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Key Performance Indicator Table

1. GENERAL DISCLOSURES

SIGNIFICANT INSTANCES* OF NON-COMPLIANCE		UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
The total number of significant instances of non-compliance with laws and regulations during the reporting period.	Environmental	Count	0	0	1	1		2-27-a
	Social	Count	0	1	0	0		
The total number of significant instances of non-compliance with laws and regulations during the reporting period for which fines were incurred.	Environmental	Count	0	0	1	1		2-27-a-i
	Social	Count	0	1	0	0		
The total number of significant instances of non-compliance with laws and regulations during the reporting period instances for which non-monetary sanctions were incurred.		Count	0	0	0	1		2-27-a-ii
Total monetary value of fines for significant instances of non-compliance with laws and regulations that occurred in the reporting period that were paid during the reporting period.	Environmental	US \$	0	0	46,083	27,900		2-27-b-i 2-27-b-ii
	Social	US \$	0	61,477	0	0		

*Significant instances include those that result in fines in excess of US\$25,000.

*2-27-d

2. ENVIRONMENTAL MANAGEMENT SYSTEM VARIABLE

KEY METRIC	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Sites ISO 14001 Certified	Count	10	21	31	33		
Sites ISO 14001 Certified	% of Total	16%	34%	53%	57%		
Sites ISO 14001 Implemented but Not Certified	Count	51	40	27	25		
Sites ISO 14001 Implemented but Not Certified	% of Total	84%	66%	47%	43%		
Sites ISO 14001 Implemented	% of Total	100%	100%	100%	100%		
Operational sites Covered by an Environmental Risk Assessment	% of Total	100%	100%	100%	100%		

Key Performance Indicator Table

3. ENERGY

ENERGY CONSUMPTION WITHIN THE ORGANIZATION - HOWMET WIDE		UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Total (direct and indirect)		Millions of gigajoules	13.61	11.27	10.98	11.33	RT-AE-130a.1	
Direct		Millions of gigajoules	8.83	7.22	7.07	7.29		
Diesel		Millions of gigajoules	0.10	0.17	0.14	0.14		302-1-a
Gasoline		Millions of gigajoules	0.00	0.00	0.00	0.00		302-1-a
LNG		Millions of gigajoules	0.02	0.01	0.00	0.00		302-1-a
LPG		Millions of gigajoules	0.02	0.04	0.03	0.02		302-1-a
Natural Gas		Millions of gigajoules	8.68	6.99	6.89	7.09		302-1-a
Propane		Millions of gigajoules	0.00	0.01	0.01	0.02		302-1-a
Indirect		Millions of gigajoules	4.77	4.05	3.91	4.04		
Retail Electricity		Millions of gigajoules	4.77	4.05	3.91	4.04		302-1-c-i
Heating Consumption		Millions of gigajoules	0.00	0.00	0.00	0.00		302-1-c-ii
Cooling Consumption		Millions of gigajoules	0.00	0.00	0.00	0.00		302-1-c-iii
Steam Consumption		Millions of gigajoules	0.00	0.00	0.00	0.00		302-1-c-iv
ENERGY CONSUMPTION WITHIN THE ORGANIZATION - BY BUSINESS SEGMENT	SEGMENT	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Direct	Corporate	Millions of gigajoules	0.01	0.01	0.01	0.01		
Direct	Engines	Millions of gigajoules	4.66	3.69	3.54	3.65		
Direct	Fasteners	Millions of gigajoules	0.45	0.39	0.43	0.46		
Direct	Structures	Millions of gigajoules	2.54	2.21	1.92	2.00		
Direct	Wheels	Millions of gigajoules	1.13	0.92	1.17	1.17		
Indirect	Corporate	Millions of gigajoules	0.02	0.02	0.02	0.01		
Indirect	Engines	Millions of gigajoules	2.49	2.17	2.08	2.15		
Indirect	Fasteners	Millions of gigajoules	0.58	0.51	0.48	0.52		
Indirect	Structures	Millions of gigajoules	1.09	0.88	0.73	0.73		
Indirect	Wheels	Millions of gigajoules	0.59	0.48	0.61	0.63		
Total (direct and indirect)	Corporate	Millions of gigajoules	0.03	0.03	0.03	0.02		
Total (direct and indirect)	Engines	Millions of gigajoules	7.15	5.86	5.62	5.80		
Total (direct and indirect)	Fasteners	Millions of gigajoules	1.03	0.89	0.91	0.97		
Total (direct and indirect)	Structures	Millions of gigajoules	3.63	3.09	2.65	2.73		
Total (direct and indirect)	Wheels	Millions of gigajoules	1.72	1.40	1.78	1.80		

