# I Financial Data for the Past 11 Years

ltems	Units	FY2013	FY2014	FY2015	FY2016	
Net sales	( Millions of yen )	21,083	25,951	28,278	30,069	
Cost of sales	( Millions of yen )	11,965	13,829	14,992	16,202	
Gross profit	( Millions of yen )	9,117	12,121	13,286	13,866	
Selling, general and administrative expenses	( Millions of yen )	4,449	5,054	5,667	6,052	
Operating profit or loss	( Millions of yen )	4,668	7,066	7,618	7,813	
Ordinary profit	( Millions of yen )	4,822	7,525	7,829	7,958	
Profit or loss attributable to owners of parent	( Millions of yen )	2,993	4,833	5,001	19,732	
Total assets	( Millions of yen )	38,625	49,440	48,749	101,999	
Total net assets	( Millions of yen )	30,520	37,680	38,891	62,611	
Interest bearing liabilities	( Millions of yen )	217	745	892	15,666	
Net cash	( Millions of yen )	8,870	11,402	12,014	(3,569)	
Equity ratio	(%)	75.9	73.3	76.1	54.0	
Cash flows from operating activities	( Millions of yen )	3,643	5,494	6,499	7,225	
Cash flows from investing activities	( Millions of yen )	(1,102)	(2,103)	(4,394)	(32,522)	
Free cash flows	( Millions of yen )	2,540	3,390	2,105	(25,296)	
Cash flows from financing activities	( Millions of yen )	(5,591)	(737)	(1,384)	24,648	
Cash and cash equivalents at end of period	( Millions of yen )	6,883	9,730	10,439	9,668	
Net assets per share	(Yen)	320.1	395.7	405.3	601.1	
Net profit or loss per share	( Yen )	32.7	52.8	54.6	215.4	
Dividends per share	( Yen )	9.7	14.3	18.0	20.0	
Total dividend paid	( Millions of yen )	885	1,312	1,648	1,831	
Dividend payout ratio	(%)	29.6	27.2	33.0	9.3	
DOE(Dividend on Equity)	(%)	3.3	4.0	4.5	4.0	
Ratio of gross profit to net sales	(%)	43.2	46.7	47.0	46.1	
Ratio of operating profit to net sales	(%)	22.1	27.2	26.9	26.0	
ROA(Return on Asset)	(%)	7.9	11.0	10.2	26.2	
ROE(Return on Equity)	(%)	11.0	14.7	13.6	42.8	
Capital investment	( Millions of yen )	1,304	2,475	4,296	4,576	
Depreciation and amortization	( Millions of yen )	1,170	1,305	1,524	1,774	
R&D expenditure	( Millions of yen )	1,235	1,309	1,404	1,383	

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.

#### Financial Data for the Past 11 Years

FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
54,339	67,809	37,487	37,034	57,087	71,527	55,796
28,636	37,363	25,484	24,451	34,661	45,741	40,189
25,703	30,446	12,003	12,582	22,426	25,786	15,606
13,386	13,821	12,198	11,716	13,686	15,561	15,481
12,316	16,624	(195)	865	8,739	10,224	124
11,946	17,185	236	1,366	9,108	10,757	570
7,777	11,322	(1,095)	662	6,643	7,595	(24,806)
138,584	142,872	131,848	140,028	143,289	154,336	119,142
108,719	113,277	106,718	110,059	98,856	103,955	79,401
1,938	2,104	6,963	6,328	16,887	22,946	18,431
27,526	16,717	12,607	14,835	3,041	(2,133)	(1,923)
71.7	72.5	73.3	73.5	69.0	67.4	66.6
9,233	15,121	10,950	9,555	9,881	10,850	12,728
(8,171)	(22,399)	(12,537)	(1,230)	(4,703)	(8,663)	(5,950)
1,062	(7,277)	(1,587)	8,324	5,178	2,187	6,778
17,493	(3,271)	2,362	(6,561)	(6,663)	(1,599)	(8,122)
28,320	17,600	18,342	19,996	18,767	19,921	18,941
1,032.4	1,076.7	1,003.8	1,068.8	1,026.9	1,093.5	836.0
83.9	117.6	(11.4)	6.9	69.0	79.7	(261.0)
26.0	38.0	20.0	20.0	21.0	28.0	20.0
2,446	3,658	1,925	1,925	2,021	2,661	1,900
31.5	32.3	_	290.6	30.4	35.1	_
3.2	3.6	1.9	1.9	2.0	2.6	2.1
 47.3	44.9	32.0	34.0	39.3	36.1	28.0
22.7	24.5	(0.5)	2.3	15.3	14.3	0.2
6.5	8.1	(0.8)	0.5	4.7	5.1	(18.1)
 10.1	11.2	(1.1)	0.7	6.6	7.5	(27.1)
8,757	23,876	7,892	1,959	5,690	9,236	4,955
5,164	5,566	6,826	6,464	7,278	8,520	9,189
2,114	2,476	2,195	2,444	3,012	3,274	3,613

