

Sustainability Data

Environment

Indicator		Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Total GHG emissions		tCO ₂	Consolidated	239,013	6,613,783
Scope 1	Japan	tCO ₂	Consolidated	80	81
	Asia			16	14
	Europe			197	47
	North America			205	145
	Total			498	286
By location	Japan	tCO ₂	Consolidated	13,394	15,418
	Asia			416	264
	Europe			2,349	2,494
	North America			783	474
	Total			16,942	18,650
Scope 2	Japan	tCO ₂	Consolidated	12,360	9,839
	Asia			—	298
	Europe			—	1,785
	North America			—	291
	Total			—	12,213
Scope 3	1. Purchased goods and services	tCO ₂	Consolidated	198,899	358,792
	2. Capital goods			17,054	11,237
	3. Fuel- and energy-related activities not included in Scope 1 or Scope 2			899	18,329
	4. Upstream transportation and distribution			3,951	8,466
	5. Waste generated in operations			455	1,322
	6. Business travel			104	702
	7. Employee commuting			212	613
	8. Upstream leased assets			0	0
	Total upstream			221,574	399,461
	9. Downstream transportation and distribution			—	3,837
	10. Processing of sold products			—	0
	11. Use of sold products			—	6,190,129
	12. End-of-life treatment of sold products			—	1,398
	13. Downstream leased assets			—	23
	14. Franchises			—	0
	15. Investments			—	0
	Total downstream			—	6,195,386
16. Other (upstream)	—	0			
17. Other (downstream)	—	0			
Total	221,574	6,594,846			
Energy consumption	Fuel consumption	MWh	Consolidated	22,170	1,815
	Electricity consumption			20,247,207	45,780
	Total			20,269,377	47,595
Renewable energy electricity ratio	%	Consolidated	—	28.2	

Indicator		Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Total water withdrawal		ML (megaliters)	Consolidated	23	31
Total water discharge				23	31
Incineration waste		t	Consolidated	54.1	2,245
Cafeteria waste				0.4	10
Amount of general waste discharge				54.5	2,255
Amount of hazardous waste discharge				—	712
Green procurement	Ratio of consent acquired for green procurement standards	%	Non-consolidated	100	100
	Number of suppliers audited	Company		9	15
Number of companies surveyed for inclusion of environmentally hazardous substances		Company	Non-consolidated	90	95
Amount of copper usage		Thousand t	Non-consolidated	3.58	3.44
Amount of oil and grease used		Thousand t	Non-consolidated	0.09	0.14
Amount of recycled plastic raw materials used		t	Non-consolidated	17.36	6.24
ISO 14001	Certification status	Company	Consolidated	5	5
	Ratio of certifications acquired at sites	%	Consolidated	50	50
Status of EHS audits		Company	Consolidated	4	4
*EHS audit: Internal environmental audit based on the ISO 14001 standard or in accordance with the company's environmental policy					
Ratio of sites where environmental risk assessments have been conducted among all sites		%	Non-consolidated	100	100
Violations of environmental laws and regulations		Number of cases	Non-consolidated	0	0
Accidents and pollution causing environmental issues		Number of cases	Non-consolidated	0	0
Complaints on environmental issues		Number of cases	Non-consolidated	0	0
Fine on environmental issues		Yen	Non-consolidated	0	0
Environmental training	Number of participants	Person(s)	Non-consolidated	2	101
	Ratio of participants to employees	%		0.5	20.6

Note: The scope of GHG emissions Scope 3 categories 1, 4, 5, 6, 7 and water and waste related data for the fiscal year ended March 31, 2022 is on a non-consolidated basis, and the calculation method is partially different from that for the fiscal year ended March 31, 2023. The above figures are rounded to the nearest whole number.

