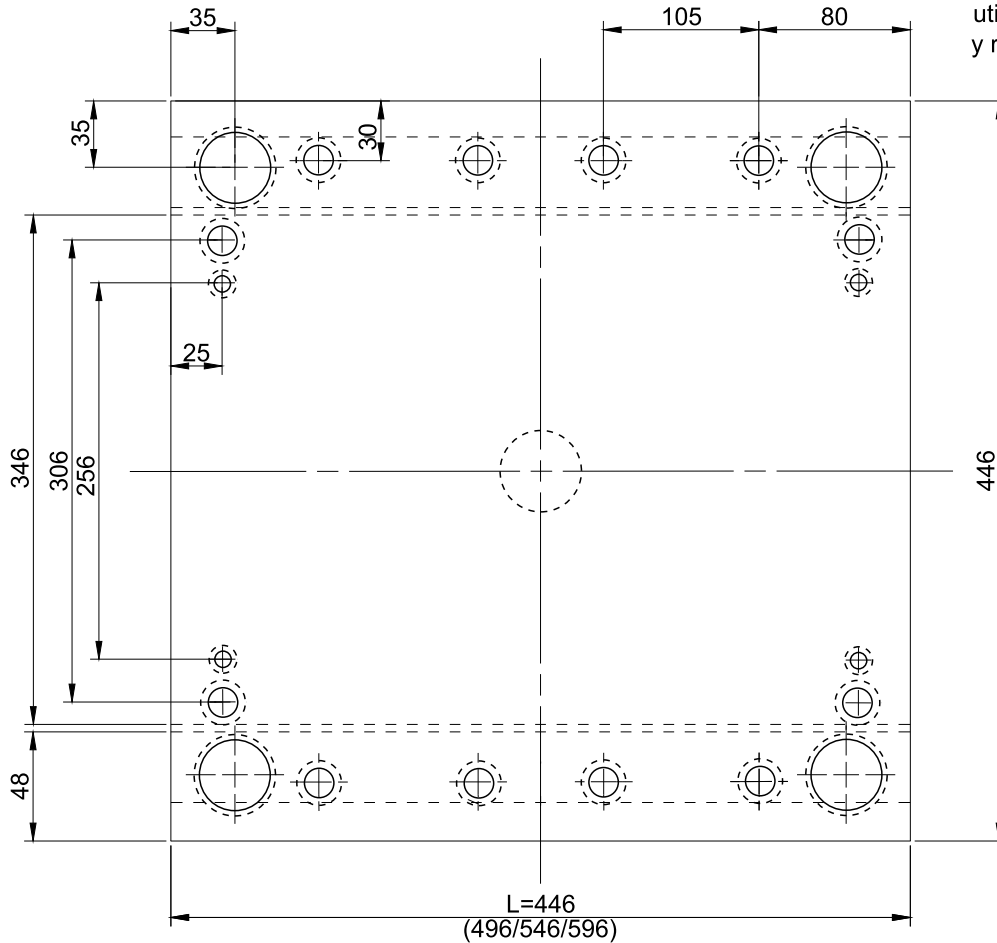
Serie 396

PS			L \ S	22	26	36	46	56	66	76	
			396		●						
			446		●						
			496		●						
			546		●						
PSE-P			L \ S	22	26	36	46	56	66	76	
			396		●						
			446		●						
			496		●						
			546		●						
PSX			L \ S	36	46	56	66	76	96	106	
			396		●	●	●	●	●	●	●
			446		●	●	●	●	●	●	●
			496		●	●	●	●	●	●	●
			546		●	●	●	●	●	●	●
PSXE			L \ S	36	46	56	66	76	96	106	
			396			●	●	●	●	●	●
			446			●	●	●	●	●	●
			496			●	●	●	●	●	●
			546			●	●	●	●	●	●
PM			L \ S	36	46	56	66	76	96	106	
			396	●	●	●	●	●	●	●	●
			446	●	●	●	●	●	●	●	●
			496	●	●	●	●	●	●	●	●
			546	●	●	●	●	●	●	●	●
PI			L \ S	36	46	56	66	76	96	106	
			396		●	●	●	●	●	●	●
			446		●	●	●	●	●	●	●
			496		●	●	●	●	●	●	●
			546		●	●	●	●	●	●	●
PX			L \ S	22	26	36	46	56	66	76	
			396				●				
			446				●				
			496				●				
			546				●				
PXE			L \ S	22	26	36	46	56	66	76	
			396				●				
			446				●				
			496				●				
			546				●				
P			L \ S	77	97	117					
			396	●	●	●					
			446	●	●	●					
			496	●	●	●					
			546	●	●	●					
PE			L \ S	22/16							
			396	●							
			446	●							
			496	●							
			546	●							
PF			L \ S	22	26	36	46	56	66	76	
			396		●						
			446		●						
			496		●						
			546		●						

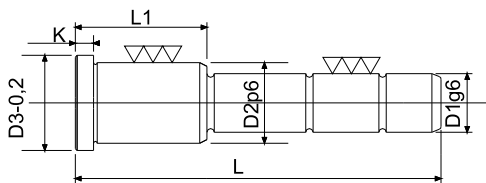
Portamoldes standard Serie 446



En esta serie se utilizan tornillos M16 y retractores Ø16

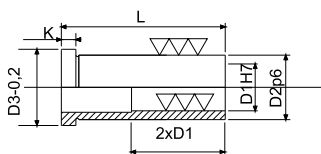


Columna ECO-1



D1	D2	D3	K	L1	L												
					90	100	120	140	160	180	200	220	240	260	280		
				36		●											
				46	●	●	●	●	●	●	●	●	●	●			
				56	●	●	●	●	●	●	●	●	●	●			
				66			●	●	●	●	●	●	●	●	●	●	●
32	40	45	7	76			●	●	●	●	●	●	●	●	●	●	●
				86				●	●	●	●	●	●	●	●	●	●
				96				●	●	●	●	●	●	●	●	●	●
				106				●	●	●	●	●	●	●	●	●	●
				116				●	●	●	●	●	●	●	●	●	●

