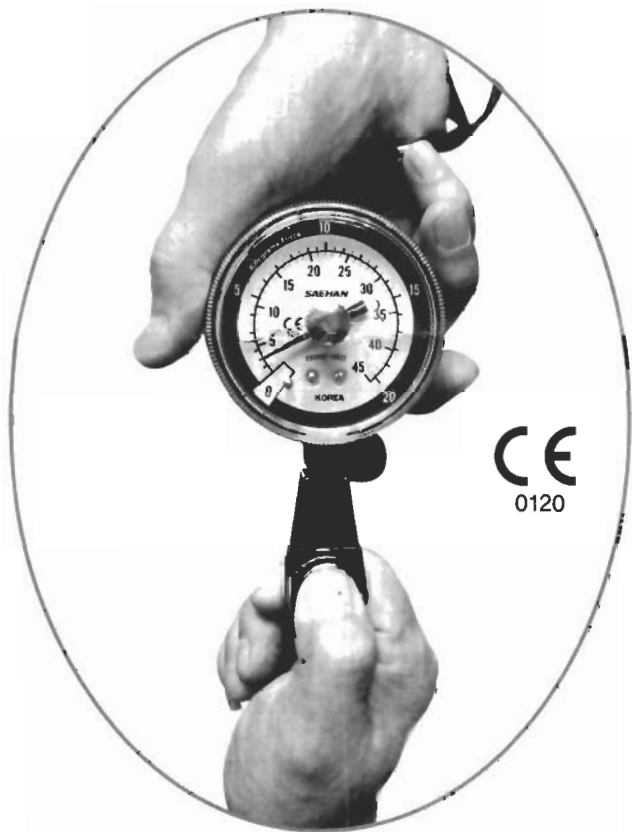


SAEHAN

Hydraulic Pinch Gauge(SH5005)

Instruction / Operator's Manual



SAEHAN Corporation

SAEHAN Hydraulic Pinch Gauge (SH5005)

Pinch Strength Norms for Adults

Average Performance of All subjects on Key Pinch (lb)

AGE	HAND	Female Scores			Male Scores		
		Mean	SD	Range	Mean	SD	Range
6-7	R	9.6	1.5	6-12	11.3	2.0	7-16
	L	9.1	1.5	5-11	10.6	2.1	4-15
8-9	R	11.6	2.6	8-23	13.1	2.6	9-18
	L	11.3	2.1	8-20	12.2	2.5	8-20
10-11	R	14.2	2.1	11-21	15.3	3.1	9-22
	L	13.3	2.0	11-19	14.5	2.9	9-22
12-13	R	15.2	2.6	11-22	16.6	2.9	11-22
	L	14.1	3.0	10-23	15.6	2.8	10-21
14-15	R	15.6	2.5	12-22	20.9	3.8	14-32
	L	14.8	2.7	7-22	19.9	3.7	12-26
16-17	R	17.3	3.0	12-27	23.3	3.4	14-31
	L	16.6	3.1	11-25	21.8	3.6	13-30
18-19	R	18.1	2.4	12-23	23.5	4.1	17-34
	L	17.2	2.5	12-22	22.9	4.0	14-33
20-24	R	17.6	2.0	14-23	26.0	3.5	21-34
	L	16.2	2.1	13-23	24.8	3.4	19-31
25-29	R	17.7	2.1	14-22	26.7	4.9	19-41
	L	16.6	2.1	13-22	25.0	4.4	19-39
30-34	R	18.7	3.0	13-25	26.4	4.8	20-36
	L	17.8	3.6	12-26	26.2	5.1	17-36
35-39	R	16.6	2.0	12-21	26.1	3.2	21-32
	L	16.0	2.7	12-22	25.6	3.9	18-32
40-44	R	16.7	3.1	10-24	25.6	2.6	21-31
	L	15.8	3.1	8-22	25.1	4.0	19-31
45-49	R	17.6	3.2	13-24	25.8	3.9	19-35
	L	16.6	2.9	12-24	24.8	4.4	18-42
50-54	R	16.7	2.5	12-22	26.7	4.4	20-34
	L	16.1	2.7	12-22	26.1	4.2	20-37
55-59	R	15.7	2.5	11-21	24.2	4.2	18-34
	L	14.7	2.2	12-19	23.0	4.7	13-31
60-64	R	15.5	2.7	10-20	23.2	5.4	14-37
	L	14.1	2.5	10-19	22.2	4.1	16-33
65-69	R	15.0	2.6	10-21	23.4	3.9	17-32
	L	14.3	2.8	10-20	22.0	3.6	17-28
70-74	R	14.5	2.9	8-22	19.3	2.4	16-25
	L	13.8	3.0	9-22	19.2	3.0	13-28
75+	R	12.6	2.3	8-17	20.5	4.6	9-31
	L	11.4	2.6	7-16	19.1	3.0	13-24