Key Performance Indicator Table

ENERGY CONSUMPTION CONTINUED	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
US eGrid % renewables - used as a surrogate for all of Howmet	%	17.0%	17.6%	19.5%	19.6%	RT-AE-130a.1	
Consumption of fuel (excluding feedstock) Millions of gigajoules from renewable sources	Millions of gigajoules	0.00	0.00	0.00	0.00		302-1-b
Consumption of fuel (excluding feedstock) Millions of gigajoules from non-renewable sources	Millions of gigajoules	8.83	7.22	7.07	7.29		302-1-a
Consumption of fuel (excluding feedstock) Total (renewable and non-renewable Millions of gigajoules)	Millions of gigajoules	8.83	7.22	7.07	7.29		
Consumption of purchased or acquired electricity Millions of gigajoules from renewable sources	Millions of gigajoules	0.81	0.71	0.76	0.79		
Consumption of purchased or acquired electricity Millions of gigajoules from non-renewable sources	Millions of gigajoules	3.96	3.34	3.15	3.25		
Consumption of purchased or acquired electricity Total (renewable and non-renewable Millions of gigajoules)	Millions of gigajoules	4.77	4.05	3.91	4.04		
Total Energy Consumption Millions of gigajoules from renewable sources	Millions of gigajoules	0.81	0.71	0.76	0.79		302-1-b
Total Energy Consumption Millions of gigajoules from non-renewable sources	Millions of gigajoules	12.79	10.56	10.22	10.54		302-1-a
Total Energy Consumption Total (renewable and non-renewable Millions of gigajoules)	Millions of gigajoules	13.61	11.27	10.98	11.33		302-1-e
Electricity Sold	MWH	0	0	0	0		302-1-d-i
Heating Sold	MWH	0	0	0	0		302-1-d-ii
Cooling Sold	MWH	0	0	0	0		302-1-d-iii
Steam Sold	MWH	0	0	0	0		302-1-d-iv
ENERGY INTENSITY	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Energy intensity ratio : Total (direct + indirect) / Third Party Revenue \$	Millions of GJ / Billion Dollars Revenue	1.91	2.14	2.20	2.00		302-3-a, 302-3-b
Energy intensity ratio : Total (direct + indirect) / Metric Ton of Purchased Metal	Millions of GJ / MT Metal	0.76	0.90	0.55	0.55		
REDUCTION OF ENERGY CONSUMPTION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives.	Millions of MJ	4	11	7	300		302-4-a



Key Performance Indicator Table

4. WATER AND EFFLUENTS

WATER WITHDRAWAL	AREA TYPE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Withdrawal Intensity	All Areas	Megaliters / Billion Dollars of Revenue	682.19	788.75	744.88	694.12		
Total Water Withdrawal	All Areas	Megaliters of water	4,846.94	4,146.44	3,724.39	3,935.67		303-3-a
Withdrawn Surface Water	All Areas	Megaliters of water		0	0	0		303-3-a-i
Withdrawn Surface Water - Fresh Water	All Areas	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Surface Water - Other Water	All Areas	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Groundwater	All Areas	Megaliters of water		39.51	36.19	30.20		303-3-a-ii
Withdrawn Groundwater - Fresh Water	All Areas	Megaliters of water		39.51	36.19	30.20		303-3-c-i
Withdrawn Groundwater - Other Water	All Areas	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Seawater	All Areas	Megaliters of water		0	0	0		303-3-a-iii
Withdrawn Seawater - Fresh Water	All Areas	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Seawater - Other Water	All Areas	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Produced Water	All Areas	Megaliters of water		0	0	0		303-3-a-iv
Withdrawn Produced Water - Fresh Water	All Areas	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Produced Water - Other Water	All Areas	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Third-Party Water	All Areas	Megaliters of water		4,106.93	3,664.40	3,905.47		303-3-a-v
Withdrawn Third-Party Water - Fresh Water	All Areas	Megaliters of water		0	0	3905.47		303-3-c-i
Withdrawn Third-Party Water - Other Water	All Areas	Megaliters of water		0	0	0		303-3-c-ii
Total Water Withdrawal	Areas With Water Stress	Megaliters of water		1,735.03	1,581.83	425.58		303-3-b
Withdrawn Surface Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-b-i
Withdrawn Surface Water - Fresh Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Surface Water - Other Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Groundwater	Areas With Water Stress	Megaliters of water		39.51	36.19	0		303-3-b-ii
Withdrawn Groundwater - Fresh Water	Areas With Water Stress	Megaliters of water		39.51	36.19	0		303-3-c-i
Withdrawn Groundwater - Other Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Seawater	Areas With Water Stress	Megaliters of water		0	0	0		303-3-b-iii
Withdrawn Seawater - Fresh Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Seawater - Other Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Produced Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-b-iv
Withdrawn Produced Water - Fresh Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-i
Withdrawn Produced Water - Other Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-ii
Withdrawn Third-Party Water	Areas With Water Stress	Megaliters of water		1,695.52	1,545.64	425.58		303-3-b-v
Withdrawn Third-Party Water - Fresh Water	Areas With Water Stress	Megaliters of water		0	0	425.58		303-3-c-i
Withdrawn Third-Party Water - Other Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-c-ii
Third-Party Water Withdrawal by Withdrawal Source - Surface Water	Areas With Water Stress	Megaliters of water		1,021.26	943.53	153.92		303-3-b-v
Third-Party Water Withdrawal by Withdrawal Source - Groundwater	Areas With Water Stress	Megaliters of water		674.26	602.11	271.66		303-3-b-v
Third-Party Water Withdrawal by Withdrawal Source - Sea Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-b-v
Third-Party Water Withdrawal by Withdrawal Source - Produced Water	Areas With Water Stress	Megaliters of water		0	0	0		303-3-b-v