# I Sustainability Data

# **Environment**

	ltems	Unit	Scope covered	FY2022	FY2023
Total GHG emissions		t-CO <sub>2</sub>	Consolidated	3,835,340	903,178
Japan				81	54
	Asia (excluding Japan)			14	(
Scope 1	Europe	t-CO <sub>2</sub>	Consolidated	103	72
	North America			145	82
	Total			342	★ 209
	Japan			15,418	12,792
	Asia (excluding Japan)			264	287
Scope 2 (Location-base)	Europe	t-CO <sub>2</sub>	Consolidated	2,494	2,168
(Localion base)	North America			474	361
	Total			18,650	<b>★</b> 15,609
	Japan			9,839	7,828
	Asia (excluding Japan)			298	287
Scope 2 (Market-base)	Europe	t-CO <sub>2</sub>	Consolidated	1,785	1,207
	North America			291	361
	Total			12,213	<b>★</b> 9,683
	1. Purchased goods and services			358,792	289,079
	2. Capital goods			11,237	12,441
	3. Fuel- and energy-related activities not included in Scope 1 or Scope 2			18,329	21,589
	Upstream transportation and distribution			8,466	6,568
	5. Waste generated in			1,322	1,067
	operations  6. Business travel			702	1,301
	7. Employee commuting			613	694
Scope3	8. Upstream leased assets	t-CO <sub>2</sub>	Consolidated	_	_
	Total upstream			399,461	332,739
	Downstream transportation and distribution			3,837	2,287
	10. Processing of sold products			_	_
	11. Use of sold products			3,428,809	<b>*</b> 557,746
	12. End-of-life treatment of sold products			1,400	<b>*</b> 228
	13. Downstream leased assets			270	286
	14. Franchises			_	_

	ltems	Unit	Scope covered	FY2022	FY2023
	15. Investments			-	_
	Total downstream			3,434,316	560,547
Scope3	Other (upstream)	t-CO <sub>2</sub>	Consolidated		
	Other (downstream)	1		_	
	Total			3,833,776	893,286
	Fuel consumption			1,815	1,052
Energy consumption	Electricity consumption	MWh	Consolidated	45,780	36,762
	Total			47,595	37,815
Total water withdrawal		3	6 11.1	31,020	<b>★</b> 29,909
Total water discharge		m <sup>3</sup>	Consolidated	31,020	<b>★</b> 29,446
	Incineration waste			2,245	1,837
Amount of general waste discharge	Cafeteria waste	1 .	Consolidated -	10	9
discharge	Total	†		2,255	1,846
Amount of hazardous waste discharge				712	584
Green procurement	Ratio of consent acquired for green procurement standards	%	Consolidated	56	56
Number of suppliers audited		,,,	Consolidated	43	54
Number of companies surv hazardous substances	veyed for inclusion of environmentally	Company	Consolidated	121	116
Amount of copper usage		Thousand t	Consolidated	3	4
Amount of oil and grease u	used	Thousand t	Consolidated	0	0
Amount of recycled plastic	raw materials used	t	Consolidated	14	6
ISO 14001 certification	Number of companies certified	Company	Consolidated	5	6
ISO 14001 Certification	Ratio of certifications acquired	%	Consolidatea	56	67
Number of sites where EHS	S audits were conducted	Company	Consolidated	4	4
Ratio of sites where enviror conducted	nmental risk assessments have been	%	Consolidated	57	79
Violations of environmental laws and regulations		Number of cases	Consolidated	0	0
Accidents and pollution causing environmental issues		Number of cases	Consolidated	0	0
Complaints on environmental issues		Number of cases	Consolidated	1	0
Fine on environmental issues		Yen	Consolidated	0	0
	Number of participants	Person(s)	0 11	950	830
Environmental training	Ratio of participants	%	Consolidated	72	62