From Mathiowetz, Article titled "Grip Strength : Norms for 6 to 75+ year olds".
American Journal of Occupational Therapy, Oct 1986 Vol, 40 NO.10

SAEHAN Hydraulic Pinch Gauge (SH5005)

Pinch Strength Norms for Adults

Average Performance of All subjects on Tip Pinch (lb)

AGE	HAND	Female Scores			Male Scores		
		Mean	SD	Range	Mean	SD	Range
6-7	R	6.7	1.2	4-10	7.2	1.6	4-10
	L	6.1	1.5	3-10	7.1	1.4	5-11
8-9	R	7.6	1.4	5-10	8.6	2.2	6-17
	L	7.2	1.3	5-10	8.3	2.2	4-15
10-11	R	9.7	1.4	7-13	10.0	2.4	5-16
	L	9.4	1.7	6-12	9.5	2.3	5-16
12-13	R	10.6	2.2	6-17	10.5	2.5	5-14
	L	10.1	2.3	5-17	9.8	2.3	5-13
14-15	R	10.2	2.3	5-15	13.1	2.9	8-20
	L	9.5	2.4	4-17	12.6	3.0	6-18
16-17	R	11.9	2.3	9-19	15.0	2.7	11-21
	L	11.1	2.3	7-17	13.8	2.7	7-22
18-19	R	13.5	2.8	7-20	17.0	3.8	10-31
	L	13.4	2.9	8-20	16.1	3.8	11-29
20-24	R	11.1	2.1	8-16	18.0	3.0	11-23
	L	10.5	1.7	8-14	17.0	2.3	12-33
25-29	R	11.9	1.8	8-16	18.3	4.4	10-34
	L	11.3	1.8	9-18	17.5	5.2	12-36
30-34	R	12.6	3.0	8-20	17.6	6.7	12-25
	L	11.7	2.8	7-17	17.6	4.8	10-27
35-39	R	11.6	2.5	8-19	18.0	3.6	12-27
	L	11.9	2.4	8-16	17.7	3.8	10-24
40-44	R	11.5	2.7	5-15	17.8	4.0	11-25
	L	11.1	3.0	6-17	17.7	3.5	12-25
45-49	R	13.2	3.0	9-19	18.7	4.9	12-30
	L	12.1	2.7	7-18	17.6	4.1	12-28
50-54	R	12.5	2.2	9-18	18.3	4.0	11-24
	L	11.4	2.4	7-16	17.8	3.9	12-26
55-59	R	11.7	1.7	9-16	16.6	3.3	11-24
	L	10.4	1.4	8-13	15.0	3.7	10-26
60-64	R	10.1	2.1	7-17	15.8	3.9	9-22
	L	9.9	2.0	6-15	15.3	3.7	9-23
65-69	R	10.6	2.0	7-15	17.0	4.2	11-27
	L	10.5	2.4	7-17	15.4	2.9	10-21
70-74	R	10.1	2.6	7-15	13.8	2.6	11-21
	L	9.8	2.3	6-17	13.3	2.6	10-21
75+	R	9.6	2.8	4-16	14.0	3.4	7-21
	L	9.3	2.4	4-13	13.9	3.7	8-25

From Mathiowetz, Article titled "Grip Strength : Norms for 6 to 75+ year olds".
American Journal of Occupational Therapy, Oct 1986 Vol, 40 NO.10

SAEHAN Hydraulic Pinch Gauge (SH5005)

Pinch Strength Norms for Adults

Average Performance of All subjects on Palmar Pinch (lb)