Key Performance Indicator Table

TOTAL WATER DISCHARGE	AREA TYPE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Total Water Discharge	All Areas	Megaliters of water				2,675.37		303-4-a
Discharge to Surface Water	All Areas	Megaliters of water				595.68		303-4-a-i
Discharge to Surface Water - Fresh Water	All Areas	Megaliters of water				2,675.37		303-4-c-i
Discharge to Surface Water - Other Water	All Areas	Megaliters of water				0		303-4-c-ii
Discharge to Groundwater	All Areas	Megaliters of water				0		303-4-a-ii
Discharge to Seawater	All Areas	Megaliters of water				0		303-4-a-iii
Discharge to Third-Party Water	All Areas	Megaliters of water				2,079.69		303-4-a-v
Third-Party Water Discharge to by Discharge destination - Produced Water	All Areas	Megaliters of water				0		
Total Water Discharge	Areas With Water Stress	Megaliters of water				413.46		303-4-c
Discharge to Surface Water	Areas With Water Stress	Megaliters of water				140.06		
Discharge to Surface Water - Fresh Water	Areas With Water Stress	Megaliters of water				413.46		303-4-c-i
Discharge to Surface Water - Other Water	Areas With Water Stress	Megaliters of water				0		303-4-c-ii
Discharge to Groundwater	Areas With Water Stress	Megaliters of water				0		
Discharge to Seawater	Areas With Water Stress	Megaliters of water				0		
Discharge to Third-Party Water	Areas With Water Stress	Megaliters of water				273.40		
Third-Party Water Discharge to by Discharge destination - Produced Water	Areas With Water Stress	Megaliters of water				0		

5. EMISSIONS

GREENHOUSE GAS EMISSIONS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Scope 1 (direct)	Million MT CO2e	0.45	0.38	0.37	0.38		305-1-a
Scope 2 (indirect)	Million MT CO2e	0.55	0.43	0.39	0.42		305-2-a
Scope 1 + Scope 2	Million MT CO2e	1.00	0.81	0.76	0.80		
Scope 3 - Total	Million MT CO2e	1.93	1.18	1.94	2.06		305-3-a
Scope 3 - Category 1	MT CO2e	1,771,588	896,529	1,595,882	1,714,180		
Scope 3 - Category 2	MT CO2e		125,486	141,974	93,313		
Scope 3 - Category 3	MT CO2e	43,000	97,693	96,356	96,300		
Scope 3 - Category 4	MT CO2e	35,587	36,194	57,551	28,144		
Scope 3 - Category 5	MT CO2e		7,639	7,117	28,239		
Scope 3 - Category 6	MT CO2e			1,162	1,962		
Scope 3 - Category 7	MT CO2e				56,848		
Scope 3 - Category 8	MT CO2e				3,564		
Scope 3 - Category 9	MT CO2e	17,830	12,961	20,609	21,203		
Scope 3 - Category 10	MT CO2e						
Scope 3 - Category 11	MT CO2e						
Scope 3 - Category 12	MT CO2e	58,719	6,590	16,724	17,326		
Scope 3 - Category 13	MT CO2e	NA	NA	NA	NA		
Scope 3 - Category 14	MT CO2e	NA	NA	NA	NA		
Scope 3 - Category 15	MT CO2e	NA	NA	NA	NA		
Number of scope 3 categories reported	Count	5	7	8	10		
SCOPE 1 GREENHOUSE GAS EMISSIONS BY SEGMENT	UNIT	2019	2020	2021	2021	SASB STANDARD	GRI STANDARD
Corporate	Million MT CO2e	0.0006	0.0005	0.0006	0.0005		
Engines	Million MT CO2e	0.24	0.20	0.19	0.19		
Fasteners	Million MT CO2e	0.13	0.11	0.10	0.10		
Structures	Million MT CO2e	0.02	0.02	0.02	0.02		
Wheels	Million MT CO2e	0.06	0.05	0.06	0.06		
SCOPE 2 GREENHOUSE GAS EMISSIONS BY SEGMENT	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Corporate	Million MT CO2e	0.0029	0.0021	0.0021	0.0010		
Engines	Million MT CO2e	0.27	0.22	0.20	0.22		
Fasteners	Million MT CO2e	0.15	0.11	0.09	0.09		
Structures	Million MT CO2e	0.05	0.04	0.04	0.04		
Wheels	Million MT CO2e	0.07	0.06	0.06	0.06		