Social

Indicator		Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Number of employees (consolidated)	Entire Group	Person(s)	Consolidated	1,145	1,324
	Entire Company			412	490
Number of employees (non-consolidated)	Male	Person(s)	Non-consolidated	352	404
	Female			60	86
	Ratio of female employees	%		14.6	17.6
Average number of temporary and contract employees		Entire Company	Person(s)	138	156
Ratio of average number of temporary employees		Entire Company	%	25.1	24.1
Average age		Entire Company	Age	41.8	41.8
Average years of service		Entire Company	Year(s)	15.1	14.4
Number of foreign employees	Entire Company			—	8
	Male	Person(s)	Non-consolidated	—	3
	Female			—	5
	Ratio of foreign employees	%		—	1.6

Indicator	Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023	
Number of newly graduated recruits	Entire Company	Person(s)	Nonconsolidated	6	9
	Male			5	8
	Female			1	1
Number of mid-career recruits	Entire Company	Person(s)	Nonconsolidated	16	13
	Male			16	10
	Female			0	3
Retention of newly graduated recruits (turnover rate after 3 years)	Entire Company	%	Nonconsolidated	7.7	0.0
	Male			5	0.0
	Female			16.7	0.0
Total turnover rate	Entire Company	%	Nonconsolidated	3.7	3.0
Turnover rate for personal reasons retirees	Entire Company	%	Nonconsolidated	3.7	2.8
Managers	Male (entire Company)	Person(s)	Nonconsolidated	81	82
	Male (foreign nationals)			0	0
	Female (entire Company)			3	2
	Female (foreign nationals)			0	0
	Ratio of female managers			%	3.6
Executive Officer	Male (entire Company)	Person(s)	Nonconsolidated	12	12
	Male (foreign nationals)			0	0
	Female (entire Company)			1	1
	Female (foreign nationals)			0	0
	Ratio of female managers			%	7.7
Employees with disabilities	Entire Company	Person(s)	Nonconsolidated	10	11
	Male			8	9
	Female			2	2
	Ratio of employees with disabilities			%	1.85
Average monthly overtime hours/person	Entire Company	Hours	Nonconsolidated	25.2	22.9
Percentage of paid leave taken		%	Nonconsolidated	69.6	73.2
Number of employees who took childcare leave	Entire Company	Person(s)	Nonconsolidated	14	9
	Male			10	9
	Female			4	0
Ratio of employees who took childcare leave	Male	%	Nonconsolidated	55.6	56.3
Labor-management meetings	Number of meetings held	Times	Nonconsolidated	12	12
Safety and Health Committee	Number of meetings held	Times	Nonconsolidated	12	12
Employee training on safety and health	Number of meetings held	Times	Nonconsolidated	20	12
	Number of participants	Person(s)		300	162
Status of EHS risk assessments *EHS: A method of managing the environment and occupational health and safety in an integrated manner	Number of cases		Nonconsolidated	41	30
Stress check inspection rate		%	Nonconsolidated	88.6	86.0
Harassment Prevention Training	Number of trainings held	Times	Nonconsolidated	3	3
	Number of participants (cumulative)	Person(s)		381	144
	Ratio of participants to employees	%		75.3	29.4
Child labor, forced labor, human trafficking	Number of cases		Consolidated	0	0
Special training (master's, doctoral, MBA, MOT, overseas training, overseas language study, etc.)	Person(s)		Nonconsolidated	1	3

Indicator	Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023
Number of employees taking correspondence education programs (cumulative)	Person(s)	Nonconsolidated	234	131
Certification status (including ISO 9001 and other industry-specific standards)	Certified sites	Company	7	7
	Ratio of sites certified	%	70	70
Number of patents held	Number of cases	Nonconsolidated	951	1,004
Corporate citizenship activities (social contribution activities)	Community cleanups	Times	6	6
	Harmonic Lectures	Times	1	1
	Harmonic Concerts	Times	0	1
	Lessons in educational facilities	Times	—	3