AGE	HAND	Female Scores			Male Scores		
		Mean	SD	Range	Mean	SD	Range
6-7	R	9.0	1.7	6-12	10.0	2.2	5-13
	L	8.4	1.4	6-11	9.2	2.0	5-13
8-9	R	10.7	2.1	8-17	11.6	2.3	7-17
	L	10.3	2.2	6-20	11.2	2.8	6-16
10-11	R	13.5	2.2	11-22	13.9	2.7	7-21
	L	12.6	2.0	10-17	13.2	2.9	8-23
12-13	R	15.4	2.6	11-23	15.5	3.6	8-26
	L	14.2	2.8	10-20	15.1	4.1	8-23
14-15	R	15.6	3.3	9-26	19.2	4.2	11-28
	L	14.7	3.4	8-25	18.8	5.0	10-33
16-17	R	17.8	3.9	12-27	22.2	5.0	17-39
	L	16.6	3.9	10-26	20.3	4.1	14-31
18-19	R	20.2	3.3	10-26	23.8	4.3	17-34
	L	19.0	3.0	14-25	23.4	4.5	16-34
20-24	R	17.2	2.3	14-23	26.6	5.5	18-45
	L	16.3	2.8	11-24	25.7	5.8	15-42
25-29	R	17.7	3.2	13-29	26.0	4.3	19-35
	L	17.0	3.0	13-26	25.1	4.2	19-36
30-34	R	19.3	5.0	12-34	24.7	4.7	16-34
	L	18.1	4.8	12-32	25.4	5.7	15-37
35-39	R	17.5	4.2	13-29	26.2	4.1	19-36
	L	17.1	3.4	12-24	25.9	5.4	14-40
40-44	R	17.0	3.1	10-23	24.5	4.3	17-37
	L	16.6	3.5	10-25	24.8	4.9	15-37
45-49	R	17.9	3.0	12-27	24.0	3.3	19-33
	L	17.5	2.8	12-24	23.7	3.8	18-33
50-54	R	17.3	3.1	12-23	23.8	5.4	15-36
	L	16.4	2.9	12-22	24.0	5.8	16-36
55-59	R	16.0	3.1	11-26	23.7	4.8	16-34
	L	15.4	3.0	11-21	21.3	4.5	12-28
60-64	R	14.8	3.1	10-20	21.8	3.3	16-28
	L	14.3	2.7	10-20	21.2	3.2	15-27
65-69	R	14.2	3.1	8-20	21.4	3.0	15-25
	L	13.7	3.4	8-22	21.2	4.1	14-30
70-74	R	14.4	2.6	9-19	18.1	3.4	14-27
	L	14.0	1.9	10-17	18.8	3.3	13-27
75+	R	12.0	2.6	8-17	18.7	4.2	9-26
	L	11.5	2.6	6-16	18.3	3.8	10-26

From Mathiowetz, Article titled "Grip Strength : Norms for 6 to 75+ year olds".
American Journal of Occupational Therapy, Oct 1986 Vol, 40 NO.10

SAEHAN Hydraulic Pinch Gauge (SH5005)

The SAEHAN Hydraulic Pinch Gauge is used for hand-strength testing by measuring tip, key and palmar pinch.

The Pinch Gauge can be used as a diagnostic tool, or for monitoring the progress of rehabilitation.

Pinch force is measured in pounds and kilograms (45 lbs or 20kg. Maximum reading) on a dual scale. It is held by the therapist, not the patient.

The patient should apply pressure the pinch block with the finger pads or finger tips. Pressing the pinch button with the thumb causes the force reading to appear on the gauge.

The position of the upper extremities can significantly affect pinch-strength measurement. The American Society of Hand Therapists recommends the following testing position :

1. Patient should be seated.
2. Shoulders should be adducted and neutrally rotated.
3. Elbow should be flexed at 90 degrees.
4. Forearm and wrist should be in a neutral position.
5. Tolerance of degree is $\pm 2\%$
6. When you dispose of this unit, it may leak oil.

Pinch Styles

1. Tip Pinch -- thumb tip to index fingertip.
2. Key Pinch -- thumb pad to lateral aspect of middle phalanx of index finger.
3. Palmar Pinch -- thumb pad to pads of index and middle fingers.

Limited Two-Year Warranty

SAEHAN warrants this Hydraulic Pinch Gauge to be free from defects in workmanship and materials for two years from the date of purchase.

If this instruments is found to be defective during the two-year period, SAEHAN will repair or replace it, at it discretion.

Thereafter, if a defect occurs, there will be a service charge for repairs.

This warranty gives you specific legal rights, You may also have other rights, which vary from state to state.

SAEHAN
Hydraulic Pinch Gauge
(SH5005)

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