

Report Content

Chapter 1	Research Methodology and Scope	13
1.1	Scope and definition	13
1.1.1	Scope	13
1.1.2	Definitions	14
1.2	Research Design	18
1.2.1	Data collection techniques	19
1.2.2	Market size estimation	19
1.2.3	Forecasting model	23
1.3	Data Sources	24
1.3.1	Primary Sources	24
1.3.2	Secondary Sources	25
1.3.2.1	Paid Sources	25
1.3.2.2	Public Sources	25
Chapter 2	Executive Summary	27
2.1	Soft Grippers, 2025-2034	27
2.2	Business trends	27
2.3	Regional trends	29
2.4	Component trends	31
2.5	Material trends	33
2.6	Application trends	34
Chapter 3	Soft Grippers Industry Insights	37
3.1	Industry ecosystem analysis	37
3.1.1	Raw Material Suppliers	37
3.1.2	Component Manufacturers	38
3.1.3	Soft Gripper Manufacturers & Technology Providers	38
3.1.4	System Integrators & Robotics OEMs	38
3.1.5	End-Users & Industry Applications	39
3.2	Vendor matrix	39
3.3	Profit margin analysis	41
3.4	Key news & initiatives	41
3.5	Technology and innovation landscape	43
3.5.1	Biomimetic Design and Soft Robotics Advancements	43
3.5.2	Smart Sensing and AI-Driven Adaptive Control	44
3.5.3	Electrostatic and Vacuum-Assisted Gripping Mechanisms	44

3.5.4	Self-Healing and Multi-Functional Material Innovations	44
3.6	Patent analysis	45
3.7	Industry impact forces	47
3.7.1	Industry impact forces.....	48
3.7.1.1	Industry impact forces.....	48
3.7.2	Growth drivers.....	48
3.7.2.1	Rising automation in manufacturing & logistics.....	48
3.7.2.2	Increasing adoption in healthcare & pharmaceuticals.....	50
3.7.2.3	Expanding e-commerce & warehouse automation	51
3.7.2.4	Rising demand for cobots (collaborative robots)	53
3.7.2.5	Surge in use in consumer electronics manufacturing	54
3.7.3	Pitfalls & challenges	55
3.7.3.1	Limited load capacity & strength constraints	55
3.7.3.2	Integration challenges associated with existing robotics	56
3.8	Growth potential analysis, 2024	57
3.9	Porter's analysis	58
3.10	PESTEL analysis	59
3.11	Future market trends	60
3.12	Regulatory landscape	61
3.12.1	North America	61
3.12.1.1	OSHA Machine Guarding Standards	61
3.12.1.2	UL 1740	61
3.12.2	Europe.....	62
3.12.2.1	EU Machinery Directive 2006/42/EC:.....	62
3.12.2.2	EN ISO 13849-1	62
3.12.3	Asia Pacific.....	62
3.12.3.1	JIS B 8433-1	62
3.12.4	Latin America.....	62
3.12.4.1	NR-12	62
3.12.5	MEA	63
3.12.5.1	United Arab Emirates (UAE) Restriction of Hazardous Substances (RoHS) regulation	63
3.12.6	International standards	63
3.12.6.1	IEC 60068	63
3.12.6.2	IEEE P1735.....	63
Chapter 4	Competitive Landscape, 2024	64
4.1	Introduction	64

4.2	Company market share, 2024	65
4.3	Competitive analysis of the key market players.....	66
4.3.1	Schmalz	67
4.3.2	SMC Corporation.....	67
4.3.3	SCHUNK SE & Co. KG	68
4.3.4	OnRobot A/S.....	68
4.3.5	Festo AG	69
4.3.6	Destaco	69
4.3.7	Robotiq Inc	70
4.4	Competitive positioning matrix.....	70
4.5	Strategic outlook matrix	72
4.6	Strategic dashboard	73
Chapter 5	Soft Grippers Market, By Component.....	74
5.1	Key trends.....	74
5.2	Soft Actuators	74
5.3	Soft Sensors	78
5.4	Control Systems	80
5.5	Power Sources	83
5.6	Others.....	85
Chapter 6	Soft Grippers Market, By Material.....	89
6.1	Key trends.....	89
6.2	Elastomers	89
6.3	Gels	91
6.4	Fabrics	93
6.5	Others.....	95
Chapter 7	Soft Grippers Market, By Application	99
7.1	Key trends.....	99
7.2	Healthcare and Medical.....	99
7.3	Food and Beverage.....	102
7.4	Logistics and warehousing	105
7.5	Automotive.....	107
7.6	Agriculture	110
7.7	Electronics	112
7.8	Others.....	115
Chapter 8	Soft Grippers Market, By Region	118

