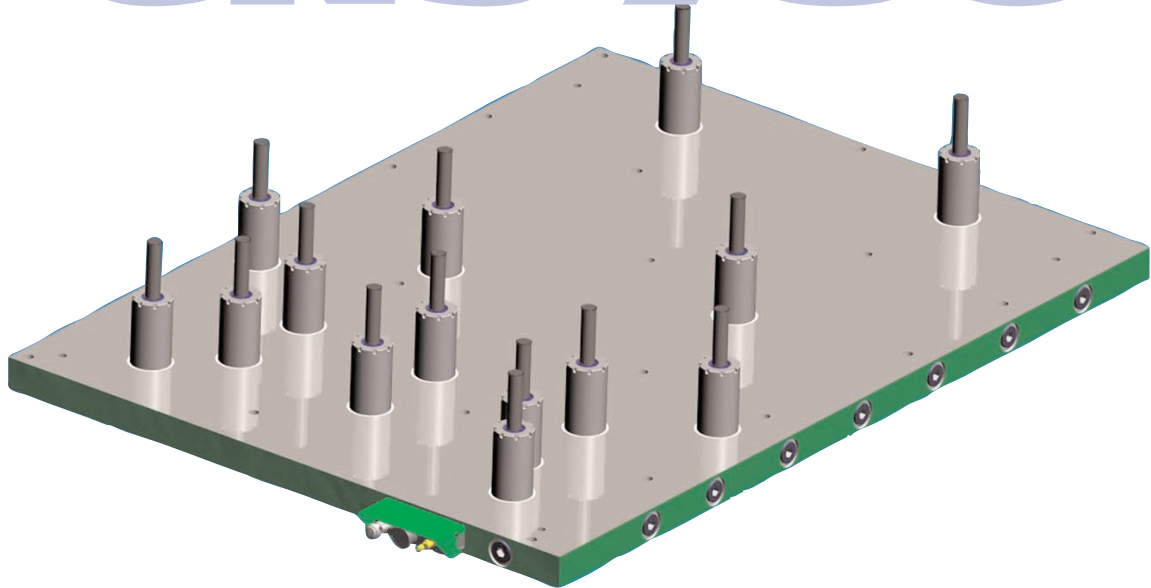


CNS 3400

**Crossover Nitrogen System™**

CNS 7800



*A Step Up from Baseplates in Productivity!*



*Go Forward With Us*

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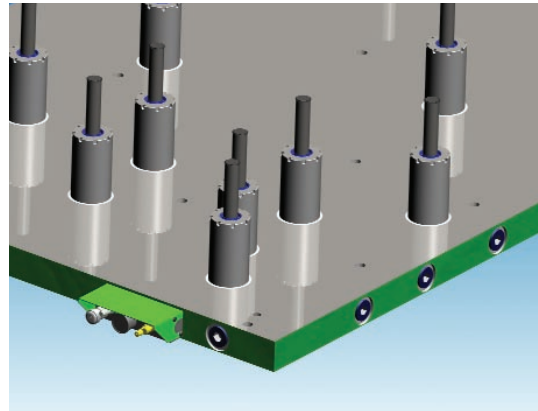
## Crossover Nitrogen System™



- **Tired of baseplate fitting failures?**
- **Tired of baseplate hose leaks?**
- **Tired of baseplate hose routing problems?**
- **Tired of baseplate deflection?**
- **Tired of baseplates in general?**

**Forward Industries has designed the Crossover Nitrogen System™ (CNS) just for you.**

The CNS is a complete low profile, high pressure system with forces up to 17,400 lbs. per cylinder and no hoses. Shorter and with more force than the standard gas spring and baseplate system, the CNS is simple to install and easy to maintain. And the engineering staff at Forward is ready to help you design the system that fits your needs.



### CNS Features

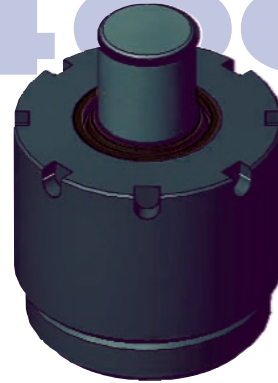
- ¥ 2-1/4 inch precision ground plate is 11 times more rigid than a 1 inch baseplate for consistent pressure and more repeatable die operations.
- ¥ No fittings or hoses eliminates potential leak points and lost production time.
- ¥ No hoses eliminates routing issues in the die where space is at a premium.
- ¥ System handles up to 65% pressure rise.
- ¥ Two models available: CNS 3400 (7,500 lbs. force) and CNS 7800 (17,400 lbs. force)
- ¥ Bore seal die cylinders resist contamination and damage for increased longevity.
- ¥ Smaller diameter cylinders require less drilling for additional cost savings.
- Low profile control console can be mounted on plate or remotely.



# Crossover Nitrogen System™ Die Cylinders

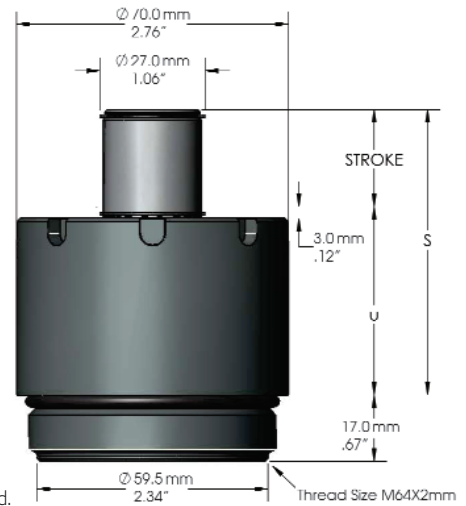
## CNS 3400 Product Specifications

Pressure Medium	Nitrogen Gas
Min. Charging Pressure	30 bar / 435 psi
Max. Charging Pressure	150 bar / 2175 psi
Max. Operating Temperature	80°C / 176°F
Maximum Rod Speed	.8m/sec
Repair Kit	0500-2580
Tube Wrench	0700-2580