<sup>★</sup>Third-party verified data

<sup>\*</sup>The calculation method has been changed for Scope 3 categories 11 and 12 in FY2023.

### Third-party verification

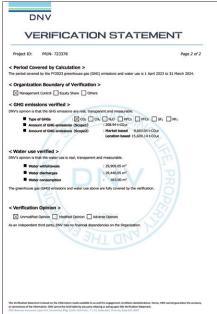
In order to improve the credibility of the environmental performance data for the entire HDS Group, we have acquired an independent third-party verification by DNV Business Assurance Japan K.K. on the GHG emissions for FY2023 (Scope 1, Scope 2 (Market-base/Location-base)), as well as water usage (total water withdrawal, total water discharge, and water consumption). We will perform continuous verifications and broaden the coverage of verified items , striving to enhance the reliability of our sustainability data.

#### <Verified data>

- · GHG emissions Scope 1
- · GHG emissions Scope 2 (Market-base)
- · GHG emissions Scope 2 (Location-base)
- · Total water withdrawal
- · Total water discharge
- · Water consumption

# Third-party verification statement





#### Social

ltems		Unit	Scope covered	FY2022	FY2023
Number of employees (consolidated)			Consolidated	1,324	1,349
	Male			389	415
Number of employees	Female	Person(s)	Non-	86	108
(non-consolidated)	Total		Consolidated	484	523
	Ratio of female employees	%		17.8	20.7
Average number of temporary a	nd contract employees*	Person(s)	Consolidated	156	689
Ratio of average number of temp	oorary employees*	%	Consolidated	24.1	33.8
Average age*		Age	Consolidated	41.8	40.0
Average years of service*		Year(s)	Consolidated	14	9
	Male			3	59
NIl	Female	Person(s)	Consolidated	5	28
Number of foreign employees*	Total		Consolidatea	8	87
	Ratio of foreign employees	%		1.2	6.4
	Male			8	18
Number of newly graduated recruits*	Female	Person(s)	Consolidated	1	5
recruits	Total			9	23
Number of mid-career recruits*	Male			10	68
	Female	Person(s)	Consolidated	3	24
	Total			13	92
Retention of newly graduated	Male			0.0	6.0
recruits	Female	%	Consolidated	0.0	0.0
(turnover rate after 3 years)*	Total	1		0.0	6.0
Turnover rate*		%	Consolidated	3.0	8.6
Turnover rate for personal reasons	retirees*	%	Consolidated	2.8	8.3
	Male			82	205
	Male (foreign nationals)	1		0	8
	Female	Person(s)		2	14
Managers*	Female (foreign nationals)	1	Consolidated -	0	0
	Total			84	219
	Ratio of female managers	%		2.4	6.4
	Male			12	29
	Male (foreign nationals)	1		0	1
	Female	Person(s)		1	2
Executive Officer*	Female (foreign nationals)	1	Consolidated	0	0
	Total	1		13	31
	Percentage of female Executive Officers	%		7.7	6.5