Key Performance Indicator Table

GHG EMISSIONS INTENSITY	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
GHG INTENSITY	Millions of MT / Billion Dollars 3rd Party Revenue	0.14	0.15	0.15	0.14		305-4-a
SCOPE 1 INTENSITY	Millions of MT / Billion Dollars 3rd Party Revenue	0.06	0.07	0.07	0.07		
SCOPE 2 INTENSITY (location based)	Millions of MT / Billion Dollars 3rd Party Revenue	0.08	0.08	0.08	0.07		
GREENHOUSE GAS EMISSIONS BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia Pacific	MT CO2e	0.03	0.03	0.03	0.03		
Europe	MT CO2e	0.11	0.07	0.07	0.07		
North America	MT CO2e	0.87	0.72	0.66	0.70		
SCOPE 1 GREENHOUSE GAS EMISSIONS BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia Pacific	MT CO2e	0.01	0.01	0.01	0.01		
Europe	MT CO2e	0.06	0.03	0.04	0.04		
North America	MT CO2e	0.38	0.34	0.32	0.33		
SCOPE 2 GREENHOUSE GAS EMISSIONS BY REGION (location based)	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia Pacific	MT CO2e	0.02	0.02	0.02	0.02		
Europe	MT CO2e	0.05	0.04	0.03	0.03		
North America	MT CO2e	0.49	0.38	0.34	0.37		
REDUCTION OF GHG EMISSIONS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Scope 1 GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO2 equivalent.	MT CO2e	569	276	423	12,000		305-5-a
Scope 2 GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO2 equivalent.	MT CO2e	282	1,823	396	5,000		305-5-a
AIR EMISSIONS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Nitrogen Oxides	Metric tons	391.28	316.10	280.90	318.89		305-7-a-i
Sulfur Oxides	Metric tons	3.57	2.78	3.03	2.97		305-7-a-ii
Volatile organic compounds (VOC)	Metric tons	199.34	174.39	206.19	205.79		305-7-a-iv
Particulate Matter (PM)	Metric tons	375.30	289.90	239.44	260.61		305-7-a-vi

Key Performance Indicator Table

6. WASTE

WASTE VARIABLE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Hazardous Waste- Generated	Thousand Metric Tons		23	25	26.20	RT-AE-150a.1	
Non-Hazardous Waste- Generated	Thousand Metric Tons				67.58		
Hazardous Waste- Diverted from disposal	Thousand Metric Tons		7.8	9.73	10.73		306-4-b
Non-Hazardous Waste- Diverted from disposal	Thousand Metric Tons				25.89		306-4-c
Landfilled Waste	Thousand Metric Tons	29.88	25.3	23.57	27.95		
Landfilled Waste Intensity	Thousand Metric Tons of Waste Per Billion Dollars of Revenue	4.2	4.81	4.71	4.93		
WASTE DIRECTED TO DISPOSAL	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Total weight of hazardous waste directed to disposal	Metric Tons				15.47		306-5-b
Total weight of non-hazardous waste directed to disposal.	Metric Tons				41.69		306-5-c

7. SUPPLY CHAIN METRICS

SUPPLIERS BY MAJOR CATEGORY	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Operational/Capital Expenditures	Count	3,172	2,708	2,425	2,301		
Information Technology and Services	Count	4,361	3,399	2,382	2,565		
Metals	Count	559	452	368	309		
Production Materials	Count	9,533	7,601	6,987	6,551		
Total	Count	17,625	14,160	12,162	11,726		
SPEND BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia	% of Total	4%	3%	5%	3%		
Europe	% of Total	17%	20%	32%	26%		
North America	% of Total	79%	78%	64%	71%		
KEY SUPPLIER ASSESSMENT RESULTS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Leading- Sustainability Maturity Rating	% of Key Suppliers	3%	9%	6%	6%		
Active- Sustainability Maturity Rating	% of Key Suppliers	80%	79%	75%	69%		
Emerging- Sustainability Maturity Rating	% of Key Suppliers	9%	9%	18%	22%		
Lagging- Sustainability Maturity Rating	% of Key Suppliers	9%	3%	1%	3%		



Key Performance Indicator Table

8. EMPLOYMENT

TOTAL EMPLOYEES (PERMANENT + TEMPORARY) BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia- Total	Count	985	783	803	839		
Australia- Total	Count	88	78	73	80		
Europe- Total	Count	6,577	5,692	5,186	5,484		
Middle East and Africa- Total	Count			110	106		
North America- Total	Count	18,585	12,893	13,731	14,837		
South America- Total	Count	25	17	16	19		
PERMANENT EMPLOYEES	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Male- Permanent Contract	Count	19,145	13,747	13,813	14,637		
Female- Permanent Contract	Count	6,824	4,629	5,059	5,490		
Not Specified- Permanent Contract	Count			7	57		
Total- Permanent Contract	Count	25,969	18,376	18,879	20,184	RT-AE-000.B	
PERMANENT EMPLOYEES BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia- Permanent Contract	Count	941	734	740	771		2-7-b-i
Australia- Permanent Contract	Count	86	78	73	80		2-7-b-i
Europe- Permanent Contract	Count	6,423	5,604	5,089	5,398		2-7-b-i
Middle East and Africa- Permanent Contract	Count			105	105		2-7-b-i
North America- Permanent Contract	Count	18,494	12,885	13,701	14,817		2-7-b-i
South America- Permanent Contract	Count	25	17	16	19		2-7-b-i
TEMPORARY EMPLOYEES	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Male- Temporary Contract	Count	221	92	119	123		2-7-b-ii
Female- Temporary Contract	Count	70	39	55	46		2-7-b-ii
Not Specified- Temporary Contract	Count			0	6		2-7-b-ii
Total- Temporary Contract	Count	291	131	174	175		2-7-b-ii
TEMPORARY EMPLOYEES BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia- Temporary Contract	Count	44	49	63	68		2-7-b-ii
Australia- Temporary Contract	Count	2	0	0	0		2-7-b-ii
Europe- Temporary Contract	Count	154	88	97	86		2-7-b-ii
Middle East and Africa- Temporary Contract	Count			5	1		2-7-b-ii
North America- Temporary Contract	Count	91	8	30	20		2-7-b-ii
South America- Temporary Contract	Count	0	0	0	0		2-7-b-ii
FULL-TIME AND PART-TIME EMPLOYEES BY GENDER	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Male- Full-time	Count	19,280	13,697	13,882	14,702		2-7-iv
Female- Full-time	Count	6,736	4,569	5,030	5,444		2-7-iv
Not Specified- Full-time	Count			7	62		2-7-iv
Total- Full-time	Count	26,016	18,266	18,919	20,208		2-7-iv
Male- Part-time	Count	86	142	50	58		2-7-v
Female- Part-time	Count	158	99	84	92		2-7-v
Not Specified- Part-time	Count			0	1		2-7-v
Total- Part-time	Count	244	241	134	151		2-7-v