Buje EBU-1



D1	D2	D3	K	L								
				36	46	56	66	76	86	96	106	116
32	40	45	7	●	●	●	●	●	●	●	●	●

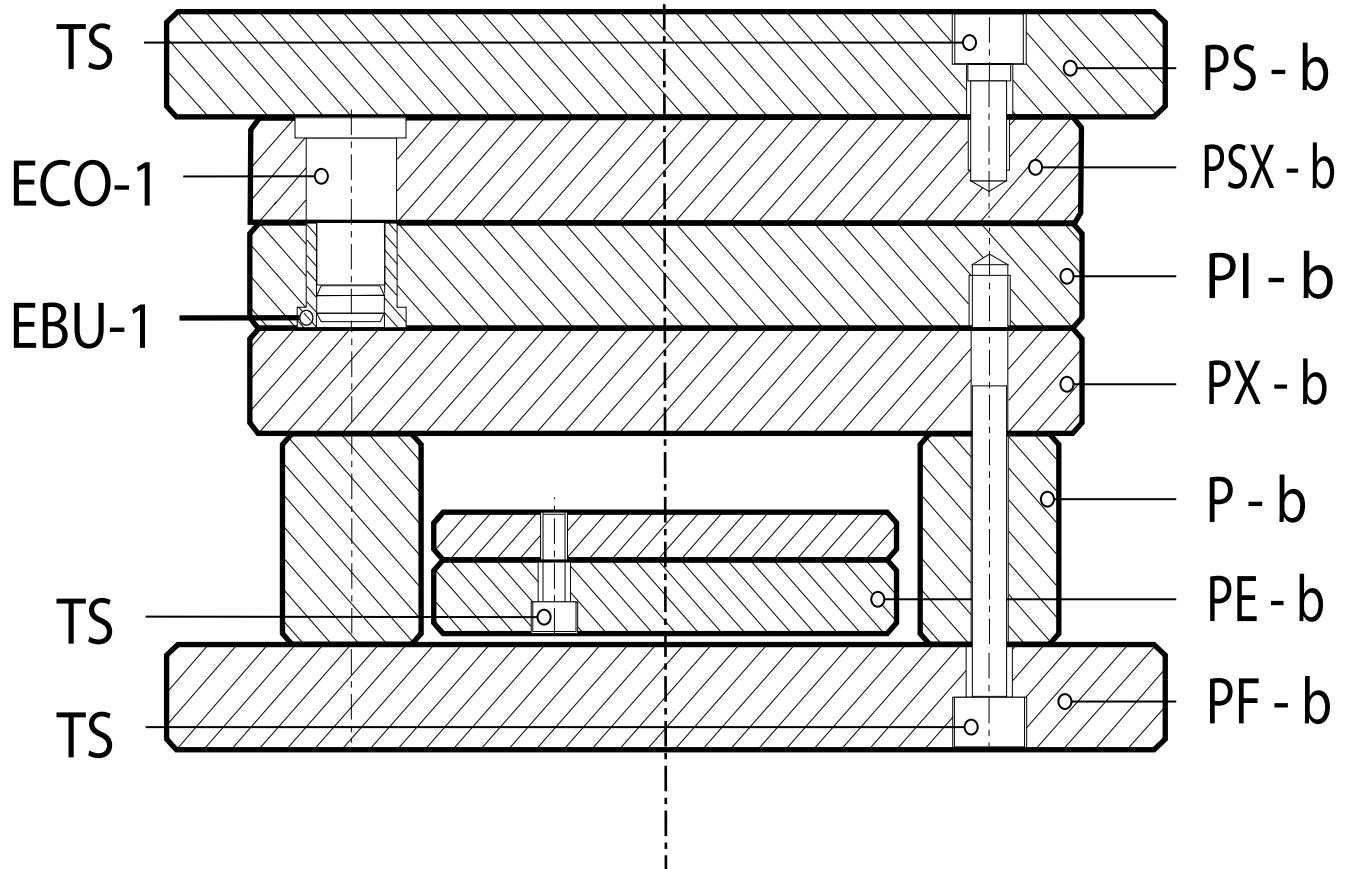


Serie 446

PS			L \ S	22	26	36	46	56	66	76	
			446		●						
			496		●						
			546		●						
			596		●						
PSE-P			L \ S	22	26	36	46	56	66	76	
			446		●						
			496		●						
			546		●						
			596		●						
PSX			L \ S	46	56	66	76	96	106	116	
			446	●	●	●	●	●	●	●	
			496	●	●	●	●	●	●	●	
			546	●	●	●	●	●	●	●	
			596	●	●	●	●	●	●	●	
PSXE			L \ S	46	56	66	76	96	106	116	
			446		●	●	●	●	●	●	
			496		●	●	●	●	●	●	
			546		●	●	●	●	●	●	
			596		●	●	●	●	●	●	
PM			L \ S	36	46	56	66	76	96	106	116
			446	●	●	●	●	●	●	●	
			496	●	●	●	●	●	●	●	
			546	●	●	●	●	●	●	●	
			596	●	●	●	●	●	●	●	
PI			L \ S	46	56	66	76	96	106	116	
			446	●	●	●	●	●	●	●	
			496	●	●	●	●	●	●	●	
			546	●	●	●	●	●	●	●	
			596	●	●	●	●	●	●	●	
PX			L \ S	22	26	36	46	56	66	76	
			446				●				
			496				●				
			546				●				
			596				●				
PXE			L \ S	22	26	36	46	56	66	76	
			446				●				
			496				●				
			546				●				
			596				●				
P			L \ S	97	117	147					
			446	●	●	●					
			496	●	●	●					
			546	●	●	●					
			596	●	●	●					
PE			L \ S	27/16							
			446	●							
			496	●							
			546	●							
			596	●							
PF			L \ S	22	26	36	46	56	66	76	
			446		●						
			496		●						
			546		●						
			596		●						

LINEA BASICA

A+B	TIPO	PS-b/PF-b	PSX-B/PI-b	PX-b	P-b	PE-b	ECO-1	EBU-1	TS	TS
156x156	B1	22	26	26	57	18/12	16X26X50	16X26	10x25	10x110
156x156	B2	22	36	26	57	18/12	16X36X70	16X36	10x25	10x110
156x196	B3	22	26	26	57	18/12	16X26X50	16X26	10x25	10x110
156x196	B4	22	36	26	57	18/12	16X36X70	16X36	10x25	10x110
196x196	B5	22	26	26	57	18/12	16X26X50	16X26	10x25	10x110
196x196	B6	22	36	26	57	18/12	16X36X70	16X36	10x25	10x110
196x246	B7	22	26	26	57	18/12	16X26X50	16X26	10x25	10x110
196x246	B8	22	36	26	57	18/12	16X36X70	16X36	10x25	10x110
196x296	B9	22	36	26	57	18/12	16X36X70	16X36	10x25	10x110
196x296	B10	22	46	26	57	18/12	16X46X90	16X46	10x25	10x110
246x246	B11	26	26	36	57	18/12	20X26X50	20X26	12x30	12x130
246x246	B12	26	36	36	57	18/12	20X36X70	20X36	12x30	12x130
246x296	B13	26	36	36	57	18/12	20X36X70	20X36	12x30	12x130
246x296	B14	26	46	36	57	18/12	20X46X90	20X46	12x30	12x130
246x346	B15	26	36	36	57	18/12	20X36X90	20X36	12x30	12x130
246x346	B16	26	46	36	57	18/12	20X46X90	20X46	12x30	12x130



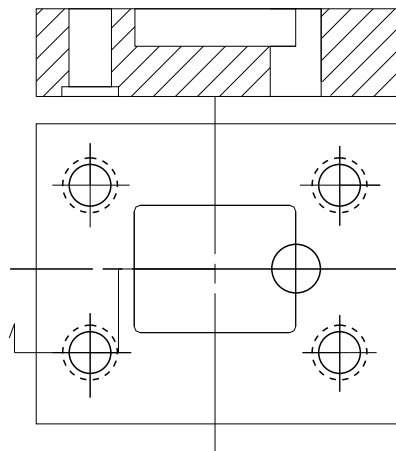
Si ninguna de las opciones de portamoldes standard que la linea **Torbelar Moldbases** ofrece satisface los requerimientos técnicos que su trabajo requiere, Torbelar S.A. brinda el servicio de fabricar portamoldes especiales bajo pedido. Nuestro departamento de asistencia tecnica al cliente puede ayudarle

a solucionar este tipo de problemas y encontrar la solucion más viable para su portamolde. Dado el gran volumen de materiales en stock y la disponibilidad de maquinaria de última generación y de gran precisión podemos responder con la celeridad requerida ante cualquier pedido.

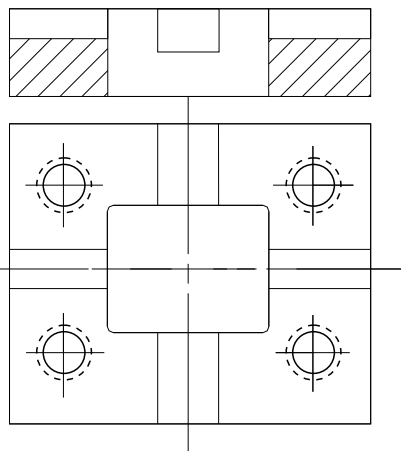
Es sumamente importante la presentación de planos finales y certeros para la cotización y posterior fabricación de los trabajos especiales.

Ejemplos de mecanizados especiales :

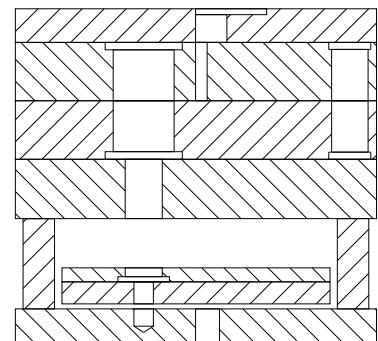
Ejemplo 1



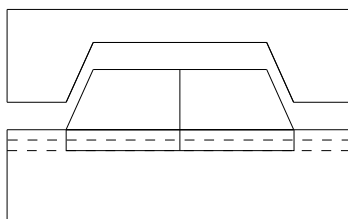
Ejemplo 2



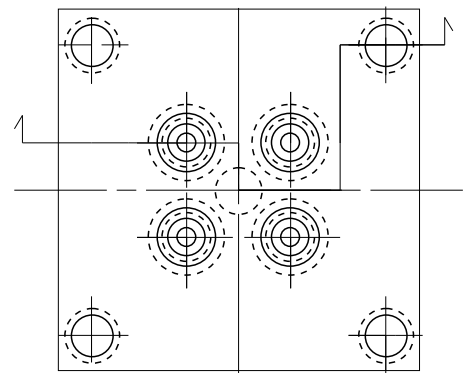
Ejemplo 3



Ejemplo 4

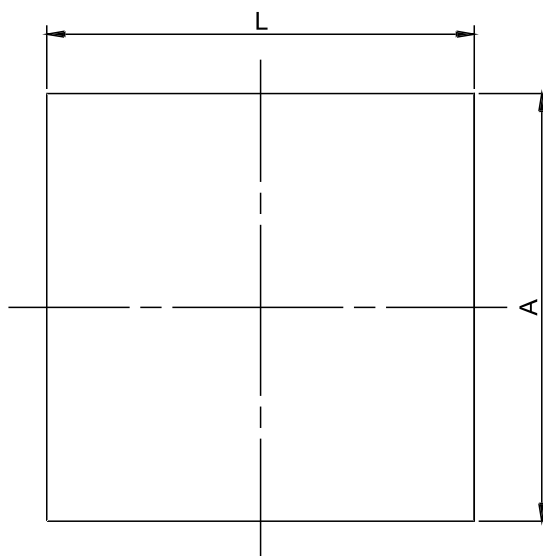


Indicar:
Diametros,
Altura de cabezas,
Entrecentros y
Tolerancias.



Las placas AX son placas ciegas, escuadradas, rectificadas y con chaflanes.

Se pueden fabricar en acero SAE 1045, SAE 4140, SAE 4140 bonificado y AISI P-20 bonificado.



Tolerancia de fabricación

Ancho : -0 // + 0,8
Largo : -0 // + 0,8
Escuadrado : +/- 0° 30'
Espesor : -0 // + 0,02

Favor de especificar previamente si se requieren las placas con mayor sobremedida.

Se pueden fabricar placas fresadas, escuadradas y/o rectificadas, con chaflanes, en medidas especiales, bajo pedido.

Como ordenar:

Cant AX Espesor x Ancho x largo - Material

Ejemplo: 4 AX 76 x 346 x 346 - AISI P20

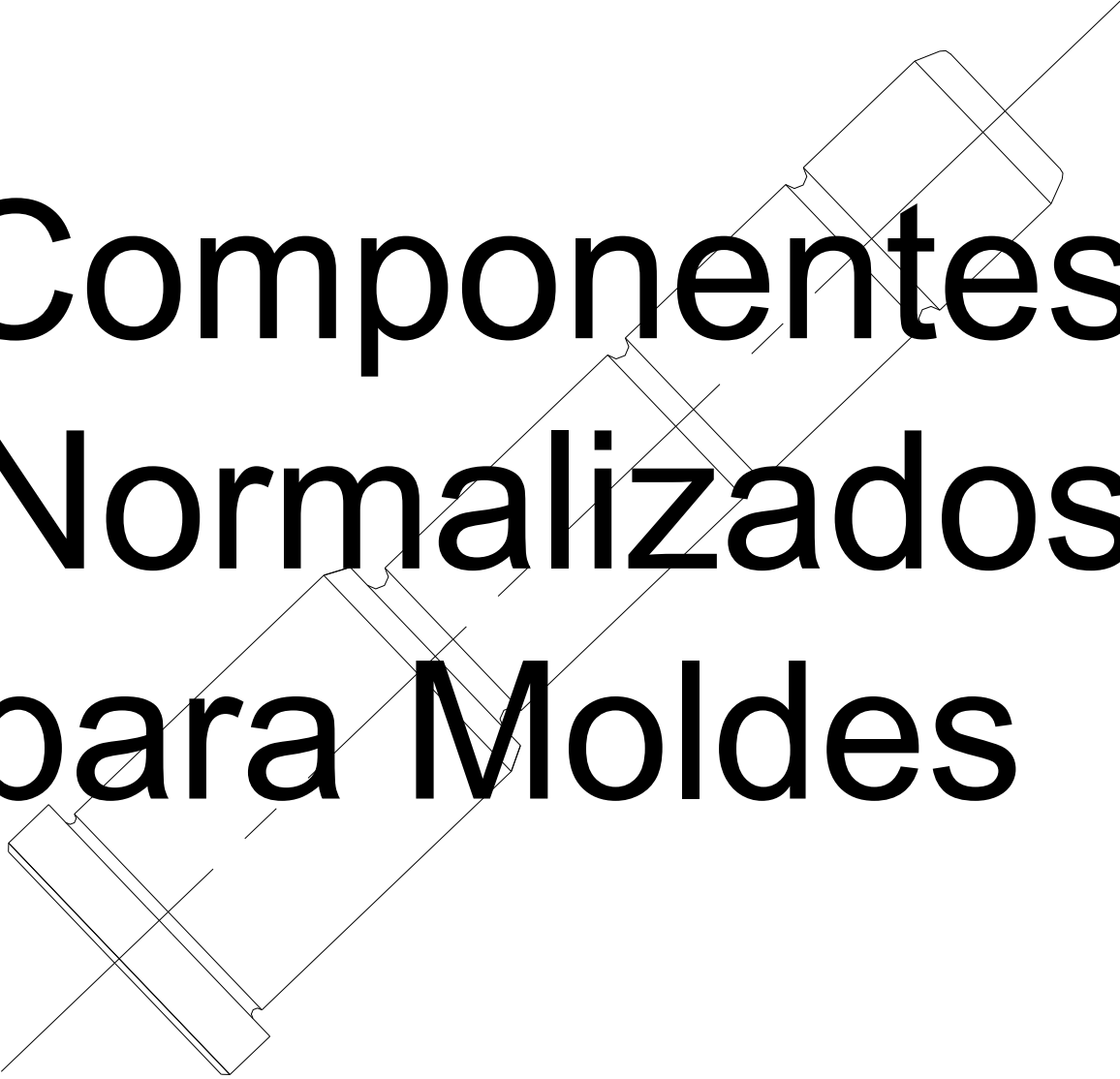
En el cuadro a continuación se presentan las medidas standard de las placas AX.

Placas Ax y placas especiales



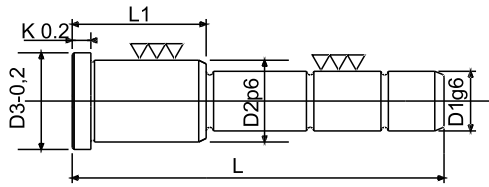
	S									
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156x156	●	●	●	●	●	●				
156x196	●	●	●	●	●	●				
156x246	●	●	●	●	●	●				
196x196	●	●	●	●	●	●	●			
196x246	●	●	●	●	●	●	●			
196x296	●	●	●	●	●	●	●			
196x346	●	●	●	●	●	●	●			
246x246	●	●	●	●	●	●	●			
246x296	●	●	●	●	●	●	●			
246x346	●	●	●	●	●	●	●			
246x396	●	●	●	●	●	●	●			
296x296		●	●	●	●	●	●	●		
296x346		●	●	●	●	●	●	●		
296x396		●	●	●	●	●	●	●		
296x446		●	●	●	●	●	●	●		
346x346		●	●	●	●	●	●	●		
346x396		●	●	●	●	●	●	●		
346x446		●	●	●	●	●	●	●		
346x496		●	●	●	●	●	●	●		
396x396		●	●	●	●	●	●	●	●	
396x446		●	●	●	●	●	●	●	●	
396x496		●	●	●	●	●	●	●	●	
396x546		●	●	●	●	●	●	●	●	
446x446		●	●	●	●	●	●	●	●	●
446x496		●	●	●	●	●	●	●	●	●
446x546		●	●	●	●	●	●	●	●	●
446x596		●	●	●	●	●	●	●	●	●



A technical drawing of a mold component, possibly a gate or a runner, shown in a perspective view. The drawing is a line drawing with some shading to indicate depth. It features a rectangular base with a central channel and a top flange. The drawing is oriented diagonally across the page.

Componentes Normalizados para Moldes

Columna guía de dos diámetros ECO-1



Acero: SAE 8620

Dureza: HRC 60-62

Proceso: Cementado, templado y revenido.

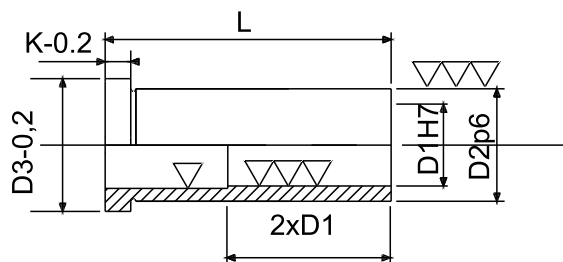
Terminación: Rectificado emboque 25% de L1

Cómo ordenar: Q ECO-1 D1 x L1 x L

Ejemplo: 4 ECO-1 16 x 36 x 70

D 1	D 2	D 3	K	L1	L (mm)																	
					40	45	50	60	70	80	90	100	120	140	160	180	200	220	240	260	280	
12	18	22	5	22			●	●	●	●												
				26			●	●	●	●												
				36			●	●	●	●	●	●										
				46					●	●	●	●	●									
14	20	24	5	22			●	●	●	●	●											
				26				●	●	●	●	●	●									
				36					●	●	●	●	●	●								
				46						●	●	●	●	●	●							
16	22	26	5	56	●																	
				22			●	●	●	●	●	●										
				26		●	●	●	●	●	●	●	●									
				36			●	●	●	●	●	●	●									
				46					●	●	●	●	●	●								
				56								●	●	●	●							
18	26	30	5	66																		
				22				●	●	●	●	●	●									
				26				●	●	●	●	●	●	●								
				36					●	●	●	●	●	●	●							
				46						●	●	●	●	●	●	●						
				56								●	●	●	●	●	●					
20	28	32	6	66																		
				26			●	●	●	●	●	●	●									
				36				●	●	●	●	●	●	●								
				46					●	●	●	●	●	●	●							
				56							●	●	●	●	●	●						
				66									●	●	●	●	●	●				
25	34	38	7	76																		
				26					●	●	●	●	●	●								
				36					●	●	●	●	●	●	●							
				46						●	●	●	●	●	●	●						
				56								●	●	●	●	●	●					
				66									●	●	●	●	●	●				
32	40	45	7	76																		
				86																		
				96																		
				106																		
				116																		
				126																		
40	48	52	7	46																		
				56																		
				66																		
				76																		
				86																		
				96																		

Buje guía con collar EBU-1

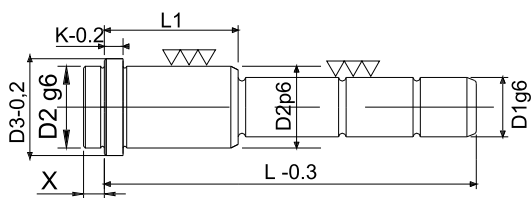


Acero: SAE 8620
 Dureza: HRC 60-62
 Proceso: Cementado, templado y revenido.
 Terminación: Rectificado
 Cómo ordenar: Q EBU-1 D1 x L
 Ejemplo: 4 EBU-1 40 x 106

				L (mm)											
D 1	D 2	D 3	K	22	26	36	46	56	66	76	86	96	106	116	126
12	18	22	5	●	●	●	●	●							
14	20	24	5	●	●	●	●	●							
16	22	26	5	●	●	●	●	●	●	●	●	●			
18	26	30	5	●	●	●	●	●	●	●	●	●			
20	28	32	6	●	●	●	●	●	●	●	●	●	●	●	●
25	34	38	7			●	●	●	●	●	●	●	●	●	●
32	40	45	7			●	●	●	●	●	●	●	●	●	●
40	48	52	8			●	●	●	●	●	●	●	●	●	●



Columna guía dos diámetros c/cabeza guía ECO-1S

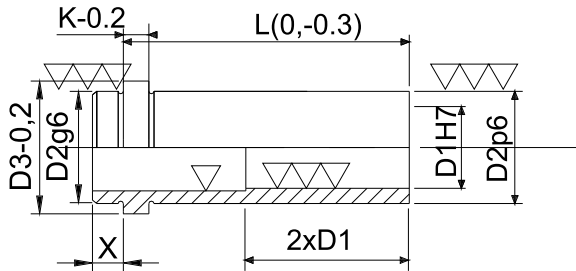


Acero: SAE 8620
 Dureza: HRC 60-62
 Proceso: Cementado, templado y revenido.
 Terminación: Rectificado
 Cómo ordenar: Q ECO-1s D1 x L1 x L
 Ejemplo: 8 ECO-1S 32 x 66 x 140

						L (mm)									
D 1	D 2	D 3	K	X	L 1	70	80	90	100	120	140	160	180	200	220
16	22	26	5	10	26	●	●	●	●	●					
					36		●	●	●	●					
					46		●	●	●	●	●	●			
					56				●	●	●	●	●		
					66					●	●	●	●	●	
					76								●	●	●
20	28	32	6	10	36	●	●	●	●	●					
					46		●	●	●	●	●				
					56			●	●	●	●	●			
					66				●	●	●	●			
					76					●	●	●	●	●	
					96								●	●	●
25	34	38	7	10	36		●	●	●	●					
					46		●	●	●	●	●				
					56			●	●	●	●	●			
					66				●	●	●	●			
					76					●	●	●	●	●	
					96								●	●	●
32	40	45	7	10	46		●	●	●	●	●				
					56				●	●	●	●			
					66				●	●	●	●	●		
					76					●	●	●	●	●	●
					96								●	●	●
40	48	52	8	10	56					●	●	●			
					66					●	●	●	●		
					76					●	●	●	●	●	
					96								●	●	●