8.1	Key trends.....	118
8.2	North America.....	118
8.3	Europe	121
8.4	Asia Pacific	125
8.5	Latin America	130
8.6	Middle East & Africa (MEA)	133
Chapter 9	Company Profile	137
9.1	Applied Robotics (Effecto)	137
9.1.1	Global Overview	137
9.1.1	Business Overview	137
9.1.2	Financial Data	137
9.1.3	Product Landscape	138
9.1.4	Strategic Outlook	139
9.1.5	SWOT Analysis	139
9.2	Artimus Robotics.....	140
9.2.1	Global Overview	140
9.2.2	Business Overview	140
9.2.3	Financial Data	140
9.2.4	Product Landscape	141
9.2.5	SWOT Analysis	141
9.3	ATI Industrial Automation	142
9.3.1	Global Overview	142
9.3.2	Business Overview	142
9.3.3	Financial Data	143
9.3.3.1	Sales Revenue, 2021-2023.....	143
9.3.4	Product Landscape	144
9.3.5	Strategic Outlook	144
9.3.6	SWOT Analysis	145
9.4	DESTACO.....	146
9.4.1	Global Overview	146
9.4.2	Business Overview	146
9.4.3	Financial Data	147
9.4.3.1	Sales Revenue, 2021-2023.....	147
9.4.4	Product Landscape	148
9.4.5	Strategic Outlook	148
9.4.6	SWOT Analysis	149
9.5	Festo AG	150

9.5.1	Global Overview	150
9.5.2	Business Overview	150
9.5.3	Financial Data	151
9.5.4	Product Landscape	151
9.5.5	Strategic Outlook	151
9.5.6	SWOT Analysis	152
9.6	Gimatic	153
9.6.1	Global Overview	153
9.6.2	Business Overview	153
9.6.3	Financial Data	154
9.6.4	Product Landscape	154
9.6.5	SWOT Analysis	154
9.7	KUKA AG	155
9.7.1	Global Overview	155
9.7.2	Business Overview	155
9.7.3	Financial Data	156
9.7.3.1	Sales Revenue, 2021-2023.....	156
9.7.4	Product Landscape	156
9.7.5	Strategic Outlook	157
9.7.6	SWOT Analysis	157
9.8	OnRobot A/S.....	158
9.8.1	Global Overview	158
9.8.2	Business Overview	158
9.8.3	Financial Data	158
9.8.4	Product Landscape	159
9.8.5	Strategic Outlook	159
9.8.6	SWOT Analysis	159
9.9	Piab	160
9.9.1	Global Overview	160
9.9.2	Business Overview	160
9.9.3	Financial Data	160
9.9.4	Product Landscape	161
9.9.5	SWOT Analysis	161
9.10	PRONAL	162
9.10.1	Global Overview	162
9.10.2	Business Overview	162
9.10.3	Financial Data	162

9.10.4	Product Landscape	163
9.10.5	SWOT Analysis	164
9.11	Robotiq Inc.....	165
9.11.1	Global Overview	165
9.11.2	Business Overview	165
9.11.3	Financial Data	165
9.11.4	Product Landscape	166
9.11.5	Strategic Outlook	167
9.11.6	SWOT Analysis	167
9.12	Rochu Robotics	168
9.12.1	Global Overview	168
9.12.2	Business Overview	168
9.12.3	Financial Data	168
9.12.4	Product Landscape	169
9.12.5	SWOT Analysis	169
9.13	Schmalz.....	170
9.13.1	Global Overview	170
9.13.2	Business Overview	170
9.13.3	Financial Data	171
9.13.3.1	Sales Revenue, 2022-2024.....	171
9.13.4	Product Landscape	172
9.13.5	Strategic Outlook	172
9.13.6	SWOT Analysis	173
9.14	SCHUNK SE & Co. KG	174
9.14.1	Global Overview	174
9.14.2	Business Overview	174
9.14.3	Financial Data	174
9.14.4	Product Landscape	175
9.14.5	SWOT Analysis	176
9.15	SMC Corporation.....	177
9.15.1	Global Overview	177
9.15.2	Business Overview	177
9.15.3	Financial Data	178
9.15.3.1	Sales Revenue, 2021-2023.....	178
9.15.4	Product Landscape	179
9.15.5	SWOT Analysis	180
9.16	SoftGripping GmbH	181

9.16.1	Global Overview	181
9.16.2	Business Overview	181
9.16.3	Financial Data	181
9.16.4	Product Landscape	182
9.16.5	SWOT Analysis	182
9.17	TESOLLO INC	183
9.17.1	Global Overview	183
9.17.2	Business Overview	183
9.17.3	Financial Data	183
9.17.4	Product Landscape	184
9.17.5	SWOT Analysis	186
9.18	Weiss Robotics GmbH & Co. KG	187
9.18.1	Global Overview	187
9.18.2	Business Overview	187
9.18.3	Financial Data	187
9.18.4	Product Landscape	188
9.18.5	SWOT Analysis	188
9.19	Yaskawa Electric Corporation.....	189
9.19.1	Global Overview	189
9.19.2	Business Overview	189
9.19.3	Financial Data	190
9.19.3.1	Sales Revenue, 2022-2024.....	190
9.19.4	Product Landscape	191
9.19.5	Strategic Outlook	191
9.19.6	SWOT Analysis	192
9.20	Zimmer Group.....	193
9.20.1	Global Overview	193
9.20.2	Business Overview	193
9.20.3	Financial Data	193
9.20.4	Product Landscape	194
9.20.5	Strategic Outlook	194
9.20.6	SWOT Analysis	195