Key Performance Indicator Table

NEW EMPLOYEE HIRES BY AGE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Age Under 30- Total	Count	2,204	621	1,655	2,350		401-1-a
Age 30 - 50- Total	Count	2,136	877	1,664	2,413		401-1-a
Age Over 50- Total	Count	663	254	453	795		401-1-a
Age Under 30- Male	Count	1,529	438	1,109	1,638		401-1-a
Age 30 - 50- Male	Count	1,448	638	1,094	1,613		401-1-a
Age Over 50- Male	Count	464	183	306	530		401-1-a
Age Under 30- Female	Count	675	182	541	688		401-1-a
Age 30 - 50- Female	Count	688	238	567	772		401-1-a
Age Over 50- Female	Count	199	71	146	260		401-1-a
Age Under 30- Not Specified	Count		1	5	24		401-1-a
Age 30 - 50- Not Specified	Count		1	3	28		401-1-a
Age Over 50- Not Specified	Count		0	1	5		401-1-a
NEW EMPLOYEE HIRES BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia- Total	Count	129	55	95	124		401-1-a
Australia- Total	Count	5	0	6	15		401-1-a
Europe- Total	Count	817	517	545	767		401-1-a
Middle East and Africa- Total	Count			3,116	15		401-1-a
North America- Total	Count	4,051	1,171	3	4,633		401-1-a
South America- Total	Count	1	15	85	4		401-1-a
Asia- Male	Count	107	34	3	101		401-1-a
Australia- Male	Count	3	0	435	7		401-1-a
Europe- Male	Count	641	409	5	566		401-1-a
Middle East and Africa- Male	Count			1,980	12		401-1-a
North America- Male	Count	2,690	805	1	3,092		401-1-a
South America- Male	Count	0	13	9	3		401-1-a
Asia- Female	Count	22	21	3	12		401-1-a
Australia- Female	Count	2	0	107	3		401-1-a
Europe- Female	Count	176	107	3	183		401-1-a
Middle East and Africa- Female	Count			1,131	1		401-1-a
North America- Female	Count	1,361	365	2	1,521		401-1-a
South America- Female	Count	1	2	1	0		401-1-a
Asia- Not Specified	Count		0	0	11		401-1-a
Australia- Not Specified	Count		0	3	5		401-1-a
Europe- Not Specified	Count		1	0	18		401-1-a
Middle East and Africa- Not Specified	Count			5	2		401-1-a
North America- Not Specified	Count		1	0	20		401-1-a
South America- Not Specified	Count		0	0	1		401-1-a



Key Performance Indicator Table

EMPLOYEE TURNOVER RATE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Voluntary	% of Total		10.0%	15.0%	16.8%		
Involuntary	% of Total		27.0%	8.0%	5.3%		
Overall	% of Total		37.0%	23.0%	22.1%		
EMPLOYEE TURNOVER BY AGE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Age Under 30- Total	Count	1,637	1,741	1,193	1,347		401-1-b
Age 30 - 50- Total	Count	2,158	3,149	1,881	1,788		401-1-b
Age Over 50- Total	Count	1,423	2,053	1,232	1,264		401-1-b
Age Under 30- Male	Count	1,173	1,264	815	927		401-1-b
Age 30 - 50- Male	Count	1,560	2,281	1,334	1,255		401-1-b
Age Over 50- Male	Count	1,060	1,477	870	878		401-1-b
Age Under 30- Female	Count	464	477	376	416		401-1-b
Age 30 - 50- Female	Count	598	868	547	526		401-1-b
Age Over 50- Female	Count	363	576	361	386		401-1-b
Age Under 30- Not Specified	Count			2	4		401-1-b
Age 30 - 50- Not Specified	Count			0	7		401-1-b
Age Over 50- Not Specified	Count			1	0		401-1-b
EMPLOYEE TURNOVER BY REGION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Asia- Total	Count	141	242	76	88		401-1-b
Australia- Total	Count	7	11	10	10		401-1-b
Europe- Total	Count	1431	946	778	660		401-1-b
Middle East and Africa- Total	Count			15	16		401-1-b
North America- Total	Count	3,636	5,747	3,425	3,624		401-1-b
South America- Total	Count	3	10	2	1		401-1-b
Asia- Male	Count	112	204	55	75		401-1-b
Australia- Male	Count	5	5	4	4		401-1-b
Europe- Male	Count	1,172	756	596	524		401-1-b
Middle East and Africa- Male	Count			10	10		401-1-b
North America- Male	Count	2,501	4,062	2,352	2,446		401-1-b
South America- Male	Count	3	8	2	1		401-1-b
Asia- Female	Count	29	38	21	9		401-1-b
Australia- Female	Count	2	6	6	6		401-1-b
Europe- Female	Count	259	190	180	135		401-1-b
Middle East and Africa- Female	Count			5	6		401-1-b
North America- Female	Count	1,135	1,685	1,072	1,172		401-1-b
South America- Female	Count	0	2	0	0		401-1-b
Asia- Not Specified	Count			0	4		401-1-b
Australia- Not Specified	Count			0	0		401-1-b
Europe- Not Specified	Count			2	1		401-1-b
Middle East and Africa- Not Specified	Count			0	0		401-1-b
North America- Not Specified	Count			1	6		401-1-b
South America- Not Specified	Count			0	0		401-1-b