Buje guía con collar y guía anterior EBU-1S

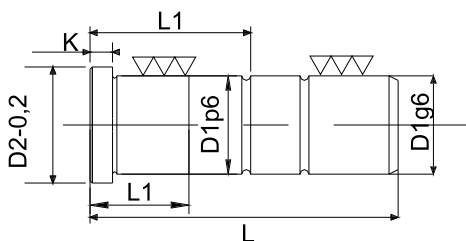


Acero : SAE 8620
 Dureza : HRC 60-62
 Proceso: Cementado, templado y revenido.
 Terminación : Rectificado
 Cómo ordenar : Q EBU-1S D₁ x L
 Ejemplo : 4 EBU-1S 25 x 56

					L (mm)							
D 1	D 2	D 3	K	X	26	36	46	56	66	76	86	96
16	22	26	5	10	●	●	●	●	●	●		
20	28	32	6	10	●	●	●	●	●	●	●	●
25	34	38	7	10		●	●	●	●	●	●	●
32	40	45	7	10			●	●	●	●	●	●
40	48	52	8	10			●	●	●	●	●	●



Columna guía de un diámetro ECO-2

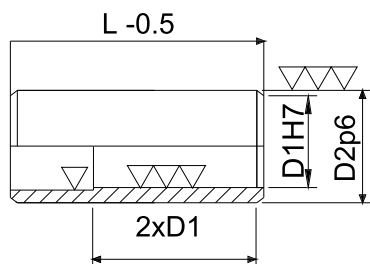


Acero: SAE 8620
 Dureza: HRC 60-62
 Proceso: Cementado, templado y revenido.
 Terminación: Rectificado
 Cómo ordenar: Q ECO-2 D1 x L
 Ejemplo: 4 ECO-2 20 x 200

			L	50	60	70	80	90	100	120	140	160	180	200	220	240	260	280	
			L1	20	20	20	20	20	25	25	25	30	30	30	30	40	40	40	
D 1	D 2	K																	
12	16	5		●	●	●	●	●	●	●	●								
14	18	5		●	●	●	●	●	●	●	●	●							
16	20	5		●	●	●	●	●	●	●	●	●	●	●					
18	22	5		●	●	●	●	●	●	●	●	●	●	●	●				
20	24	6			●	●	●	●	●	●	●	●	●	●	●	●			
25	30	7					●	●	●	●	●	●	●	●	●	●	●	●	●
32	37	7								●	●	●	●	●	●	●	●	●	●
40	45	8								●	●	●	●	●	●	●	●	●	●



Buje guía liso EBU-2

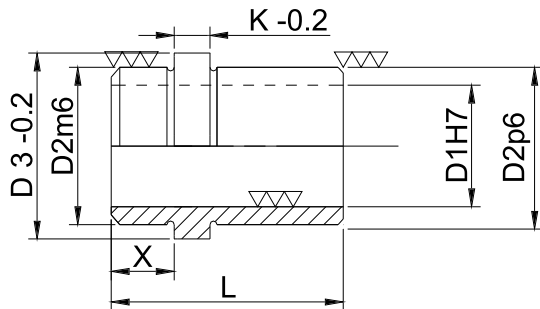


Acero: SAE 8620
 Dureza: HRC 60-62
 Proceso: Cementado, templado y revenido.
 Terminación: Rectificado
 Cómo ordenar: Q EBU-2 D₁ x L
 Ejemplo: 4 EBU-2 40 x 76

		L (mm)									
D 1	D2	22	26	36	46	56	66	76	86	96	106
12	18	●	●	●	●						
14	20	●	●	●	●						
16	22	●	●	●	●	●	●	●			
18	26	●	●	●	●	●	●	●			
20	28		●	●	●	●	●	●	●	●	
25	34		●	●	●	●	●	●	●	●	
32	40			●	●	●	●	●	●	●	●
40	48				●	●	●	●	●	●	●



Buje guía EBU-3



Acero: SAE 8620

Dureza: HRC 60-62

Proceso: Cementado, templado y revenido.

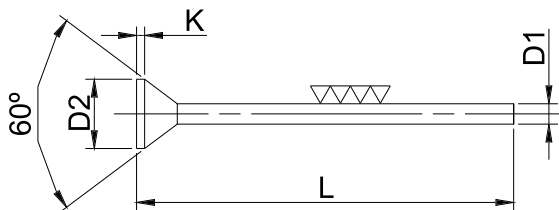
Terminación: Rectificado

Cómo ordenar: Q EBU-3 D₁ x L

Ejemplo: 4 EBU-3 16 x 40

					L (mm)				
D 1	D 2	D 3	K	X	32	40	50	65	80
14	20	24	5	16	●	●			
16	22	26	5	16	●	●			
18	26	30	5	16	●	●			
20	28	32	6	16	●	●			
25	34	38	7	16	●	●			
32	40	45	7	25			●	●	
40	48	52	8	32				●	●

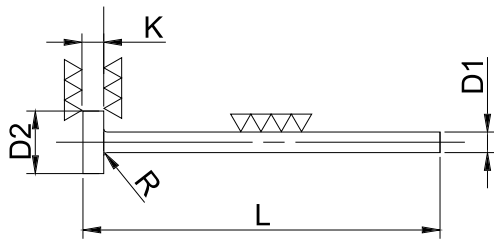
Expulsor con cabeza cónica (templado) EES-1



Acero: DIN 1.2842 SAE-01
 Dureza: Cuerpo HRC 61 ± 1.
 Cabeza HRC 45 ± 5.
 Proceso: Lapidado
 Cómo ordenar:
 Q EES-1 D1 x L
 Ejemplo: 50 EES-1 4 x 150

D 1 (g6)	D 2 (-0,12)	K	L(mm)			
			100	125	160	200
1,0	1,8	0,5	●	●	●	
1,25	2,0	0,5	●	●	●	
1,5	2,2	0,5	●	●	●	
1,75	2,8	0,5	●	●	●	
2,0	3,0	0,5	●	●	●	●
2,1	3,2	0,5	●	●	●	●
2,25	3,5	0,5	●	●	●	●
2,5	3,5	0,5	●	●	●	●
2,75	4,0	0,5	●	●	●	●
3,0	4,5	0,5	●	●	●	●
3,1	4,5	0,5	●	●	●	●
3,25	4,5	0,5	●	●	●	●
3,5	5,0	0,5	●	●	●	●
3,75	5,0	0,5	●	●	●	●
4,0	5,5	0,5	●	●	●	●
4,1	5,5	0,5	●	●	●	●
4,2	5,5	0,5	●	●	●	●
4,5	6,0	0,5	●	●	●	●
5,0	6,5	0,5	●	●	●	●
5,1	6,5	0,5	●	●	●	●
5,25	6,5	0,5	●	●	●	●
5,5	7,0	0,5	●	●	●	●
6,0	8,0	0,5	●	●	●	●
6,5	9,0	1,0	●	●	●	●
7,0	9,0	1,0	●	●	●	●
7,5	10,0	1,0	●	●	●	●
8,0	10,0	1,0	●	●	●	●
8,5	11,0	1,0	●	●	●	●
9,0	11,0	1,0	●	●	●	●
9,5	12,0	1,0	●	●	●	●
10,0	12,0	1,0	●	●	●	●
10,5	13,0	1,0	●	●	●	●
11,0	13,0	1,0	●	●	●	●
12,0	14,0	1,0	●	●	●	●
13,0	15,0	1,0	●	●	●	●
14,0	16,0	1,5	●	●	●	●
15,0	17,0	1,5	●	●	●	●
16,0	18,0	1,5	●	●	●	●
17,0	19,0	1,5	●	●	●	●
18,0	20,0	1,5	●	●	●	●
20,0	22,0	1,5	●	●	●	●

Expulsor con cabeza cilíndrica nitrurado EES-2C



Acero: DIN 1.2343 SAE H13

Dureza: Superficie 950 Vickers 68-70 HRC

Cabeza: 390-450 vickers HRC 45+/-5

Resistencia a la tracción: 140-150Kg-mm²

Resistencia al revenido: 500°C-550°C

Proceso: Rectificado y lapidado.

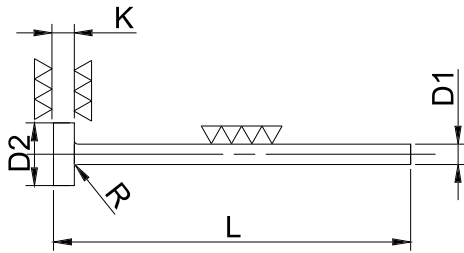
Cómo ordenar: Q EES-2C D1 x L

Ejemplo: 20 EES-2C 8 x 400

D 1 (g6)	D 2 (-0,2)	DIN K (-0,05)	L(mm)										
			100	125	160	200	250	300	400	500	630	800	1000
2,0	4	2	●	●	●	●	●	●					
2,5	5	2	●	●	●	●	●	●					
3,0	6	3	●	●	●	●	●	●	●				
3,5	6	3	●	●	●	●	●	●	●				
4,0	8	3	●	●	●	●	●	●	●				
4,5	8	3	●	●	●	●	●	●	●				
5,0	10	3	●	●	●	●	●	●	●	●	●		
5,5	10	3	●	●	●	●	●	●	●	●	●		
6,0	12	5	●	●	●	●	●	●	●	●	●		
6,5	12	5	●	●	●	●	●	●	●	●	●		
7,0	12	5	●	●	●	●	●	●	●	●	●		
7,5	12	5	●	●	●	●	●	●	●	●	●		
8,0	14	5	●	●	●	●	●	●	●	●	●		
8,5	14	5	●	●	●	●	●	●	●	●	●		
9,0	14	5	●	●	●	●	●	●	●	●	●		
10,0	16	5	●	●	●	●	●	●	●	●	●	●	●
11,0	16	5	●	●	●	●	●	●	●	●	●	●	
12,0	18	7	●	●	●	●	●	●	●	●	●	●	●
14,0	22	7	●	●	●	●	●	●	●	●	●	●	●
16,0	22	7	●	●	●	●	●	●	●	●	●	●	●
18,0	26	7	●	●	●	●	●	●	●	●	●	●	●
20,0	26	8	●	●	●	●	●	●	●	●	●	●	●
25,0	32	10			●	●	●	●	●	●	●	●	●
32,0	40	10				●	●	●	●	●	●	●	●