Governance

Indicator	Unit	Scope covered	Fiscal year ended March 31, 2022	Fiscal year ended March 31, 2023	
Director	Male	Person(s)	5	5	
	Internal	Female	Person(s)	0	0
		Female ratio	%	0	0
	Outside	Male	Person(s)	4	4
		Female ratio	%	0	0
Total	Person(s)	Nonconsolidated	9	9	
Ratio of Independent Outside Directors	%	Nonconsolidated	44.4	44.4	
Number of Board of Directors meetings	Times	Nonconsolidated	17	17	
Average attendance at Board of Directors meetings		%	Nonconsolidated	99.3	99.4
	Internal			1	1
Corporate Auditor	Outside	Person(s)	3	3	
	Total		4	4	
Ratio of Independent Outside Corporate Auditors	%	Nonconsolidated	50.0	50.0	
Number of Board of Corporate Auditors meetings	Times	Nonconsolidated	18	18	
Average attendance at Corporate Auditors meetings	%	Nonconsolidated	98.6	98.6	
Number of whistleblown cases	Number of cases	Nonconsolidated	17	19	
Number of confirmed corruption cases	Number of cases	Nonconsolidated	0	0	
Fines imposed in connection with corruption	Yen	Nonconsolidated	0	0	
Compliance trainings	Number of trainings held	Times	—	6	
	Number of participants	Person(s)	—	293	
	Ratio of participants to employees	%	—	59.8	
Political donations	Yen	Nonconsolidated	0	0	
Number of incidents of corruption and bribery	Number of cases	Nonconsolidated	0	0	
Number of violations of antitrust laws	Number of cases	Nonconsolidated	0	0	
Number of information security incidents	Number of cases	Consolidated	1	0	
Information security compliance ratio	%	Consolidated	97.0	96.5	
Awareness training to prevent information security breach	Number of trainings held	Times	1	2	
	Number of participants (cumulative)	Person(s)	470	1,040	
Information security due diligence performed by a third party	Times	Consolidated	2	2	

Financial Data for the Past 11 Years

Items	Units	FY2012	FY2013	FY2014	FY2015
Net sales	(Millions of yen)	18,130	21,083	25,951	28,278
Cost of sales	(Millions of yen)	10,762	11,965	13,829	14,992
Gross profit	(Millions of yen)	7,368	9,117	12,121	13,286
Selling, general and administrative expenses	(Millions of yen)	3,931	4,449	5,054	5,667
Operating profit or loss	(Millions of yen)	3,436	4,668	7,066	7,618
Ordinary profit	(Millions of yen)	3,576	4,822	7,525	7,829
Profit or loss attributable to owners of parent	(Millions of yen)	1,960	2,993	4,833	5,001
Total assets	(Millions of yen)	36,953	38,625	49,440	48,749
Total net assets	(Millions of yen)	25,986	30,520	37,680	38,891
Interest bearing liabilities	(Millions of yen)	4,919	217	745	892
Net cash	(Millions of yen)	7,068	8,870	11,402	12,014
Equity ratio	(%)	67.5	75.9	73.3	76.1
Cash flows from operating activities	(Millions of yen)	4,700	3,643	5,494	6,499
Cash flows from investing activities	(Millions of yen)	3,271	(1,102)	(2,103)	(4,394)
Free cash flows	(Millions of yen)	7,972	2,540	3,390	2,105
Cash flows from financing activities	(Millions of yen)	(2,545)	(5,591)	(737)	(1,384)
Cash and cash equivalents at end of period	(Millions of yen)	9,713	6,883	9,730	10,439
Net assets per share	(Yen)	272.5	320.1	395.7	405.3
Net profit or loss per share	(Yen)	21.4	32.7	52.8	54.6
Dividends per share	(Yen)	7.3	9.7	14.3	18.0
Total dividend paid	(Millions of yen)	671	885	1,312	1,648
Dividend payout ratio	(%)	34.2	29.6	27.2	33.0
Ratio of total amount of dividends to net assets	(%)	2.8	3.3	4.0	4.5
Ratio of gross profit to net sales	(%)	40.6	43.2	46.7	47.0
Ratio of operating profit to net sales	(%)	19.0	22.1	27.2	26.9
ROA	(%)	5.4	7.9	11.0	10.2
ROE	(%)	8.2	11.0	14.7	13.6
Capital investment	(Millions of yen)	1,377	1,304	2,475	4,296
Depreciation and amortization	(Millions of yen)	1,119	1,170	1,305	1,524
R&D expenditure	(Millions of yen)	1,146	1,235	1,309	1,404

Note 1: The Company conducted a 3-for-1 common stock split on October 1, 2014. However, net profit/dividend paid/net assets per share are calculated based on the assumption that the stock split was executed at the beginning of FY2012.

Note 2: Depreciation and amortization represents the total depreciation and amortization expense related to property, plant and equipment and intangible assets.

FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
30,069	54,339	67,809	37,487	37,034	57,087	71,527
16,202	28,636	37,363	25,484	24,451	34,661	45,741
13,866	25,703	30,446	12,003	12,582	22,426	25,786
6,052	13,386	13,821	12,198	11,716	13,686	15,561
7,813	12,316	16,624	(195)	865	8,739	10,224
7,958	11,946	17,185	236	1,366	9,108	10,757
19,732	7,777	11,322	(1,095)	662	6,643	7,595
101,999	138,584	142,872	131,848	140,028	143,289	154,336
62,611	108,719	113,277	106,718	110,059	98,856	103,955
15,666	1,938	2,104	6,963	6,328	16,887	22,946
(3,569)	27,526	16,717	12,607	14,835	3,041	(2,133)
54.0	71.7	72.5	73.3	73.5	69.0	67.4
7,225	9,233	15,121	10,950	9,555	9,881	10,850
(32,522)	(8,171)	(22,399)	(12,537)	(1,230)	(4,703)	(8,663)
(25,296)	1,062	(7,277)	(1,587)	8,324	5,178	2,187
24,648	17,493	(3,271)	2,362	(6,561)	(6,663)	(1,599)
9,668	28,320	17,600	18,342	19,996	18,767	19,921
601.1	1,032.4	1,076.7	1,003.8	1,068.8	1,026.9	1,093.5
215.4	83.9	117.6	(11.4)	6.9	69.0	79.7
20.0	26.0	38.0	20.0	20.0	21.0	28.0
1,831	2,446	3,658	1,925	1,925	2,021	2,661
9.3	31.5	32.3	—	290.6	30.4	35.1
4.0	3.2	3.6	1.9	1.9	2.0	2.6
46.1	47.3	44.9	32.0	34.0	39.3	36.1
26.0	22.7	24.5	(0.5)	2.3	15.3	14.3
26.2	6.5	8.1	(0.8)	0.5	4.7	5.1
42.8	10.1	11.2	(1.1)	0.7	6.6	7.5
4,576	8,757	23,876	7,892	1,959	5,690	9,236
1,774	5,164	5,566	6,826	6,464	7,278	8,520
1,383	2,114	2,476	2,195	2,444	3,012	3,274

Financial Data (FY2022)

Consolidated Balance Sheets

(Millions of yen) As of March 31, 2023	(Millions of yen) As of March 31, 2023
Assets	Liabilities
Current assets	Current liabilities
Cash and deposits 20,783	Notes and accounts payable - trade 3,596
Notes receivable - trade 7,408	Contract liabilities 267
Accounts receivable - trade 10,165	Short-term borrowings 2,610
Securities 28	Current portion of long-term borrowings 2,569
Merchandise and finished goods 2,014	Lease liabilities 583
Work in process 3,658	Income taxes payable 1,046
Raw materials and supplies 6,828	Provision for bonuses 1,471
Other 1,307	Provision for bonuses for directors (and other officers) 351
Allowance for doubtful accounts (19)	Provision for loss on compensation for aftercare of products 64
Total current assets 52,175	Other 3,906
Non-current assets	Total current liabilities 16,467
Property, plant and equipment	Non-current liabilities
Buildings and structures 27,102	Long-term borrowings 17,766
Accumulated depreciation (7,679)	Lease liabilities 3,836
Buildings and structures, net 19,423	Deferred tax liabilities 10,003
Machinery, equipment and vehicles 41,046	Provision for retirement benefits for directors (and other officers) 12
Accumulated depreciation (23,709)	Provision for operating officers' retirement benefits 80
Machinery, equipment and vehicles, net 17,337	Retirement benefit liability 750
Tools, furniture and fixtures 9,579	Other 1,463
Accumulated depreciation (7,735)	Total non-current liabilities 33,913
Tools, furniture and fixtures, net 1,843	Total liabilities 50,380
Land 3,329	Net assets
Leased assets 6,253	Shareholders' equity
Accumulated depreciation (2,100)	Share capital 7,100
Leased assets, net 4,153	Capital surplus 22,773
Construction in progress 2,766	Retained earnings 64,852
Other 821	Treasury shares (4,978)
Accumulated depreciation (747)	Total shareholders' equity 89,747
Other, net 73	Accumulated other comprehensive income
Total property, plant and equipment 48,926	Valuation difference on available-for-sale securities 5,845
Intangible assets	Foreign currency translation adjustment 8,146
Goodwill 15,258	Remeasurements of defined benefit plans 216
Software 191	Total accumulated other comprehensive income 14,207
Customer related assets 19,489	Total net assets 103,955
Technical assets 5,205	Total liabilities and net assets 154,336
Other 187	
Total intangible assets 40,332	
Investments and other assets	
Investment securities 11,044	
Shares of subsidiaries and associates 89	
Retired benefit asset 1,191	
Deferred tax assets 439	
Other 141	
Allowance for doubtful accounts (5)	
Total investments and other assets 12,901	
Total non-current assets 102,160	
Total assets 154,336	

