

# PT AND PTD TRUE-HARD™ SERIES



# Royal

## M-2 EJECTOR/CORE PINS

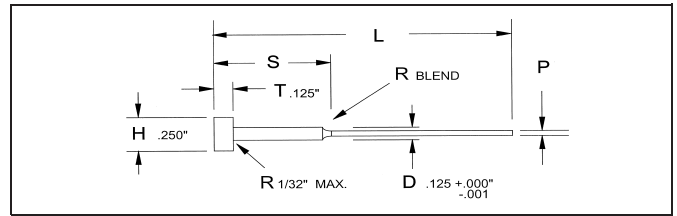
TIGHTEST TOLERANCE IN THE INDUSTRY (.0003")

SHOULDER STYLE

STANDARD FRACTIONAL AND .0001" INCREMENT DIAMETERS

MATERIAL : M-2 HIGH SPEED STEEL  
THROUGH-HARDENED TO 60-63 RC

Royal TRUE-HARD™ Ejector/Core Pins are made from superior quality, wear resistant M-2 high speed steel, through hardened and double tempered to 60-63 RC in our specially developed vacuum heat treating equipment which is computer regulated to produce maximum toughness and durability. The diameters are precision ground after hardening to insure the high accuracy and finish.



TOLERANCES				
P		H	T	L
PT -.0005"	PTD +.0000"	+ .000"	+ .000"	+ .375"
		-.010"	-.002"	-.000"

HOW TO ORDER : EXAMPLES			
Qty.	Cat. No.	Length	P (If PTD)
12	PT-5-3	L-8	
36	PTD-7-2	L-6	P= .0925

PT TYPE STANDARD FRACTIONAL DIAMETERS 12 PINS PER PACKAGE						PTD TYPE NON-STANDARD FRACTIONAL DIAMETERS .0001" INCREMENTS													
P NOM. PIN DIA.	ACTUAL PIN DIA.	S SHL. LGTH.	CAT. NO.	L-6"	L-8"	P DIA. RANGE	S SHL. LGTH.	CAT. NO.	L-6"					L-8"					
				STD. DIA.	STD. DIA.				50-99	25-49	10-24	5-9	1-4	50-99	25-49	10-24	5-9	1-4	
1/32	.0308" .0305"	1/2	PT-2-1/2	9.52	Q	UNDER .0312"	1/2	PTD-2-1/2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
		2"	PT-2-2	8.76	9.40		2"	PTD-2-2	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
		3"	PT-2-3	Q	9.40		3"	PTD-2-3	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
		4"	PT-2-4	Q	8.00		4"	PTD-2-4	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
3/64	.0464" .0461"	1/2	PT-3-1/2	6.04	Q	.0313" THRU .0469"	1/2	PTD-3-1/2	8.48	10.24	15.70	19.30	23.67	Q	Q	Q	Q	Q	
		2"	PT-3-2	5.90	7.62		2"	PTD-3-2	8.36	10.12	15.56	19.16	23.51	11.50	13.27	19.53	23.28	27.66	
		3"	PT-3-3	Q	7.62		3"	PTD-3-3	Q	Q	Q	Q	Q	11.50	13.27	19.53	23.28	27.66	
		4"	PT-3-4	Q	6.85		4"	PTD-3-4	Q	Q	Q	Q	Q	10.79	12.57	18.69	22.42	26.79	
1/16	.0620" .0617"	1/2	PT-5-1/2	5.20	9.65	.0470" THRU .0625"	1/2	PTD-5-1/2	7.71	9.47	14.79	18.35	22.71	Q	Q	Q	Q	Q	
		2"	PT-5-2	5.01	6.85		2"	PTD-5-2	7.55	9.30	14.59	18.14	22.49	10.79	12.57	18.69	22.42	26.79	
		3"	PT-5-3	Q	6.85		3"	PTD-5-3	Q	Q	Q	Q	Q	10.79	12.57	18.69	22.42	26.79	
		4"	PT-5-4	Q	6.22		4"	PTD-5-4	Q	Q	Q	Q	Q	10.20	11.97	18.00	21.69	26.06	
5/64	.0776" .0773"	1/2	PT-6-1/2	5.20	9.65	.0626" THRU .0781"	1/2	PTD-6-1/2	7.71	9.47	14.79	18.35	22.71	Q	Q	Q	Q	Q	
		2"	PT-6-2	5.01	6.85		2"	PTD-6-2	7.55	9.30	14.59	18.14	22.49	10.79	12.57	18.69	22.42	26.79	
		3"	PT-6-3	Q	6.85		3"	PTD-6-3	Q	Q	Q	Q	Q	10.79	12.57	18.69	22.42	26.79	
		4"	PT-6-4	Q	6.22		4"	PTD-6-4	Q	Q	Q	Q	Q	10.20	11.97	18.00	21.69	26.06	
3/32	.0933" .0930"	1/2	PT-7-1/2	4.82	7.62	.0782" THRU .0938"	1/2	PTD-7-1/2	7.38	9.12	14.38	17.91	22.28	Q	Q	Q	Q	Q	
		2"	PT-7-2	4.62	5.95		2"	PTD-7-2	7.19	8.95	14.17	17.69	22.07	9.97	11.73	17.71	21.40	25.77	
		3"	PT-7-3	Q	5.95		3"	PTD-7-3	Q	Q	Q	Q	Q	9.97	11.73	17.71	21.40	25.77	
		4"	PT-7-4	Q	5.63		4"	PTD-7-4	Q	Q	Q	Q	Q	9.73	11.50	17.44	21.11	25.48	
7/64	.1089" .1086"	1/2	PT-8-1/2	4.82	7.62	.0939" THRU .1094"	1/2	PTD-8-1/2	7.38	9.12	14.38	17.91	22.28	Q	Q	Q	Q	Q	
		2"	PT-8-2	4.62	5.95		2"	PTD-8-2	7.19	8.95	14.17	17.69	22.07	9.97	11.73	17.71	21.40	25.77	
		3"	PT-8-3	Q	5.95		3"	PTD-8-3	Q	Q	Q	Q	Q	9.97	11.73	17.71	21.40	25.77	
		4"	PT-8-4	Q	5.63		4"	PTD-8-4	Q	Q	Q	Q	Q	9.73	11.50	17.44	21.11	25.48	
Q = Price Per Quotation							.1095" THRU .1245"	1/2	PTD-9-1/2	5.57	7.31	12.23	15.66	20.02	Q	Q	Q	Q	
								2"	PTD-9-2	5.38	7.19	12.01	15.44	19.80	8.84	10.61	16.40	20.02	24.40
								3"	PTD-9-3	Q	Q	Q	Q	Q	8.84	10.61	16.40	20.02	24.40
								4"	PTD-9-4	Q	Q	Q	Q	Q	8.61	10.37	16.13	19.73	24.10

Please see PAGE 1 for a complete list of modifications that are available for any of the ROYAL Family of Pins and Punches