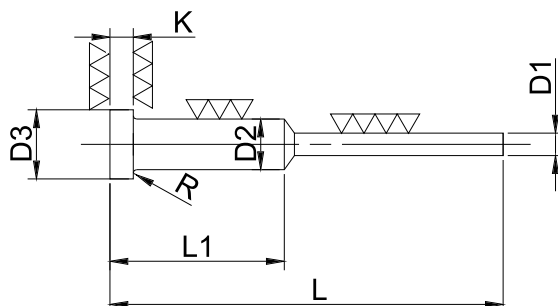
Expulsor con cabeza cilindrica templado EES-2T



Acero: DIN 1.2843 SAE 01
 Dureza: Cuerpo 61 ± 2 HRC
 Cabeza: 45±5 HRC
 Proceso: Rectificado y lapidado.
 Cómo ordenar: Q EES-2T D1 x L
 Ejemplo: 25 EES-2T 4 x 125

D 1 (g6)	D 2 (-0,2)	K (-0,05)	L(mm)					
			100	125	160	200	250	315
2,0	4	2	●	●	●	●		
2,5	5	2	●	●	●	●	●	
3,0	6	3	●	●	●	●	●	●
3,5	7	3	●	●	●	●	●	●
4,0	8	3	●	●	●	●	●	●
4,5	8	3	●	●	●	●	●	●
5,0	10	3	●	●	●	●	●	●
6,0	12	5	●	●	●	●	●	●
7,0	12	5	●	●	●	●	●	●
8,0	14	5	●	●	●	●	●	●
9,0	14	5	●	●	●	●	●	●
10,0	16	5	●	●	●	●	●	●
12,0	18	7	●	●	●	●	●	●
14,0	22	7	●	●	●	●	●	●
16,0	22	7	●	●	●	●	●	●
20,0	26	8	●	●	●	●	●	●

Expulsor c/ cabeza cilindrico c/ rebaje EES-3/EES-3T



EES-3T (templado)

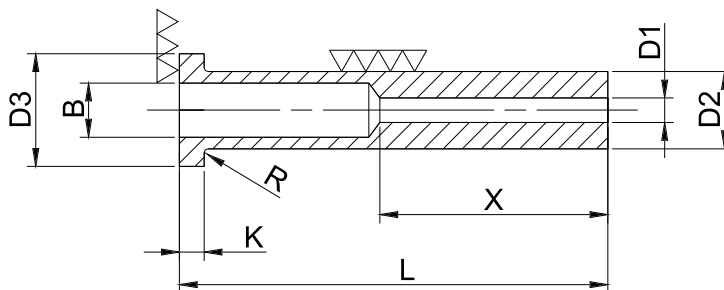
Acero: DIN 1.2842 SAE 01
 Dureza: Cuerpo 61 ± 2 HRC
 Cabeza: 45 ± 5 HRC
 Proceso: Rectificado y lapidado
 Cómo ordenar: Q EES-3T D1 x L
 Ejemplo: 12 EES-3T 2 x 150

EES-3 (nitrurado)

Acero: DIN 1.2343 SAE H 13
 Dureza: Superficie 950 vickers 68-70 HRC
 Cabeza: 390-450 Vickers 45 ± 5 HRC
 Resistencia a la tracción: 140-150 Kg/mm²
 Resistencia al revenido: 500°C-550°C.
 Proceso: Rectificado y lapidado
 Cómo ordenar: Q EES-3 D1 x L
 Ejemplo: 12 EES-3 2 x 150

D 1 (g6)	D 2 (g6)	D 3 (-0,2)	K	L	L1
1,5	3	6	3	150	50
1,5	3	6	3	200	75
2,0	3	6	3	150	50
2,0	3	6	3	200	75
2,5	3	6	3	150	50
2,5	3	6	3	200	75

Expulsor Tubular EES-4/EES-4T



EES-4T (templado)

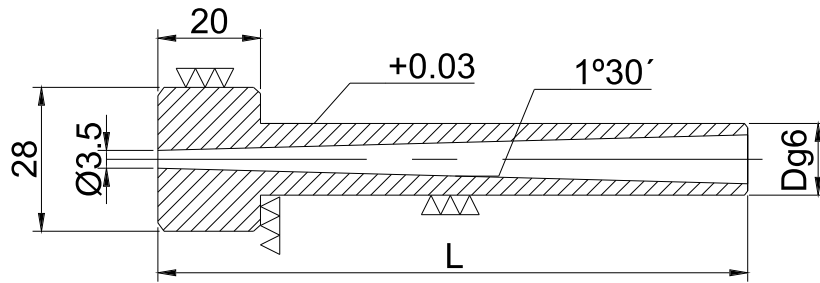
Acero: DIN 1.2842 SAE 01
 Dureza: Cuerpo 61 ±2 HRC
 Cabeza: 45 ± 5 HRC
 Proceso: Rectificado y lapidado
 Cómo ordenar: Q EES-4T D1 x L
 Ejemplo: 12 EES-4T 6 x 75

EES-4 (nitruado)

Acero: DIN 1.2343 SAE H 13
 Dureza: Superficie 950 vickers 68-70 HRC
 Cabeza: 390-450 Vickers 45 ± 5 HRC
 Resistencia a la tracción: 140-150 Kg/mm²
 Resistencia al revenido: 500°C-550°C.
 Proceso: Rectificado y lapidado
 Cómo ordenar: Q EES-4 D1 x L
 Ejemplo: 12 EES-4 6 x 75

D1 H6	D2 g6	D3 -0.2	K -0.05	B	R	X	L(mm)								
							75	100	125	150	160	175	200	250	
2,0	4	8	3	2,3	0,3	29	●	●	●						
2,5	5	10	3	2,8	0,3	29	●	●	●	●					
3,0	5	10	3	3,3	0,3	39	●	●	●	●	●	●	●		
3,5	6	12	5	3,8	0,3	37	●	●	●	●	●	●	●		
4,0	6	12	5	4,3	0,5	41	●	●	●	●	●	●	●	●	●
4,5	8	14	5	4,8	0,5	45	●	●	●	●	●	●	●	●	●
5,0	8	14	5	5,3	0,5	48	●	●	●	●	●	●	●	●	●
6,0	10	16	5	6,3	0,5	48	●	●	●	●	●	●	●	●	●
8,0	12	20	7	8,3	0,7	48	●	●	●	●	●	●	●	●	●
10,0	14	22	7	10,3	0,7	48	●	●	●	●	●	●	●	●	●
12,0	16	22	7	12,3	0,7	48	●	●	●	●	●	●	●	●	●

Boquilla de inyección EUG-1/1T



EUG-1

Boquilla para inyección, no templado (acero) SAE 8640

Cómo ordenar: Q EUG-1 Ø D x L

Ejemplo: 1EUG-1 Ø 14 x 115

EUG-1T

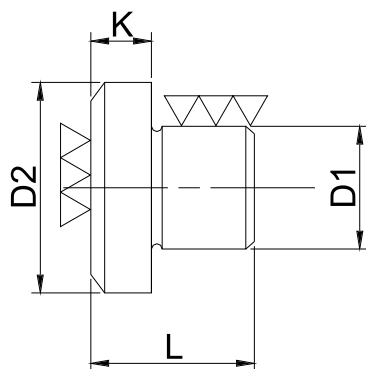
Boquilla para inyección templado (acero) SAE 4140 55/58 HRC

Cómo ordenar: Q EUG-1T Ø D x L

Ejemplo: 1 EUG-1T Ø 14 x 85

D	L(mm)						
	50	65	75	85	95	105	115
14	●	●	●	●	●	●	●
18	●	●	●	●	●	●	●

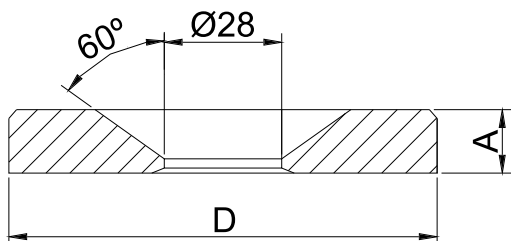
Topes placas expulsoras EA-1



Acero: SAE 8620
 Proceso: Cementado, templado y revenido
 Cómo ordenar: Q EA-1 D1 x L
 Ejemplo: 4 EA-1 8 x 21

D1 m6	D 2	K	L
8	18	5	21
14	24	6	21

Anillos centradores EAC-1



Acero: SAE 4140
 Cómo ordenar: Q EAC-1 ØD
 Ejemplo: 1 EAC-1 Ø 90

D	A
Ø60	10
Ø70	10
Ø80	10
Ø90	10
Ø100	12
Ø125	12
Ø150	12
Ø175	20



A technical drawing of a mold assembly, showing a perspective view of a rectangular mold with internal components. The drawing includes hatching to indicate different materials or sections, and dashed lines to show hidden parts. The mold is tilted at an angle.

Portamatrices

Especificaciones Técnicas

Los portamatrices se proveen con placas de acero SAE 1045 y componentes de deslizamiento ECO-4 / EBU-4, bajo requerimiento se pueden proveer con ECO-7 / EBU-7 ó ECBB-4 ó ECBB-7.

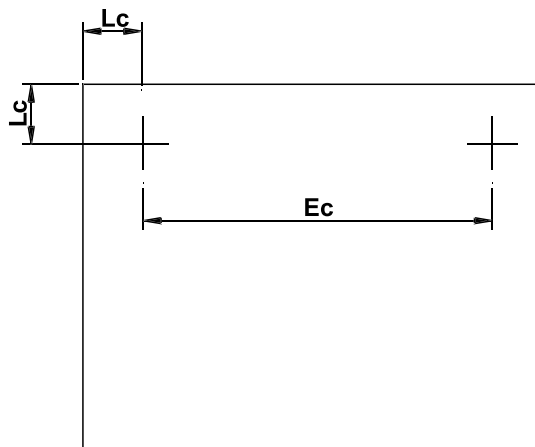
Pueden variarse, según necesidad, los largos de bujes y columnas en función a las dimensiones que se detallan en las paginas 12, 13, 14, 15 y 16.

También se pueden fabricar los portamatrices con prensachapa, lo cual también tiene que ser especificado con anterioridad.

Los portamatrices se entregan armados.

