

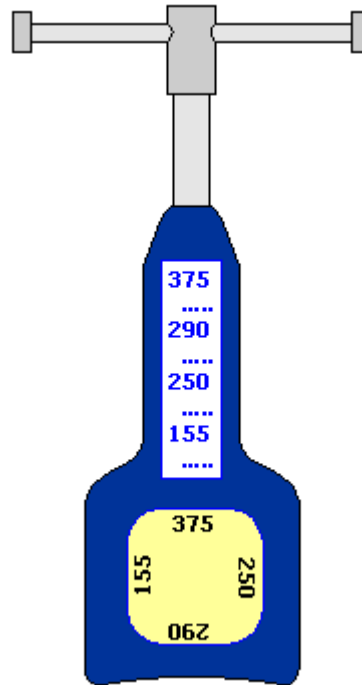
See Page 2 for a Complete Summary of Gap Stop Ranges

How to Select Gap Stop Settings for Apollo ST Series Squeeze Tools

As shown in the illustration on the right, the outer end of each lower jaw is die stamped with gap stop numbers which indicate the actual gap stop for each corresponding face on the jaw. The numbers show the gap stop measured in mils or thousandths of an inch.

For example, the gap stop stamped as 375 represents an actual gap stop of 375 mils or 0.375" for that face of the jaw.

Affixed to the frame of the tool is a schedule for the gap stop numbers that are stamped on the end of the lower jaw. This schedule lists all of the various pipe sizes which may be properly squeezed by each particular gap stop setting.



Squeeze Tool Illustration With 375, 290, 250 & 155 mil Stops

Squeeze Off Schedule Shown on the Right

375 mils 1" IPS - 6 1-1/4" IPS - 6 2" IPS - 11 3" IPS - S40 4" IPS - S40
290 mils 1-1/4" IPS - 10 1-1/2" IPS - 11 1-1/4" IPS - 9.3
250 mils 1" IPS - 9.3 1-1/4" CTS - 9.3 1-1/4" IPS - 11 1-1/4" IPS - S40 1-1/2" IPS - S40 2" IPS - S40
155 mils 1/2" CTS - 7 1/2" IPS - 9.3 3/4" CTS - 9.7 3/4" IPS - 11 1" CTS - 12.5 1" CTS - 11.5 1" CTS - 11.5 1" CTS - 11 1-1/4" CTS - 15

Apollo Engineering Model ST-204

What to do if your pipe is not listed on the schedule or if the schedule is illegible ...

- Step 1 Determine the wall thickness of the pipe that you working with.
- Step 2 Multiply twice the wall thickness by 0.70 to determine the maximum allowable squeeze gap.
- Step 3 Multiply twice the wall thickness by 0.90 to determine the minimum required squeeze gap.
- Step 4 Select the gap stop stamped on the jaw which is between the minimum and maximum computed gaps.

Example: Select the gap stop to use for 2" IPS/SDR-11 Pipe

- Step 1 Compute wall thickness $2.375 \div 11 = 0.216"$
- Step 2 Compute max. squeeze $0.216 \times 2 \times 0.70 = 0.302"$
- Step 3 Compute min. squeeze $0.216 \times 2 \times 0.90 = 0.388"$
- Step 4 Select the 375 mil gap stop for this squeeze off operation.

Apollo Engineering Company
P.O. Box 2050 Broken Arrow, OK 74013
tel: (918)251-6780 fax: (918)251-5986
www.apolloeng.com

Gap Stop Ranges for Apollo ST Series Squeeze Tools

Pipe or Tube Size	O.D.	W.T.	Std. Gap	% Sqz.	Stop
1/2" CTS - 10	0.625	0.062	0.110	11.3	110
1" CTS - 18	1.125	0.062	0.110	11.3	
3/4" CTS - 11	0.875	0.077	0.125	18.8	125
1/2" CTS - 7	0.625	0.090	0.155	13.9	155
1/2" IPS - 9.3	0.840	0.090	0.155	13.9	
3/4" CTS - 9.7	0.875	0.090	0.155	13.9	
3/4" IPS - 11	1.050	0.095	0.155	18.4	
1" CTS - 12.5	1.125	0.090	0.155	13.9	
1" CTS - 11.5	1.125	0.095	0.155	18.4	
1" CTS - 11.5	1.125	0.099	0.155	21.7	
1" CTS - 11	1.125	0.101	0.155	23.3	
1-1/4" CTS - 15	1.375	0.090	0.155	13.9	
1/2" CTS - 6	0.625	0.104	0.170	18.3	
1/2" IPS - S40	0.840	0.109	0.188	13.8	188
3/4" IPS - S40	1.050	0.113	0.188	16.8	
1" IPS - 11	1.315	0.119	0.188	21.0	
1-1/4" CTS - 11	1.375	0.121	0.188	22.3	
1" CTS - 9.3	1.125	0.121	0.215	11.2	215
1" IPS - S40	1.315	0.133	0.215	19.2	
1" IPS - 9.3	1.315	0.140	0.215	23.2	250
1-1/4" CTS - 9.3	1.375	0.148	0.250	15.5	
1-1/4" IPS - 11	1.660	0.151	0.250	17.2	
1-1/4" IPS - S40	1.660	0.140	0.250	10.7	
1-1/2" IPS - S40	1.900	0.145	0.250	13.8	
2" IPS - S40	2.375	0.154	0.250	18.8	
1-1/4" IPS - 10	1.660	0.166	0.290	12.7	290
1-1/2" IPS - 11	1.900	0.173	0.290	16.2	
1-1/4" IPS - 9.3	1.660	0.178	0.290	18.5	
1" IPS - 6	1.315	0.219	0.375	14.4	375
1-1/4" IPS - 6	1.660	0.237	0.375	20.9	
2" IPS - 11	2.375	0.216	0.375	13.2	
3" IPS - S40	3.500	0.216	0.375	13.2	
4" IPS - S40	4.500	0.237	0.375	20.9	
2" IPS - 9.3	2.375	0.255	0.450	11.8	450
2-1/2" IPS - 11	2.875	0.261	0.450	13.8	
3" IPS - 13.5	3.500	0.259	0.450	13.1	
3" IPS - 11.5	3.500	0.307	0.500	18.6	500
3" IPS - 11	3.500	0.318	0.562	11.6	562
4" IPS - 13.5	4.500	0.333	0.562	15.6	
3" IPS - 9.3	3.500	0.375	0.625	16.7	625
4" IPS - 11.5	4.500	0.395	0.670	15.2	670
4" IPS - 11	4.500	0.409	0.670	18.1	
4" IPS - 9.3	4.500	0.482	0.750	22.2	750

Apollo Engineering Company

P.O. Box 2050 Broken Arrow, OK 74013

tel: (918)251-6780

fax: (918)251-5986

www.apolloeng.com

Copyright © 1998-2003 Apollo Engineering Co. All Rights Reserved