V: Data & Profile

<sup>\*</sup>Consolidated basis from FY2023

#### Sustainability Data

# Social

İtems		Unit	Scope covered	FY2022	FY2023
	Male			9	24
	Female	Person(s)		2	4
Employees with disabilities*	Total		Consolidated	11	28
	Ratio of employees with disabilities	%		1.8	2.1
Average monthly overtime hours*		Hours	Consolidated	22.9	9.7
Percentage of employees who took	paid leave*	%	Consolidated	73.2	66.7
	Male			9	25
Number of employees who took childcare leave*	Female	Person(s)	Consolidated	N.A.	20
criliacare leave	Total			9	45
Ratio of males who took childcare le	ave*	%	Consolidated	56.3	47.2
Average number of labor-manageme	ent meetings held*	Times	Consolidated	12	9
Average number of Safety and Heal	th Committee held*	Times	Consolidated	12	9
Employee training on safety and	Number of meetings held	Times	Consolidated	12	82
health*	Number of participants	Person(s)	Consolidatea	162	641
Number of ESH risk assessments		Number of cases	Consolidated	33	31
Stress check inspection rate*		%	Consolidated	86.0	90.1
	Number of meetings held	Times		3	9
Harassment prevention training*	Number of participants	Person(s)	Consolidated	144	320
	Ratio of participants	%		75.3	29.4
Number of child labor, forced labor,	human trafficking	Number of cases	Consolidated	0	0
Number of participants in special tro MBA, MOT, overseas training, overs		Person(s)	Consolidated	2	5
Number of employees taking corresponders	oondence education	Person(s)	Consolidated	131	185
Certification status (including ISO	Certified sites	Company		7	7
9001 and other industry-specific standards)	Ratio of certifications acquired	%	Consolidated	77.8	77.8
Number of patents held		Number of cases	Consolidated	1,004	1,050
	Community cleanups		Consolidated	7	10
Corporate citizenship (social	Harmonic Lectures	1		1	1
contribution) activities	Harmonic Concerts	Times	Non-	0	1
	Lessons in educational facilities		Consolidated	5	5

<sup>\*</sup>Consolidated basis from FY2023

### **Governance**

	tems		Unit	Scope covered	FY2022	FY2023
		Male			5	5
	Internal	Female	Person(s)		0	0
		Total			5	5
		Male			4	4
Directors	Outside	Female	Person(s)	Non-Consolidated	0	1
		Total			4	5
	Total		Person(s)		9	10
	Ratio of femal	e Directors	%		0.0	10.0
Ratio of Independent Outsi	de Directors		%	Non-Consolidated	44.4	50.0
Number of Board of Direct	tors meetings		Times	Non-Consolidated	18	18
Average attendance at Bo	ard of Directors	meetings	%	Non-Consolidated	98.5	98.5
		Male			1	1
	Internal	Female	Person(s)	Non-Consolidated	0	0
		Total			1	1
C		Male			3	3
Corporate Auditors	Outside	Female	Person(s)	Non-Consolidated	0	0
		Total			3	3
	Total		Person(s)	Non-Consolidated	4	4
	Ratio of female Corporate Auditors		%	Non-Consolidated	0.0	0.0
Ratio of Independent Outsi	de Corporate A	uditors	%	Non-Consolidated	50.0	50.0
Number of Board of Corpo	orate Auditors m	neetings	Times	Non-Consolidated	18	17
Average attendance at Co	rporate Auditors	s meetings	%	Non-Consolidated	98.6	100
Number of whistleblowing	cases*		Number of cases	Consolidated	21	35
Number of corruption case	es*		Number of cases	Consolidated	0	1
Amount of fines related to	corruptions*		Yen	Consolidated	0	0
	Number of me	eetings held	Times		6	4
Compliance trainings*	Number of po	articipants	Person(s)	Consolidated	293	931
	Ratio of partic	ipants	%		60.5	69.0
Political donations*			Yen	Consolidated	0	0
Number of corruptions and	briberies detec	ited*	Number of cases	Consolidated	0	0
Number of violations of antitrust laws*		Number of cases	Consolidated	0	0	
Number of information security incidents*		Number of cases	Consolidated	0	1	
Information security compliance ratio*		%	Consolidated	96.5	97.9	
Awareness training	Number of tra	inings held	Times	0 11	2	29
to prevent information security breach*	Number of po		Person(s)	Consolidated	1,040	1,696
Number of information set by a third party*	curity due dilige	ence performed	Times	Consolidated	2	16

<sup>\*</sup>Consolidated basis from FY2023

#### 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 subsidiary, Harmonic Drive SE and its eight consolidated subsidiaries are in charge of Europe, Middle

East, Africa, India, and South America. Harmonic Drive LLC, the U.S. subsidiary, covers North America.