Cálculo de la ubicación de bujes y columnas en un portamatriz:

Dimensión L_c : distancia del borde de la placa al centro del buje o columna.



Diferentes tipos de portamatrices

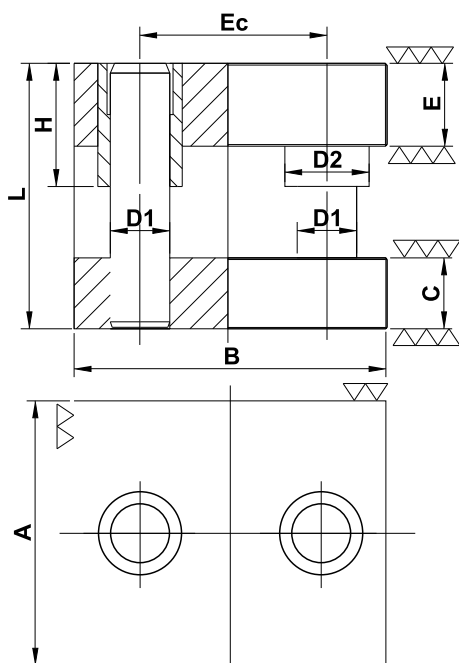
Los cuatro tipos de Portamatrices standard que **Torbelar Moldbases** ofrece son los siguientes:

Tipo F: con dos columnas al medio.

Tipo L: con dos columnas en diagonal.

Tipo Z: con dos columnas atras o adelante.

Tipo D: con cuatro columnas.



Características Técnicas

Material: Placas, acero SAE 1045, bujes y columnas, SAE 8620.

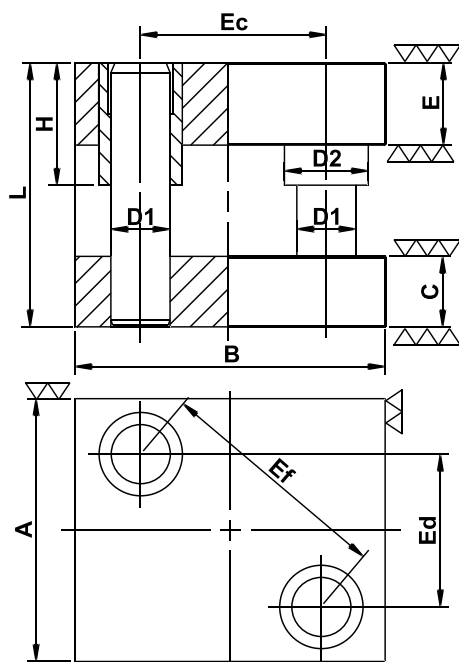
Tratamiento: Bujes y columnas templado, revenido y cementado dureza 60 : 62 RC.

Cómo ordenar

Cantidad x Tipo Liviano o pesado

Por ejemplo : 1 X F 20 Pesado

Tipo	Espesores				Dimensión		Entrecentros	Columnas		Bujes	
	Liviano		Pesado		A	B		D 1	L	D 2	H
	C	E	C	E							
F 1	26	26	36	36	156	156	108	20	145	30	60
F 2	26	26	36	36	156	196	138	25	145	36	70
F 3	36	36	46	46	196	196	138	25	170	36	70
F 4	36	36	46	46	196	246	178	30	170	45	80
F 5	36	36	46	46	196	296	228	30	170	45	80
F 6	36	36	46	46	196	346	278	30	170	45	80
F 7	36	36	46	46	246	246	176	30	170	45	80
F 8	36	36	46	46	246	296	218	34	185	50	80
F 9	36	36	46	46	246	346	268	34	185	50	80
F 10	36	36	46	46	246	396	318	34	185	50	80
F 11	36	36	46	46	296	296	218	34	185	50	80
F 12	36	36	46	46	296	346	256	40	185	55	100
F 13	46	46	56	56	296	396	306	40	185	55	100
F 14	46	46	56	56	296	446	356	40	185	55	100
F 15	46	46	56	56	346	346	256	40	185	55	100
F 16	46	46	56	56	346	396	286	50	200	70	100
F 17	46	46	56	56	346	446	336	50	200	70	100
F 18	46	46	56	56	346	496	386	50	200	70	100
F 19	46	46	56	56	396	396	286	50	200	70	100
F 20	46	46	56	56	396	446	336	50	200	70	100
F 21	46	46	56	56	396	496	386	50	200	70	100
F 22	46	46	56	56	396	546	436	50	200	70	100
F 23	56	56	66	66	446	446	336	50	225	70	100
F 24	56	56	66	66	446	496	386	50	225	70	100
F 25	56	56	66	66	446	546	436	50	225	70	100
F 26	56	56	66	66	446	596	486	50	225	70	100



Características Técnicas

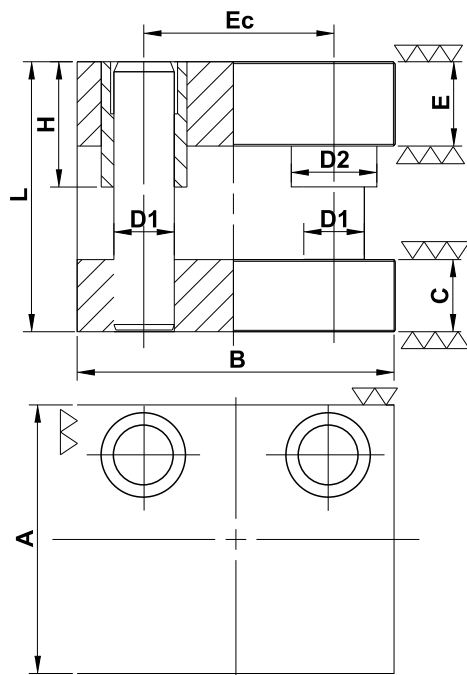
Material: Placas acero, SAE 1045, bujes y columnas, SAE 8620.

Tratamiento: Bujes y columnas templado, revenido y cementado dureza 60: 62 RC.

Cómo ordenar

Cantidad x Tipo Liviano o pesado
Por ejemplo : 1 X L 18 Pesado

Tipo	Espesores				Dimension		Entrecentros			Columnas		Bujes	
	Liviano		Pesado		A	B	Ec	Ed	Ef	D 1	L	D 2	H
	C	E	C	E									
L 1	26	26	36	36	156	156	108	106	152.7	20	145	30	60
L 2	26	26	36	36	156	196	138	96	169.3	25	145	36	70
L 3	36	36	46	46	196	196	138	136	196.2	25	170	36	70
L 4	36	36	46	46	196	246	176	126	216.5	30	170	45	80
L 5	36	36	46	46	196	296	226	126	258.8	30	170	45	80
L 6	36	36	46	46	196	346	276	126	303.4	30	170	45	80
L 7	36	36	46	46	246	246	176	176	248.9	30	170	45	80
L 8	36	36	46	46	246	296	218	166	275.2	34	185	50	80
L 9	36	36	46	46	246	346	268	166	316.3	34	185	50	80
L 10	36	36	46	46	246	396	318	166	359.6	34	185	50	80
L 11	36	36	46	46	296	296	218	216	308.3	34	185	50	80
L 12	36	36	46	46	296	346	256	206	328.6	40	185	55	100
L 13	46	46	56	56	296	396	306	206	368.9	40	185	55	100
L 14	46	46	56	56	296	446	356	206	411.3	40	185	55	100
L 15	46	46	56	56	346	346	256	256	362.0	40	185	55	100
L 16	46	46	56	56	346	396	286	236	370.8	50	200	70	100
L 17	46	46	56	56	346	446	336	236	410.6	50	200	70	100
L 18	46	46	56	56	346	496	386	236	452.4	50	200	70	100
L 19	46	46	56	56	396	396	286	286	404.5	50	200	70	100
L 20	46	46	56	56	396	446	336	286	441.2	50	200	70	100
L 21	46	46	56	56	396	496	386	286	480.4	50	200	70	100
L 22	46	46	56	56	396	546	436	286	521.4	50	200	70	100
L 23	56	56	66	66	446	446	336	336	475.2	50	225	70	100
L 24	56	56	66	66	446	496	386	336	511.8	50	225	70	100
L 25	56	56	66	66	446	546	436	336	550.4	50	225	70	100
L 26	56	56	66	66	446	596	486	336	590.8	50	225	70	100



Características Técnicas

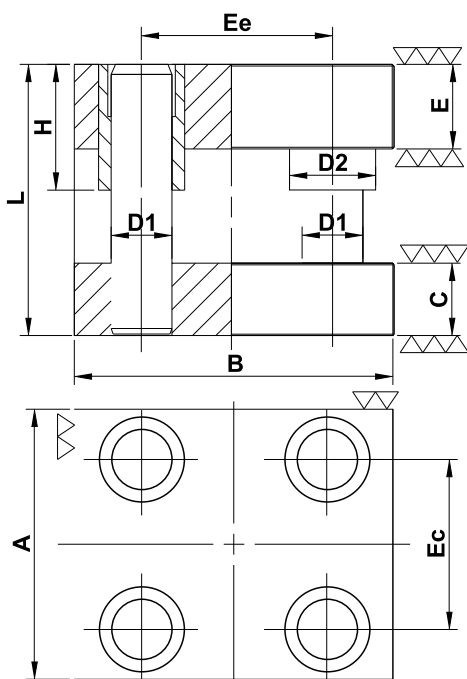
Material : Placas acero, SAE 1045, bujes y columnas, SAE 8620.

Tratamiento: Bujes y columnas templado, revenido y cementado dureza 60 : 62 RC.

Cómo ordenar

Cantidad x Tipo Liviano o pesado
Por ejemplo : 1 X Z 9 Liviano.