Data Tables

TABLE 1	Soft Grippers market revenue, by company, 2024 (USD Million)	21
TABLE 2	Sources, by region	25
TABLE 3	Global soft grippers market, 2021-2024 (USD Million)	29
TABLE 4	Global soft grippers market, 2025-2034 (USD Million)	29
TABLE 5	Global soft grippers market, by region, 2021-2024 (USD Million)	30
TABLE 6	Global soft grippers market, by region, 2025-2034 (USD Million)	31
TABLE 7	Global soft grippers market, by component, 2021 - 2024 (USD Million)	32
TABLE 8	Global soft grippers market, by component, 2025 - 2034 (USD Million)	32
TABLE 9	Global soft grippers market, by material, 2021 - 2024 (USD Million)	33
TABLE 10	Global soft grippers market, by material, 2025 - 2034 (USD Million)	34
TABLE 11	Global soft grippers market, by application, 2021 - 2024 (USD Million)	36
TABLE 12	Global soft grippers market, by application, 2025 - 2034 (USD Million)	36
TABLE 13	Competitive analysis of prominent market players	66
TABLE 14	Competitive positioning matrix: Classification criteria	71
TABLE 15	Strategic outlook matrix: Classification criteria	72
TABLE 16	Global soft grippers market, by component, 2021-2024 (USD Million)	88
TABLE 17	Global soft grippers market, by component, 2025-2034 (USD Million)	88
TABLE 18	Global soft grippers market, by material, 2021-2024 (USD Million)	97
TABLE 19	Global soft grippers market, by material, 2025-2034 (USD Million)	98
TABLE 20	Global soft grippers market, by application, 2021-2024 (USD Million)	116
TABLE 21	Global soft grippers market, by application, 2025-2034 (USD Million)	117
TABLE 22	North America soft grippers market, by country, 2021-2024 (USD Million)	121
TABLE 23	North America soft grippers market, by country, 2025 – 2034 (USD Million)	121
TABLE 24	Europe soft grippers market, by country, 2021-2024 (USD Million)	124
TABLE 25	Europe soft grippers market, by country, 2025 – 2034 (USD Million)	124
TABLE 26	Asia Pacific soft grippers market, by country, 2021-2024 (USD Million)	128
TABLE 27	Asia Pacific soft grippers market, by country, 2025 – 2034 (USD Million)	129
TABLE 28	Latin America soft grippers market, by country, 2021-2024 (USD Million)	132
TABLE 29	Latin America soft grippers market, by country, 2025 – 2034 (USD Million)	132
TABLE 30	MEA Soft Grippers market, by country, 2021-2024 (USD Million)	135
TABLE 31	MEA soft grippers market, by country, 2025 – 2034 (USD Million)	136

Charts & Figures

FIG. 1	Research design	18
FIG. 2	Data collection techniques	19
FIG. 3	Market sizing approach	20
FIG. 4	Primary Insights	22
FIG. 5	Forecasting model	24
FIG. 6	Soft Grippers 360 ^o synopsis, 2025-2034	27
FIG. 7	Revenue share of the e-commerce market worldwide from 2022 to 2029, by sales channel (in %)	35
FIG. 8	Soft Grippers industry ecosystem analysis	37
FIG. 9	Profit margin analysis	41
FIG. 10	Industry impact forces	47
FIG. 11	Industrial automation market, 2021–2025 (in USD Billion)	49
FIG. 12	Global warehouse automation market size 2023-2027, (in USD Billion)	51
FIG. 13	Volume of consumer electronics globally 2022-2029, (in million pieces)	54
FIG. 14	Growth potential analysis, 2024	57
FIG. 15	Porter’s analysis	58
FIG. 16	PESTEL analysis	59
FIG. 17	Company market share, 2024	65
FIG. 18	Competitive analysis of key market players	66
FIG. 19	Competitive positioning matrix	70
FIG. 20	Strategic outlook matrix	72
FIG. 21	Key trends 74	
FIG. 22	Projected global smart manufacturing sector size in 2017 and 2023 (in USD billion)	75
FIG. 23	Key trends 89	
FIG. 24	Key trends 99	
FIG. 25	Unit sales of electric vehicles , 2020– 2027 (in thousand vehicles)	108
FIG. 26	Forecast market size of precision farming worldwide 2021-2027, (in USD Billion)	110
FIG. 27	Total wearable device unit shipments worldwide 2021-2028 (in Million)	114
FIG. 28	Key trends 118	
FIG. 29	Agribusiness market value in South Africa, 2020–2023 (in USD million)	134