

NITROGAS

Roller Cam

NITROGAS Roller Cams are compact and cost effective. Designed for a long service life, since the wear surfaces are mounted with Aluminium-Bronze alloy with graphite against steel surfaces hardened to 55-60 HRC.

As the movement of the press is transformed by a roller, the roller cams are applicable for longer strokes (50-100 mm) and for loads up to 20000 daN. Nominal forces of 2000 daN, 3000 daN, 5000 daN, 15000 daN and 20000 daN are available.

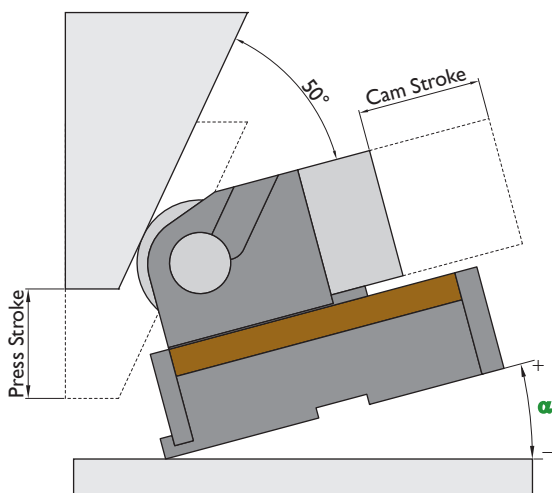
Roller Cams are recommended in case of long strokes and little space. Due to the guiding type they are not recommended for heavy asymmetric loads (see Working Force Distribution on the side page).

The cam units are fitted with gas springs to provide the return force and ensure the return of the body. All models has an easy access to the return spring (see Gas Spring extraction below).

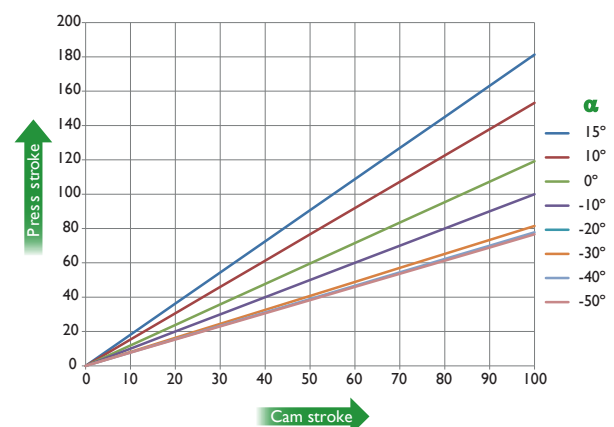
NITROGAS offers engineering support referring to cam applications for die designers and builders.

CAD files of Roller Cams can be downloaded for FREE from our website: www.nitrogas.com

Cam Diagram

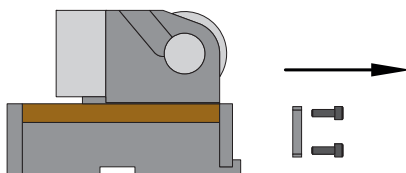


The press stroke depends on the assembly angle (α) of the Roller Cam Unit.



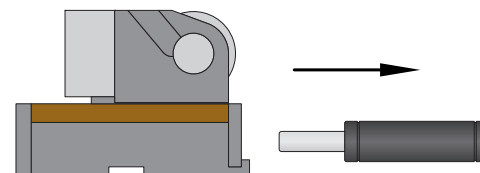
Gas spring extraction

The dismounting of the gas spring allows an easier movement of the cam slide at the adjustment of the Roller Cam Unit.



STEP 1

Remove the screws.