Tipo	Espesores				Dimensión		Entrecentros	Columnas		Bujes	
	Liviano		Pesado		A	B	Ec	D 1	L	D 2	L
	C	E	C	E							
Z 1	26	26	36	36	156	156	108	20	145	30	60
Z 2	26	26	36	36	156	196	138	25	145	36	70
Z 3	36	36	46	46	196	196	138	25	170	36	70
Z 4	36	36	46	46	196	246	176	30	170	45	80
Z 5	36	36	46	46	196	296	226	30	170	45	80
Z 6	36	36	46	46	196	346	276	30	170	45	80
Z 7	36	36	46	46	246	246	176	30	170	45	80
Z 8	36	36	46	46	246	296	218	34	185	50	80
Z 9	36	36	46	46	246	346	268	34	185	50	80
Z 10	36	36	46	46	246	396	318	34	185	50	80
Z 11	36	36	46	46	296	296	218	34	185	50	80
Z 12	36	36	46	46	296	346	256	40	185	55	100
Z 13	46	46	56	56	296	396	306	40	185	55	100
Z 14	46	46	56	56	296	446	356	40	185	55	100
Z 15	46	46	56	56	346	346	256	40	185	55	100
Z 16	46	46	56	56	346	396	286	50	200	70	100
Z 17	46	46	56	56	346	446	336	50	200	70	100
Z 18	46	46	56	56	346	496	386	50	200	70	100
Z 19	46	46	56	56	396	396	286	50	200	70	100
Z 20	46	46	56	56	396	446	336	50	200	70	100
Z 21	46	46	56	56	396	496	386	50	200	70	100
Z 22	46	46	56	56	396	546	436	50	200	70	100
Z 23	56	56	66	66	446	446	336	50	225	70	100
Z 24	56	56	66	66	446	496	386	50	225	70	100
Z 25	56	56	66	66	446	546	436	50	225	70	100
Z 26	56	56	66	66	446	596	486	50	225	70	100



Características Técnicas:

Material: Placas de acero, SAE1045, bujes y columnas, SAE 8620.

Tratamiento: Bujes y columnas templado, revenido y cementado dureza 60: 62 RC.

Cómo ordenar:

Cantidad x Tipo Liviano o pesado
Por ejemplo: 1 X D 14 Liviano.

Tipo	Espesores				Dimensión		Entrecentros		Columnas		Bujes	
	Liviano		Pesado									
	C	E	C	E	A	B	Ec	Ee	D 1	L	D 2	H
D 1	26	26	36	36	156	156	108	108	20	145	30	60
D 2	26	26	36	36	156	196	108	148	20	145	30	60
D 3	36	36	46	46	196	196	138	138	25	170	36	70
D 4	36	36	46	46	196	246	138	188	25	170	36	70
D 5	36	36	46	46	196	296	138	238	25	170	36	70
D 6	36	36	46	46	196	346	138	288	25	170	36	70
D 7	36	36	46	46	246	246	176	176	30	185	45	80
D 8	36	36	46	46	246	296	176	226	30	185	45	80
D 9	36	36	46	46	246	346	176	276	30	185	45	80
D 10	36	36	46	46	246	396	176	326	30	185	45	80
D 11	36	36	46	46	296	296	218	218	34	185	50	80
D 12	36	36	46	46	296	346	218	268	34	185	50	80
D 13	46	46	56	56	296	396	218	318	34	185	50	80
D 14	46	46	56	56	296	446	218	368	34	185	50	80
D 15	46	46	56	56	346	346	256	256	40	200	55	100
D 16	46	46	56	56	346	396	256	306	40	200	55	100
D 17	46	46	56	56	346	446	256	356	40	200	55	100
D 18	46	46	56	56	346	496	256	406	40	200	55	100
D 19	46	46	56	56	396	396	306	306	40	200	55	100
D 20	46	46	56	56	396	446	306	356	40	200	55	100
D 21	46	46	56	56	396	496	306	406	40	200	55	100
D 22	56	56	66	66	396	546	306	456	40	200	55	100
D 23	56	56	66	66	446	446	356	356	40	200	55	100
D 24	56	56	66	66	446	496	356	406	40	200	55	100
D 25	56	56	66	66	446	546	356	456	40	200	55	100
D 26	56	56	66	66	446	596	356	506	40	200	55	100

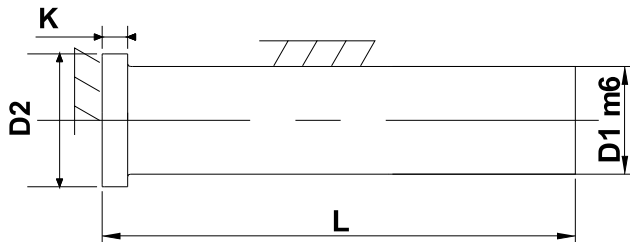
Si las opciones de portamatrices standard que la linea **Torbelar Moldbases** ofrecen no satisfacen los requerimientos técnicos que su trabajo requiere, Torbelar S.A. puede fabricar portamatrices especiales bajo pedido. Nuestro departamento de asistencia técnica al cliente puede ayudarle a solucionar este tipo de problemas y encontrar la solución más viable para su portamatriz. Dado el gran volumen de materiales en stock y la disponibilidad de maquinaria de última generación y de gran precisión podemos responder con la celeridad requerida ante cualquier pedido. Es sumamente importante la presentación de planos finales y certeros para la cotización y posterior fabricación de los trabajos especiales. Se pueden realizar los siguientes trabajos especiales :

Portamatrices que difieren de los standard en las medidas de las placas, ubicación del encolumnado o variación en los diámetros de encolumnados;
Portamatrices con prensachapas;
Portamatrices utilizando componentes ECO-7, EBU-7, ECBB-4 y ECBB-7.
En todos los casos se requieren planos indicando todas las medidas en cuestión y especialmente indicando las tolerancias que se requieren.
Lider en



Componentes
Normalizados
para Matrices

Punzones con cabeza cilíndrica forjada EP-2C/EP-2HSS



Acero:

EP-2C: DIN 1.2080 SAE D.3

EP-2HSS: DIN 1.3343 SAE M2

Dureza: Cuerpo HRC 62-64+/-1

Cabeza: HRC45+/- 5

Proceso: Rectificado y lapidado.

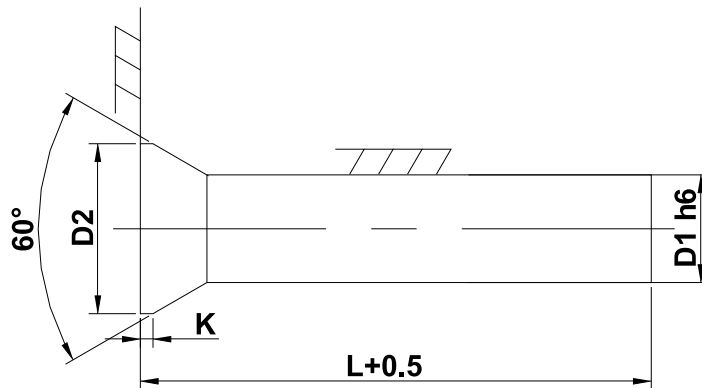
Cómo ordenar:

Q EP-2C D1 x L.

Q EP-2HSS D1 x L

			L(mm)	
D1 m6	D2-0.3	K+0.1	71	100
2	4	3	●	●
3	5	3	●	●
4	6	3	●	●
5	7	5	●	●
6	9	5	●	●
8	11	5	●	●
10	13	5	●	●
13	16	5	●	●
16	19	5	●	●
20	24	5	●	●
25	29	5	●	●





Proceso : El cuerpo del punzón está rectificado y lapidado

Materiales

EP-1

DIN 9861 forma D

Acero: DIN 1.2842 SAE 01

EP-1C

DIN 9861 forma D

Acero: DIN 1.2080 SAE D.3

EP-1HSS(hastaØ12)

DIN 9861 forma D

Acero: HSS DIN 1.3343-1.3554

SAE M2

Dureza: Cuerpo HRC64+/-2

Cabeza: HRC 45+/-5

EP-1K190(hastaØ12)

DIN 9861 forma DK 190

Acero: K 190

Dureza: Cuerpo HRC 64+/-1

Cabeza: HRC 45+/- 5

Cómo ordenar:

EP-1

Q EP-1 D1 x L *Ejemplo 100 EP-1 1,1x 71*

EP-1C

Q EP-1C D1 x L *Ejemplo 100 EP-1C 1,1 x 71*

EP-1HSS

Q EP-1HSS D1 x L *Ejemplo 50 EP-1HSS 5.0 x 100*

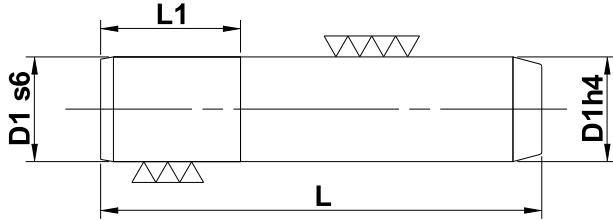
EP-1K190

Q EP-1K190 D1 x L *Ejemplo 70 EP-1K190 5.5 x 71*

D1	D2	K	L(mm)		D1	D2	K	L(mm)	
			71	100				h6	71
h6		+0,15	71	100	h6			71	100
1,0-1,1	1,8	0,5	●	●	6,5-7,4	9,0	1,0	●	●
1,2-1,3	2,0	0,5	●	●	7,5-8,4	10,0	1,0	●	●
1,4-1,5	2,2	0,5	●	●	8,5-9,4	11,0	1,0	●	●
1,6-1,7	2,5	0,5	●	●	9,5-10,4	12,0	1,0	●	●
1,75-1,8	2,8	0,5	●	●	10,5-11,4	13,0	1,0	●	●
1,9-2,0	3,0	0,5	●	●	11,5-12,4	14,0	1,0	●	●
2,1-2,2	3,2	0,5	●	●	12,5-13,4	15,0	1,0	●	●
2,3-2,5	3,5	0,5	●	●	13,5-14,4	16,0	1,0	●	●
2,6-2,9	4,0	0,5	●	●	14,5-15,0	17,0	1,5	●	●
3,0-3,4	4,5	0,5	●	●	15,0-16,0	18,0	1,5	●	●
3,5-3,9	5,0	0,5	●	●	16,1-16,9	19,0	1,5	●	●
4,0-4,4	5,5	0,5	●	●	17,0-17,9	20,0	1,5	●	●
4,5-4,9	6,0	0,5	●	●	18,0-18,9	21,0	1,5	●	●
5,0-5,4	6,5	0,5	●	●	19,0-20,0	22,0	1,5	●	●
5,5-5,9	7,0	0,5	●	●					
6,0-6,4	8,0	0,5	●	●					