Key Performance Indicator Table

ADDITIONAL LABOR INDICATORS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Locations with leave of absence provisions in place beyond standard vacations.	% of Total	100%	100%	100%	100%		
Locations with health care coverage arrangements for employees.	% of Total	100%	100%	100%	100%		
Employees covered by collective bargaining agreements	% of Total				33%		2-30-a
Employees covered by formally elected employee representatives	% of Total				49%		
Employees represented in formal joint management-worker health & safety committees	% of Total				34%		
COUNTRY OR REGION OF UNION REPRESENTATION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Canada	% of Total		0%	37%	27%		
Mexico	% of Total		12%	93%	56%		
USA	% of Total		24%	26%	25%		

9. OCCUPATIONAL SAFETY AND HEALTH

H&S MANAGEMENT SYSTEM VARIABLE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Sites ISO 45001 Certified	Count	1	4	6	6		
Sites ISO 45001 Certified	% of Total	2%	7%	10%	10%		
Sites ISO 45001 Implemented but Not Certified	Count	60	57	52	52		
Sites ISO 45001 Implemented but Not Certified	% of Total	98%	93%	90%	90%		
Sites ISO 45001 Implemented	% of Total	100%	100%	100%	100%		
Operational sites Covered by a Health and Safety Risk Assessment	% of Total	100%	100%	100%	100%		
Locations with Implemented processes for safe handling of chemicals	% of Total	100%	100%	100%	100%		
Employees enrolled in Occupational Health Programs	% of Total	100%	100%	100%	100%		
Contractors and subcontractors trained on H&S risks before working on the premises.	% of Total	100%	100%	100%	100%		
PREVENTION OF FATALITY RISKS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Risks Identified	Count	884	692	902	1071		
Risks Closed	Count	845	744	757	914		
INCIDENT RATES - All Employees and Supervised Workers	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Fatalities	Count	0	0	0	1		403-9-a-i
Recordable Incidents	Ratio*	0.9	0.71	0.71	0.66		403-9-a-iii
Days Away, Restricted and Transfer	Ratio*	0.25	0.24	0.22	0.15		
Lost Workday	Ratio*	0.12	0.12	0.15	0.09		
INCIDENT RATES - Contractors and Contracted Services	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Fatalities	Number	0	0	0	0		
Total Recordable Incident	Ratio*	0.84	0.5	0.45	0.77		
Total Recordable Incident Benchmark- Aerospace and Defense Sector Average**	Ratio*	2.0	1.7	1.8	NOT AVAILABLE		
Days Away, Restricted and Transfer	Ratio*	0.36	0.11	0.34	0.25		
Days Away, Restricted and Transfer Benchmark- Aerospace and Defense Sector Average**	Ratio*	1.2	1.1	1.1	NOT AVAILABLE		
Lost Workday	Ratio*	0.24	0.11	0.23	0.17		
Lost Workday Benchmark- Aerospace and Defense Sector Average**	Ratio*	0.5	0.5	0.6	NOT AVAILABLE		

*Lost workday rate represents the number of injuries and illnesses resulting in one or more days away from work per 100 full-time workers. Days away, restricted and transfer rate includes lost workday cases plus cases that involve days of restricted duty and job transfer per 100 full-time workers. Total recordable incident rate represents the number of injuries and illnesses resulting in days away from work, job transfer or restriction, medical treatment or other recordables per 100 full-time workers.