Consolidated Statement of Income

(Millions of yen) For the fiscal year ended of March 31, 2023
Net sales 71,527
Cost of sales 45,741
Gross profit 25,786
Selling, general and administrative expenses 15,561
Operating profit 10,224
Non-operating income
Interest income 14
Dividend income 268
Foreign exchange gains 275
Subsidy income 245
Other 212
Total non-operating income 1,016
Non-operating expenses
Commission for purchase of treasury shares 116
Interest expenses 166
Share of loss of entities accounted for using equity method 0
Foreign exchange losses -
Rental expenses 144
Other 55
Total non-operating expenses 484
Ordinary profit 10,757
Extraordinary income
Gain on sale of non-current assets 1
Gain on sale of investment securities -
Subsidy income 2
Total extraordinary income 3
Extraordinary losses
Loss on sale of non-current assets -
Loss on retirement of non-current assets 63
Loss on tax purpose reduction entry of non-current assets 2
Special extra for retirement payments 501
Total extraordinary losses 567
Profit before income taxes 10,194
Income taxes - current 3,089
Income taxes - deferred (491)
Total income taxes 2,598
Profit 7,595
Profit attributable to non-controlling interests -
Profit attributable to owners of parent 7,595

Consolidated Statement of Comprehensive Income

(Millions of yen) For the fiscal year ended March 31, 2023
Profit 7,595
Other comprehensive income
Valuation difference on available-for-sale securities (66)
Foreign currency translation adjustment 4,392
Remeasurements of defined benefit plans, net of tax 209
Total other comprehensive income 4,536
Comprehensive income 12,132
Comprehensive income attributable to
Comprehensive income attributable to owners of parent 12,132
Comprehensive income attributable to noncontrolling interests -

Consolidated Statements of Cash Flows

(Millions of yen) For the fiscal year ended of March 31, 2023
Cash flows from operating activities
Profit before income taxes 10,194
Depreciation 8,520
Amortization of goodwill 1,054
Increase (decrease) in allowance for doubtful accounts (4)
Increase (decrease) in retirement benefit liability (381)
Increase (decrease) in provision for retirement benefits for directors (and other officers) (478)
Increase (decrease) in provision for operating officers' retirement benefits (48)
Increase (decrease) in provision for bonuses for directors (and other officers) 40
Increase (decrease) in provision for loss on compensation for aftercare of products (1)
Interest income (14)
Dividend income (268)
Interest expenses 166
Share of loss/profit of entities accounted for using equity method 0
Subsidy income (2)
Loss (gain) on sale of investment securities -
Loss (gain) on sale of non-current assets (1)
Loss on retirement of non-current assets 61
Loss on tax purpose reduction entry of non-current assets 2
Decrease (increase) in trade receivables (1,636)
Decrease (increase) in inventories (2,540)
Increase (decrease) in trade payables (458)
Other, net 1,347
Subtotal 15,551
Interest and dividends received 283
Subsidies received 2
Interest paid (177)
Income taxes paid (4,967)
Income taxes refund 158
Net cash provided by (used in) operating activities 10,850
Cash flows from investing activities
Purchase of property, plant and equipment (8,838)
Proceeds from sale of property, plant and equipment 2
Purchase of intangible assets (229)
Proceeds from sale of investment securities -
Payments into time deposits (1,701)
Proceeds from withdrawal of time deposits 2,108
Payments of leasehold and guarantee deposits (8)
Proceeds from refund of leasehold and guarantee deposits 4
Other, net 0
Net cash provided by (used in) investing activities (8,663)
Cash flows from financing activities
Proceeds from short-term borrowings 9,910
Repayments of short-term borrowings (7,610)
Proceeds from long-term borrowings 6,000
Repayments of long-term borrowings (2,242)
Repayments of lease liabilities (551)
Purchase of treasury shares (5,000)
Dividends paid (2,105)
Dividends paid to non-controlling interests -
Net cash provided by (used in) financing activities (1,599)
Effect of exchange rate change on cash and cash equivalents 567
Net increase (decrease) in cash and cash equivalents 1,154
Cash and cash equivalents at beginning of period 18,767
Cash and cash equivalents at end of period 19,921