Columna sin cabeza

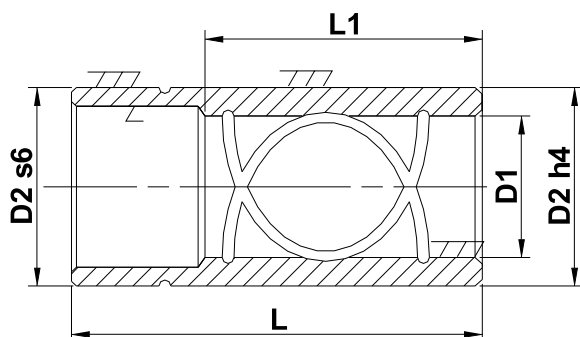
ECO-4



Acero: SAE 8620
Dureza: HRC 60-62
Proceso: Cementado, templado y revenido.
Terminación: Lapidado
Cómo Ordenar:
Q ECO-4 D1x L
Ejemplo: 2 ECO-4 25 X 200

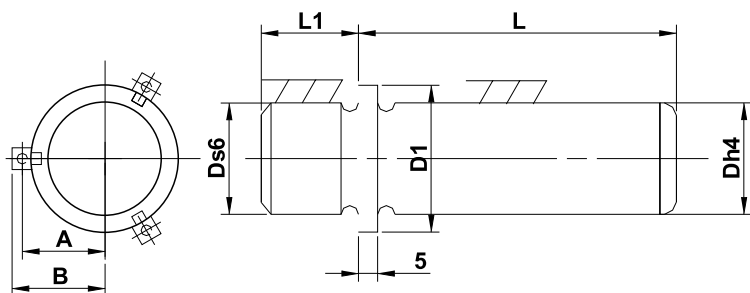
		L																	
D1	L1	85	95	105	115	125	135	145	155	170	185	200	225	250	275	300	325	350	400
16	26	●	●	●	●	●	●												
	36										●	●							
20	26	●	●	●	●	●	●	●	●	●	●	●							
	36										●	●							
25	26				●	●	●	●	●	●	●	●	●	●					
	36										●	●	●	●					
30	36				●	●	●	●	●	●	●	●	●	●	●	●			
	46												●	●	●	●			
34	36							●	●	●	●	●	●						
	46													●	●	●	●	●	
40	36							●	●	●									
	46										●	●	●	●	●	●	●	●	●
50	46									●	●	●	●	●					
	56														●	●	●	●	●





Acero: SAE 8620
Dureza: HRC 60-62
Proceso: Cementado, templado y revenido.
Cómo Ordenar:
Q EBU-4 D1x L
Ejemplo: 2 EBU-4 25 X 200

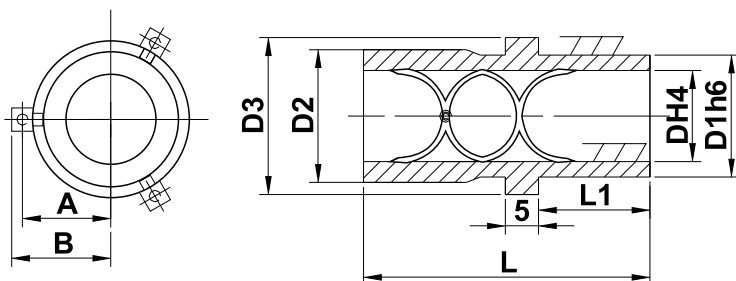
Serie normal	D1	L1	D2	Tolerancia D1
L(mm)			(h4-S6)	
60	20	38	30	+0.008/+0.012
70	25	38	36	+0.008/+0.012
80	30	48	45	+0.006/+0.010
80	34	48	50	+0.006/+0.010
100	40	70	55	+0.006/+0.010
100	50	70	70	+0.006/+0.010
Serie corta	D1	L1	D2	Tolerancia D1
L(mm)			(h4-S6)	
45	20	30	30	+0.008/+0.012
50	25	30	36	+0.008/+0.012
55	30	37	45	+0.006/+0.010
55	34	30	50	+0.006/+0.010
60	40	35	55	+0.006/+0.010
60	50	40	70	+0.006/+0.010



Acero: SAE 8620
Dureza: HRC 60-62
Proceso: Cementado, templado y rectificado.
Cada columna está provista de 3 grampas.
Tornillos de fijación: M8x20
Cómo Ordenar:
Q ECO-7 D x L
Ejemplo: 2 ECO-7 32 X 220

D	D1	A	B	L1	L
25	32.4	20.8	28.3	24	70
					80
					90
					100
					110
					120
					130
					140
					150
					160
32	42.8	26.0	33.5	30	170
					180
					190
					200
					210
					220
					230
					240
					250
					260
40	51.8	30.5	38.0	37	270
					280
					290
					300
					310
					320
					330
					340
					350
					360

D	D1	A	B	L1	L
50	64.8	37.0	44.5	45	170
					180
					190
					200
					210
					220
					230
					240
					250
					260
63	76.8	43.0	50.5	49	270
					280
					290
					300
					310
					320
					330
					340
					350
					360



Acero: SAE 8620
Dureza: HRC 60-62
Proceso: Cementado, templado y rectificado.
Cada Buje esta provisto de 3 grampas y tornillos M8 x 20.
Cómo Ordenar:
Q EBU-7 D1x L
Ejemplo: 2 EBU-7 32 X 90

D	A	B
25	26.70	34.20
32	31.20	38.70
40	36.20	43.70
50	44.20	51.70
63	50.70	58.20

Tipo Corto

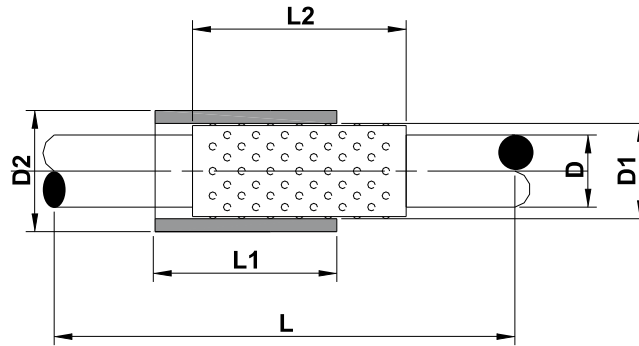
D	L	L1	D1	D2	D3
25	37	23	38	38	44
32	44	30	45	45	53
40	52	38	54	55	63
50	62	48	65	70	79
63	75	61	81	87	92

Tipo Medio

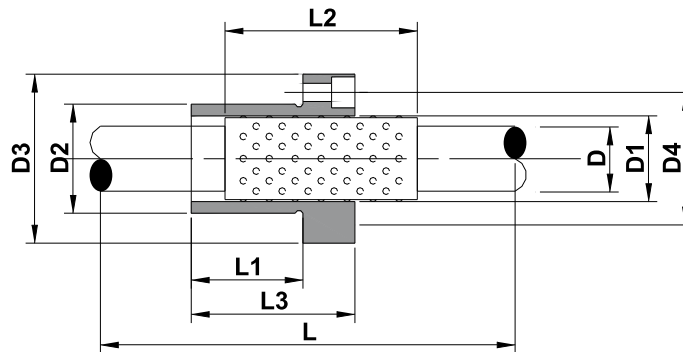
D	L	L1	D1	D2	D3
25	55	23	38	39	44
32	60	26	45	48	53
40	67	30	54	58	63
50	75	35	65	74	79
63	90	48	81	87	92

Tipo Largo

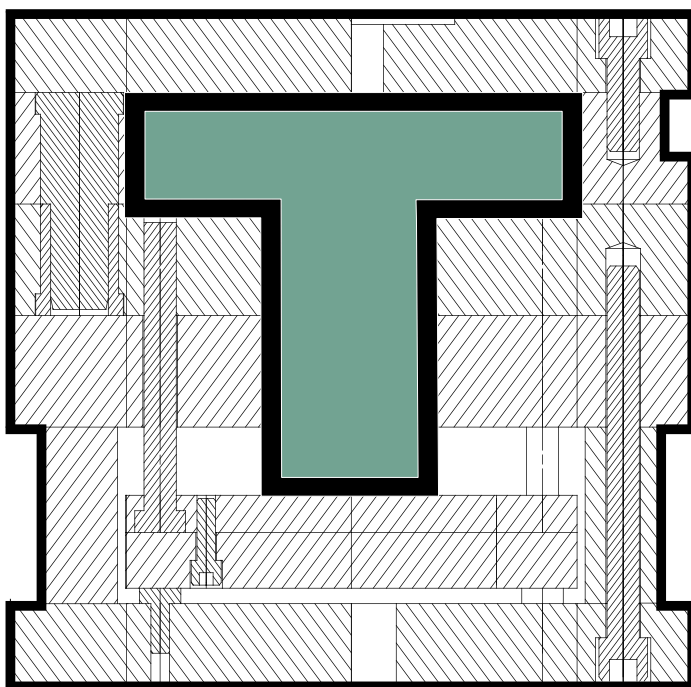
D	L	L1	D1	D2	D3
25	80	23	38	39	44
32	90	26	45	48	53
40	100	30	54	58	63
50	110	35	65	74	79
63	130	48	81	87	92



D	16	20	25	30	40	50
D1	22	26	31	38	48	58
D2	28	33	40	48	58	70
L1	37-47-53	47-53-67	47-67-77	53-77-86	63-86-96-116	80-90-116
L2	43-54-63	54-63-74	54-74-83	58-88-103	68-94-108-128	88-108-128
L	80 a 200	100 a 220	100 a 270	100 a 240	140 a 300	160 a 300









D	25	30	40	50
D1	31	38	48	58
D2	40	48	58	70
D3	65	72	85	104
D4	51	58	70	86
L1	43	48	52	59
L2	54-74-83	58-88-103	68-94-108-128	88-108-128
L3	63	72	80	100
L	100 a 270	100 a 240	140 a 300	180 a 300



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Desde 1984 trabajando para Usted

-  **Porta moldes**
-  **Porta matrices**
-  **Placas especiales**
-  **Mecanizados segun plano**
-  **Componentes normalizados para moldes**
-  **Componentes normalizados para matrices**

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