### Dimensions

Model	Stroke		S		U	
	mm	in.	mm	in.	mm	in.
CNS 3400-25	25	.98	73.5	2.89	48.5	1.91
CNS 3400-38	38	1.50	99.5	3.92	61.5	2.42
CNS 3400-50	50	1.97	123.5	4.86	73.5	2.89
CNS 3400-63	63	2.48	149.5	5.89	86.5	3.41
CNS 3400-75	75	2.95	173.5	6.83	98.5	3.88
CNS 3400-80	80	3.15	183.5	7.22	103.5	4.07
CNS 3400-100	100	3.94	223.5	8.80	123.5	4.86
CNS 3400-125	125	4.92	273.5	10.77	148.5	5.85
CNS 3400-150	150	5.91	323.5	12.74	173.5	6.83
CNS 3400-175	175	6.89	373.5	14.70	198.5	7.81
CNS 3400-200	200	7.87	423.5	16.67	223.5	8.80



All dimensions are nominal unless tolerance is stated.

### Force (lbf at 150 bar, maximum pressure rise)

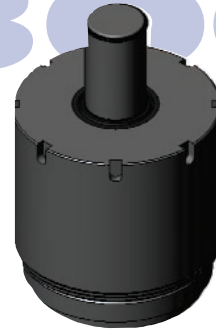
Stroke(mm)	0	25	38	50	63	75	80	100	125	150	175	200
25	12393	12361										
38	12393	10138	12392									
50	12393	9361	10735	12418								
63	12393	8896	9839	10905	12357							
75	12393	8646	9383	10185	11223	12389						
80	12393	8567	9243	9969	10895	11918	12403					
100	12393	8328	8827	9344	9977	10643	10947	12361				
125	12393	8151	8529	8910	9363	9824	10030	10947	12361			
150	12393	8037	8340	8641	8993	9344	9499	10172	11160	12361		
175	12393	7958	8212	8462	8750	9033	9157	9688	10444	11329	12377	
200	12393	7901	8120	8333	8577	8815	8918	9357	9969	10667	11470	12403

Note: To calculate Newtons, multiply Lbs. force by 4.448.

# Crossover Nitrogen System™ Die Cylinders

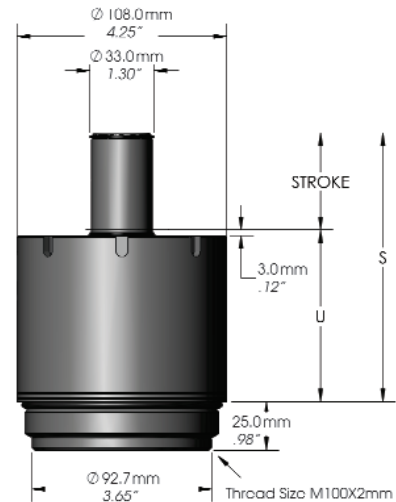
## CNS 7800 Product Specifications

Pressure Medium	Nitrogen Gas
Min. Charging Pressure	30 bar / 435 psi
Max. Charging Pressure	150 bar / 2175 psi
Max. Operating Temperature	80°C / 176°F
Maximum Rod Speed	1.6m/sec
Repair Kit	0500-6280
Tube Wrench	0700-6280



### Dimensions

Model	Stroke		S		U	
	mm	in.	mm	in.	mm	in.
CNS 7800-25	25	.98	88.5	3.48	63.5	2.50
CNS 7800-38	38	1.50	114.5	4.51	76.5	3.01
CNS 7800-50	50	1.97	138.5	5.45	88.5	3.48
CNS 7800-63	63	2.48	164.5	6.48	101.5	4.00
CNS 7800-75	75	2.95	188.5	7.42	113.5	4.47
CNS 7800-80	80	3.15	198.5	7.81	118.5	4.67
CNS 7800-100	100	3.94	238.5	9.39	138.5	5.45
CNS 7800-125	125	4.92	288.5	11.36	163.5	6.44
CNS 7800-150	150	5.91	338.5	13.33	188.5	7.42
CNS 7800-175	175	6.89	388.5	15.30	213.5	8.41
CNS 7800-200	200	7.87	438.5	17.26	238.5	9.39



All dimensions are nominal unless tolerance is stated.

### Force (lbf at 150 bar, maximum pressure rise)

Stroke (mm)	0	25	38	50	63	75	80	100	125	150	175	200
25	28679	28691										
38	28679	23468	28693									
50	28679	21623	24767	28606								
63	28679	20600	22795	25281	28670							
75	28679	20020	21735	23603	26025	28749						
80	28679	19821	21382	23059	25199	27561	28681					
100	28679	19286	20452	21660	23141	24701	25414	28734				
125	28679	18866	19744	20630	21684	22757	23236	25373	28668			
150	28679	18600	19304	20003	20819	21634	21993	23556	25852	28644		
175	28679	18413	18999	19575	20239	20894	21179	22403	24148	26187	28602	
200	28679	18278	18782	19272	19833	20381	20618	21625	23032	24633	26475	28613

Note: To calculate Newtons, multiply Lbs. force by 4.448.



Go Forward With Us

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The Crossover Nitrogen System offers the highest tonnage per dollar available—cross over to Forward. Call today toll free at 1-800-860-5301 (USA) or 1-800-713-1575 (Canada).



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