Global Network

Establishing a global supply network of high-quality product lineups

The HDS Group has production bases in Japan, Germany, the U.S., and South Korea and also conducts development in Japan, Germany, and the U.S. The Company provides sales and technological services in Japan and the Asian region, while the German consolidated subsidiary,

Harmonic Drive SE and its eight consolidated subsidiaries are in charge of Europe, Middle East, Africa, India, and South America. Harmonic Drive L.L.C., the U.S. subsidiary, covers North America. The Chinese consolidated subsidiary, Harmonic Drive Systems (Shanghai) Co., Ltd., provides sales and technological services to the Chinese market. The South Korean subsidiary, SAMDICK ADM CO., LTD., manufactures Precision planetary speed reducers.

Harmonic Drive SE

Location : Hessen, Germany
Business domain : development, production, and sales of speed reducers and mechatronics products



SAMICK ADM CO., LTD.

Location : Dalseonggun, Daegu, South Korea
Business domain : manufacture of Precision planetary speed reducers



Harmonic Drive L.L.C.

Location : Massachusetts, U.S.A.
Business domain : development, production, and sales of speed reducers and mechatronics products



HD Systems, Inc.

Location : Massachusetts, U.S.A.
Business domain : holding company for the HDS Group business in the U.S.

HD Systems, Inc. Silicon Valley Office

Location : California, U.S.A.
Business domain : research and study of advanced technologies

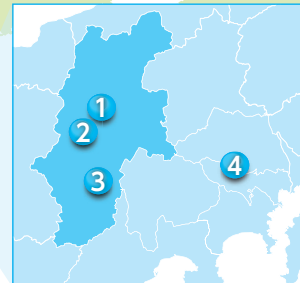
Harmonic Drive Systems (Shanghai) Co., Ltd.

Location : Shanghai, China
Business domain : sales of and technical services for speed reducers and mechatronics products



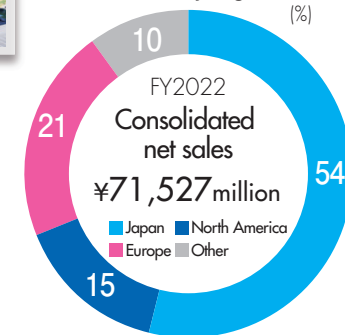
Harmonic Drive Systems Inc. Taiwan Representative Office

Location : Taipei, Taiwan
Business domain : market research and technical support

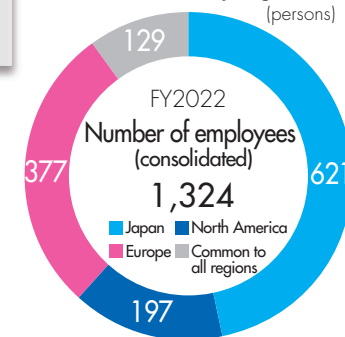


- ① Harmonic Drive Systems Inc. Hotaka Factory and Ariake Factory
Harmonic AD, Inc.
HD Logistics, Inc.
- ② Harmonic Precision Inc.
- ③ Harmonic Winbel Inc.
- ④ Ome Iron Casting Co., Ltd.

Composition of consolidated net sales by region (%)



Number of employees (consolidated) by region



Corporate Overview

Corporate Information (As of March 31, 2023)

Corporate Name	Harmonic Drive Systems Inc.
Location of head office	6-25-3 Minami-Oi, Shinagawa-ku, Tokyo 140-0013, Japan
TEL	+81-3-5471-7800
Corporate website	https://www.hds.co.jp/english/#1
Founded	October 27, 1970
Listed stock exchange	Tokyo Stock Exchange (Standard Market) Securities code: 6324
Business domain	Development, production, and sales of precision speed reducers and applied mechatronics products (actuators and motion control equipment)
Fiscal year end	March
Share capital	¥7,100,036,369
Net sales	Consolidated: ¥71.5 billion Non-consolidated: ¥50.8 billion
No. of employees	Consolidated: 1,324 Non-consolidated: 490
Group companies	Consolidated subsidiaries: 18, Equity-method affiliates: 1