**source: <https://www.bls.gov/web/osh/table-1-industry-rates-national.htm> NAICS code 3364

Key Performance Indicator Table

10. TRAINING AND EDUCATION

TRAINING		UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Employee Environmental Training		% of Total	100%	100%	100%	100%		
Employee Health and Safety Training		% of Total	100%	100%	100%	100%		
Contractors and subcontractors trained on H&S risks before working on the premises.		% of Total	100%	100%	100%	100%		
Employees and supervised contractors receiving personal protective equipment (e.g. shoes, helmet, gloves, respiratory protection) including training on hazards and use		% of Total	>99%	>99%	>99%	>99%		
Employees and supervised contractors receiving health and safety training, instructions, safety data sheets (SDS) in local language		% of Total	>99%	>99%	>99%	>99%		
Employees and supervised contractors receiving training on safety and health hazards including e.g. machine safety, mobile equipment safety, workplace violence, safely working with hazardous substances, and ergonomics.		% of Total	>99%	>99%	>99%	>99%		
Employees and supervised contractors receiving training on risk assessment, STOP (unsafe situations) and Human Performance.		% of Total	>99%	>99%	>99%	>99%		
Employees receiving Training on Howmet's Code of Conduct, including business ethics, preventing discrimination and human rights violations.		% of Total	100%	100%	100%	100%		
Cybersecurity training - Cybersecurity Awareness		% of Total				>95%		
Cybersecurity training - Data Privacy Awareness		% of Total				>95%		
LEADERSHIP DEVELOPMENT PROGRAMS	BREAKDOWN	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Organizational Development - Develops Organizational Leaders = Senior and Executive	Total Participants	Count		18	24	24		
Organizational Development - Develops Organizational Leaders = Senior and Executive	Diverse	% of Total		11%	4%	4%		
Organizational Development - Develops Organizational Leaders = Senior and Executive	Women	% of Total		22%	24%	17%		
Organizational Development - Develops Organizational Leaders = Senior and Executive	Leadership Successor	% of Total		100%	100%			
Management Essentials - Develops People Leaders	Total Participants	Count		40	80	34		
Management Essentials - Develops People Leaders	Diverse	% of Total		47%	28%	18%		
Management Essentials - Develops People Leaders	Women	% of Total		36%	36%	41%		
Management Essentials - Develops People Leaders	Leadership Successor	% of Total		1	1			
Business Essentials - Targets Emerging Leaders	Total Participants	Count		30	60	137		
Business Essentials - Targets Emerging Leaders	Diverse	% of Total		36%	27%	19%		
Business Essentials - Targets Emerging Leaders	Women	% of Total		30%	44%	36%		
Business Essentials - Targets Emerging Leaders	Leadership Successor	% of Total		50%	80%			
Total Program Attendance - All Levels		Count		88	164	195		
EMPLOYEE PERFORMANCE REVIEWS		UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Performance Plans		Count				4,840		
Development Goals		Count				23,536		
Development Goals		Count				2,251		
TALENT DEVELOPMENT*		UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Leadership Career Mobility		% of Total			10%	31%		
Employee Career Mobility		Count			7453	6,488		
Employee Talent Profiles		Count				1,425		
Employee Succession Plans		Count			255	421		

*Leadership career mobility represents our leaders at director level and above. Career mobility refers to a transfer or promotion during the specified time period. We did not track employee talent profiles in 2021.

Key Performance Indicator Table

11. DIVERSITY

EMPLOYEE DIVERSITY VARIABLE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Board of Directors- Age Under 30	Count	0	0	0	0		
Officers and Assistant Officers- Age Under 30	Count	0	0	0	0		
Employees- Age Under 30	Count	4,028	2,037	2,635	3,295		
Board of Directors- Age 30 - 50	Count	1	2	1	1		
Officers and Assistant Officers- Age 30 - 50	Count	3	4	4	4		
Employees- Age 30 - 50	Count	12,467	8,918	9,193	9,766		
Board of Directors- Age Over 50	Count	9	8	9	9		
Officers and Assistant Officers- Age Over 50	Count	11	5	6	4		
Employees- Age Over 50	Count	9,765	7,548	7,224	7,298		
Board of Directors- Age Under 30	% of Total	0%	0%	0%	0%		405-1-a-ii
Officers and Assistant Officers- Age Under 30	% of Total	0%	0%	0%	0%		405-1-a-ii
Employees- Age Under 30	% of Total	15%	11%	14%	16%		405-1-b-ii
Board of Directors- Age 30 - 50	% of Total	10%	20%	10%	10%		405-1-a-ii
Officers and Assistant Officers- Age 30 - 50	% of Total	21%	44%	40%	50%		405-1-a-ii
Employees- Age 30 - 50	% of Total	47%	48%	48%	48%		405-1-b-ii
Board of Directors- Age Over 50	% of Total	90%	80%	90%	90%		405-1-a-ii
Officers and Assistant Officers- Age Over 50	% of Total	79%	56%	60%	50%		405-1-a-ii
Employees- Age Over 50	% of Total	37%	41%	38%	36%		405-1-b-ii
Male- Board of Directors	Count	9	7	6	6		
Male- Officers and Assistant Officers	Count	9	5	6	4		
Male- Employees	Count	19,366	13,839	13,932	14,760		
Female- Board of Directors	Count	1	3	4	4		
Female- Officers and Assistant Officers	Count	5	4	4	4		
Female- Employees	Count	6,894	4,668	5,114	5,536		
Not Specified- Board of Directors	Count			0	0		
Not Specified- Officers and Assistant Officers	Count			0	0		
Not Specified- Employees	Count			7	63		
Male- Board of Directors	% of Total	90%	70%	60%	60%		405-1-a-i
Male- Officers and Assistant Officers	% of Total	64%	56%	60%	50%		405-1-a-i
Male- Employees	% of Total	74%	75%	73%	72%		405-1-b-i
Female- Board of Directors	% of Total	10%	30%	40%	40%		405-1-a-i
Female- Officers and Assistant Officers	% of Total	36%	44%	40%	50%		405-1-a-i
Female- Employees	% of Total	26%	25%	27%	27%		405-1-b-i
Not Specified- Board of Directors	% of Total	0%	0%	0%	0%		405-1-a-i
Not Specified- Officers and Assistant Officers	% of Total	0%	0%	0%	0%		405-1-a-i
Not Specified- Employees	% of Total	0%	0%	0.04%	0.31%		405-1-b-i