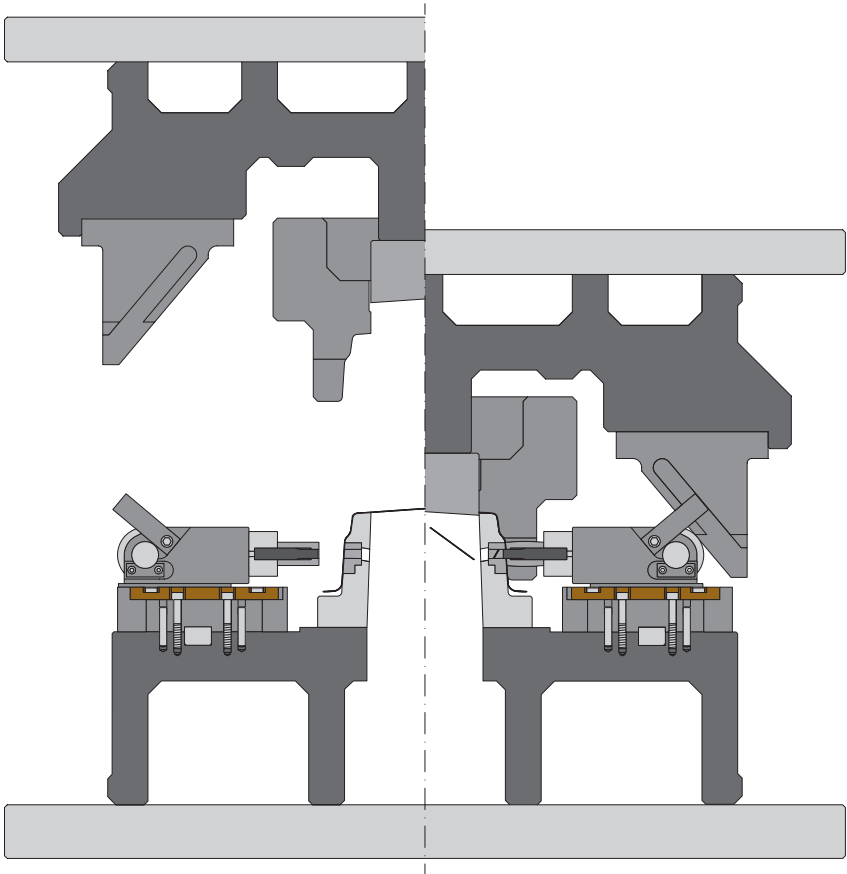
STEP 2

Remove the gas spring.

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Roller Cam

Example of work

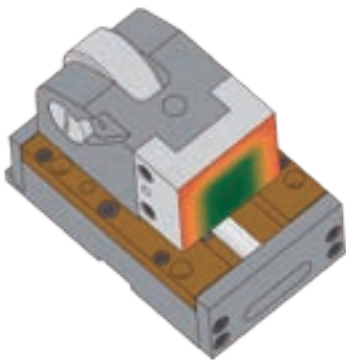


Spare parts available for all the Roller Cams.

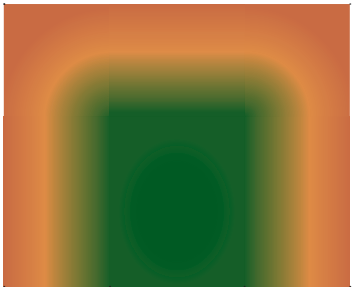


Maximum press speed 1.6 m/s
Maximum cadence (at 20°C) 40 strokes/min

Working force distribution



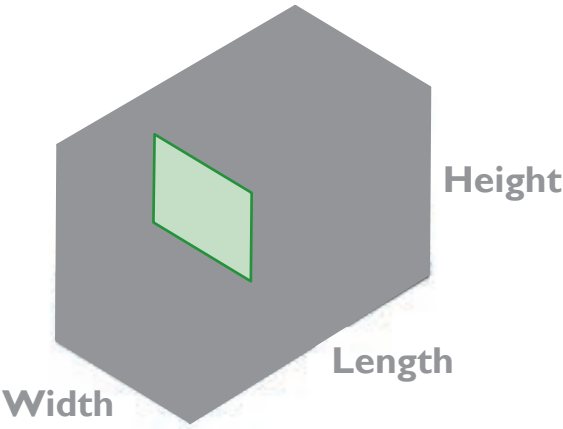
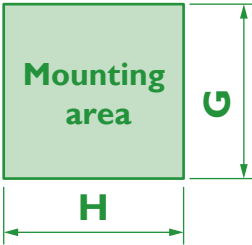
The center of the load must be located as much centered as possible.

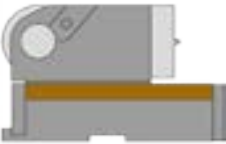
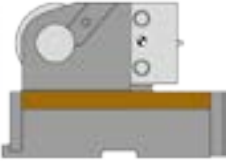


Working Force

100% 80% 50% 10%

Roller cams overview



			Mounting area		Overall Dimensions				
Model	Working Force daN	S mm	H mm	G mm	Spring Force daN	Width mm	Height mm	Length mm	Weight kg
<div>CRCN</div> 	03000	50	63	63	390	94	117	190	9.2
		80			540			220	10.3
	05000	50	90	74	390	120	140	190	14.7
		80			540			220	15.7
		100					157	260	22.2
	15000	50	135	90	910	170	165	190	26.7
		80			710			220	28.5
		100						260	32.5
<div>CRCS</div> 	02000	22	50	50	180	75	85	115	3
		35			190			136	3.7
	03000	50	68	63	450	100	117	200	10.7
		80			540			230	11.1
		100						260	16.9
	05000	50	88	74	450	120	140	200	15.4
		80			540			230	17
		100						260	18.3
	15000	50	132	92	910	170	165	220	28.8
		80			710			250	29
		100						270	29.8
	20000	50	196	110		240	205	250	61.8
		80			1200			280	62.1
		100						300	65.4

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