Major Offices and Factories

Name	Location
Head Office	Shinagawa-ku, Tokyo, Japan
Tokyo Office	Shinagawa-ku, Tokyo, Japan
Kohshin Office	Azumino-shi, Nagano, Japan
Chubu Office	Meito-ku, Nagoya-shi, Aichi, Japan
Kansai Office	Yodogawaku, Osaka-shi, Osaka, Japan
Kyushu Office	Hakata-ku, Fukuoka-shi, Fukuoka, Japan
Taiwan Representative Office	Taipei City, Taiwan (R.O.C.)
Hotaka Factory	Azumino-shi, Nagano, Japan
Ariake Factory	Azumino-shi, Nagano, Japan
Matsumoto Factory	Matsumoto-shi, Nagano, Japan
Komagane Factory	Komagane-shi, Nagano, Japan

Name of consolidated subsidiary	Percentage of voting rights	Location	Business domain
HD Logistics, Inc.	100.0%	Azumino-shi, Nagano, Japan	Logistics
Harmonic Precision Inc.	100.0%	Matsumoto-shi, Nagano, Japan	Production and processing of cross roller bearings
Harmonic AD, Inc.	100.0%	Azumino-shi, Nagano, Japan	Production of Precision planetary speed reducers
Harmonic Winbel Inc.	100.0%	Komagane-shi, Nagano, Japan	Development, mass production support, manufacturing and sales of various motors
HD Systems, Inc.*	100.0%	Beverly, Massachusetts, U.S.A.	Investment in Harmonic Drive L.L.C., research and study of speed reducers and mechatronics products
Harmonic Drive L.L.C.*	100.0%	Beverly, Massachusetts, U.S.A.	Development and production of speed reducers and mechatronics products, and sales in North America region
Harmonic Drive Systems (Shanghai) Co., Ltd.*	100.0%	Shanghai, China	Sales and technical services of speed reducers and mechatronics products
SAMICK ADM CO., LTD.*	51.0% (51.0%)	Dalseong-gun, Daegu, South Korea	Production of Precision planetary speed reducers
GK HD Management*	100.0%	Shinagawa-ku, Tokyo, Japan	Holding company for the purpose of investment in Harmonic Drive SE
Harmonic Drive SE and 8 consolidated subsidiaries*	100.0%(63.2%)	Limburg a.d. Lahn, Hessen, Germany	Development and production of speed reducers and mechatronics products, and sales in Europe, Middle East, Africa, India and South America region

Note 1: Fiscal year ends on December 31 for the consolidated subsidiaries marked with *.

Note 2: Percentage of voting rights () indicates the percentage of indirect ownership.

Note 3: Harmonic Winbel Inc. changed its name from Winbel Co., Ltd. as of April 1, 2023.

Name of equity-method company	Percentage of voting rights	Location	Business domain
Ome Iron Casting Co., Ltd.	49.2%	Nishitama-gun, Tokyo, Japan	Development, production, and sales of high-strength cast-iron products

HDS Report 2023 Editors

Corporate Planning Division
Corporate Planning &
Investor Relations
Secretariat, Sustainability
Committee



Kazuha Yamakawa

Makiko Ono

Aoi Ando

<From the editors>

Thank you for reading the HDS REPORT 2023. This is the first integrated report for our Company. The content is designed to introduce the voices of the frontline in an easy-to-understand manner, including the management philosophy, value creation process, top management message, messages from each executive in charge, roundtable discussions among employees as well as among Outside Directors. We hope that this report will help you deepen your understanding of the HDS Group and look forward to the realization of our vision. We also hope that the report will stimulate our dialogue with all of our stakeholders.

Stock Information

Stock Information (As of March 31, 2023)

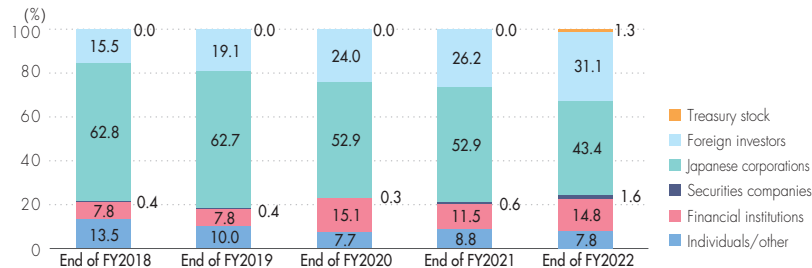
Total number of shares authorized to be issued	356,400,000 shares
Total number of issued and outstanding shares	96,315,400 shares
Number of shareholders	9,053
Fiscal year	From April 1 of each year to March 31 of the following year
Ordinary General Meeting of Shareholders	Held in June every year
Record date	March 31
Interim dividend	September 30
Transfer agent	1-3-3, Marunouchi, Chiyoda-ku, Tokyo 100-8241 Japan
Special account manager	Mizuho Trust & Banking Co., Ltd.
Handling office	1-3-3, Marunouchi, Chiyoda-ku, Tokyo 100-8241 Japan Stock Transfer Agency Department, Head Office, Mizuho Trust & Banking Co., Ltd.