Key Performance Indicator Table

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN AND MEN	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Canada	Count*				110		
China	Count*				134		
France	Count*				311		
Hungary	Count*				457		
Japan	Count*				163		
Mexico	Count*				254		
United Kingdom	Count*				362		
United States	Count*				2,581		
Total	Count*				4,372		
Canada- Mid-Level Management	% female salary to male				91%		405-2-a
China- Mid-Level Management	% female salary to male				80%		405-2-a
France- Mid-Level Management	% female salary to male				106%		405-2-a
Hungary- Mid-Level Management	% female salary to male				106%		405-2-a
Japan- Mid-Level Management	% female salary to male						405-2-a
Mexico- Mid-Level Management	% female salary to male				144%		405-2-a
United Kingdom- Mid-Level Management	% female salary to male				94%		405-2-a
United States- Mid-Level Management	% female salary to male				97%		405-2-a
Total- Mid-Level Management	% female salary to male				97%		405-2-a
Canada- Professional	% female salary to male				86%		405-2-a
China- Professional	% female salary to male				107%		405-2-a
France- Professional	% female salary to male				93%		405-2-a
Hungary- Professional	% female salary to male				91%		405-2-a
Japan- Professional	% female salary to male				97%		405-2-a
Mexico- Professional	% female salary to male				111%		405-2-a
United Kingdom- Professional	% female salary to male				89%		405-2-a
United States- Professional	% female salary to male				98%		405-2-a
Total- Professional	% female salary to male				96%		405-2-a

*Salaried Employees - includes countries with more than 100 employees and represents 96.6% of all salaried employees (4,372 out of 4,528).

WOMEN AND U.S. MINORITY* REPRESENTATION	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Global Women - Female Executives and Mid-Management	% of Total	24%	13%	23%	22%		
Global Women - Female Professionals	% of Total	30%	28%	27%	27%		
Global Women - Female Employees Overall	% of Total	26%	25%	27%	27%		
U.S. Minorities - U.S. Minority Executives and Mid-Management	% of Total	13%	3%	15%	14%		
U.S. Minorities - U.S. Minority Professionals	% of Total	22%	22%	23%	25%		
U.S. Minorities - U.S. Minority Employees Overall	% of Total	39%	38%	39%	44%		

*Minorities represent employees who identify as Asian, African American, Alaska Native, American Indian, Black, Hispanic, Latino, Native Hawaiian, Pacific Islander, or two or more races.



Key Performance Indicator Table

12. ETHICS

ETHICS VARIABLE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Integrity Line Calls	Count	553	413	315	395		
Corrective Action Implemented in the Year	Count	129	38	75	40		
Completion of Annual Conflicts of Interest Survey by Salaried Employees globally.	% of Total	100%	100%	100%	100%		

13. CUSTOMER HEALTH AND SAFETY AND PRODUCT SAFETY

PRODUCT SAFETY-RELATED RECALLS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Voluntary recalls issued	Count	0	0	1	0	RT-AE-250a.1	
Involuntary recalls issued	Count	0	0	0	0	RT-AE-250a.1	
Total units recalled	Count	0	0	22	0	RT-AE-250a.1	
DETECTED OR SUSPECTED COUNTERFEIT PARTS IN OPERATIONS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Actual	Count	0	0	0	0	RT-AE-250a.2	
Suspected	Count	0	0	0	0		
AIRWORTHINESS DIRECTIVES	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Airworthiness Directives issued by Federal Aviation Administration	Count	0	0	0	0	RT-AE-250a.3	
PRODUCT SAFETY MONETARY LOSSES	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Losses from legal proceedings associated with product safety.	U.S. Dollars	0	0	0	0	RT-AE-250a.4	
CERTIFICATIONS	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Locations with one or more quality certifications including Quality Management Systems (QMS).	% of Total	100%	100%	100%	100%		

14. CYBERSECURITY

CYBER SECURITY VARIABLE	UNIT	2019	2020	2021	2022	SASB STANDARD	GRI STANDARD
Data Events	Count		6	5	15		
Data Breaches	Count		0	0	2	RT-AE-230a.1	
Involving Confidential Data	Count		0	0	2	RT-AE-230a.1	
Net Expenses Incurred from Security Breaches (US\$)	Count		Immaterial	Immaterial	Immaterial		

Last Update: May 2023