The Chinese subsidiary, Harmonic Drive Systems (Shanghai) Co., Ltd., provides sales and technological services to the Chinese market. The South Korean subsidiary, SAMICK ADM CO., LTD., manufactures Precision planetary speed reducers.



# I Corporate Overview

Corporate Inform	nation (As of March 31, 2024)
Corporate Name	Harmonic Drive Systems Inc.
Location of head office	6-25-3 Minami-Oi, Shinagawa-ku, Tokyo 140-0013, Japan
Phone Number	+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: ¥55.7 billion Non-consolidated: ¥28.5 billion
No. of employees	Consolidated: 1,349 Non-consolidated: 523
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	Yodogawa-ku, 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		
Toyoshina Factory	Azumino-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 LLC, research and study of speed reducers and mechatronics products
Harmonic Drive LLC*	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  $^{\star}$ .

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 2024 Editors

Sustainability Management Office



Kazuha Yamakawa

Makiko Ono

Aoi Ando

#### <From the editors>

Thank you for reading the HDS REPORT 2024. In this second publication of the integrated report, we have included the unwavering commitment of our President & CEO, Executive Officers in charge of respective areas, next-generation leaders, and the top leaders of our overseas Group companies as we work towards the realization of the Medium-Term Management Plan (FY2024-FY2026) which began in FY2024. 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.

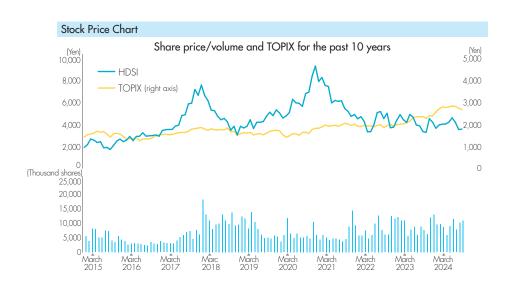
#### Stock Information

Stock Information (As of March 31, 2024)	
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	8,302
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 Special account manager	1-3-3, Marunouchi, Chiyoda-ku, Tokyo 100-8241 Japan 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	35.3
SSBTC CLIENT OMNIBUS ACCOUNT	7,058	7.4
The Master Trust Bank of Japan, Ltd. (Trust Account)	3,752	4.0
Custody Bank of Japan, Ltd. (Trust Account)	3,345	3.5
Norimitsu Ito	3,041	3.2
Control trust (AO30) trustee SMBC Trust Bank Ltd.	2,176	2.3
JP MORGAN CHASE BANK 385632	1,986	2.1
STATE STREET BANK WEST CLIENT-TREATY 505234	1,681	1.8
J.P. MORGAN BANK LUXEMBOURG S.A. 381572	1,571	1.7
NORTHEN TRUST CO. (AVFC) REIEDU UCITS CLIENTS NON LENDING 15 PCT TREATY ACCOUNT	1,448	1.5
Total	59.553	62.7

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





Comparison of Stock Performance (TSR: Total Shareholder Return, %)								
Investment period	1 year (March 31, 2023 - March 31, 2024)	3 years (March 31, 2021 - March 31, 2024)	5 years (March 31, 2019 - March 31, 2024)	10 years (March 31, 2014 - March 31, 2024)				
Harmonic Drive Systems Inc.	-8.9	-45.8	8.0	305.5				
TOPIX	41.3	52.5	96.2	188.6				
TOPIX Sector Indices (Machinery)	46.2	52.8	117.0	201.8				

Note: The table above shows the cumulative return on investment including dividends as of March 31, 2024, if investments were made 1, 3, 5, and 10 years ago.

Stock Price Valuation					
	FY2019	FY2020	FY2021	FY2022	FY2023
Stock price at end of term (Yen)	4,725	7,480	4,220	4,395	3,985
PBR (Times)	4.7	7.0	4.1	4.0	4.8
ROE (Times)	-1.1	0.7	6.6	7.5	-27.1
PER (Times)	-415.2	1,087.2	61.1	55.2	-15.3
Dividend yield (%)	0.4	0.3	0.5	0.6	0.5
Market capitalization at end of period (Billions of yen)	4,551	7,204	4,065	4,233	3,838