Status of Major Shareholders

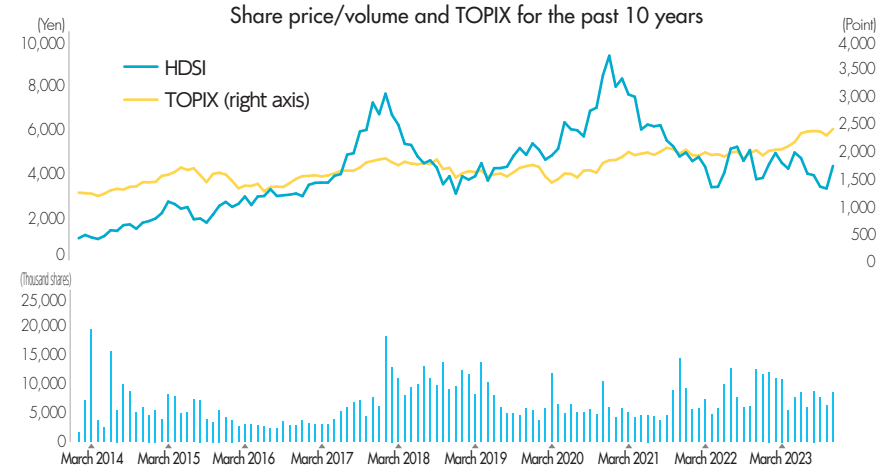
Name of shareholder	No. of shares held (thousand)	Shareholding ratio (%)
KODEN Holdings Co., Ltd.	33,490	35.2
SSBTC CLIENT OMNIBUS ACCOUNT	6,436	6.8
The Master Trust Bank of Japan, Ltd. (Trust Account)	4,576	4.8
Toyota Motor Corporation	4,379	4.6
Norimitsu Ito	3,041	3.2
Custody Bank of Japan, Ltd. (Trust Account)	2,970	3.1
Central trust (A030) trustee SMBC Trust Bank Ltd.	2,176	2.3
The Nomura Trust and Banking Co., Ltd. (Trust Account)	2,000	2.1
J.P.MORGAN BANK LUXEMBOURG S.A. 381572	1,786	1.9
STATE STREET BANK WEST CLIENT-TREATY 505234	1,223	1.3
Total	62,080	65.2

Note: The shareholding ratios noted above are calculated excluding treasury stock.

Percentage of Shares Held by Type of Shareholder



Stock Price Chart



Comparison of Stock Performance (TSR: Total Shareholder Return, %)

Investment period	1 year (March 31, 2022 - March 31, 2023)	3 years (March 31, 2020 - March 31, 2023)	5 years (March 31, 2018 - March 31, 2023)	10 years (March 31, 2013 - March 31, 2023)
Harmonic Drive Systems Inc.	4.8	-5.5	-26.0	718.3
TOPIX	5.8	53.4	31.8	142.1
TOPIX Sector Indices	8.6	67.1	29.3	152.6

Note: The table above shows the cumulative return on investment including dividends as of March 31, 2023, if investments were made 1, 3, 5, and 10 years ago.

Stock Price Valuation

	FY2018	FY2019	FY2020	FY2021	FY2022
Stock price at end of term (Yen)	3,790	4,725	7,480	4,220	4,395
PBR (Times)	3.5	4.7	7.0	4.1	4.0
ROE (Times)	11.2	-1.1	0.7	6.6	7.5
PER (Times)	32.2	-415.2	1,087.2	61.1	55.2
Dividend yield (%)	1.0	0.4	0.3	0.5	0.6
Market capitalization at end of period (Billions of yen)	365.0	455.1	720.4	406.5	423.3